White Paper on Small and Medium Enterprises in Japan

A Wake-Up Call to Small Business — Building a Self-Sustaining Enterprise

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A Wake-Up Call to Small Business —
Building a Self-Sustaining Enterprise

Small and Medium Enterprise Agency
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In line with the Government’s policy of administrative reform to help transform Japan’s postwar social and economic structures, the Ministry of International Trade and Industry was reorganized in January 2001 to form the Ministry of Economy, Trade and Industry (METI). This White Paper is consequently the first to be published by the new ministry.

Although we stand now at the beginning of a new century, the economic slowdown in the United States combined with the slow pace of balance sheet adjustment gives little cause to expect a strong recovery in Japan. Conditions are weak too in the small business sector, where the firms that form the foundations of the Japanese economy have been hit by enormous structural changes, causing managers and proprietors to lose confidence in their own businesses because of the uncertain outlook.

Despite these conditions, however, many SMEs are innovating and entering new fields of business. They have come to terms with the business environment they face and identified their strengths and weaknesses, and have made a conscious decision not to be hidebound by precedent and industry practices. They are, in short, self-sustaining enterprises capable of standing on their own two feet.

The purpose of this White Paper is to describe to managers and proprietors as clearly as possible and from a variety of perspectives examples of companies that provide clues as to how to grasp new business opportunities and solve problems. Paying particularly close attention to cases where firms have made use of information technology, we analyze how technology has been applied at each stage of introduction, and describe examples of failure from which other companies can learn. The White Paper also describes pioneering cases in fields with high future growth potential, such as the environment industry and lifestyle support services for the elderly.

The Ministry of Economy, Trade and Industry will be doing all in its power to implement the necessary measures to enable small and medium businesses to overcome their present difficulties and develop in the future. I hope that this White Paper serves as a useful resource for those who work in and with the small business sector, and helps increase awareness of the small business sector among the general public.

Finally, I should like to thank those in the small business sector and everyone else without whose cooperation this White Paper could not have been produced.

Takeo Hiranuma
Minister of Economy, Trade and Industry
May 2001
1. Under the Small and Medium Enterprise Basic Law, the term “small and medium enterprise” (SME) refers in general to enterprises with capital of no more than ¥300 million or a regular workforce of no more than 300, and sole proprietorships with no more than 300 employees. However, SMEs in the wholesale sector are enterprises with capital of no more than ¥100 million or a workforce of no more than 100, SMEs in the retail sector are enterprises with capital of no more than ¥50 million or a workforce of no more than 50, and SMEs in the service sector are enterprises with capital of no more than ¥50 million or a workforce of no more than 100. Small enterprises are defined as enterprises with no more than 20 employees. In the commercial and service sectors, however, they are defined as enterprises with fewer than six employees.

2. Except where otherwise noted, business establishments are regarded as enterprises for the purposes of analyses in this report that make use of statistics on number of business establishments. In such cases, SMEs are business establishments that satisfy the above conditions regarding size of workforce. In some cases, therefore, the business establishments of large enterprises may be treated as SMEs.

3. This report largely draws on statistical data published by the Government and Bank of Japan. However, use is also made of analyses based on these data and studies conducted by various entities in the private sector. Sources, methods of calculation and other relevant information are specified where data are cited. However, the main sources cited in this report are described briefly below. (The unit of measurement in statistical data not specifically mentioned below or in the main text is the enterprise.)


   (3) Ministry of Economy, Trade and Industry, *Current Survey of Production*. Statistics on number of enterprises. These statistics and *Manufacturing Production Indices by Size of Firm*, which are compiled based on these statistics, do not always cover small business establishments.

   (4) Ministry of Economy, Trade and Industry, *Basic Survey of Japanese Business Structure and Activities*. As this survey covers only enterprises with at least 50 employees and capital of at least ¥30 million, it does not cover small enterprises and sole proprietorships.

   (5) Ministry of Finance, *Financial Statements Statistics of Corporation by Industry*. As these statistics do not include sole proprietorships, they do not reveal overall trends among smaller firms. Because of the size of samples and response rates to these surveys, results concerning small corporations need to be regarded with a certain degree of latitude. It is also important to note that the quarterly statistics do not include corporations with capital of less than ¥10 million.

This census contains statistics on numbers of both business establishments and enterprises. In this report, analyses based on enterprises using these statistics also include sole proprietors (sole proprietorships). As statistics cannot be compiled by the “nayose” method of aggregating all returns from those establishments that belong to the same company, the size of sole proprietorships is determined on the basis of the number of employees at its head office or principal place of business. A manufacturer with 100 employees at its head office and 300 employees at branch offices would therefore be treated as an SME.

Where these statistics are cited, SMEs are, except where otherwise noted, defined as enterprises with under 300 employees. However, SMEs in the wholesale and service sectors are enterprises with under 100 employees, and SMEs in the retail sector are enterprises with under 50 employees.


Aggregated statistics on numbers of business establishments. The “regular workers” mentioned in this survey are called “employees” in this report.


Statistics on numbers of business establishments.

4. This report also includes analyses of the results of questionnaire surveys of SMEs and other enterprises conducted by the Small and Medium Enterprise Agency. As not all enterprises surveyed responded and the response rates appeared to be higher the more outstanding the company, the results probably paint a better picture than the reality. Totals cited based on the results of these surveys do not always come to 100% due to rounding to the first decimal place.
Recent trends in the small business sector
1. Business confidence in the small business sector

(1) Recent trends in business confidence in the small business sector

Conditions in the small business sector have been gradually improving, with information technology (IT) related industries leading the way. There are indications, however, such as the increasingly negative business conditions diffusion index (the percentage of firms saying business has improved minus the percentage saying business has worsened), that conditions in the small business sector remain weak. Characteristic of this recovery has been the weakness of recovery outside IT.

1) Trends across all industries

According to the Survey of Business Conditions in the Small Business Sector of business confidence among SMEs conducted by the Small and Medium Enterprise Agency and the Japan Small and Medium Enterprise Corporation, the business conditions DI began to recover in January-March 1999 after bottoming out in October-December 1998. Although the pace of recovery began to flag from July-September 1999, the recovery continued for six quarters until April-June 2000 (Fig. 111-1). However, the recovery leveled off in July-September 2000, and the DI began to decline from the October quarter.

2) Trends by industry

Closer inspection reveals considerable variation in the pace of recovery between industries (Fig. 111-2). In manufacturing, for example, the business conditions DI rose consistently until the October quarter of 2000, then fell for the first time in 10 quarters in January-March 2001. Confidence in the retail and service sectors, on the other hand, began to recover in the first half of 1999, but then began to repeatedly seesaw. The course of recovery in these sectors has thus not been entirely smooth. In construction, meanwhile, confidence began to decline in the second half of 2000, while in the wholesale sector, confidence began to ebb from October-December 2000.

3) Trends in IT-related sectors

A search for the cause of the comparatively buoyant condition of manufacturing reveals that the strong recovery in business conditions DIs in the electrical machinery, general machinery and precision equipment sectors (all closely IT related) pushed up the DI for manufacturing as a whole (Fig. 111-3, Supplementary Table 111-1). The DIs for these sectors were positive for the first time in three years in July-September 2000, indicating that the proportion of firms saying that

![Fig. 111-1 Business conditions DI in small business sector (all industries)](source: Small and Medium Enterprise Agency/JASMEC, Survey of Business Conditions in the Small Business Sector.

Note: The business conditions DI is calculated by subtracting the percentage of firms that said business had “deteriorated” compared with the same period a year earlier from the percentage that said business had “improved”.)
business had improved had begun to exceed the proportion saying that business had deteriorated. Even among these IT-related sectors where confidence was relatively high, however, warning signs began to emerge, such as a decline in the DI for electrical machinery (though the DI nevertheless remained positive) in October-December 2000. This was followed by declines in the DIs for the electrical machinery, general machinery and precision equipment sectors in January-March 2001.

According to the Small and Medium Enterprise Agency’s *Manufacturing Production Indices by Size of Firm*, production indices in the small business sector in October-December 2000 were dominated by IT related products. In first place were semiconductors, followed by communications and electronic components in second

**Fig. 111-2 Movement in business conditions DI in five main sectors**

![Graph showing movement in business conditions DI in five main sectors](image)

*Source: Small and Medium Enterprise Agency/JASMEC, Survey of Business Conditions in the Small Business Sector.*

*Note: The business conditions DI is calculated by subtracting the percentage of firms that said business had “deteriorated” compared with the same period a year earlier from the percentage that said business had “improved”.*

**Fig. 111-3 Trends in business conditions in IT-related sectors**

![Graph showing trends in business conditions in IT-related sectors](image)

*Source: Small and Medium Enterprise Agency/JASMEC, Survey of Business Conditions in the Small Business Sector.*
place, and communications equipment in third (Fig. 111-4).
From this it can be seen that IT is having repercussions not
only on output of finished communications equipment and
computers, but also on output of parts and components such
as semiconductor parts, communications and electronic
components, batteries, semiconductor elements, integrated
circuits, and electric wires and cables, and production of
special industrial machinery such as semiconductor
manufacturing equipment, thus boosting manufacturing as a
whole.

4) Differences in conditions between individual
companies
While the averages for individual industries described
above show how business conditions vary between
industries, it is also important to note the differences in
conditions between individual companies. Thus even in
those sectors where recovery has been strongest, some
companies report that business has deteriorated.
Likewise, there are also always companies in industries
where conditions are more severe that report that
business has improved. According to a survey of
business confidence in January-March 2001, for
example, even in the three sectors of manufacturing with
the highest DIs (general machinery, electrical machinery
and iron and steel/non-ferrous metals), 37.3% of firms
reported that business conditions had deteriorated. In
contrast, 6.4% of firms in six sectors where the DI was

Fig. 111-4 Top production indices for products in small business sector
(Oct.-Dec. 2000, seasonally adjusted)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry</th>
<th>Production index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Semiconductor parts</td>
<td>213.1</td>
</tr>
<tr>
<td>2</td>
<td>Communication and electronic components</td>
<td>200.6</td>
</tr>
<tr>
<td>3</td>
<td>Communications equipment</td>
<td>200.5</td>
</tr>
<tr>
<td>4</td>
<td>Batteries</td>
<td>191.4</td>
</tr>
<tr>
<td>5</td>
<td>Industrial robots</td>
<td>183.1</td>
</tr>
<tr>
<td>6</td>
<td>Semiconductor elements</td>
<td>154.9</td>
</tr>
<tr>
<td>7</td>
<td>Consumer electronic equipment</td>
<td>146.2</td>
</tr>
<tr>
<td>8</td>
<td>Integrated circuits</td>
<td>136.0</td>
</tr>
<tr>
<td>9</td>
<td>Electronic computers</td>
<td>135.9</td>
</tr>
<tr>
<td>10</td>
<td>Ships and ship engines</td>
<td>130.2</td>
</tr>
<tr>
<td>11</td>
<td>Wires and cables</td>
<td>129.6</td>
</tr>
<tr>
<td>12</td>
<td>Special industrial equipment</td>
<td>124.1</td>
</tr>
<tr>
<td>13</td>
<td>Electric measuring devices</td>
<td>120.5</td>
</tr>
<tr>
<td>14</td>
<td>High-pressure gas</td>
<td>118.0</td>
</tr>
<tr>
<td>15</td>
<td>Inorganic pharmaceuticals, pigments and catalysts</td>
<td>114.4</td>
</tr>
<tr>
<td>16</td>
<td>Medical drugs</td>
<td>112.9</td>
</tr>
<tr>
<td>17</td>
<td>Automobile parts</td>
<td>112.4</td>
</tr>
<tr>
<td>18</td>
<td>Vegetable and fruit products</td>
<td>111.9</td>
</tr>
<tr>
<td>19</td>
<td>Coated steel</td>
<td>111.9</td>
</tr>
<tr>
<td>20</td>
<td>Ceramics and fine ceramics</td>
<td>109.6</td>
</tr>
<tr>
<td></td>
<td>Manufacturing industry (average for approx. 100 products)</td>
<td>99.2</td>
</tr>
</tbody>
</table>

Source: Small and Medium Enterprise Agency, Manufacturing Production Indices by Size of Firm.

Fig. 111-5 Proportion of manufacturers reporting “improvement” or
“deterioration” (Jan.-Mar. 2001)

<table>
<thead>
<tr>
<th></th>
<th>DI</th>
<th>Improved (%)</th>
<th>No change (%)</th>
<th>Deteriorated (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General machinery</td>
<td>-16.3</td>
<td>19.8</td>
<td>44.1</td>
<td>36.1</td>
</tr>
<tr>
<td>Electrical machinery</td>
<td>-21.6</td>
<td>17.4</td>
<td>43.6</td>
<td>39.0</td>
</tr>
<tr>
<td>Iron and steel/non-ferrous products</td>
<td>-23.1</td>
<td>15.0</td>
<td>46.9</td>
<td>38.1</td>
</tr>
<tr>
<td>Average for above</td>
<td>-18.9</td>
<td>18.3</td>
<td>44.4</td>
<td>37.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>DI</th>
<th>Improved (%)</th>
<th>No change (%)</th>
<th>Deteriorated (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textiles</td>
<td>-54.1</td>
<td>4.4</td>
<td>37.1</td>
<td>58.5</td>
</tr>
<tr>
<td>Clothing and other textile products</td>
<td>-48.9</td>
<td>7.5</td>
<td>36.1</td>
<td>56.4</td>
</tr>
<tr>
<td>Ceramic, stone and clay products</td>
<td>-44.1</td>
<td>7.8</td>
<td>40.3</td>
<td>51.9</td>
</tr>
<tr>
<td>Wood and wood products</td>
<td>-41.9</td>
<td>6.7</td>
<td>44.7</td>
<td>48.6</td>
</tr>
<tr>
<td>Furniture and fittings</td>
<td>-40.8</td>
<td>5.8</td>
<td>47.6</td>
<td>46.6</td>
</tr>
<tr>
<td>Publishing and printing</td>
<td>-40.4</td>
<td>6.7</td>
<td>46.2</td>
<td>47.1</td>
</tr>
<tr>
<td>Average for above</td>
<td>-43.5</td>
<td>6.4</td>
<td>42.0</td>
<td>51.6</td>
</tr>
<tr>
<td>Average for all industry</td>
<td>-34.5</td>
<td>10.0</td>
<td>45.5</td>
<td>44.5</td>
</tr>
</tbody>
</table>

Note: The business conditions DI is calculated by subtracting the percentage of firms that said business had “deteriorated”
compared with the same period a year earlier from the percentage that said business had “improved”.

I — Recent trends in the small business sector
lower than the average for manufacturing as a whole (textiles, clothing, other textile products, and ceramic, stone and clay products) reported that business had improved (Fig. 111-5).

The companies in hard-hit industries reporting improving business conditions are characterized by, among other things, their positive approach to meeting users' needs, provision of distinctive products and services, and reduction of inventory to ensure profits.

(2) Comparison with past recoveries

Compared with recoveries in the past, manufacturing has recovered strongly fuelled by buoyant conditions in IT-related sectors. The recovery in other industries has been weaker than in the past, however, and the recovery in supporting industries has been particularly limited in scope. Shown in Fig. 111-6 is a comparison of movements in the business conditions DIs since their lows for the past four recoveries (including the present one). As can be seen from

Fig. 111-6 Trends in business conditions DI since lowest level (before economic trough)

![Graph showing trends in business conditions DI since lowest level](image)

Notes: 1. Change in business conditions DI from quarter in which lowest DI around business trough was recorded.  
2. Quarter of low does not always coincide with the trough in the business cycle.

Fig. 111-7 Scale of recovery in business conditions DI

![Graph showing scale of recovery in business conditions DI](image)

Notes: 1. Scale of recovery in terms of difference between DI low and high.  
2. Highs and lows in each industry do not always coincide with the peaks and troughs in the business cycle.
the graph, the business conditions DI this time sank lower than in the past, and has remained negative even during recovery. The scale of recovery from the lowest to the highest point has also been smaller than in the past. Looked at by industry, it can be seen that the scale of recovery during the present recovery has been particularly great in manufacturing (Fig. 111-7). Recovery in other sectors has been weak, with the small swing in retailing in particular having an impact on the scale of recovery overall.

(3) Differences in business confidence between SMEs and large enterprises

According to the Bank of Japan’s Short-Term Economic Survey of Enterprises in Japan (“Tankan”), the business conditions DI for SMEs (enterprises with 50~299 employees), middle-tier enterprises (300~999 employees) and large enterprises (1,000 or more employees) improved in all industries from the January quarter of 1999, only to deteriorate again in January-March 2001. As can be seen from Fig. 111-8, the DI for SMEs was lower than those for large and middle-tier enterprises during this period. The decline in business conditions DI in January-March 2001 appears to have been due to the downward revision of forecasts of ordinary profits in value terms for FY2000 from the previous quarter. Thus although forecast profits remained above actual results the previous year, SMEs revised down growth expectations from 10.3% the previous year to 5.7%, middle-tier enterprises revised down from 15.3% to 9.7%, and large enterprises revised down from 16.3% to 13.4%.

Fig. 111-8 Changes in business conditions DI by size (all industries)

Notes: 1. DI = percentage of respondents who reported “favorable business conditions” - “unfavorable business conditions”
2. Classification of enterprises by size

<table>
<thead>
<tr>
<th>Industry</th>
<th>No. of employees</th>
<th>SMEs</th>
<th>Middle-tier</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>50~299</td>
<td></td>
<td>300~999</td>
<td>1,000+</td>
</tr>
<tr>
<td>Wholesale</td>
<td>20~99</td>
<td></td>
<td>100~999</td>
<td>1,000+</td>
</tr>
<tr>
<td>Retail and services</td>
<td>20~49</td>
<td></td>
<td>50~999</td>
<td>1,000+</td>
</tr>
</tbody>
</table>

(4) Trends in business confidence among small enterprises

Within the small business sector, increasingly harsh conditions are being faced by small enterprises (enterprises with 20 or fewer employees in the manufacturing and construction sectors, and enterprises with 5 or fewer employees in the retail, wholesale and service sectors). Business confidence among such enterprises, despite gradually improving has remained lower than among SMEs in general, and declined in the latter half of 2000.

1) Trends in all industries
A comparison of changes in business confidence during past recoveries shows that while the business conditions DI of small enterprises has been less depressed than that of other SMEs at around the trough of the business cycle, the situation has been reversed during the recovery phase, during which there has been comparatively little improvement until the peak of the business cycle (Fig. 111-9). During the current recovery too, the DI for small enterprises was less negative at its lowest than that of other enterprises until April-June 1999, when the DI for other SMEs overtook that of small enterprises. Recovery then came to a standstill in the second half of 1999, and
although the DI began to rise again in the first half of 2000, it went into decline again in the July quarter. In the latest quarter for which figures were available (January-March 2001), the business conditions DI for small enterprises was still comparatively lower than that for other SMEs (-42.0 as against -37.5).

2) Trends by sector
While business confidence among small manufacturers consistently improved until October-December 2000, the recovery has been much less smooth for small retailers and service enterprises, whose business conditions DI declined in the second half of 1999 (Fig. 111-10). In sectors other than manufacturing, DI began to fall from the July and October quarters of 2000, especially in the service sector.

A comparison by industry of the DI for small enterprises and other SMEs in the January quarter of 2001 reveals...
the DI for small enterprises to be lower in all industries except construction. This is due not only to size, but also to the makeup of industries, viz. the fact that small enterprises make up a smaller proportion of enterprises in the comparatively more buoyant manufacturing sectors, such as the electrical machinery sector.

2. Small manufacturing sector production and inventory indices

(1) Trends in production

Looking at trends in output according to the Small and Medium Enterprise Agency’s Manufacturing Production Indices by Size of Firm, it can be seen that the production index for SMEs bottomed out in October-December 1998 (when the index was a seasonally adjusted 93.5) before gradually recovering until July-September 2000 (99.2) (Fig. 111-11). The index then leveled off in the following October quarter (99.2). This trend almost exactly duplicates the trend in the business conditions DI for small and medium manufacturers (Fig. 111-2). In contrast, the production index for all enterprises (including both SMEs and large enterprises) according to the Ministry of Economy, Trade and Industry’s Index of Industrial Production fell only temporarily, bottoming out in October-December 1998 (96.7) and then continuing to rise until October-December 2000.

Fig. 111-11 Production indices (1995=100)

![Graph showing production indices for SMEs and all enterprises from 1995 to 2000.]

Source: Small and Medium Enterprise Agency, Manufacturing Production Indices by Size of Firm.
(2) Trends in inventory

As the inventory cycle diagram in Fig. 111-2 shows, output fell from the same period a year earlier in April-June 1999, and then began to grow from the July quarter, when the scale of the decline in inventory also began to shrink. However, year-on-year growth in output began to decline after peaking in April-June 2000. In the October quarter, growth in output continued to decline, and inventory began to grow in year-on-year terms as the economy entered the shipment recovery phase.

In the diagram, the circle for SMEs is smaller than that for enterprises as a whole. This is because year-on-year increases and decreases in output and inventory are smaller among SMEs than enterprises as a whole, a reflection of their more cautious business approach.

Fig. 111-12 Inventory cycle

Source: Small and Medium Enterprise Agency, Manufacturing Production Indices by Size of Firm.
2. Quarterly inventory figures indicate inventory at end of quarter (inventory in last month of quarter).
3. Trends in corporate earnings

The ratio of ordinary profit to net sales (an indicator of corporate profitability) of large enterprises has recovered considerably since bottoming out in July-September 1998. The ratio for SMEs, on the other hand, began to recover from October-December 1998. The recovery then began to flag, however, and a gap opened up in the pace of recovery between firms of different sizes (Fig. 111-13). Looking at the labor share in order to analyze in greater detail trends in earnings shows that the labor share among SMEs rose substantially from the second half of 1997 due to falling sales, and remained high for a while thereafter. This appears to be one reason for the slow recovery in earnings at SMEs (Fig. 111-14).

Dividing expenses under profit and loss statements into four categories—variable expenses, personnel expenses, depreciation expenses, and non-operating profit/loss—to determine the contribution of each to changes in the ratio of ordinary profit to net sales reveals that containment of personnel expenses by both large enterprises and SMEs from the start of 2000 contributed to growth in earnings (Fig. 111-15). Responding to the growing cost of personnel expenses due to the fall in sales between 1998 and 1999, SMEs concentrated on containing variable expenses by, for example, cutting incidental expenses and revising prime costs. Once variable expenses had been pared as far as possible, however, they then turned their attention to cutting personnel costs instead. Although the increase in variable expenses from April-June 2000 contributed to the drop in earnings among SMEs, one reason for this appears to have been the increase in cost of outsourced processing work. This is because of the increased outsourcing of activities formerly performed in-house as a means of cutting costs instead of pursuing improvements in business efficiency by cutting personnel costs.

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**Fig. 111-13  Trends in the ratio of ordinary profits to net sales (all industries)**


Notes:
1. SMEs are defined as business corporations with capital of at least ¥10 million and under ¥100 million, and large enterprises are defined as business corporations with capital of at least ¥100 million.
2. Seasonally adjusted by the four-quarter moving average method, except the figures for July-September 2000, which are calculated by the three-quarter moving average method.
Chapter 1 — Business trends in the small business sector

Fig. 111-14 Trends in labor share (all industries)

![Graph showing trends in labor share for SMEs and large enterprises from 1989 to 2000.]

Notes: 1. Labor share = personnel expenses / (ordinary profit + deprecations expenses + interest payments and discount charges + personnel expenses)
2. See notes 1 and 2 to Fig. 111-13 regarding other matters.

Fig. 111-15 Change in ratio of ordinary profit to net sales and factorial analysis (year-on-year difference)

![Graph showing change in ratio of ordinary profit to net sales and factorial analysis for SMEs and large enterprises from 1998 to 2000.]

Notes: 1. Variable expenses = (sales - ordinary profit) - (personnel expenses + depreciation expenses - non-operating profit and loss)
2. Year-on-year difference in sales ratio of variable expenses, personnel expenses, depreciation expenses and non-operating profit/loss.
3. See note 1 to Fig. 111-13 regarding definitions of SMEs and large enterprises.
4. Bankruptcy trends

(1) Bankruptcy trends in 2000

The number of bankruptcies in 2000 rose 22% on the previous year to 18,769. Bankruptcies thus began to climb again compared with the situation in 1999, when companies benefited from the impact of steps by the Government to stabilize the financial system, exemplified by the creation of the special credit system. 18,497 of these bankruptcies were of SMEs (Appended Table 111-2).1) Figures on the liabilities left by bankruptcies, on the other hand, show that while liabilities surged 75% overall on the previous year (reaching a record high in terms of the value of liabilities) due to the prevalence of bankruptcies of large companies such as major life insurers and long-established department stores, liabilities left by SMEs fell 19% (Fig. 111-16).

Looking at the change in the number of bankruptcies on the same month the previous year in each industry, it can be seen that there were increases in almost all industries in 2000. The increase was particularly striking in the construction industry, which was hit by the fall in public works spending and contributed significantly to the increase in bankruptcies overall (Fig. 111-17, Appended Table 111-3). The number of bankruptcies began to fall slightly in all industries (including construction) from December 2000, but the number again started to rise again in February 2001. Given this and the still high monthly level of bankruptcies, future trends in bankruptcies must continue to be watched closely.

One of the defining features of bankruptcies in recent years has been the increase in bankruptcies among long-established companies. A breakdown of bankruptcies according to how long companies have been in business shows that the proportion of bankruptcies of long-established firms that had been in business at least 30 years is gradually on the increase (Fig. 111-18).

Although a long-established name had until now translated into a firm business base and strong creditworthiness, this applies less now than in the past. The conclusion to be drawn is that an increasing number of long-established companies are going under due to being unable to adapt to the rapid changes in the economic environment following the collapse of the

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1) In the absence of a legal definition of bankruptcy, the figures cited here indicate the total number of 1) enterprises whose business with banks had been suspended, 2) enterprises that had filed for corporate reorganization, 3) enterprises that had filed for corporate arrangement and reconstruction, 4) enterprises that had filed for rehabilitation (or filed for composition before March 2000), 5) enterprises that had filed for bankruptcy, 6) enterprises that had filed for special liquidation, and 7) enterprises that had undergone internal reorganization. The figures include only bankruptcies of enterprises with liabilities of at least ¥10 million. SMEs are defined as sole proprietorships and corporations with capital of under ¥100 million.
bubble economy. A large number of bankruptcies among long-established companies are in addition the result of difficulty finding a successor. For SMEs, therefore, the question of how to maintain and reproduce business resources is a serious problem. 2)

Fig. 111-17 Change in number of bankruptcies by industry (percentage change on same month a year earlier)

Source: Tokyo Shoko Research, Ltd., *Business Failure News (Monthly)*.

Fig. 111-18 Breakdown of bankruptcies by length in business

Source: Teikoku Databank, Ltd., *Bankruptcy Report*.
Note: Proportions were calculated excluding bankruptcies of enterprises whose length in business was unknown.

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2) According to a survey by Teikoku Databank, Ltd., 302 bankruptcies in 2000 were due to the death or illness of the proprietor. 77 (approximately 26%) of these were bankruptcies of enterprises that had been in business for at least 30 years, and 155 (51%) were of enterprises that had been in business for at least 20 years.
(2) Use of the Civil Rehabilitation Law

The Civil Rehabilitation Law, which entered effect in April 2000, was enacted in order to establish procedures for the reconstructive disposal of bankruptcies and rectify the structural inadequacies of the previous Composition Law. The main characteristics of rehabilitation under the Civil Rehabilitation Law are that 1) sole proprietorships as well as business corporations can file for rehabilitation, 2) applicants can file for rehabilitation before their businesses actually collapse (e.g. due to insolvency or excess debts), and 3) the debtor retains the right of management, enabling the management ability and credit of the existing management or proprietor to be used in reconstruction of the company. These, combined with the ease and speed with which procedures can be completed, make the system easy to use for SMEs. The number of applications up until February 2001 was 682, more than four times the 154 applications for composition over the same period a year earlier. Around 60% of applicants had capital of between at least ¥10 million and under ¥50 million, indicating that SMEs are making considerable use of the system (Fig. 111-19).

Rehabilitation under the Civil Rehabilitation Law thus offers an extremely easy way for SMEs seeking to reconstruct their businesses. This does not mean, however, that all businesses that file for rehabilitation easily succeed in reconstructing. According to a survey by a private research agency, the number of applicants actually approved by the courts up until February 2001 was 122. Over the same period of time, 31 cases did not reach the stage of approval of rehabilitation plans. There are also some cases where rehabilitation procedures are discontinued and the applicant subsequently declares bankruptcy because of the failure of creditors to give their approval for rehabilitation plans.

In order for SMEs to make use of the rehabilitation system under the Civil Rehabilitation Law in order to rebuild their businesses, it is essential not only that they seek to rebuild at an early stage prior to their de facto collapse, but also that detailed rehabilitation plans be drawn up and that managers and proprietors act in good faith.

Fig. 111-19 Number of enterprises filing for civil rehabilitation (by amount of capital)

Source: Tokyo Shoko Research, Ltd.
Notes: 1. Number of applicants between April 2000 and February 2001 (682 in total).
2. Applicants transferred from under the Composition Law and other legal processes and companies ordered in the past to suspend bank transactions not included.
3. “Others” includes entities such as medical corporations and educational foundations as well as sole proprietorships.

1) Problems with the previous Composition Law included 1) the need for the existence of grounds for bankruptcy (e.g. insolvency or excess debt) in order to file for composition, 2) the need for applicants to submit liquidation plans at the same time as filing for composition, and 3) the lack of any restriction on foreclosure, meaning that applicants faced the risk of loss of the assets required to stay in business due to foreclosure.

2) The figures do not include approvals of cases transferred from composition and other legal procedures. However, they may include some approvals due to transfers from suspension of bank transactions.
Case 1: Business reconstruction through civil rehabilitation with the help of a sponsor

Company A, a company in Kanagawa Prefecture with a workforce of 113 when it filed for rehabilitation, filed and obtained approval under the civil rehabilitation system for a painful rehabilitation plan entailing far-reaching reconstruction of existing operations and the holding of management to account. Backed by its creditors and a sponsor, the company has overcome these difficulties and is now rebuilding its business and restoring its credit.

The company, which is involved in the freight transport and warehousing business, built a combined logistics center in 1992. As most of the ¥5 billion cost of construction was covered by loans from financial institutions, the impact of the slump in orders because of the subsequent deterioration of the economy meant that the cost of payment of principal and interest put a severe squeeze on profits. The company planned to overcome this by revising the terms for repayment to financial institutions and reconstructing its operations. However, the business reconstruction plan it came up with was lacking in solid quantitative targets and did not go far enough, and so was rejected by the company’s main lender. The company consequently filed for civil rehabilitation in May 2000 under the Civil Rehabilitation Law in an effort to rebuild its business. Immediately after filing for rehabilitation, the company, under the guidance of its main lender, reworked its business revenue plans for the next 10 years several times, finally producing a plan based on past performance. It also announced other more far-reaching measures, such as pulling out of unprofitable areas of business and laying off or offering voluntary retirement to its employees. In order to obtain creditors’ consent, the plan also incorporated conditions such as 1) a decrease in the company’s capitalization, 2) the receipt of aid from its sponsor (capital increase), 3) the resignation of current managers and transfer of the right of management to the sponsor, and 4) the sale of the personal homes of current counselors (previous managers) and current managers and acceptance of managerial liability. By drawing up such a concrete, detailed plan for rehabilitation, the company succeeded in gaining approval in December, seven months after filing for rehabilitation. At present, the company is taking further steps to rebuild its business as rapidly as possible.

(3) Relationship between business conditions and bankruptcies

Although the number of bankruptcies is thought to be affected by trends in business conditions, a simple comparison of indices of trends in business conditions and the total number of bankruptcies does not reveal a clear correlation between the two. This is due largely to 1) the impact of localized factors unrelated to trends in business conditions, such as bankruptcy due to careless management and the death of proprietors, and 2) the fact that bankruptcy patterns are not only cyclical like business conditions, but are also heavily affected by changes in the industrial structure (such as the switch to dependence on domestic demand, the growth in the service economy, and deregulation). An examination of the relationship between the number of bankruptcies and economic indices excluding as far as possible highly localized factors shows that, although not conclusive, there is a stronger correlation between the two, and also that the trend in bankruptcies lags one to two quarters behind the business cycle (Figs. 111-20(1)–(2)). A breakdown by period also reveals that the lag behind the business cycle has been slightly shorter since the 1990s than in the 1980s (Fig. 111-20(3)).

Looking at the relationship between the number of bankruptcies and business conditions, it can be seen that although there is a strong correlation with business conditions as a whole in manufacturing, there is a stronger correlation with business conditions in each sector in the construction and wholesale/retail sectors (Fig. 111-21). In observing trends in bankruptcies in the future, therefore, it is necessary to keep a close eye on trends in business conditions within the construction and the wholesale/retail sectors as well as business conditions overall.
Recent trends in the small business sector

### Fig. 111-20(1) Correlation between number of bankruptcies and real GDP growth rate

<table>
<thead>
<tr>
<th></th>
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<td>No. of bankruptcies</td>
<td>6,000</td>
<td>5,000</td>
<td>4,000</td>
<td>3,000</td>
<td>2,000</td>
<td>1,000</td>
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<tr>
<td>No. of bankruptcies due to slump</td>
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<td>5,000</td>
<td>4,000</td>
<td>3,000</td>
<td>2,000</td>
<td>1,000</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Real GDP growth rate (right-hand scale)</td>
<td>6,000</td>
<td>5,000</td>
<td>4,000</td>
<td>3,000</td>
<td>2,000</td>
<td>1,000</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>


Notes:
1. All data seasonally adjusted by the four-quarter moving average method (quarterly basis).
2. 68SNA data (base year=1990) are used for the real GDP growth rate.
3. “Bankruptcies due to slump” are all bankruptcies due to slump in sales, slump in exports, difficulty recovering accounts receivable, accumulation of non-performing loans, and slump in industry.

### (2) Correlation between number of bankruptcies and real GDP growth rate

| Coefficient of correlation between number of bankruptcies and real GDP growth rate (lag) |
|-----------------------------------------------|-----------------------------------------------|
| 0Q                                           | 1Q                                           | 2Q                                           | 3Q                                           | 4Q                                           |
| All bankruptcies                             | -0.428                                       | -0.420                                       | -0.398                                       | -0.368                                       | -0.339                                       |
| Bankruptcies due to slump                    | -0.617                                       | -0.629                                       | -0.623                                       | -0.605                                       | -0.580                                       |

### (3) Correlation between number of bankruptcies due to slump and real GDP growth rate (by period)

| Coefficient of correlation between number of bankruptcies due to slump and real GDP growth rate (lag) |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------|
| 0Q                                           | 1Q                                           | 2Q                                           | 3Q                                           | 4Q                                           |
| 1980s                                         | -0.725                                       | -0.747                                       | -0.733                                       | -0.674                                       | -0.583                                       |
| 1990s onward                                  | -0.749                                       | -0.743                                       | -0.718                                       | -0.689                                       | -0.663                                       |

### Fig. 111-21 Correlation between number of bankruptcies and real GDP growth rate by industry

| Coefficient of correlation between number of bankruptcies and real GDP growth rate by industry |
|---------------------------------------------------------------------------------------------|-----------------------------------------------|
| GDP growth rate in each industry                                                           | Construction | Manufacturing | Wholesale/retail |
| GDP growth rate for all industries                                                        | -0.6594      | -0.3882       | -0.4802         |
| GDP growth rate for all industries                                                        | -0.3406      | -0.5231       | -0.3125         |

Source: Calculated based on data from Teikoku Databank, Ltd., *Bankruptcy Report; Cabinet Office, National Accounts Statistics.*

Notes:
2. 68SNA (price base=1990) data used for the real GDP growth rate.
The stagnation of sales due to the prolonged economic slump, uncertain economic outlook and cautious lending attitude of financial institutions have combined since 1997 to push down capital investment by enterprises of all sizes. Planned capital investment by large enterprises recovered in FY2000, however, and there was also strong growth in investment by small and medium manufacturers due to an increase in IT-related investment (Fig. 121-1). There are nevertheless signs that growth in capital investment is flagging, such as the dip in machinery orders, a bellwether of trends in private non-residential investment, which suggests that investment will decline even in manufacturing.1) In this chapter, we outline trends in capital investment among SMEs during the present fiscal year by industry.

Fig. 121-1  Trends in capital investment by size (% change on previous fiscal year)

1) According to the Cabinet Office Economic and Social Research Institute’s Orders Received for Machinery, forecast machinery orders were down in January-March 2001 in both manufacturing (down 4.5% from the previous quarter) and non-manufacturing (down 6.4% not including the shipping and electric power sectors) on a seasonally adjusted basis.

1. Trends in capital investment among small and medium manufacturers

(1) Trends in capital investment in FY2000

According to the Japan Finance Corporation for Small Business’s Survey of Capital Investment by Small Sized Manufacturers, capital investment by small and medium manufacturers (SMMs) declined for three years running from FY1997 on a year-on-year basis. In FY2000, however, planned capital investment rose 1.6% in April according to initial plans, and 13.5% in September according to revised investment plans. This was the first increase in initially planned investment in 27 years, and the highest increase in revised planned investment since the 9.8% increase in FY1996 (Fig. 121-2). These figures would suggest, therefore, that capital investment by SMMs has begun to recover.

Note: Figures for FY2000 indicate planned investment (as of March 2001).
(2) Trends by industry

A breakdown by industry reveals growth on actual investment the previous fiscal year in 14 of a total of 18 industries. Growth in investment was particularly strong among manufacturers of electrical equipment (where there has been growth in output of electronic components for information and communications devices such as cellular phones and personal computers), related peripheral components such as cables and connectors, and nonferrous metals, precision equipment and plastics, which registered strong growth in output of processed parts and raw materials, such as nonferrous metal materials and plastic parts. There was also considerable growth in investment among manufacturers of transport equipment (where there has been growth in output of automobiles and motorcycles), general machinery (where there has been growth in output of industrial machinery and construction equipment), and chemicals (where there has been growth in output of pharmaceuticals and cosmetics).

Fig. 121-2 Trends in capital investment by SMMs (% change on previous fiscal year)

Note: Figure for FY2000 indicates revised planned investment as of September.

Fig. 121-3 Trends in capital investment by SMMs by industry (% change on previous fiscal year; revised planned figures for FY2000)

Notes: 1. Horizontal axis indicates each sector’s percentage share of capital investment in FY1999.
2. “Others” includes petroleum and coal products, rubber products and others.
capital investment by lumber manufacturers, which invested in improving their seasoning facilities in order to be better able to produce products of clear quality and performance to comply with the new Law Concerning Promotion of Quality Assurance for Houses (Fig. 121-3). The effects of the increase in output of IT-related equipment because of the global growth in demand for semiconductors and the rapid proliferation of information and communications devices have thus spread to the SMMs manufacturing the peripheral parts for such products, and they have responded by spending aggressively on capital investment. A further factor behind the increase in capital investment overall is the growing number of SMEs that are stepping up capital investment in order to take advantage of the business opportunities offered by the strengthening of environmental legislation in recent years.1)

Case 2: IT-related enterprise jumps on the bandwagon and expands capital investment

Company A, a solder manufacturer based in Tokyo with 150 employees, has invested around ¥200 million in construction of a new plant to increase production capacity from the present 100 tons per month to 200 tons per month. The recent surge in growth in the digital consumer electronics market has impacted on Company A, which manufactures terminal materials for electronic components. The move was prompted by the rapid increase in demand for solder for cellular phones and for digital consumer electronics products, such as for the electronic circuits used in CD-ROM and DVD drives, together with an anticipated increase in orders from automakers due to the rising use of IT equipment in automobiles. The importance of soldering is increasing as electrical equipment shrinks in size and grows in capabilities, and the more minute electrical circuits become, the more compact and more adhesive soldering must be. Being of better quality, the solder manufactured by Company A costs five to six times as much as that of its competitors. The large clients on its books are happy to pay the extra cost, however, because of the vital importance of using quality materials in cellular phones.

Case 3: Expansion of capital investment to take advantage of business opportunities created by environmental regulations

To coincide with the end of the three-year postponement of the application of the Container and Packaging Recycling Law to SMEs after the law’s initial entry into effect, Company A, a company in Aichi Prefecture with 200 employees, decided to enter the PET bottle recycling business and invest a total of ¥2.1 billion in the construction of a suburban recycling plant. The company, which is involved in the warehouse management, loading and unloading, and packing business, has a transport subsidiary that handles the group’s transportation needs, giving it the capability to offer combined warehouse management and transportation services. The company is also aggressively expanding into other prefectures. Its investment in the new plant is designed to tap demand for recycling of PET bottles, which is expected to grow rapidly in the years ahead, and was undertaken after fully considering the project’s profitability and future potential. As the company’s corporate group is already involved in environmentally friendly business activities (such as actively introducing high mileage and low emission vehicles, reusing waste tires, and cutting idling by vehicles during use), this project represents a continuation of the company’s emphasis on environmental protection. The project was undertaken with the approval of the prefecture under the Law on Supporting Business Innovation, and was funded in part by low-interest loans from government-affiliated financial institutions.

1) According to data on investment in specific fields from the Japan Finance Corporation for Small Business’s Survey of Capital Investment by Small Sized Manufacturers, 19.4% of enterprises undertaking or planning capital investment in FY2000 responded that they were focusing on IT-related investment. At the same time, however, 6.4% of respondents were also investing in response to tougher environmental regulation.
2. Trends in capital investment among small and medium wholesalers

(1) Trends in capital investment in FY2000

With planned capital investment down in FY2000, capital investment by small and medium wholesalers has fallen for four years running. However, the pace of decline is easing, and there are signs of an improvement around the corner (Fig. 121-4).

(2) Trends by industry

A breakdown by industry reveals that investment has declined in all but three of the 12 main sectors. Although capital investment recovered in the chemical products, machinery and equipment, and mineral and metal sectors, and many companies saw a recovery in sales underpinned by robust production activity and capital investment in manufacturing, capital investment was weak in sectors hurt by the slump in personal consumption, such as the textile product and food and drink sectors. Investment was particularly sharply down in “others” (i.e. pulp and paper, hardware and sports equipment, etc.) (Fig. 121-5).

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**Fig. 121-4 Trend in capital investment by small and medium wholesalers**

(% change on previous fiscal year)

![Graph showing trend in capital investment by small and medium wholesalers](image)

**Source:** Small and Medium Enterprise Agency/Japan Finance Corporation for Small Business, *Survey of Trends in Capital Investment in the Commercial and Service Sectors*.

**Note:** Figures for FY2000 are according to revised plans as of October.

**Fig. 121-5 Trends in capital investment by small and medium wholesalers by industry**

(% change on previous fiscal year; revised planned figures for FY2000)

![Graph showing trend in capital investment by industry](image)

**Source:** Small and Medium Enterprise Agency/Japan Finance Corporation for Small Business, *Survey of Trends in Capital Investment in the Commercial and Service Sectors*.

**Note:** Horizontal axis indicates each sector’s percentage share of capital investment in FY1999.
3. Trends in capital investment among small and medium retailers

(1) Trends in capital investment in FY2000

Capital investment by small and medium retailers rose for the first time in nine years in FY1999, but again went into decline in FY2000 according to figures on planned investments, revealing concern over the uncertain economic outlook (Fig. 121-6).

(2) Trends by industry

A breakdown by industry reveals that investment grew in two sectors: the textile, clothing and accessories sectors, which refurbished in order to attract customers amid growing competition between large stores and large specialist stores; and the furniture, household goods and household machinery and equipment sectors, which were buoyed up by strong sales of digital consumer appliances and PCs. However, a sharp drop in investment in a number of other sectors (e.g. books, stationery, fuel, pharmaceuticals and cosmetics) caused capital investment by small and medium retailers as a whole to go into decline (Fig. 121-7).

Fig. 121-6 Trend in capital investment by small and medium retailers (% growth on previous fiscal year)

![Graph showing trend in capital investment by small and medium retailers](image)


Note: See note to Fig. 121-4.

Fig. 121-7 Trends in capital investment among small and medium retailers by sector (% change on the previous fiscal year; revised planned figures for FY2000)

![Bar chart showing trends in capital investment](image)


Note: Horizontal axis indicates each sector’s percentage share of investment in FY1999.
4. Trends in capital investment among small and medium service enterprises

(1) Trends in capital investment in FY2000

With planned investment down again in FY2000, capital investment by small and medium service enterprises shrank for the fourth year running. However, the rate of decline is falling, and the recovery trend continues (Fig. 121-8).

(2) Trends by industry

Capital investment grew in two of the nine service sectors: automobile maintenance services and entertainment. In the former, enterprises invested to increase their competitiveness in response to fiercer competition because of deregulation, and in the latter, investment growth was fueled by the frequent replacement of pachinko machines with the latest models at pachinko parlors in order to attract customers. The hotel business, however, where income per customer is falling and the slump in banquet demand continues, remains as depressed as ever. There were also downturns in planned investment in FY2000 in the environmental hygiene and information service sectors due to capital investment having run its course in these sectors the previous year (Fig. 121-9).

Fig. 121-8  Trend in capital investment by small and medium service enterprises (% change on previous fiscal year)

Note: See note to Fig. 121-4.

Fig. 121-9  Trends in capital investment by small and medium service enterprises by sector (% change on previous fiscal year; revised planned investment for FY2000)

Note: Horizontal axis indicates each sector’s percentage share of capital investment in FY1999.
1. Employment trends by size

(1) Trends in number of employees

Having declined in 1998 and 1999, the number of employees in non-agricultural sectors began to grow again in 2000. A breakdown shows that growth in employment by enterprises with between 30 and 99 and over 499 employees contributed to the overall increase in employment. Employment by enterprises with 1~29 employees, on the other hand, continued to decline, indicating that the ability of small enterprises to absorb employment, which had hitherto consistently increased, is falling (Fig. 131-1). Looking at changes in employment by size of enterprise compared with the same month a year earlier, it can be seen that the number of employees began to increase from May 2000, followed by particularly striking growth in employment by enterprises with 30~99 employees from September. Employment by enterprises with 1~29 employees, which had been shrinking, also began to recover from November (Fig. 131-2).

Fig. 131-1  Changes in number of employees by size of workforce (non-agricultural)

Notes: 1. Figures are annual averages.
2. Totals do not match the totals for enterprises of all sizes due to the inclusion of public sector workers and employees of enterprises of unknown size.
(2) Trends in unemployment

The average rate of unemployment in 1999 was 4.7%,
the highest level since comparable records began to be
kept in 1953. Unemployment remained high in 2000
-especially in December, when unemployment reached a
record high), and the average rate of unemployment for
the year as a whole remained at 4.7% (Fig. 131-3). An
examination of the number of ordinary new job openings
by size of business establishment shows, however, that
there began a recovery at business establishments with at
least 500 employees in 1999, and at enterprises of all
sizes in 2000 (Fig. 131-4).

Thus as business sentiment improves, the number of
employees and number of new job openings are growing.
A defining feature of the current employment
environment, however, is that despite this, the
unemployment rate remains high, suggesting there has
arisen a mismatch between the employment needs of
enterprises and the employment wishes of job seekers.

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**Fig. 131-2** Changes in number of employees by size of workforce
(non-agricultural; percentage change on same month a year earlier)

![Graph showing changes in number of employees by size of workforce](image)

- Note: Totals do not match totals for enterprises of all sizes due to inclusion of public sector workers and employees of enterprises of unknown size.

**Fig. 131-3** Trend in unemployment rate

![Graph showing trend in unemployment rate](image)

Over and under-employment sentiment

As can be seen from Fig. 131-5, over-employment sentiment continued to decline at enterprises of all sizes as a result of an improvement in business sentiment and continued employment adjustment in 2000. With sales still stagnant in the small business sector, however, the burden of labor costs (personnel expenses, etc.) remains heavy (Fig. 111-14). Also important to remember is that the recovery in business sentiment in the small business sector has come to a standstill.

Fig. 131-5 Employment conditions DI (all industries)

Notes: 1. DI = “excessive” minus “insufficient”
2. Changes in forms of employment

(1) Increase in use of irregular employees

The recent full-scale structural reform of the Japanese economy together with the prolonged slump have increased the need for greater labor mobility in the labor market, and employment patterns are now changing at not only large enterprises, but also SMEs. Figures indicate that the proportion of irregular employees (part-timers and temporary staff hired from temporary staffing agencies) is higher the smaller the enterprise. In recent years, however, the use of irregular employees has increased at enterprises of all sizes (Fig. 131-6). This is thought to be due to moves by companies to increase profitability by cutting fixed labor costs (such as personnel expenses). From the point of view of the employee, however, part-time employment also allows one to choose one’s working hours and holidays to suit one’s lifestyle, and provides the opportunity to use or develop one’s specialist skills. The employment needs of employees are thus growing more diverse,\(^1\) and this diversification of employment needs is something that can no longer be ignored by SMEs.

(2) Liberalization of temporary staffing business

In order to promote the smooth movement of labor and proper allocation of manpower, the Government has over the past few years phased in measures to deregulate the commercial employment service and temporary staffing businesses (Appended Table 131-1). Regarding the latter, the diversification of employment needs noted above has seen a rise in the use of temporary staff (Fig. 131-7), prompted to a large degree by the general deregulation of the temporary staff business and expansion of services covered by the amendment of the Temporary Employment Law in December 1999.\(^2\) Although temporary employment has in the past been thought of as largely the preserve of women, the

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1) According to the Ministry of Health, Labour and Welfare’s General Survey on the Diversification of Forms of Employment 1999, the commonest reason cited for choosing irregular employment was the ability to tailor working hours to suit one’s lifestyle (32.8%), followed by ease of combining work with domestic responsibilities and other activities (29.4%), shorter working hours and number of work days (26.3%) and ability to put professional qualifications and skills to use (10.9%).

2) According to a survey by the Japan Temporary Staffing Association, assignments by 23 temporary staffing agencies in the Tokyo metropolitan area began to increase on the same month a year earlier in December 1999, and have continued to grow by around 20% a month since February 2000.
Chapter 3—Employment trends

Fig. 131-7 Trends in number of temporary employees

<table>
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<tr>
<th>Year (FY)</th>
<th>No. of temporary employees</th>
<th>Equivalent no. of permanent employees</th>
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<tr>
<td>1995</td>
<td>61.2</td>
<td>25.5</td>
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<td>1996</td>
<td>72.4</td>
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<td>1997</td>
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<tr>
<td>1999</td>
<td>106.8</td>
<td>39.5</td>
</tr>
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</table>

Notes: 1. The number of temporary workers equals the number of registered workers and workers employed permanently by ordinary temporary employment businesses and the number of temporary workers employed by special temporary employment businesses.
2. “Equivalent no. of permanent employees” is the total number of employees employed permanently by ordinary temporary employment businesses, the number of workers other than permanent employees (equivalent to the number of permanent employees) and the number of temporary employees employed by special temporary employment businesses.

Fig. 131-8 Temp-to-perm employment process

- Maximum period of temporary employment: 1 year
- During the assignment period, the temporary employee confirms the suitability of work, and employer judges the ability of the temporary employee to discharge duties.

Start of employment under temp-to-perm contract or employment contract concerning temp-to-perm employment

Conclusion of term of temporary contract

Confirmation of interest of parties and offer

Agreement between parties

Formal employment

Join firm

Client company

Temporary employee

Agency

- Confirmation of employment conditions
- Confirmation of desire to employ
- Confirmation of employment conditions
- Confirmation of desire to be employed
The proportion of male temporary staff has risen following the lifting of the ban on the employment of temporary staff in sales and marketing positions under the amended Temporary Employment Law. For SMEs, this offers an important means of using temporary staff to not only cut fixed labor costs, but also to enter new areas of business and gain access to valuable professional skills. In December 2000, the ban on temporary to permanent, or temp-to-perm, services was lifted. In a temp-to-perm situation, a temporary employee assigned to a client company would expect to be hired as a permanent employee of that company after the completion of assignment. After the assignment, the employer and employee confirm their interest in employing or being employed by the other, and the employer makes an offer to employ the temporary employee directly (Fig. 131-8). In the U.S., which is one of the frontrunners in the temporary staffing field, this system has become widespread, and 25 to 30% of temporary staff are temp-to-perm employees. From the perspective of temporary workers seeking to enter full-time employment, this system offers them an opportunity to determine during their assignment whether the company and work there suit them, while for the company, the system gives them time to ascertain the abilities and attributes of temporary employees. Temp-to-perm services thus offer an important means of reducing the mismatch in employment and solving the shortage of human resources suffered by SMEs.

Case 4: Temporary staffing business grows by leaps and bounds

Company A, a major temporary staffing agency in Tokyo with 340,000 temporary staff on its books, has successfully expanded its business in response to progressive deregulation. Following the amendment in December 1999 of the Temporary Employment Law, which removed most restrictions on the areas of employment open to the temporary staffing business, assignments by the company have further increased.

Situation after amendment of the Temporary Employment Law: Large increase in assignments in sales positions

Compared with prior to the amendment of the Temporary Employment Law, demand from companies for temporary workers has increased drastically. Among the areas of employment opened up to temporary staffing under the amended Temporary Employment Law, there has been marked growth in the employment of temporary staff in sales positions, and the number of registered temporary staff in such positions is now in excess of 8,000. Around 55% of these 8,000 staff are men and 45% are women. In comparison with the temporary staff in other fields, therefore, there is a higher proportion of men in sales positions. The impression gained by the company is that many of the male temporary staff seek to use the opportunity of temporary employment to increase their specialist skills, while the clients that employ male temporary workers are keen to make maximum use of their abilities.

Use of temporary staff by SMEs: Increase in use of temporary staff in core business

The company is sending increasing numbers of staff to companies of all sizes. New SME clients include those that could not until now build up core areas of business, such as middle management, financial affairs and marketing, due to a shortage of human resources. These companies are now employing highly skilled temporary staff to acquire know-how in a short period of time.

The company also expects strong growth in demand for temp-to-perm services, the ban on which was lifted in December 2000. Having begun with fresh graduates, the company is now actively expanding services to facilitate the movement of human resources from large enterprises to SMEs focusing on middle-aged and older workers, formerly a problem in adjusting the balance of supply and demand for labor.

Current issues: Improvement of matchmaking functions

There is strong demand from clients for the continuation of temporary employment even after the conclusion of an assignment. At the same time, there are also many people who wish to work on a temporary basis for an extended period because of their lifestyles. The company therefore considers the one-year limit on temporary employment imposed on newly recognized job categories to be a bottleneck. In addition, while the number of registered temporary staff has been steadily rising, the needs of companies for temporary staff are growing increasingly specialized and diverse, making it more and more difficult to place temporary staff to meet these needs. Because of this, the company is seeking to increase its matchmaking capabilities by making use of IT and enhancing training for temporary staff.

3) Although it is unclear what use is being made of temporary workers by SMEs since the amendment of the Temporary Employment Law, a survey on temporary employment conducted in March 1999 by the Labor and Economic Affairs Bureau of the Tokyo Metropolitan Government shows that 73% of companies hiring temporary staff had under 300 employees.
3. The impact of IT on employment trends: The U.S. experience

The development of information technology (IT) should theoretically act on employment through the expansion of investment demand in three main ways. First is the increase in demand for labor in IT-related industries with the growth in demand for IT-related products. The second is the change in occupational patterns at companies that have welcomed advances in IT. While on the one hand employment of IT experts may be expected to increase, employment in other job categories replaced by the introduction of IT should also fall. At the same time, the improvement in quality and fall in price of products and services through the use of IT should increase demand and in turn fuel an increase in employment. And third is the impact on companies that have yet to take advantage of IT. A good example of this is the negative impact on orders and consequent fall in employment by conventional wholesale and retail outlets that fail to respond to the demands of customers and suppliers to be able to place and receive orders online via the Internet as part of moves to rationalize and simplify distribution operations (Fig. 131-9).

Looking at employment trends in the U.S. in recent years, it can be seen that while there was an increase in employment in all occupations due to economic growth fuelled by IT investment from the mid-1990s, there was particularly strong growth in fresh employment in the service sector (Fig. 131-10). Underlying the growth in employment in service industries has been the reconstruction of business operations by many companies in tandem with the concentration of business resources on areas of core competence and outsourcing of other operations, from which service providers have been among the main beneficiaries. A more detailed breakdown of the increase in employment in the service sector in fact shows that the proportion of employment in business services has increased. However, there have also been increases in the more traditional medical, welfare and education service sectors too that have made a major contribution to growth. Recently in the U.S., there has in addition been a clear change in the occupational makeup of employment. Thus in industries such as manufacturing, finance and insurance, real estate and retail, where the introduction of IT has improved and expanded business, IT has taken the place of employees in clerical support jobs, reducing the proportion of employees in such positions, and led to an increase in the proportion of high value-added workers in management and specialist fields. In industries such as construction and mining, on the other hand, where less use is made of IT investment, the reverse trend is apparent, i.e. the proportion of employees in specialist positions is falling (Appendix Table 131-2).

Japan is at the present stage facing an imbalance in supply and demand for skilled employees, such as a shortage of IT experts, and it is not clear how trends in employment will develop in the future. Judging from the U.S. experience, however, it is perfectly possible that there will be an upturn in employment even in industries unrelated to IT, such as traditional service sectors. Because of this, it is vitally important that companies concentrate on innovating in their own business by, for example, rethinking their business strategies including creating closer ties with customers and determining customer needs (e.g. through one-to-one marketing), and improving quality control.

---

1) According to the U.S. Department of Labor’s Employment and Earnings, the approximately 5.70 million increase in increase in employment in the service industry between January 1995 and December 1998 breaks down into approximately 2.50 million in business establishment services, 1.30 million in medical and welfare services, 450,000 in education services, and 280,000 in entertainment services.

2) One-to-one marketing means identifying the tastes and demands of individual customers, collecting and analyzing data on customer attributes, purchasing history and behavior, and providing the products and services to meet customer tastes when sought by the customer. It means placing the main emphasis on maintaining the customer base and increasing customer satisfaction, and responding flexibly to diversifying customer needs.
I — Recent trends in the small business sector

**Fig. 131-9** Impact of development of IT on macro-employment

- Employment creation
- Employment replacement

**IT-related enterprises**
- Communications and electronic equipment and parts manufacturers
- Communications and information service industries
- Expansion of derived demand

**Enterprises adopting IT**
- Expansion of demand for information experts
- Reduction of demand for jobs replaced
  - Improvement of production efficiency
  - Reduction of expenses
  - Reduction of prices and rates
  - Improvement of competitiveness
- Expansion of demand for existing enterprises and existing products
- Increase in demand for new enterprises and products (e-commerce)

**Enterprises that fail to introduce IT**
- Fall in demand due to emergence of new products and change in logistics systems

**Fig. 131-10** Increase in employment in United States (by main industry)

(10,000 employees)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Increase in Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>104.4</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>5.8</td>
</tr>
<tr>
<td>Wholesale</td>
<td>59.0</td>
</tr>
<tr>
<td>Retail</td>
<td>151.7</td>
</tr>
<tr>
<td>Services</td>
<td>570.7</td>
</tr>
<tr>
<td>Transport and communications</td>
<td>78.7</td>
</tr>
</tbody>
</table>

Source: Compiled from U.S. Department of Labor, *Employment and Earnings.*
Note: Comparison between January 1995 and December 1998.
Chapter 4 — Trends in financing

1. Financing patterns in the small business sector

Looking at trends in financing patterns in the small business sector, one finds that long-term loans (loans with a payback period of at least a year) are growing increasingly important. Compared with large enterprises, indirect financing is of central importance to SMEs (Figs. 141-1–2). SMEs are also more dependent on borrowing than large enterprises (Fig. 141-3). Looking at lending to SMEs by financial institutions, it can be seen that the value of business loans increased from the beginning of 2000, and outstanding loans to SMEs, which leveled off from 1999, returned to their former level (Fig. 141-4). Using the financial position DI and borrowing difficulty DI as a gauge of the financial status of SMEs, it can be seen that although there was a recovery from July-September 1998, the situation began to deteriorate again from April-June 2000 (Fig. 141-5).
I — Recent trends in the small business sector

Fig. 141-2 Comparison of financing patterns by size (FY1999)

Notes: 1. SMEs are business corporations with capital of under ¥100 million, and large enterprises are business corporations with capital of at least ¥100 million.
2. “Other” is defined the same as in the note to Fig. 141-1.

Fig. 141-3 Trends in dependence on borrowing by size

Notes: 1. SMEs are business corporations with capital of under ¥100 million, and large enterprises are business corporations with capital of at least ¥100 million.
2. Dependence on borrowing = (short-term borrowing + long-term borrowing) / total capital
**Chapter 4 — Trends in financing**

**Fig. 141-4** Outstanding business loans to SMEs by financial institutions

![Graph showing outstanding business loans to SMEs by financial institutions from 1998 to 2001.](image)

**Source:** Compiled from Bank of Japan, *Monthly Financial and Economic Statistics* and other sources.

**Note:** Loans to enterprises with capital of ¥100 million or under or 300 or fewer employees. (Lending to enterprises with capital of ¥30 million or under or 100 or fewer employees in the wholesale sector, and enterprises with capital of ¥10 million or under or 50 or fewer employees in the retail and service sectors.)

**Fig. 141-5** Trends in SME financial position DI and borrowing difficulty (short and long-term funds) DI

![Graph showing trends in SME financial position DI and borrowing difficulty from 1996 to 2001.](image)

**Source:** Small and Medium Enterprise Agency/JASMEC, *A Survey of Business Conditions in the Small Business Sector*.

**Notes:**
1. Financial position DI = "improved" - "deteriorated" compared with the same period a year earlier
2. Borrowing difficulty DI = "easy" - "difficult" compared with the previous quarter
3. Financial position DI is compared with the same quarter a year earlier, and the borrowing difficulty (short and long-term borrowing) DI is compared with the previous quarter.
2. Lending to small and medium enterprises

When lending by city and regional banks slumped between 1998 and 1999, the decrease in lending to SMEs was covered by government-affiliated financial institutions and credit associations (Fig. 141-6). From 2000, in contrast with the preceding period, private-sector financial institutions led by city and regional banks expanded lending to SMEs. According to a survey by the Financial Services Agency of lending by 15 banks that received public funds, the banks surveyed increased lending by ¥4.3 trillion in the year following the injection of public funds amid the weak tone of recovery in business conditions (Fig. 141-7).

According to a survey by a private-sector research agency, however, the total number of loans to SMEs declined 2.3% (about 490,000) from the previous year to 20.73 million in FY1999. Thus while the value of outstanding loans to SMEs increased, the actual number of loans decreased.

A survey by the Bank of Japan of the lending attitudes of the leading banks also found that whereas the reasons for a more active lending stance toward large enterprises were “increased competition with other banks”, “improvement of business conditions (performance) of specific industries and companies”, and “increased competition from direct finance market”, the overriding factor in the case of lending to SMEs was “increased competition with other banks” (Fig. 141-8). Regarding how the terms of loans had been changed, while credit to both large enterprises and SMEs had been expanded, there was a stronger move toward more vigorous assessment of the credit risk of borrowers and widening of profit margins in the case of SMEs than large enterprises.

Looking at the situation of SMEs as borrowers, on the other hand, it can be seen that there has been an increase in the proportion of companies that expect lending attitudes to grow more accommodative or tighter than at present. Regarding how lending attitudes will become tighter, more companies expect an increase in interest rates or security conditions rather than loans being made smaller than those sought. In the future, however, many companies expect the value of loans to fall (Fig. 141-9(1)).

The proportion of companies that said lending attitudes had grown more accommodative was greater among

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Fig. 141-6 Outstanding loans to SMEs and trends in growth rates (by type of financial institution)

---

1) Now 14 due to the merger of Mitsui Trust and Banking and Chuo Trust and Banking. Reconstruction plans were submitted for the Mizuho Financial Group and follow-up on the three banks combined from the half-year ending September 2000.

companies with the highest credit ranking, and the proportion of companies that said lending attitudes had tightened was greater among companies with the lowest credit ranking (Fig. 141-9(2)). Regarding lending attitudes in the future, an increasing number of companies with high credit rankings expect them to grow more accommodative, and an increasing number of companies with lower credit rankings expect them to tighten. The increase in outstanding loans by private-sector financial institutions to SMEs should therefore be regarded cautiously with an eye on future trends.

**Fig. 141-7** Lending to SMEs by financial institutions that received public funds

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Mizuho banks</td>
<td>32,959.7</td>
<td>34,146.5</td>
<td>1,186.8</td>
<td>33,314.2</td>
<td>33,507.1</td>
<td>33,564.2</td>
<td>250.0</td>
</tr>
<tr>
<td>Sakura</td>
<td>14,521.5</td>
<td>14,745.7</td>
<td>224.2</td>
<td>14,326.7</td>
<td>14,332.6</td>
<td>14,426.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Sumitomo</td>
<td>14,486.4</td>
<td>14,926.4</td>
<td>437.0</td>
<td>13,756.2</td>
<td>13,987.7</td>
<td>13,856.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Daiwa</td>
<td>5,552.2</td>
<td>6,061.8</td>
<td>509.6</td>
<td>5,848.1</td>
<td>5,860.3</td>
<td>5,958.1</td>
<td>110.0</td>
</tr>
<tr>
<td>Sanwa</td>
<td>10,488.0</td>
<td>10,914.8</td>
<td>416.8</td>
<td>12,081.5</td>
<td>12,275.3</td>
<td>12,181.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Tokai</td>
<td>8,033.9</td>
<td>8,475.5</td>
<td>441.6</td>
<td>8,610.6</td>
<td>8,692.2</td>
<td>8,700.6</td>
<td>90.0</td>
</tr>
<tr>
<td>Asahi</td>
<td>7,600.5</td>
<td>8,214.1</td>
<td>613.6</td>
<td>8,587.1</td>
<td>8,793.0</td>
<td>8,678.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Yokohama</td>
<td>3,492.1</td>
<td>3,573.5</td>
<td>81.4</td>
<td>3,558.2</td>
<td>3,587.7</td>
<td>3,608.2</td>
<td>50.0</td>
</tr>
<tr>
<td>Mitsubishi Trust &amp; Banking</td>
<td>3,657.9</td>
<td>3,688.2</td>
<td>30.3</td>
<td>3,241.4</td>
<td>3,209.8</td>
<td>3,261.4</td>
<td>20.0</td>
</tr>
<tr>
<td>Sumitomo Trust &amp; Banking</td>
<td>3,865.4</td>
<td>3,896.1</td>
<td>30.7</td>
<td>3,359.4</td>
<td>3,370.6</td>
<td>3,389.4</td>
<td>30.0</td>
</tr>
<tr>
<td>Toyo Trust &amp; Banking</td>
<td>2,659.0</td>
<td>2,757.4</td>
<td>98.4</td>
<td>2,983.7</td>
<td>2,918.3</td>
<td>3,003.7</td>
<td>20.0</td>
</tr>
<tr>
<td>Chuo Mitsui Trust &amp; Banking</td>
<td>4,339.2</td>
<td>4,521.3</td>
<td>182.1</td>
<td>4,560.3</td>
<td>4,645.9</td>
<td>4,610.3</td>
<td>50.0</td>
</tr>
<tr>
<td>Total</td>
<td>111,668.8</td>
<td>115,921.3</td>
<td>4,252.5</td>
<td>114,227.4</td>
<td>115,180.5</td>
<td>115,247.4</td>
<td>1,020.0</td>
</tr>
</tbody>
</table>


Notes: 1. Actual value excluding impact loans.
2. Due to the change in definition of SMEs, the figures for the year ending March 2000 are not continuous with the succeeding figures.

**Fig. 141-8** Trends in lending by leading banks

(1) How have the terms of business loans been changed?

<table>
<thead>
<tr>
<th>Change in terms of loans</th>
<th>Large enterprises</th>
<th>Middle-tier enterprises</th>
<th>SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit (expanded=more accommodative)</td>
<td>3.06</td>
<td>3.14</td>
<td>3.06</td>
</tr>
<tr>
<td>Profit margin (reduced=more accommodative)</td>
<td>3.00</td>
<td>2.94</td>
<td>2.82</td>
</tr>
<tr>
<td>Assessment of credit risk of borrower</td>
<td>2.92</td>
<td>2.88</td>
<td>2.78</td>
</tr>
<tr>
<td>Security conditions</td>
<td>3.02</td>
<td>2.98</td>
<td>2.92</td>
</tr>
<tr>
<td>Other</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>No. of responses</td>
<td>49</td>
<td>49</td>
<td>49</td>
</tr>
</tbody>
</table>

(2) Reasons for more positive stance to lending to businesses

<table>
<thead>
<tr>
<th>Reasons for more positive lending stance</th>
<th>Large enterprises</th>
<th>Middle-tier enterprises</th>
<th>SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement in own asset position</td>
<td>1.64</td>
<td>1.44</td>
<td>1.32</td>
</tr>
<tr>
<td>Improvement in economic outlook</td>
<td>1.36</td>
<td>1.33</td>
<td>1.24</td>
</tr>
<tr>
<td>Improvement in business conditions (performance) of specific industries/companies</td>
<td>2.09</td>
<td>1.83</td>
<td>1.52</td>
</tr>
<tr>
<td>Increased competition with other banks</td>
<td>2.27</td>
<td>2.56</td>
<td>2.36</td>
</tr>
<tr>
<td>Increased competition with other types of business</td>
<td>1.55</td>
<td>1.56</td>
<td>1.44</td>
</tr>
<tr>
<td>Increased competition with direct finance market</td>
<td>2.00</td>
<td>1.22</td>
<td>1.08</td>
</tr>
<tr>
<td>Improved ALM risk tolerance</td>
<td>1.55</td>
<td>1.33</td>
<td>1.28</td>
</tr>
<tr>
<td>Other</td>
<td>2.33</td>
<td>2.20</td>
<td>2.14</td>
</tr>
<tr>
<td>No. of responses</td>
<td>11</td>
<td>18</td>
<td>25</td>
</tr>
</tbody>
</table>


Notes: 1. Figures in angle brackets indicate weight of each item (1~5 or 1~3).
2. Figures are calculated by multiplying the weight by the proportion of respondents (weighted average).
3. Large enterprises are corporations with capital of at least ¥1 billion and over 300 regular employees. SMEs are sole proprietorships and corporations with capital of no more than ¥300 million or no more than 300 regular employees. Middle-tier enterprises are corporations other than large enterprises and SMEs.
Recent trends in the small business sector

**Fig. 141-9(1) Lending attitude of private-sector financial institutions (all)**

Q: Current lending attitude compared with one or two months ago

<table>
<thead>
<tr>
<th>No. of respondents</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tighter</td>
<td>9</td>
</tr>
<tr>
<td>Somewhat tighter</td>
<td>53</td>
</tr>
<tr>
<td>No change</td>
<td>880</td>
</tr>
<tr>
<td>Somewhat more</td>
<td>42</td>
</tr>
<tr>
<td>accommodative</td>
<td></td>
</tr>
<tr>
<td>More accommodative</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>990</td>
</tr>
</tbody>
</table>

Q: Tighter in what respect?

<table>
<thead>
<tr>
<th>No. of respondents</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher interest rates</td>
<td>16</td>
</tr>
<tr>
<td>Tighter security conditions</td>
<td>13</td>
</tr>
<tr>
<td>No long-term fixed loans</td>
<td>4</td>
</tr>
<tr>
<td>Reduction in size of desired loan</td>
<td>12</td>
</tr>
<tr>
<td>More materials/lengthier screening period</td>
<td>9</td>
</tr>
<tr>
<td>Additional security required</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
</tr>
</tbody>
</table>

Q: Lending attitude at end of March

<table>
<thead>
<tr>
<th>No. of respondents</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tighter</td>
<td>17</td>
</tr>
<tr>
<td>Somewhat tighter</td>
<td>85</td>
</tr>
<tr>
<td>No change</td>
<td>794</td>
</tr>
<tr>
<td>Somewhat more</td>
<td>67</td>
</tr>
<tr>
<td>accommodative</td>
<td></td>
</tr>
<tr>
<td>More accommodative</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>990</td>
</tr>
</tbody>
</table>

Q: In what respect will lending attitudes become tighter?

<table>
<thead>
<tr>
<th>No. of respondents</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher interest rates</td>
<td>17</td>
</tr>
<tr>
<td>Tighter security conditions</td>
<td>15</td>
</tr>
<tr>
<td>No long-term fixed loans</td>
<td>4</td>
</tr>
<tr>
<td>Reduction of desired loan</td>
<td>41</td>
</tr>
<tr>
<td>More materials/lengthier screening period</td>
<td>19</td>
</tr>
<tr>
<td>Reduction of services (e.g. waiving of fees)</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
</tr>
</tbody>
</table>

Source: Shoko Chukin Bank.
Notes: Survey sample: 1,000 customers of the Shoko Chukin Bank (valid responses: 990).
Date of survey: January 17, 2001.

**Fig. 141-9(2) Lending attitude of private-sector financial institutions (by credit ranking)**

Source: Shoko Chukin Bank.
Notes: 1. Enterprises with high credit ranking: 350 (35.4%)
   - Enterprises with medium credit ranking: 311 (31.4%)
   - Enterprises with low credit ranking: 329 (33.2%)
2. “Now” means lending attitude compared with one or two months ago. “Future” means lending attitude at end of March.
3. “Tighter is the total for “tighter” and “somewhat tighter”. “More accommodative” is the total for “more accommodative” and “somewhat more accommodative”.
1. Overseas investment by small and medium enterprises

(1) Recent trends in overseas subsidiaries

Figures on the sales of overseas subsidiaries of Japanese SMEs show that although the sales of subsidiaries in the United Kingdom steadily began to recover from 1999, the rate of growth began to slow from 2000. The sales of subsidiaries in the U.S. continued to fall in 1999, but began to recover again in 2000. In the ASEAN4, sales of affiliates in Indonesia and Thailand generally grew, while sales in Malaysia grew steadily until April-June 2000, but then began to decline from the July quarter. In the Philippines, sales have continued to decline sharply since January-March 1999. In the three NIEs, SMEs’ subsidiaries’ sales continued their downward path until October-December 1999 before recovering strongly in January-March 2000. Since the April quarter, however, growth has flagged (Fig. 151-1).

Fig. 151-1  Growth in yen sales of overseas affiliates of Japanese SMEs

1) Affiliates in U.S./U.K.

1) ASEAN4 refers to Thailand, Malaysia, Indonesia and the Philippines.
2) NIEs 3 refers to The Republic of Korea, Taiwan and Singapore.
(2) Response to business challenges

According to JASMEC’s Report on Overseas Expansion by Small and Medium Enterprises, 64.8% of SMEs expanding or developing new markets and 68.1% of companies cutting the cost of procurement of materials are taking action domestically and overseas or will take action overseas. Regarding the “development of business” and “improvement of quality of products and services”, on the other hand, 53.3% and 48.7% of companies intend only to take action domestically. These figures show that a large proportion of companies are tackling core business challenges only in Japan and not overseas (Fig. 151-2).
(3) Reasons for overseas expansion or withdrawal

While SMEs expand overseas for a variety of reasons, the principal ones are to cut costs and expand and develop new overseas markets (Fig. 151-3). Regarding the actual effects of expansion, on the other hand, 48.6% of companies achieve reductions in costs, and 38% succeed in hiring the manpower they need. Only 31.3%, however, succeed in expanding and developing new markets as a result of expansion overseas, indicating that overseas investment does not always have the desired effect (Fig. 151-4). A common reason for pulling out of all regions except China is declining sales. In the U.S., Europe and China, many companies also pull out because of problems with partners in the host country and, in the case of China, changes in local conditions because of the abolition of preferential measures and changes in regulations and taxation. These figures emphasize the importance of conducting careful investigations and making proper preparations before investing in projects overseas (Fig. 151-5).

**Fig. 151-3 Reasons for investment overseas**

<table>
<thead>
<tr>
<th>Reason</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction of costs</td>
<td>57.5</td>
</tr>
<tr>
<td>Expansion and development of new overseas markets</td>
<td>42.5</td>
</tr>
<tr>
<td>Securement of manpower</td>
<td>20.7</td>
</tr>
<tr>
<td>Securement of raw materials</td>
<td>8.4</td>
</tr>
<tr>
<td>Risk hedging through dispersal of production operations</td>
<td>6.1</td>
</tr>
<tr>
<td>Other*</td>
<td>6.1</td>
</tr>
<tr>
<td>To promote new business</td>
<td>3.9</td>
</tr>
</tbody>
</table>

* Other: requested by parent company, acquisition of data, training of employees and PR center, expansion of scale of business

I — Recent trends in the small business sector

**Fig. 151-4 Effects of investment overseas**

<table>
<thead>
<tr>
<th>Effects</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction of costs</td>
<td>48.6</td>
</tr>
<tr>
<td>Securement of manpower</td>
<td>38.0</td>
</tr>
<tr>
<td>Expansion and development of new overseas markets</td>
<td>31.3</td>
</tr>
<tr>
<td>Securement of raw materials</td>
<td>12.8</td>
</tr>
<tr>
<td>Hedging of risks through dispersal of production operations</td>
<td>12.3</td>
</tr>
<tr>
<td>Promotion of new business</td>
<td>5.6</td>
</tr>
<tr>
<td>Other*</td>
<td>3.9</td>
</tr>
</tbody>
</table>

* Other: requested by parent company, acquisition of data, training of employees and PR center, expansion of scale of business

Note: Totals exceed 100 due to multiple responses.

**Fig. 151-5 Reasons for withdrawal from overseas (by region of investment)**

<table>
<thead>
<tr>
<th>Reason for withdrawal</th>
<th>U.S./Europe</th>
<th>China</th>
<th>NIEs</th>
<th>ASEAN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in strategy of Japanese parent company</td>
<td>22.2%</td>
<td>0.0%</td>
<td>22.2%</td>
<td>0.0%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Deterioration of business of Japanese parent company</td>
<td>11.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>25.0%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Problems with host country partner</td>
<td>44.4%</td>
<td>42.9%</td>
<td>33.3%</td>
<td>0.0%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Failure to recruit skilled local personnel</td>
<td>22.2%</td>
<td>0.0%</td>
<td>22.2%</td>
<td>0.0%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Slump in sales</td>
<td>66.7%</td>
<td>14.3%</td>
<td>66.7%</td>
<td>50.0%</td>
<td>51.7%</td>
</tr>
<tr>
<td>Withdrawal of parent company/main customers</td>
<td>0.0%</td>
<td>0.0%</td>
<td>22.2%</td>
<td>0.0%</td>
<td>6.9%</td>
</tr>
<tr>
<td>No personnel to dispatch</td>
<td>22.2%</td>
<td>28.6%</td>
<td>22.2%</td>
<td>25.0%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Difficulty of procurement of parts and materials</td>
<td>0.0%</td>
<td>14.3%</td>
<td>11.1%</td>
<td>0.0%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Increase in costs</td>
<td>33.3%</td>
<td>28.6%</td>
<td>33.3%</td>
<td>25.0%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Abolition of preferential measures and change of regulations and taxation</td>
<td>33.3%</td>
<td>42.9%</td>
<td>11.1%</td>
<td>0.0%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Local political or economic instability</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>25.0%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Other*</td>
<td>33.3%</td>
<td>57.1%</td>
<td>11.1%</td>
<td>25.0%</td>
<td>31.0%</td>
</tr>
</tbody>
</table>

* Other: requested by parent company, acquisition of data, training of employees and PR center, expansion of scale of business

Note: Totals exceed 100 due to multiple responses.
2. Trends in imports and exports of typical small business products

Typical small business products made up 15.1% of exports in 2000 (Fig. 151-6), and the figure is steadily rising. Looking at year-on-year growth in exports of typical small business products (measured in yen terms), it can be seen that the upward trend in exports that began in October-December 1999 continued in FY2000, and that growth in exports of typical small business products was underpinned by exports of general machinery and chemicals (Fig. 151-7).

The production activities of SMEs are affected not by the direct export of products shipped by SMEs (direct dependence), but also by the export of products containing parts produced by SMEs (indirect dependence). As a result of the shrinkage of domestic markets and the globalization of markets, both direct and indirect dependence are growing (Fig. 151-8).

An examination of trends in imports of typical small business products (in terms of dollars) reveals that the growth rates remain high in all sectors (Fig. 151-9).

Because of the increase in imports of general machinery and electrical machinery such as PCs and peripherals for cellular phones from economies such as the ASEAN4, NIEs 42) and China by large enterprises, however, the proportion of imports made up of typical small business products has fallen to 39.7%.

Fig. 151-6 Proportion of value of imports and exports made up of typical small business products (2000)

Sources: Ministry of Economy, Trade and Industry, Census of Manufactures; Ministry of Finance, Trade Statistics.

Note: Industrial products only.

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1) Typical small business products (typical large enterprise products) are products that account for at least 70% of the value of shipments of small and medium business establishments (large business establishments) according to the standard industrial classification system of Japan (base year=1995). General products are products that make up no more than 70% of the value of shipments of both SMEs and large enterprises.

2) NIEs 4 refers to R.O.K., Hong Kong, Taiwan and Singapore.
Recent trends in the small business sector

Fig. 151-7  Trends in exports of typical small business products (in yen)

Sources: Ministry of Economy, Trade and Industry, Census of Manufactures; Ministry of Finance, Trade Statistics.
Note: Top three sectors in terms of value. All other sectors subsumed under “others”.

Fig. 151-8  Trend in export dependence of SMEs

Note: Indirect dependence = (value of output arising from export by Japan - value of direct exports) / value of output.
Fig. 151-9  Trends in imports of typical small business products (in dollar terms)

Sources: Ministry of Economy, Trade and Industry, Census of Manufactures; Ministry of Finance, Trade Statistics.

Note: Top three sectors in terms of value. All other sectors subsumed under “others”.
As the environment faced by small enterprises has changed in recent years, businesses’ support needs have grown more diverse. Thus in addition to the traditional business support activities provided by associations and chambers of commerce and industry, such as advice on book-keeping, there has arisen a need for new activities, such as support for start-ups, business innovation, and the introduction of IT (Fig. 161-1). The growing geographical spread of local economic activities combined with moves to merge municipalities is also generating a greater need for support for small enterprises over a wider area across municipal boundaries (Fig. 161-2).

The operational structure of the commerce and industry associations that undertake such activities consequently needs to be revised, and their structures enhanced through mergers and cooperation across a wider area.

1. Moves to merge and expand the geographical spread of commerce and industry organizations

Of the 2,800 or so commerce and industry associations found throughout Japan, largely in towns and villages, about 80% have fewer than 500 members, and around 90% have fewer than three business advisers. They are thus extremely small in scale, and have tended to become more so in recent years. As noted, commerce and industry associations are being expected to play an increasingly diverse range of roles.

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**Fig. 161-1 Attitudes toward provision of start-up support and expansion of activities**

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should actively provide start-up support</td>
<td>71.0 23.7 5.4</td>
</tr>
<tr>
<td>Should actively expand activities</td>
<td>68.6 23.4 8.2</td>
</tr>
</tbody>
</table>


**Fig. 161-2 Activities over a wide area**

(Should commerce and industry associations engage in activities over a wider area crossing municipal boundaries?)

- Yes: 50.2%
- Not especially: 19.6%
- No: 5.3%
- No response: 25%


**Fig. 161-3 Consideration of cooperation and mergers in prefectures**

- Already implementing: 4.3%
- Being considered: 1.3%
- Not yet being considered: 72.3%
- Other: 15.1%

Source: Central Federation of Societies of Commerce and Industry.
Due to the way their activities have been structured to date, however, they are at the same time becoming increasingly unable to respond to the needs of small enterprises because of problems such as 1) their inability to specialize by sharing responsibilities among business advisers, 2) the lack of replacements for business advisers, which makes it difficult to allow advisers time away from their everyday duties to undergo training and improve their skills, and 3) the inability to make relative assessments compared with organizations with more business advisers, and difficulty of properly assessing the ability and performance of business advisers.

To overcome these problems, many commerce and industry associations are looking into expanding the framework of their activities by tying up and merging with associations in other regions (Fig. 161-3). In Akita and Nagasaki Prefectures, for example, the prefectural federations of commerce and industry associations have drawn up models for the merger of associations within their prefectures, and in Tottori Prefecture, the prefectural federation of commerce and industry associations has led the way in promoting alliances between associations in the prefecture.

**Case 5: Promotion of geographical spread and cooperation among associations and chambers of commerce and industry**

In order to effectively utilize the human resources of commerce and industry associations, the Tottori Prefectural Federation of Commerce and Industry Associations led the formation of the prefecture’s 36 commerce and industry associations into nine councils in April 2000 so as to integrate their business guidance services and centralize operations.

Among the problems faced by the prefecture’s commerce and industry associations were 1) their inability to offer specialist guidance due to the small number of business advisers in each association, 2) the provision of answers concerning the specific means and content of business guidance based on the personal judgment of each adviser, and 3) the failure of staff to share information with other associations.

The main effects of the reorganization of associations in the prefecture have been threefold. Firstly, a diagnostic team of six to eight advisers can now be formed in each council to provide specialist advice concerning management issues regarding which information has been gathered in that district. Advisory meetings offering expert advice can then be held for managers and proprietors. Secondly, in addition to individual business advisers handling everyday matters according to their own judgment, staff led by the business planning chiefs can meet once a month at each council to confer and respond to important issues raised by the managers in each district. And thirdly, the use of PCs to handle all data, such as information on previous advice given to members and members’ attributes, enables data to be shared between organizations, resulting in an improvement in the quantity and quality of data accumulated by councils and associations.

The aim of these changes among commerce and industry associations is to create combined organizations capable of functioning over a wider geographical area and, by helping to maintain and create employment and create new local industries, to encourage greater permanent residence and contribute to greater interaction and the revitalization of local communities and economies (Fig. 161-4).

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**Fig. 161-4 Framework of cooperation among commerce and industry associations in Tottori Prefecture**

**Source:** Compiled from Tottori Prefectural Federation of Commerce and Industry Associations and the 36 Commerce and Industry Associations of Tottori Prefecture, *A Guide to the Large Area Joint Organizational Structure.*
2. Developing the infrastructure for commerce and industry organizations

As a result of these moves to merge and increase the geographical spread of commerce and industry associations, there has emerged a need for the development of the legal framework to facilitate their merger. Studies are therefore being conducted by organizations such as the Committee for the Implementation of New Small Business Policy and the Small and Medium Enterprise Policy Council’s Committee on Small Enterprises.

(1) Development of infrastructure to facilitate mergers

Under the merger procedures laid down by the current Commerce and Industry Association Law, procedures must be undertaken to transfer to the surviving or newly established association each of the individual assets, credits and liabilities of the association that is dissolved, which results in considerable legal costs. In order to reduce these costs, regulations should be established regarding the merger of associations, and their merger facilitated in order to develop the conditions for the reform of associations.

(2) Districts of merged commerce and industry associations

The regulations regarding the area of commerce and industry associations should be applied following mergers. However, special exceptions should also be made to allow for special transitive measures to deal with the merger, abolition, creation and division of municipalities.

3. Facilitating the merger and geographical spread of commerce and industry associations

The aim of the merger of associations is not merger in itself. The decision whether to merge should instead be made after careful consideration of what form associations’ activities should take following their merger. Moreover, even if a number of associations are merged to form a new association, it is necessary to verify whether they are of a suitable size and area to function as a unit for operations and, where activities over a wider area are found to be more necessary than the merger of associations, cooperation over a wider area should be pursued.

It is on this basis that commerce and industry associations should build systems capable of fully meeting the needs of small enterprises.
Action required of small and medium enterprises in order to adapt smoothly to economic structural change
Chapter 1  Business innovation by small and medium enterprises

Section 1  Becoming a self-sustaining enterprise

1. The problems faced by one SME

O Ltd. is a small enterprise in Tokyo with 11 employees that prints materials such as business literature for companies. For around 20 years, it has undertaken subcontracting work for large printers.

Performance slump

Over the past few years, the company’s business has declined. The company initially expected business to pick up when the economy recovered. Contrary to expectations, however, the slump dragged on, and business remained in the doldrums.

The slump in business was not the only problem faced by the company. In the 1990s, hitherto stable relations between clients and printing subcontractors were dramatically transformed. Copiers became more commonplace among clients, and also came to offer greater functionality, enabling companies to print simple materials that O Ltd. used to print. New media such as the Internet and CD-ROMs have also emerged in recent years, and these began to encroach upon the business of printers.

At the same time, there arose greater demand from clients for subcontractors capable of handling and correcting copy in digital format. Copy comes in a variety of formats that printers are now required to integrate into one. While clients’ needs were thus evolving, O Ltd. introduced equipment to enable it to meet conventional bulk demand. Because of the rapid growth in demand for digital printing services in the printing industry, however, this turned out to be a wasted investment.1)

At the root of the decline in the company’s business was its inability to adapt to the growing demand for digital services. Because of the lack of computer-literate personnel, the company still receives and corrects copy manually.

Debt overhang

Having failed to keep pace with the growth in digital demand, the company invested like others by borrowing the funds it needed for the above capital investment from financial institutions.

Because of the company’s slowness to respond to the demand for digital services, however, the aggressive capital investment of the early 1990s served only to leave the company with a mountain of debt. In autumn 1998, funds were running out, but the company somehow managed to survive by making use of the special credit guarantee program. However, repaying the funds it had borrowed remained a heavy burden. Dividing the company’s outstanding debt by annual cashflow, it would take O Ltd. well over 30 years to repay its debt. These financial matters had previously been left to the company’s accounting division and tax accountants. Because of the seriousness of the situation, however, the president is now keenly aware of the need to find a way out of the crisis. Because of the company’s financial difficulties, however, the company does not know what to do apart from starting by first raising funds.

Lack of human resources and succession problems

The company recognizes that the slump in business is due to the slowness of its response to demand for digital services. What the solution is, though, no one knows.

Everyone from the president down considers himself poor with computers. Although some PCs were purchased, no one has made any attempt to learn how to use them. Even if the company were to attempt to employ fresh computer experts, there is a market-wide shortage of IT experts, and the company lacks the wherewithal to pay such experts a suitably attractive salary.

Although the company is not a particularly large organization, there is poor communication between the actual printing departments and the general affairs and accounting departments, and operational errors often occur. The company’s proprietor is old, and the question of the company’s succession has become a concern. The proprietor’s son, however, currently works at a computer company. If the proprietor were to allow him to start up in business utilizing his own university network, he would be prepared to take over management of the company.

1) Not only O but other companies that have failed to adapt to such changes in client demands are gradually declining. According to the Japan Federation of Printing Industries’ A Study of the Handling of Electronic Documents in the Printing Industry (FY1998), around 80% of the copy submitted by clients consists wholly or partly of electronic data. However, the fact that 64% of companies receive less than half of their copy in electronic format indicates that electronic copy is concentrated among just a few printing companies.
The above case is not that of an actual company. It is instead an amalgamation produced based on the results of interviews with a number of managers and proprietors. However, many SMEs in various industries no doubt face similar problems.

2. Business problems confronting SMEs

In order to revitalize the still languishing Japanese economy, it is essential that SMEs, which alongside large enterprises have given the Japanese economy its strength, take independent action to innovate and grow. However, SMEs face a variety of business problems, and the following problems affect many SMEs regardless of industry.

(1) Stagnation of demand
According to the Survey of Business Conditions in the Small Business Sector conducted in March 2001 by the Small and Medium Enterprise Agency and JASMEC, the most serious business problem faced in many industries is “stagnation of demand” (Fig. 211-1). It is important to consider this problem from a long-term perspective. Looking at the long-term structural problems of SMEs according to the Ministry of Economy, Trade and Industry’s Basic Survey of Commercial and Manufacturing Structure and Activity (June 1998), it can be seen that “winning orders” is the most serious problem in the manufacturing and wholesale sectors (Fig. 211-2).

Over the long term, the sales of SMEs rose until 1992, but subsequently went into decline (Figs. 211-3~5). To cope with the stagnation of demand in Japan, an increasing number of companies are aggressively taking advantage of growing economic globalization to enter new markets and utilize the best business resources in Japan and abroad.

![Fig. 211-1 Business problems faced by SMEs](Unit: %)

<table>
<thead>
<tr>
<th>Business problems faced in the present quarter (Jan.-Mar. 2001)</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing Stagnation of demand 38.3</td>
<td>Decline and difficulty of raising unit price of products (processing) 22.4</td>
<td>Responding to changes in product needs 9.6</td>
<td>Intensification of competition due to emergence of large enterprises 5.8</td>
<td>Shortage and aging of production facilities 4.2</td>
<td></td>
</tr>
<tr>
<td>Wholesale Stagnation of demand 50.7</td>
<td>Decline and difficulty of raising unit selling price 14.7</td>
<td>Intensification of competition due to emergence of large enterprises 9.1</td>
<td>Intensification of competition due to emergence of retailers 5.0</td>
<td>Worsening recovering of payment 3.4</td>
<td></td>
</tr>
<tr>
<td>Retail Intensification of competition due to the emergence of large and medium-size stores 27.9</td>
<td>Stagnation of demand 24.0</td>
<td>Outflow of purchasing power to other regions 15.9</td>
<td>Meeting consumers’ needs 8.2</td>
<td>Emergence of similar businesses 7.2</td>
<td></td>
</tr>
<tr>
<td>Services Stagnation of demand 33.5</td>
<td>Meeting users’ needs 20.3</td>
<td>Increase in new entrants 10.9</td>
<td>Decline and difficulty of raising charges 8.8</td>
<td>Intensification of competition due to emergence of large enterprises 7.5</td>
<td></td>
</tr>
<tr>
<td>Construction Stagnation of public demand 26.2</td>
<td>Decline and difficulty of raising unit subcontracting income 23.6</td>
<td>Stagnation of private-sector demand 22.6</td>
<td>Intensification of competition due to emergence of large enterprises 8.5</td>
<td>Increase in new entrants 3.8</td>
<td></td>
</tr>
</tbody>
</table>


Notes: 1. Figures indicate the proportion of enterprises that chose that item as the most serious problem (one choice only).
2. Most possible responses concern short-term business conditions, as the survey is a quarterly one.

1) According to the Ministry of Economy, Trade and Industry’s Basic Survey of Commercial and Manufacturing Structure and Activity (June 1998), 85% of small and medium manufacturers, 86% of small and medium wholesalers and 81% of small and medium retailers believe they face some kind of business problem.

2) The sales DI of SMEs is also low. (See Appended Table 211-1.)
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

Fig. 211-2 Business management problems

<table>
<thead>
<tr>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>Winning orders</td>
<td>Hiring and training</td>
<td>Cheap competition</td>
<td>No successor</td>
<td>Fund raising and debt guaranteeing</td>
</tr>
<tr>
<td></td>
<td>72.2</td>
<td>38.8</td>
<td>32.2</td>
<td>30.4</td>
<td>26.1</td>
</tr>
<tr>
<td>Wholesale</td>
<td>Winning orders</td>
<td>Hiring and training</td>
<td>Cheap competition</td>
<td>Fund raising and debt guaranteeing</td>
<td>No successor</td>
</tr>
<tr>
<td></td>
<td>47.8</td>
<td>45.2</td>
<td>41.9</td>
<td>32.9</td>
<td>23.7</td>
</tr>
<tr>
<td>Retail</td>
<td>Cheap competition</td>
<td>Competition with large stores</td>
<td>No successor</td>
<td>Hiring and training</td>
<td>Fund raising and debt guaranteeing</td>
</tr>
<tr>
<td></td>
<td>40.8</td>
<td>35.3</td>
<td>33.7</td>
<td>25.2</td>
<td>20.2</td>
</tr>
</tbody>
</table>


Notes: 1. Figures indicate the proportion of enterprises in each industry that cited the problem shown.
2. Totals exceed 100 due to multiple responses.

Fig. 211-3 Trends in value of shipments of small and medium manufacturers

Source: Ministry of Economy, Trade and Industry, Census of Manufactures.

Note: Small and medium manufacturers are defined as business establishments with 300 or fewer employees. Large manufacturers are business establishments with more than 300 employees.
Chapter 1 — Business innovation by small and medium enterprises

Fig. 211-4  Trends in sales of small and medium wholesalers

![Graph showing trends in sales of small and medium wholesalers over years](image)


Note: Small and medium wholesalers are enterprises with fewer than 100 employees. Large wholesalers are enterprises with 100 or more employees.

Fig. 211-5  Trends in sales of small and medium retailers

![Graph showing trends in sales of small and medium retailers over years](image)


Note: Small and medium retailers are enterprises with fewer than 50 employees. Large retailers are enterprises with 50 or more employees.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

(2) Deterioration of fundraising environment
The stagnation of demand has a major impact on fundraising. According to the *Survey of Business Conditions among Small and Medium Enterprises* conducted by the Japan Finance Corporation for Small Business, although “burden of repayment of past loans” and “no scope for further borrowing” were cited as reasons for the tightness of SME finances, the most commonly cited reason was “decline in sales”. It is apparent, therefore, that the recent decline in sales of SMEs continues to have an impact on the still severe fundraising environment faced by SMEs (Figs. 211-6-7).

![Fig. 211-6 Reasons for fundraising difficulties](chart)

Note: Totals exceed 100 due to multiple responses.

![Fig. 211-7 Trends in financing DI of SMEs](chart)

Note: The financing DI is calculated by subtracting the percentage of firms that said financing “deteriorated” compared with the same period a year earlier from the percentage that financing had “improved”.
(3) Hiring, training and shortage of successors
The most widely cited long-term problem faced by SMEs after “winning orders” is “hiring and training human resources”. However, this does not indicate that there is strong demand for labor of all forms. Looking at the perceived sufficiency of employment in the small business sector, it can be seen that while there was thought to be a serious shortage during the bubble period, employment began to be considered excessive from the latter half of the 1990s (Fig. 211-8).

The human resources that SMEs need are specialists and technical experts (Fig. 211-9). The shortage of IT experts in particular is perhaps the biggest obstacle to the introduction and use of IT (Fig. 211-10).

**Fig. 211-8  Trends in employment DI by size of enterprise**

<table>
<thead>
<tr>
<th>Year</th>
<th>Large enterprises</th>
<th>Middle-tier enterprises</th>
<th>SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>2001</td>
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Note: DI = “excess” - “shortage”

**Fig. 211-9  Trend in technical expert and specialist employment DI**

(all industries by size of workforce)

<table>
<thead>
<tr>
<th>Year</th>
<th>30~99 employees</th>
<th>100~299 employees</th>
<th>300~999 employees</th>
<th>1,000 or more employees</th>
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<tr>
<td>1998</td>
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<td>2000</td>
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Note: The DI is the proportion of enterprises that said “excess” minus the proportion that said “shortage”.
SMEs also recognize the absence of successors to be a serious problem. The Japanese population is aging, and the self-employed are no exception (Fig. 211-11). If population aging continues, the question of how to pass on a business to the next generation will be one faced by many businesses. If businesses cannot be passed on smoothly from generation to generation, there is a risk that the business resources of the small business sector, which lies at the root of the Japanese economy’s dynamism, may be scattered and lost.

**Fig. 211-10** Obstacles to introduction of enterprise intranets

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>(%  )</th>
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<tbody>
<tr>
<td>Cannot fully utilize in the company</td>
<td>34.2</td>
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<tr>
<td>Maintenance costs outweigh possible benefits</td>
<td>26.8</td>
</tr>
<tr>
<td>No personnel capable of studying introduction of suitable system</td>
<td>24.7</td>
</tr>
<tr>
<td>Insufficient funds to cover the high cost of introduction</td>
<td>18.6</td>
</tr>
<tr>
<td>Waiting due to rapid advance of computing technology</td>
<td>11.1</td>
</tr>
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</table>

Source: Compiled by the Small and Medium Enterprise Agency based on Japan Finance Corporation for Small Business, *Current State and Outlook for Adoption of Information Technology by Small and Medium Enterprises* (October 2000).

Notes: 1. Totals exceed 100 due to multiple responses.
2. Top five most cited responses.

**Fig. 211-11** Breakdown of age structure of the self-employed

(non-agriculture and forestry)

<table>
<thead>
<tr>
<th>Year</th>
<th>29 or under</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60 or over</th>
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<tbody>
<tr>
<td>1980 average</td>
<td>7.3</td>
<td>27.8</td>
<td>29.7</td>
<td>19.5</td>
<td>15.8</td>
</tr>
<tr>
<td>1990 average</td>
<td>5.0</td>
<td>16.7</td>
<td>35.7</td>
<td>25.9</td>
<td>21.7</td>
</tr>
<tr>
<td>2000 average</td>
<td>5.1</td>
<td>12.5</td>
<td>23.5</td>
<td>30.4</td>
<td>31.6</td>
</tr>
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3. Expectations of SMEs: Steps toward the creation of self-sustaining SMEs

Facing these sorts of problems, the behavior of Japanese SMEs has begun to change in recent years. According to the Ministry of Finance’s Financial Statements Statistics of Corporation by Industry, the sales of SMEs (corporations with capital of ¥10 million or over and under ¥100 million) since 1999 have remained approximately level. Ordinary profits, however, have rapidly recovered since the first three months of 2000 (Fig. 211-12). This increase in earnings appears to be due to cuts in personnel costs (Fig. 111-15).

Looking at the capital investment and cashflows of SMEs, it can be seen that cashflows overtook capital investment from April-June 1999, and that stances on capital investment have grown more cautious (Fig. 211-13). To cope with the slump in sales, SMEs are rationalizing personnel costs and capital investment, and are frantically restructuring in order to restore business results to former levels.

Alongside taking such action, it is hoped that SMEs will identify their own strengths and weaknesses and come to terms with the business environment that they face, adopting a dynamic approach, not hidebound by precedent and conventional industry practices, that enables them to stand on their own two feet and play a central role in the revitalization of the Japanese economy.

This current time of depression is also a time that offers bright opportunities for companies. Some SMEs have already taken advantage of these opportunities to innovate, ready to take center stage in the next round of growth.

In this chapter, we shall look at the various challenges currently confronting SMEs in Japan, paying particularly close regard to SMEs which are innovating to solve these business problems.

The small business sector is highly diverse. Not surprisingly, there are some business problems that confront companies in a number of industries, and some that are peculiar to particular industries. In Section 2, we shall focus on the responses of SMEs to business problems that cross the boundaries between industries, and in Section 3 we shall look at the business problems and responses of SMEs in particular industries. In Section 4, we focus on IT, use of which has spread among SMEs in recent years.

**Fig. 211-12 Trends in sales and ordinary profits of SMEs**

![Graph showing trends in sales and ordinary profits of SMEs](image)

**Source:** Ministry of Finance, *Financial Statements Statistics of Corporation by Industry.*

**Notes:**
1. All figures have been adjusted by the three-quarter backward moving average method.
2. Both sales and ordinary profit are indexed against the end of FY1988 (=100).
3. SMEs are business corporations with capital of ¥10 million or over and under ¥100 million.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

Fig. 211-13  Trends in capital investment and cashflow of SMEs

Notes: 1. All figures have been adjusted by the past three-quarter moving average method.
2. Cashflow = operating profit x 1/2 + depreciation costs
3. SMEs are business corporations with capital of ¥10 million or over and under ¥100 million.
Section 2 Cross-industry issues

1. Measures to expand customer base

As seen in the previous section, the stagnation of demand is recognized to be the most serious business problem faced, outweighing the business problems relating to the intensification of competition between enterprises, such as the intensification of competition due to the emergence of large enterprises and the increase in new entrants (Fig. 211-1). That this is so is an indication that the managers and proprietors of SMEs, while recognizing that they face a prolonged slump, are unable to properly determine what it is that customers require. This is because during the 1990s, the hitherto apparently stable relations between SMEs and their customers underwent a dramatic transformation, and the managers and proprietors of SMEs are now unsure of winning customers.

1) In manufacturing, the traditional relationship between parent companies and subcontractors is breaking down (Fig. 212-1). Parent companies are now being more selective in their choice of the small and medium manufacturers to which they have until now subcontracted the production of parts and other products and materials.

2) The affiliated outlets of large consumer electronics manufacturers have, in contrast with the growth of suburban large discount stores, entered a slump.

3) Motorization has increased the popularity of large suburban discount stores and shopping centers, while the drawing power of city centers has waned dramatically.

4) The complexity of relations between wholesalers and the length of the distribution chain has been identified as a problem in Japan. In recent years, however, there has been an increase in transactions bypassing the middle men due to the increasing use of IT and the more rigorous selection of wholesalers, thus shortening distribution channels (Fig. 212-2).

5) As is apparent from the increase in selective consumption, consumption is diversifying (Fig. 212-3).

With these points in mind, therefore, we look at SMEs that have succeeding in identifying customer needs and winning new customers by tailoring their goods and services to meet these needs.

(1) Solicitation of feedback from purchases to enable improvement of products

The most important and basic means of acquiring information on what customers need is to monitor the impressions of users who purchased a product. Below we introduce a one company that has steadily practiced such an approach.

![Fig. 212-1 Trends in the proportion of small and medium subcontractors](image)
(2) Development of products reflecting customer needs

As seen in (1) above, it is possible to solicit the opinions of customers by sounding out the impressions of users after the development of a product. In the case of products such as homes, however, which are difficult to improve after construction, it is more efficient to determine and respond to the needs of customers from the design and development stages. Below, therefore, we describe the case of a company that made improvements by sounding out the views of potential users—both businesses and individuals—at the trial production stage in order to make improvements, and the case of a company that develops technology utilizing a network linking it with outside entities to solve customers’ problems.

Case 6  Company finds new outlets for product and increases sales by listening to customers

A Ltd. is a Tokyo-based manufacturer and distributor of hygiene products with a workforce of eight. After developing a portable toilet, the company sought the honest opinions of customers by participating in emergency drills and sponsoring a “present corner” campaign in magazines. The company discovered as a result that there was a need for a portable toilet—which the company had initially designed for emergency use in other fields, such as the nursing care and outdoor pursuits markets. The company therefore began to market the product to hospitals and outdoor stores, thereby increasing sales.

Company takes part in emergency drills to hear directly from customers

The Hanshin-Awaji Earthquake made the company keenly aware of the need for a portable toilet, and so developed one. After development, the company actively participated in emergency drills organized by local governments and neighborhood associations in order to find out users’ opinions. Grassroots publicity of this kind was initially undertaken because the company was unable to spend large sums on advertising. However, such events also provided a valuable opportunity for hearing from users. Because of the almost complete absence of people who had thought about the problem of the availability of toilet facilities in emergencies, the company’s sales staff were able to hear the frank views and questions of participants who had only just realized the importance of such facilities. Opinions relating to product improvements and sales promotion were immediately reported upon their return to the company.

The company also distributed questionnaires to people along with samples in order to determine users’ impressions. In order to raise the response rate, the company offered telephone cards to respondents.

Views of customers suggest wide range of needs e.g. in nursing and outdoor fields

The product was initially developed for emergency use. However, one question asked at an emergency drill suggested to the company that there also existed a wide range of needs for such a toilet for use in e.g. nursing care and outdoor pursuits, and at times of traffic congestion. Hitherto, the company had concentrated its efforts on marketing the product to government agencies. Having become aware of these other needs, however, the company expanded its marketing activities to encompass mountaineering clubs and outdoor shops.

Fig. 212-2 Comparison of size of wholesale/retail ratio at the wholesale stage

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<tr>
<td>1~4 employees</td>
<td>2.32</td>
<td>2.91</td>
<td>-0.59</td>
<td>-0.60</td>
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<tr>
<td>5~19 employees</td>
<td>2.25</td>
<td>2.05</td>
<td>0.20</td>
<td>0.15</td>
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<tr>
<td>20~49 employees</td>
<td>2.11</td>
<td>2.01</td>
<td>0.10</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>50~99 employees</td>
<td>2.09</td>
<td>2.34</td>
<td>-0.25</td>
<td>-0.25</td>
<td></td>
</tr>
<tr>
<td>100 or more employees</td>
<td>2.3</td>
<td>3.51</td>
<td>-1.21</td>
<td>-1.21</td>
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Note: Wholesale/retail ratio = (sales to wholesalers + sales to retailers) / sales to retailers
A Ltd. is a manufacturer of commercial kitchen appliances. Based in Osaka, it has a workforce of 73. When developing a grill for commercial use, it had a potential future customer try out a number of trial products in order to remedy points that they were dissatisfied with so as to produce better products.

**Repeated provision of trial products**

Hearing about B Ltd., a large operator of a chain of bars that asked one of its suppliers to make certain improvements to a grill that it made but was refused, A set about developing a product. Once a trial product had been completed, the company asked B to evaluate it by trying it out in its bars. This was because it was not possible to tell how easy the product was to use and to assess its grilling performance without putting it to actual use. The first prototype was not found to be satisfactory, however, and B pointed out a variety of flaws. A therefore produced another prototype that remedied these shortcomings for B to try out again in its bars. The designers responsible for the product’s development visited B’s bars to sound out users’ opinions and observe how the product was used, and in this way the prototypes were repeatedly improved and evaluated. The designers were given a valuable opportunity that they would not otherwise have had to hear directly the views of users. By observing how the product was actually used, they also discovered things that they would not otherwise have seen, such as the differences in the use of grills depending on the skill of the cook.

**One year spent on perfecting the product**

It ultimately took about a year for the product to be completed to B’s satisfaction. The development period was longer than initially planned, and there were concerns within the company regarding whether the personnel costs and cost of production of the prototypes could be recouped. The president continued with development, however, saying it was a good opportunity and that the company should listen to the customer’s opinions as far as possible. There was also initially some resistance from the designers, who were reluctant to be subjected to direct criticism from users regarding the prototypes that they had produced with such confidence. However, the end product was clearly superior to rival products, and was finished to the satisfaction of its designers.

The company had hitherto been skilled at developing highly innovative new products, but was somewhat dependent on the skills and intuition of its designers. As a result of this episode, however, the company came to emphasize a development style based on directly sounding out the opinions of potential users at the development stage. The company has also established facilities at its plant enabling users and designers to test products together.
Case 8: Design of homes by individually combining the opinions of prospective buyers of condominiums

Based in Tokyo and with a workforce of 63, A Ltd. is a planner and designer of homes. The approach it has successfully adopted is to first lay down the basic specifications for condominiums (such as the area per unit), advertising to attract prospective buyers interested in purchasing a condominium, and making individual adjustments for each applicant so as to combine their requirements.

Learning from precedent
The company’s main line of business is the planning and design of cooperative housing (apartment houses designed and built to the specification of prospective buyers advertised for prior to the design stage). While the advantage of cooperative houses is that they can be built to suit the tastes of prospective buyers, the downside is the hard work that must be put in to combining the requirements of prospective buyers before actual construction can begin. A was not in fact the first company to build cooperative housing in Japan, but it was the first to do so profitably.

The company conducted interviews with design agencies and others with experience of cooperative housing prior to starting up in this line of business. It concluded as a result that it would be difficult to integrate the disparate requirements of prospective buyers, and that, even if they were forcibly combined, some prospective buyers might continue to be dissatisfied.

Lessons of trial marketing
The next company planned cooperative housing on an experimental basis (trial marketing) to determine what problems might cause the adjustment of requirements to be difficult. Initially, the company ran into problems when it attracted prospective buyers and had them adjust their requirements without first laying down the basic specifications of a project. Working on the basis of the correspondence received at the adjustment stage, the company laid down the basic specifications regarding e.g. the area per apartment and external appearance of the building, and advertised for prospective buyers interested in the project. At the same time, the company scrapped the idea of having prospective buyers adjust their requirements among themselves. Instead, the company and applicants corresponded on an individual basis so as to integrate requirements. The decision was made to construct three cooperative housing apartment buildings, and the project was completed last. The company as a result acquired the know-how for putting together designs.

In order to reduce the cost of cooperative housing, which is expensive in terms of time and effort, advertising was restricted to the use of handbills, word of mouth and homepages, and no model rooms were built. The business consequently yielded a profit from the seventh project, and the company is now involved in a series of new projects.

Case 9: Company receives public subsidy, cooperates with other companies to develop technology, and develops and manufactures building materials to solve customers’ problems

Based in Hyogo Prefecture and with a workforce of 31, A Ltd. is involved in the import, sale and maintenance of automatic wood-planing machines. Confronted with a leveling off of sales, the company decided to develop and begin commercial production of recycled wood building materials produced from the wood waste that the homebuilders that made up its customers found hard to dispose of. Funded by a public subsidy, the company has now set up an inter-industry exchange committee with homebuilders and is developing technology.

Motivated by leveling off of sales of core products
Recycling and cheaply disposing of wood shavings, sawdust and waste wood from demolished buildings had long been a problem for homebuilders. Due to being designated as industrial waste, it was not possible to incinerate or dump such waste. Because of the absence of any way of recycling large quantities, however, it was costly to dispose of. The managing director of A, who was a technology expert, was interested in engaging in R&D in order to solve customers’ problems, but it was not possible to actually embark on such a course as the development of technology was not the company’s principal line of business.

At the start of the 1990s, however, when the housing market peaked, the housing industry began to cut back on capital investment, and sales of wood-planing machines, which constituted the company’s core products, leveled off. Deciding that it was necessary to enter a new field, the president established a team led by the managing director, and set about developing the technology to manufacture recycled wood building materials by mixing the wood shavings generated in large quantities by home builders with waste plastic produced by electrical manufacturers. The choice of such a technology was influenced by the fact that recycling of construction waste was made mandatory under the Construction Materials Recycling Law (Demolition Recycling Law), which suggested that demand for recycling would expand in the future.

Acquisition of public subsidy, establishment of inter-industry exchange committee and launch of development of technology
The company applied for and received a grant for R&D on creative technology, giving it the necessary funds to undertake development. In order to gain ideas on the development of technology and on the production side of things, the company appealed to homebuilders, electrical makers, waste disposal providers and experts in the field, and established a waste wood and plastics study team. (The approval of a grant helped attract participants.) In order to make the technology commercially profitable, the company is now proceeding with R&D to reduce production costs and improve quality and collection.
Chapter 1 — Business innovation by small and medium enterprises

In this age of physical excess and affluence, there is a growing demand for new products and services that will satisfy people’s psychological needs. It has therefore become essential to growth to take account of the outlook and feelings of women, who are thought to have 70% of the final say in purchasing decisions.

The spread of the Internet has reduced the barriers to women starting up in business to realize their dreams and contribute to society, and there is growing start-up activity in the SOHO sector.

In many cases, the enterprises started up by women have succeeded by providing uniquely “feminine” services to help people in trouble having noticed and overcome the inconveniences faced in everyday life.

A Ltd., an online gift shop in Osaka Prefecture with a workforce of eight, is one such company. Its popularity stems from the fact that it provides services from a customer perspective.

The company’s founder set out in business as a result of her own experience of being unable to spend time in stores choosing the things that she wanted.

However, this founder has never worked at a gift shop. After having a baby, she needed to buy various gifts and presents, but was unable to spend time shopping at gift shops because she had to take her baby with her, and wondered whether there was a way of choosing gifts at home. Realizing the convenience of the Internet (which was just beginning to take off in Japan) for people who could not easily go out shopping, she established an Internet gift shop.

Shoppers also seek advice on what presents to buy

When buying presents, people are concerned not only about price, but also things such as the recipient’s taste and likes, and etiquette when giving presents. They therefore require appropriate advice when buying gifts.

Having experienced such feelings herself when shopping for presents, the president makes sure of providing plenty of advice on gifts on the company’s homepage. The company also responds promptly to e-mail inquiries.

The company provides other services sought by customers, such as informing customers of anniversaries. As a result, sales are growing strongly.
2. **Active use of useful overseas resources and expansion of markets**

Because of the increasingly competitive state of domestic markets caused by economic globalization in recent years, it is now more important than ever that SMEs no longer persist in procuring all their business resources and sales outlets only in Japan, but also consider using overseas resources and moving into foreign markets as a part of their business strategy using

(1) **Enterprises utilizing outstanding overseas business resources to boost competitiveness**

While full-fledged efforts are now underway in the small business sector to expand business overseas, there remain many enterprises seeking to develop their core business domestically by, for example, establishing new business operations and new products, rather than expand overseas and face the variety of risks that such a move entails (Fig. 151-2). Below, therefore, we describe a number of companies that are making active use of overseas research and design skills unavailable in Japan in order to boost the competitiveness of their core operations in Japan.

**Case 10: Company boosts competitiveness by acquiring results of research overseas**

A Ltd., which is based in Gifu Prefecture and has a workforce of 172, produces health foods whose active components are derived from microscopic algae. While striving to rationalize and pare costs to the bone, the company also invests substantially in its own R&D, and is strengthening its competitiveness through its own network of university professors and researchers, and by making use of the results of research conducted overseas. By initially visiting professors of agriculture and microbiology at national universities to obtain their cooperation with papers for academic conferences that it could not have produced by itself, it added value to and increased confidence in the products it developed. The company also enhanced its own R&D capabilities by obtaining the help of researchers in microbiology at central health centers and researchers at large pharmaceutical manufacturers. As well as conducting its own research, A also successfully sought to gain the exclusive worldwide license for marketing the active components researched and extracted from microscopic algae by B, a research institute in Israel. (The powerful support of the above network of researchers and academics built up by the president was an important factor that helped it to win the license.) Having developed a commercial product using this active component, the company was swamped by orders from around the world, increasing the company’s competitiveness still further. The company’s intention is to continue to conduct its own research while also utilizing the fruits of overseas research using its human network.

**Case 11: Company uses outstanding foreign design skills to differentiate itself from other companies**

A Ltd., which is based in Osaka Prefecture and has a workforce of 56, deals in decorative metal fittings for household use (such as doorknobs). It has distinguished itself from its competitors by conducting the planning side (such as the size and specifications of products) in Japan, and then contracting an Italian firm with outstanding design skills to manufacture them. The company initially specialized in the import and sale of excellently designed Italian products. Recognizing that it could not compete if a large trading company entered the arena, however, the company decided to utilize the design skills of Italian companies and have them manufacture products planned in Japan to Japanese specifications. The company therefore engaged in repeated talks with an Italian manufacturer to build up trust, and succeeded in placing an order for the manufacture of such products. The imported products initially cost 2.5 times as much as equivalent Japanese products. The company therefore sold the products as luxury foreign imports targeted at wealthier consumers. As the yen appreciated, however, the company succeeded in targeting a wider range of consumers, marketing the products as cheap fittings excellently designed to meet Japanese tastes, and sales are now increasing.
A Ltd., which is based in Chiba Prefecture and has a workforce of 95, is involved in selective breeding and research on crossbreeding of a variety of seeds suited to soil and climates around the world. Utilizing a network developed by the company, seeds for commercial sale are produced in ideal locations around the world. Seeds that need to be crossbred by hand are produced in China, Thailand and Chile, where labor costs are low, and seeds that need to be crossbred by bees are produced in countries such as the United States, Australia, New Zealand and Italy, where there are many secluded regions in the mountains that are unaffected by pollen from other plants.

The decline in the number and aging of farming households pushed up the cost of production of commercial seeds and reduced the company’s competitiveness. It therefore concentrated on production overseas in order to reduce costs and ensure business succession. At such time, access was gained to ideal locations around the world suited to manual and bee crossbreeding by using the World Seed Organization’s network of businesses around the world, whose cooperation was obtained due to the importing of seeds.

**Case 12: Company succeeds in gathering variety of seeds by securing access to optimum locations around the world (Fig. 212-4)**

**Fig. 212-4  Company boosts competitiveness by gaining access to ideal locations around the world**

- **Crossbreeding by bees**
  - Secluded mountain areas unaffected by other pollen
  - U.S., Australia, New Zealand, Italy

- **Crossbreeding by hand**
  - Countries with low labor costs and land prices
  - China, Thailand, Chile

**A Ltd.**
- Selective breeding and research on crossbreeding of seeds suited to soil and climates around the world

**Fall in number of farming households in Japan**
- Aging of farming households in Japan

**Overseas expansion**
- Use of World Seed Organization’s network

**Case 13: Purchase of farms in the U.S. in order to obtain land for organic cultivation**

A Ltd. is a bean sprout producer in Gifu Prefecture. In order to distinguish itself from other companies, it has become involved in organic cultivation. It therefore cultivates seeds on farmland in the U.S. that meets the organic farming standards of a U.S. organic farming certification body because land in Japan does not meet these standards. The company imported seeds cultivated in China via trading companies for production in Japan. After investigating all aspects of the environment, such as the environment in farms, transportation routes, and conditions at the place of origin of seeds, it found that the seeds did not reach the standards laid down by a U.S. organic farming certification body. The company therefore began cultivation of seeds.

Because of the state of use of farmland and use of agricultural chemicals in Japan, however, the company could not meet the necessary standards even if it produced them in Japan. It therefore tried cultivating seeds in the U.S. by borrowing land that met the standards through an acquaintance. Having as a consequence managed to cultivate and obtain a stable quantity of seeds, the company purchased land in the U.S. and engaged in full-scale cultivation the following year for import into Japan. By importing seeds cultivated in the U.S., it is now able to produce organically cultivated bean sprouts in Japan, and so set itself apart from its competitors.
Use of resources that are familiar in Japan to improve products and expand markets

One of the main reasons cited by companies for expanding overseas is to open up and expand new markets (Fig. 151-3). Developing markets is easier said than done, however, and many companies end up by abandoning such efforts (Fig. 151-5). Below, therefore, we describe a number of companies that have succeeded by modifying their products using familiar Japanese resources.

Case 14: Company succeeds in tapping niche market in Japan using its experience of overseas markets

A Ltd., which is based in Osaka Prefecture and has a workforce of 69, is a manufacturer and distributor of wood and bamboo interior blinds. Using the experience it gained moving into overseas markets, the company succeeded in tapping into a niche market in Japan. Seeing that there was a long-established market for bamboo blinds as a part of interior design in the U.S., the company used traditional techniques for manufacturing Japanese-style blinds to start manufacturing and marketing blinds for the U.S. market. Although it began by supplying simple blinds, the variety of needs for products in the U.S. market and the diversity of designs led it to develop a variety of products to meet subtly differing needs, and established a base in the U.S.

Because of the appreciation of the yen and the growth in production of blinds in the NIEs of Asia, the company became keenly aware of the need to open up new markets, and so decided to tap into the Japanese market. Using its experience of business in the U.S., the company developed bamboo and wood blinds and rugs as well as traditional Japanese-style blinds (acquiring three patents in the process). It also used newly developed bamboo materials in products. As a result, the company began producing to order for corporations, and succeeded in tapping into the Japanese market.

Case 15: Company expands market by using traditional Chinese herbs and Oriental medicine as ingredients for medical supplies and cosmetics for North American and European markets (Fig. 212-5)

Based in Gifu Prefecture and with a workforce of 132, A Ltd. is a manufacturer of ingredients for medical supplies and cosmetics. Because of limited custom and sale in Japan, the company turned its eyes overseas and is now aggressively exporting. Using the ideas for products gained in its transactions with foreign companies, the company has reaped considerable success by marketing ingredients extracted from Chinese herbs (such as turmeric, which has an antibacterial effect different from the mainstream aloe and herbs found in North America and Europe that have a “whitening” effect) and Oriental medicines (such as Lithospermi Radix, which has an anti-inflammatory effect). When the company’s sales managers went overseas on a fact-finding mission, they were asked whether there were no Oriental ingredients in Japan. Believing that there was considerable potential demand for “Oriental” products, it conducted some research and came upon Chinese herbs and Oriental medicines. It also discovered that these herbs and medicines had different effects, such as antibacterial and anti-inflammatory effects, that aloe and herbs did not have. The company used its own techniques to develop and market ingredients extracted from them. These met with a huge response both in Japan and overseas, enabling it to tap into a new market and further strengthen its international competitiveness.
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Fig. 212-5 Expansion of market through improvement of Chinese herbs and Oriental medicines familiar in Japan

Case 16: Traditional craft products modified for overseas markets contribute to growth in domestic demand

Based in Iwate Prefecture and with a workforce of 40, A Ltd. is a manufacturer of a type of traditional Nanbu ironware, and exports its products to Europe. Because of poor sales to begin with, the company developed an innovative range of colorful ironware, which it discovered appealed not only to consumers in Europe, but also to a new class of customer that bought interior design products in the Japanese market, where demand was sluggish.

Since the emergence of stainless steel and aluminum products in Japan since the 1980s, the company had suffered from weak demand for Nanbu ironware. As a solution, the company sought to move into the European market, where there is a preference for tough products and an interest in the "mysterious" culture of the Orient.

The company began by exhibiting Nanbu ironware at exhibitions in Europe for two years, but sales were poor. Seeking the advice of local trading companies and agents, the company was told that it was not the design but rather the traditionally dull black and gray coloring that was proving unpopular with consumers. The company therefore spent five years developing the technology to color the surface of ironware in bright colors such as red and yellowish-green. These products were not only a hit as articles for daily use, but also proved popular with a new type of customer who was interested in the products as items for interior design. Orders exceeded production capacity, and the company's name became synonymous with Nanbu ironware. Since then, there has been an increase in orders for production of ironware of a variety of colors and designs from local trading companies and agents. Where deemed profitable, the company proceeds with commercial production, and most products have been highly popular.

In the domestic market too, which has been sluggish in recent years, there have been orders from new sales outlets, such as specialist shops selling luxury general merchandise and interior design shops that saw the company's products overseas, and demand is again growing.
Companies that have adapted to the various risks associated with expansion overseas

Expanding overseas is very likely to yield various benefits other than the expansion of markets, such as the startup of new business (Fig. 151-4). Because expanding overseas means doing business with partners with different customs and cultures to Japan, however, there exist many risks that may ultimately force a company to pull out (Fig. 151-5). Below, therefore, we describe some companies that have adapted appropriately to the various problems that arise with suppliers, customers and employees by making careful preparations for expanding overseas.

Case 17: Promotion of BtoB business by checking out customers and negotiating payment in advance (Fig. 212-6)

A Ltd., which is based in Saitama Prefecture and has a workforce of 68, is actively exporting gears that it makes. It initially only exported through an agent, but it is now focusing on BtoB transactions using IT. BtoB business entails a number of uncertainties, such as the fact that a company does not know what companies it will be doing business with. A has overcome these risks by, for example, checking other companies’ homepages to check up on their business, and by negotiating payment in advance with the cost of freight charges included. A became involved in BtoB business as a result of its participation in inter-industry exchanges and study meetings organized by public agencies, which made the president aware of the need for IT. The company thus became one of the first to set up a homepage, and also supported and joined e-mails combining data on numerous makers. To deal with technical inquiries, the company has established a highly rated, comprehensive company-wide backup system whereby representatives from the technology division take responsibility for responding to inquiries, and it has won a series of orders from overseas by e-mail without going through local agencies. Because nothing is known about the companies that place orders, it avoids risk by checking out their homepages and negotiating payment in advance.
3. Facilitation of financing

(1) Current situation

As seen in the previous section, the most serious problems faced by SMEs are the decline in orders received and level of cheap competition. By reducing sales, these business problems also have a negative impact on SMEs’ financial position (Figs. 211-1, 211-6). Because declining sales discourage capital investment in boosting capacity, demand for long-term funds falls. However, demand for funds to pay back existing debt, which remains the same regardless of sales, does not drop significantly. As a consequence, a decline in earnings also often leads to a decline in overall cash flow.

In order to improve the finances of SMEs, it is important to increase sales. However, the burden of repayment of existing loans is also a serious problem (Fig. 211-6). Looking at the burden of repayment of existing loans in terms of interest-bearing debt as a proportion of cash flow (period required for repayment), it can be seen that the burden on SMEs increased from 1989 to 1998, and that the period required for repayment (19 years) was higher than that for large and middle-tier enterprises (Fig. 212-7). Regarding dependence on borrowing, too, there was an increase during the 1990s (Fig. 141-3).

There has at the same time been a change in the lending attitude of financial institutions toward SMEs in that there is now a tendency to consider the security of a company when lending to an SME. According to the National Life Finance Corporation’s Survey of Bank Borrowing in the Small Business Sector (July-August 2000), the higher the dependence on borrowing and the ratio of net worth, the greater the variation in borrowing rates (Figs. 212-8~9). A comparison of the coefficient of correlation between the gap in interest rates (difference between the short-term prime rate and borrowing rate at the time of a loan) and the dependence on borrowing, and the coefficient of correlation between the gap in interest rates and the ratio of net worth between 1997/8 and 1999/2000, shows that the later is higher, which indicates that there is a gradually growing tendency to place greater emphasis on the security of enterprises (Fig. 212-10).

Facing the burden of repaying existing loans, and required by financial institutions to demonstrate their security, SMEs thus face a harsher fundraising environment. As the return on assets (ROA) was between 6% and 8% until 1991, but then declined dramatically (Fig. 212-11), it can be seen that the aggressive capital investment of the early 1990s failed to generate cashflow, and as a consequence served only to increase the burden of debt.

Below, we look at a company that succeeded in squeezing purchasing costs by determining accurate financial data (cost price structure) and a company that improved its financial position by preparing financial-related statements from the perspective of facilitating the fundraising through indirect financing by SMEs. We shall then touch on the role expected of financial institutions and recent response of the Government from the perspective of facilitating the financing of SMEs. Finally, we shall describe the development of the market in order to provide more diverse means of financing.
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**Fig. 212-7 Period required for repayment of interest-bearing debt based on cashflow**

![Graph showing period required for repayment of interest-bearing debt based on cashflow]

**Source:** Ministry of Finance, *Financial Statements Statistics of Corporation by Industry.*

**Notes:**
1. SMEs are business corporations with capital of under ¥100 million, middle-tier enterprises are business corporations with capital of ¥100 million or over and under ¥1 billion, and large enterprises are business corporations with capital of ¥1 billion or over.
2. Interest-bearing debt = short-term loans + long-term loans + bonds
   Cashflow = operating profit x 1/2 + depreciation costs

**Fig. 212-8 Change in gap in interest rates (average) according to dependence on borrowing**

![Graph showing change in gap in interest rates (average) according to dependence on borrowing]


**Note:** The gap in interest rates is the difference between the borrowing rate and the short-term prime rate at the time of the loan. Averages of responses.
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Fig. 212-9 Gap in interest rates by ratio of net worth

Notes: 1. The gap in interest rates is the difference between the borrowing rate and the short-term prime rate at the time of the loan. Averages of responses.
2. Ratio of net worth = (net worth / total capital) x 100

Fig. 212-10 Coefficient of correlation between ratio of net worth and dependence on borrowing, and gap in interest rates

Note: Coefficient of correlation for 1999-2000 is significant at the 5% level.
Facilitation of fundraising through indirect financing

1) Activities of SMEs

Given the decline in ROA, it is important that SMEs engaging in fresh capital investment consider the cost of investment against earnings so as not to repeat the mistakes of the past. It is therefore crucial that they strive harder to ascertain financial data. In order to alleviate the burden of repayment of existing loans as well, they should also take steps to enjoy the advantages in terms of financing of disclosing financial data that can be trusted by other parties.

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Fig. 212-11  ROA by size

Notes: 1. ROA = (operating profit + non-operating income) / total assets
2. SMEs are business corporations with capital of under ¥100 million. Large enterprises are business corporations with capital of ¥100 million or over.

Case 19: Chinese restaurant improves results by ascertaining and overcoming its weaknesses (high cost of sales ratio) by ascertaining financial data

A Ltd. is a Chinese restaurant based in Tokyo with five employees. Discovering from financial data that its cost of sales ratio was high, it addressed this problem and succeeded in improving profits.
The first thing it did in order to determine what course of reform it should adopt was to gain a better picture of its own financial data. The president spent between 30 minutes and an hour each day entering and analyzing data on a PC in an effort to determine the company’s prime cost structure. Comparing the data with that of other leading Chinese restaurants, he discovered that the company’s cost of sale ratio was much higher. The restaurant tried changing containers and serving sizes, but this had little impact on its results. In the end, therefore, the company revised its menu. Previously, for example, it offered fried rice with crab and fried rice with prawns as separate items on the menu. These were consolidated into one-fried rice with seafood—-with the result that use of crab and prawns was reduced and use was made of cheaper whitefish, squid and scallops, creating a more profitable dish. The restaurant also ordered in processed meat for the slices of pork used for ramen. By ordering in unprocessed meat, however, it reduced the cost of sale ratio from 59% to 31%.
Another step taken was to halve the more than 120 items on the menu and focus on dishes popular with customers in order to enable sales data on each type of product to be determined by season, day, time and customer segment. Excess stocks were also minimized. Not only did the company revise costs, but it also sought to increase support among customers by making sure it purchased high-quality ingredients and by improving service. As a result of these efforts, it succeeded in reducing its cost of sales ratio to the average for leading restaurants, and it improved its bottom line.
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Case 20: SME succeeds in raising funds by disclosing annual reports and business plans showing the soundness of its business to financial institutions

A Ltd. is a restaurant based in Saitama Prefecture with five employees. Despite lacking property to pledge as security, the company applied for and obtained a loan for opening a new branch from a financial institution. B Ltd., which is a Saitama-based manufacturer of meat plant with a workforce of 27, fell into financial difficulties as a result of being sued for damages over a business matter. It applied for and succeeded in obtaining a loan from a financial institution to tide it over.

The secret to the two companies’ fundraising success lies in their financial reports and business plans. At the advice of their tax accountants, both companies prepared business plans for improving their financial position and financial reports drawn up in accordance with accounting legislation. Their financial reports included statements of profit and loss, balance sheets, cashflow statements and operating reports. Their tax accountants audited the two companies each month, and drew up the documents based on their books of account, which had been verified to be both accurate and lawful. The business plans contained details of basic business policy, priorities and plans of action, and also described their profit targets and financial plans, and measures for improving and strengthening their financial position.

The two companies submitted their financial reports and business plans to financial institutions when they applied for loans. Financial institutions are interested in borrowers’ ability to repay loans. These financial reports and business plans were therefore useful for proving that the two companies were sufficiently capable of repaying their loans, and demonstrated their financial management ability.

The relationship between lending and determination of financial data in the small business sector in the U.S.

It was noted above that SMEs should take steps to take advantage of fundraising opportunities by disclosing financial information that can be trusted by others. In an environment where financial institutions are sensitive to lending risk and profitability, however, there is likely to emerge a difference in whether loans are offered and the terms of loans between those companies that ascertain and disclose their financial data, and those that do not. Companies that cannot easily be investigated by financial institutions when they apply for loans should find it particularly difficult to obtain loans unless they actively keep track of their own data and endeavor to reduce the cost of investigation for financial institutions.

This point has been researched by Peterson and Rajan (2000) using a sample from a questionnaire survey conducted by the U.S. Small Business Agency (SBA) and the Federal Reserve Board (FRB). This empirical study used the results of a questionnaire survey of SMEs in receipt of loans from financial institutions, which included financial data (such as the distance between the principal place of business and the financial institution, and the first year of a loan) as well as the scale of companies and their performance. Because the cost of investigation for the lender normally increases the greater the distance between the financial institution and the borrower, it is thought to be harder for companies located further away from financial institutions to obtain loans. In order for such businesses to obtain loans, they should therefore be expected to actively determine and disclose data.

In order to verify this hypothesis, Peterson and Rajan investigated the coefficient of correlation between the distance between a financial institution and SME, and the disclosure of financial data. They found this to be statistically positively significant. In other words, businesses located far away from financial institutions and yet in receipt in loans more actively keep track of and disclose information than businesses located closer to financial institutions.

3) As this questionnaire did not ask SMEs when and by what financial institutions they had been refused a loan, it is not possible to calculate directly the correlation between monitoring and disclosure of information, and receipt of a loan.
2) Role of financial institutions
As already seen, financial institutions tend to attach greater importance to data regarding the “security” of SMEs, such as the equity ratio and dependence on borrowing, when providing loans. However, such data only make up some of the information about a business. Basically, funds are likely to be extended by financial institutions commensurate with the risk and profitability of a business. Compared with large enterprises, SMEs have yet to build up sufficient data (such as data on defaulting) to enable credit risk to be assessed. Recently, small, unsecured loans provided after accelerated screening using credit scoring have started to be made by city and regional banks as new lending instruments for SMEs, but these have yet to be adopted widely.1) Because of this, there remain concerns that SMEs with insufficient assets to offer as security and SMEs making maximum use of credit guarantees may be incapable of quickly raising funds when they need them in a hurry. Financial institutions too need to take a longer term view of credit decisions taking into consideration various data on, for example, credit risk and the content and growth potential of businesses, as well as the equity ratio and dependence on borrowing.

3) Government response
(a) Credit guarantees
Because SMEs tend to be less able to provide security than large enterprises, they are often unable to obtain sufficient loans from private-sector financial institutions. In such case, the Government facilitates the financing of SMEs through, for example, credit guarantee corporations, which guarantee the debts of SMEs.2) At the time of the credit crunch following the fall in confidence in the financial system in the autumn of 1997, the Cabinet adopted a policy to combat the credit crunch faced by SMEs in August 1998, under which the Government established the special credit guarantee system for stabilizing the finances of SMEs ("special guarantee system") and expanded the provision of loans by government-affiliated financial institutions.

Fig. 212-12 Trend in number of loans guaranteed under the special credit guarantee system

Source: Small and Medium Enterprise Agency.
Note: The total number of loans that had been guaranteed as of February 2001 was 1,597,144.

1) Such products accounted for 0.3% of the loans to SMEs of one certain financial institution in August 2000.
2) Credit guarantee corporations were established in 52 locations throughout Japan. When an SME with insufficient security seeks to obtain a loan from a private-sector financial institution, these corporations guarantee the loan and, in the event that the borrower becomes insolvent, repay the loan for the borrower. The risk of a credit guarantee corporation having to make a subrogation payment is covered by JASMEC, which provides reinsurance (credit insurance).

The value of loans to SMEs by financial institutions guaranteed under the system was around ¥42 trillion at the end of June 2000, equivalent to 13% of the ¥321 trillion in outstanding loans to SMEs.
As of February 2001, some 1.6 million loans had been guaranteed under the special credit guarantee system, and around ¥27 trillion of the total ¥30 trillion allotted had been used (Figs. 212-12-13). According to the Questionnaire Survey of Enterprises Using the Special Credit Guarantee System conducted in March 2001, the commonest use of funds raised under the special credit guarantee system was “reborrowing of the decrease in existing borrowing”, followed by “funds to cover deficit due to decline in sales”. Around 40% of enterprises thus used funds to improve their financial position. On the other hand, 12% and 8% of enterprises used the system for “funds to expand existing business (mainly equipment funds)” and “funds for investment in new business” respectively. 20% of enterprises thus used the system in a positive sense in that they used the funds guaranteed to expand their businesses (Fig. 212-14).

With regard to recent business conditions, more enterprises said that conditions had improved (“improved greatly” and “improved slightly”) compared with prior to introduction of the system than said conditions had deteriorated (“deteriorated greatly” and “deteriorated slightly”) (Fig. 212-15). Asked what obstacles to business (if any) may have arisen in view of performance at the time if the special credit guarantee system had not been in existence, the largest proportion of enterprises responded “reduction of business”, followed by “reduction of workforce”. If enterprises that said “withdrawal from business” and “reduction of capital investment plans” are included, the proportion that said that they would have encountered business difficulties was 85%. From this, it may be concluded that the special credit guarantee system proved to be a highly effective temporary means of stabilizing the business of SMEs at a time when SMEs faced a dramatic change in the financial environment combined with an unprecedented credit crunch. The view held in some quarters that the special credit guarantee system merely prolonged the lives of enterprises that should have been weeded out does not therefore hold true (Fig. 212-16).

However, this system was from the outset introduced as a temporary measure for use for a limited time only (“Overall Policy on Small Business Measures to Counter the Credit Crunch”), and was scheduled to expire in March 2001. Because of this, the Small Business Credit Insurance Law and other legislation were revised in December 2000. Among the measures taken, the limit on guarantees of unsecured loans was raised from ¥50 million to ¥80 million in view of the downward trend in land prices in recent years and the increased need for collateral-free loans of SMEs with little security.1)

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1) The limit on use of unsecured loan guarantees to cope with changes in the environment (e.g. large bankruptcies, disasters and the collapse of financial institutions, etc.) combined with the ordinary unsecured loan guarantees was at the same time raised from ¥100 million to ¥160 million. The scope of this guarantee system was additionally expanded to cover SMEs with no direct business relations in the event of the limitation of business activities by other businesses.
A shift is already underway from special credit guarantees to ordinary unsecured loan guarantees. According to a survey by credit guarantee corporations in Tokyo, Osaka, Aichi and Fukuoka, the number of business users and value of ordinary unsecured loan guarantees of over ¥50 million during January 2001 following the entry into effect of the amended law in December 2000 were 43 and over ¥2.5 billion respectively. Conversely, the number of business establishments making maximum use of special guarantees in combination with ordinary unsecured loan guarantees accounted for 1.6% of the total number of users, a fall of 0.2% from the end of March 2000. From this it can be seen that rather than the expansion of ordinary guarantees leading to their use in combination with special guarantees, there has been a shift toward the repayment of special guarantees and expansion of use of ordinary guarantees.

(b) Development of the infrastructure for the assessment of credit risk of business

As touched upon in “2) Role of financial institutions”, SMEs have less data (such as data regarding defaulting) than large enterprises to enable assessments to be made of credit risk. In view of this situation, the Government is developing the infrastructure for the sharing of information on the financial affairs of business borrowers accumulated in-house by financial institutions in order to enable financial institutions and investors to conduct highly reliable assessments of the creditworthiness of SMEs. For example, financial and non-financial data and data on defaulting concerning small business borrowers is collected for the SME credit risk database (CRD) project launched in April 2001 with the involvement of private-sector financial institutions, credit guarantee corporations and government-affiliated small business financial institutions. Statistical analyses are then conducted based on these data in order to quantitatively assess the credit risk of SMEs.

Fig. 212-14 Uses of funds raised under the special credit guarantee system

Source: Small and Medium Enterprise Agency, Questionnaire Survey of Enterprises Using the Special Credit Guarantee System (March 2001).
Fig. 212-15 Recent business conditions compared with before the introduction of the special credit guarantee system

Source: Small and Medium Enterprise Agency, Questionnaire Survey of Enterprises Using the Special Credit Guarantee System (March 2001).

Fig. 212-16 How might business have been impeded had there been no special credit guarantee system?

Source: Small and Medium Enterprise Agency, Questionnaire Survey of Enterprises Using the Special Credit Guarantee System (March 2001).
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(3) Diversification of means of financing

For the many SMEs suffering under the burden of interest-bearing debt, the diversification of means of financing is an important future issue. However, because of the risk inherent in business innovation, which SMEs cannot avoid if they are to succeed, SMEs need to enhance their net worth over the long term in order to improve their ability to handle risk. The markets are gradually developing to provide more diverse means of financing, and such means will need to be considered by SMEs in the future.

1) Financing using accounts receivable

Use has long been made of financing using receivables in the form of notes receivable discounted. Its importance is increasing, however, as a means of making effective use of SMEs' assets while contributing to an improvement in their balance sheets. It is in addition a means by which SMEs can make effective use of their assets while at the same time contributing to an improvement in their balance sheets.

(a) Loans secured against receivables

These are loans made by financial institutions secured against the credit receivable of SMEs (such as assignment security). Such loans in 2000 were worth around ¥3.9 trillion. Loans have to date in Japan been largely secured against collateral such as real estate, but loans secured against credit receivable expand the fundraising capabilities of SMEs that have limited collateral.

(b) Factoring

Whereas notes receivable discounted are used by issuing commercial bills, factoring involves the purchase of an enterprise's accounts receivable, which are converted to funds before the maturity date. There are around 20 factoring companies in Japan that recover funds from payers. According to the Factor Association, the factoring market grew from around ¥160 billion in FY1996 to ¥450 billion in FY1999, thus almost tripling in size in three years. Many of the users of factoring companies are SMEs.

(c) Securitization of accounts receivable

The accounts receivable of a business are transferred to a special purpose vehicle (SPV), which issues asset-backed securities backed by these accounts. Securitization of accounts receivable thus offers a means of raising funds directly from the capital market. The value of securitized accounts receivable is estimated to be worth around ¥2.3 trillion.

In order to encourage companies to raise funds in these ways using accounts receivable, it is necessary to take action to lay down provisions on validity against third parties concerning the transfer of credits and mortgage by transfer, further enhance the assignment registration system to prevent the risk of double transfer, enhance creditworthiness of accounts receivable, reduce the cost of handling accounts receivable, and remedy the commercial practice of using special clauses prohibiting assignment.

2) Issue of bonds

(a) Issue of privately-placed bonds guaranteed by credit guarantee corporations

Privately-placed bonds are corporate bonds issued by enterprises to small numbers of investors. Because of the risk of default, they are not easy for ordinary investors to subscribe to, and they have in the past been mainly underwritten by the issuer’s correspondent banks. In view of this situation, the Small Business Credit Insurance Law was revised in December 1999 to allow public guarantees of privately-placed bonds, and since then there has been an increase in issues of privately-placed bonds guaranteed by credit guarantee corporations throughout Japan. According to the National Federation of Credit Guarantee Corporations, 2,285 privately-placed bond issues by SMEs have been guaranteed by credit guarantee corporations, and the value of issues guaranteed has reached around ¥224.2 billion by December 2000. The system is thus clearly being used by SMEs as a means of raising funds.

(b) Tokyo bond market initiative

There is in Tokyo Metropolitan Government a feeling that even highly innovative enterprises with a high level of technical capability cannot raise sufficient funds, and steps are being taken to open up to dynamic, superior SMEs direct finance as a means of raising funds. In March 2000, the first securitization of new loan credit was initiated in the form of collateralized loan obligations (CLOs) using a credit guarantee provided by a

1) Use of the assignment register under the Law on Exemptions to the Civil Code Regarding the Validity against Third Parties of Assignments (effective since October 1998) offers a useful means of securitizing credits such as accounts receivable. However, all assignment registration applications must be made to the Tokyo Legal Affairs Bureau, and applications must be made in writing to the Tokyo Legal Affairs Bureau to obtain a certificate where confirmation is required showing whether a credit has been transferred to another party. The point has been made, therefore, that the system cannot cope properly with the demands of corporate finance, where every moment counts. From FY2000, it became possible to make assignment registration applications online. Measures are at the same time being rapidly pursued to enable information from the assignment register to be obtained rapidly via the Internet. These moves are expected to contribute to the diversification of means of financing available to SMEs.

2) Securities such as asset-backed securities (ABS) and asset-backed commercial papers (ABCP) secured by assets transferred by the SPV.

3) Collateralized loan obligations (CLOs) are securities issued backed by the lump value of the loan credits of a financial institution to a number of enterprises.
credit guarantee corporation, and some 1,700 SMEs succeeded in raising around ¥70 billion as a result (Fig. 212-17). In March 2001, the second bond issue took place, and around 950 SMEs raised around ¥32.5 billion.4)

3) Developments in stock markets to accommodate ventures
The last couple of years have seen the establishment of new stock markets for emerging enterprises. In November 1999, for example, the Mothers market was established by the Tokyo Stock Exchange to raise funds for emerging businesses and the development of new industries. Then in June 2000, Nasdaq Japan was established jointly by Nasdaq Japan Planning and the Osaka Stock Exchange. These developments have widened the choice of stock markets available to ventures, which were previously limited largely to raising funds on the over-the-counter markets. The number of IPOs on the OTC markets, TSE Mothers and Nasdaq Japan reached record highs of 97, 27 and 33 respectively in 2000. Although the venture stock markets have shown strong growth since their launch, a glance at the trading values on each stock market in 2000 show that they have not been an unqualified success (Fig. 212-18). TSE Mothers and Nasdaq Japan have not only eased listing requirements for ventures, but also place a strong emphasis on disclosure, and require that listed companies hold investors’ meetings. It has nevertheless been pointed out that (1) offer prices are not set fairly by securities companies, and (2) security trading rules are not applied properly. Further steps are therefore required of these markets in order to raise the liquidity of shares and to attract more investors.

Fig. 212-17  CLO issue scheme implemented by Tokyo Metropolitan Government

[CLO issue system]
1. Financial institution lends to SME and loan credit transferred to trust bank.
2. Trust bank transfers trust beneficiary right to Special Purpose Company (SPC).
3. SPC issues bond (CLO) backed by trust beneficiary right and sells to investor.
4. Loans from financial institutions to SMEs are guaranteed by the Tokyo Credit Guarantee Corporation. This makes it easier to attract investment in terms of bond rating, etc.

Source: Compiled by the Small and Medium Enterprise Agency based on data from the Tokyo Metropolitan Government’s website.

4) In the case of a second bond issue, bonds not covered by subrogation payment by credit guarantee corporations are also issued to institutional investors.
If raising funds through shares and privately-placed bonds, an enterprise has a greater probability of raising funds the better its information disclosure. Disclosure is therefore extremely important.

In Japan, all joint-stock companies are required by law to disclose certain financial data once a year. The only forms of disclosure currently recognized, however, are through the official gazette and daily newspapers, which are too expensive for SMEs to use. Now, however, bodies such as the Legislative Council are considering permitting SMEs to use cheaper and more effective methods of disclosure, such as the Internet. It is hoped that SMEs will respond to these legislative developments to more actively disclose financial data and raise funds.5)

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5) To enable ambitious SMEs to voluntarily disclose their accounting documents, it is important to develop a system that can be introduced incrementally, and there are growing efforts in the private sector to formulate suitable accounting standards for SMEs under such a system.
4. Enhancement of measures providing access to human resources

There is among SMEs a shortage of technical experts with specialist knowledge, such as IT experts (Figs. 211-9-10), and hiring skilled staff is a problem for management. Looking at movements of skilled workers in general, it can be seen that the proportion seeking to change employer has been increasing over the past few years, and is significantly higher than the average for all occupations. However, the actual turnover rate is in fact lower than for other occupations. This is thought to be because there are few companies that can meet the conditions to make technical experts want to change employer. According to a questionnaire survey made of technical experts seeking to change jobs concerning the points they attached most importance to in their choice of employer, the second commonest response after “good pay and other remuneration” (93%) was “opportunity to learn properly about new technology” (78%). It can be seen, therefore, that technical experts are strongly motivated by the desire to improve their own specialist skills, and the opportunity to develop one’s skills is an important determinant of choice of employer.

Labor mobility is increasing, and the turnover rate is increasing. As a result, enterprises may seek to cut back support for development of skills of employees and cut expenditures on training and education on the grounds that employees will still leave even if they are given opportunities to improve their skills. Considering, however, that being able to offer an environment where employees can learn about the latest technology is an important factor in technical experts’ choice of employer, SMEs that do not offer skill improvement opportunities are going to find themselves unable to recruit technical experts and other skilled human resources. In order for SMEs to successfully recruit human resources, it is also important that they revise their personnel systems and corporate welfare systems (e.g. by providing support for childcare). It will thus become even more important that SMEs, which have in the past suffered from a shortage of human resources, innovate to create an attractive environment, increase corporate value for employees and so motivate their employees.

Below, we look at the case of a company that has succeeded in making itself more attractive to employees and attracting the staff it needs by adopting innovative skill development programs and personnel systems, and introducing childcare support.

Case 21: Company boosts training and maintains high level of technical ability by creating its own unique technical qualification system

A Ltd. is a manufacturer of tools used to manufacture electronic components and ultra-hard, abrasion-resistant tools and dies. Based in Tokyo, it has capital of ¥96 million and a workforce of 900. It established its own in-house technical qualification system in order to pass on the skills of senior employees to younger workers and maintain its high level of technological expertise. One of the company’s priorities is the acquisition of skills by employees, such as by encouraging employees to acquire technical qualifications. In so doing, it has produced a number of products that only it can make, earning it a strong reputation both within and outside the company.

In-house technical qualification system
Manufacture of the company’s products (especially at the finishing stage) requires the acquisition of specialist skills not covered by the national technical qualification system. Because of this, the company established an in-house qualification system equivalent in level to the national examination, and is seeking to improve skills by encouraging employees to actively acquire them. When the system was established, the content of the exam was designed based on the technology and know-how built up by the company. What level of knowledge and practical skills would be required was a difficult decision, but an in-depth study was made led by senior employees, and the system successfully launched.

The company has now succeeded in producing many employees who have graduated from technical colleges and also managed to recruit large numbers of outstanding employees who have graduated from technical colleges and the like.

1) According to the Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Statistics Bureau’s Annual Labor Force Survey (1997), the proportion of technical experts interested in changing jobs was 11.4%, more than the average for all occupations (9.6%). According to the same bureau’s Employment Status Survey (1997), however, the actual proportion of specialists and technical experts that had changed jobs was 2.7%, lower than the average for all occupations (4.0%).
2) Reader survey conducted by Recruit TECH B-ing.
Case 22: Young directors appointed for limited period to reform operations and revitalize organization

A Ltd., which is based in Kanagawa Prefecture and has a workforce of 64, introduced a unique personnel system whereby proposals for business improvement plans were solicited from its younger employees, and the person who put forward the best plan was made a "young director" for a limited period. This system was designed to give authority and scope for action to ordinary employees in order to motivate them. Three employees who had in the past been appointed as young directors had all achieved results in one form or another, and they contributed to the reform of the company's operations.

The company is a market leader in the manufacture of filtration sand for water purification plants. Over a considerable period, however, the company had been the unrivalled market leader in its field, and as a consequence had lost some of its dynamism. The current president felt a deeply concerned about the situation, and sought to revitalize the company through a variety of reforms. Three years previously, the company hit upon the idea of introducing a unique personnel system called the "Young Director System". Employees of assistant manager level or below were invited to submit proposals for the improvement of business, from which one was adopted and the proposer appointed as a director for one year. This director is not a director in the legal sense, but otherwise has the powers and annual pay commensurate with a normal director, and is also allowed to participate in board meetings. The employee appointed as a director dedicates himself for one year to implementing his business reform plans, and is not held in any way responsible if during this time they do not prove effective during his term of office.

Actual business improvement plan planned and implemented by young director

B, who was in his seventh year with the company when he was appointed as a young director for one year between April 1999 and March 2000, submitted a proposal for cutting logistics costs, and succeeded in cutting logistics costs by ¥10 million per year. He was previously a section head in the production control department in the company's main plant, and was responsible for the manufacture of filtration sand. He became concerned about the stagnation of profits despite growing earnings, and, after revising expenses, he noticed that transportation expenses were somewhat high. Until then, the transportation of filtration sand from the main plant had been contracted out to a local logistics provider. However, the contract terms had not once been revised in a decade despite the increase in transport costs and intensification of competition among logistics providers. As a consequence, logistics costs were higher than the norm. B resolicited the logistics providers (including those for local plants), and succeeded in cutting the company's total logistics costs. In recognition of his success, B was made deputy manager of the engineering service department after his term as a young director, and is now said to have learnt to always think not only about his own area of concern but also about the company as a whole as a result of his experience as a director.

Case 23: Company enhances childcare systems and stems loss of female technicians

A Ltd. is a business application software developer and distributor based in Fukui Prefecture with a workforce of 43. In order to prevent the loss of its best female software engineers, it introduced a generous childcare support system that allowed employees to work fewer hours and released them from overtime and business trip commitments in order to prevent the loss of skilled employees and enable women to return to the workplace more quickly.

Childcare support system

The purpose of this system is to enable employees who find it difficult to work normally because of childcare responsibilities to change their working conditions in consultation with the company of employees. To suit their own individual circumstances, employees are consequently not required to work overtime or on holidays, or go on business trips. Employees' basic salary is reduced while the system is used, but bonuses are paid.

Advantages for the company

It takes at least three to five years to turn fresh graduates into full-fledged engineers. If women engineers leave the company to have a child, this is not only a waste of investment in training, it is also hard filling the gap left by that engineer when she retires, and this can impede business. This system, however, enables the company to keep hold of its best employees, and is at present being used by four female engineers. Although the reduction of working hours could theoretically mean that the personnel costs of employees using the system are a little high, the current president feels that instead “productivity has improved as people now concentrate on achieving more in less time”. In addition, the company has gained a growing reputation in the media as a company that enables employees to combine work and family commitments, and this has translated into an improvement of the company's image and helped it recruit staff.
5. Solving business problems

In closing this section, we describe (1) the choice of diverse forms of cooperative organization, (2) revision of business structures, and (3) new developments in the theoretical armory of managers and proprietors for solving the various business problems described thus far that are faced by SMEs, which lack their own business resources and whose management tends to be affected to a large extent by the ability of managers and proprietors.

(1) Choice of diverse forms of cooperative organization

There are cases where although a company may be unable to solve a business problem with only its own business resources, it may be able to resolve such problems by making use of business resources available outside the company. There is a growing acceptance that the increasingly fierce level of competition in recent years has made it crucially important that enterprises have their own areas of core competence (i.e. the core capability of an enterprise to provide value to customers that cannot be imitated by other enterprises to customers). 1) Because of their extremely limited business resources, SMEs should make use of outside business resources suited to their own area of core competence. Use of external business resources can take the form of an SME outsourcing the supply of goods or services for its own independent business, or a number of SMEs cooperating to make use of each other’s resources in business. The small business association system was established to encourage the latter type of cooperative activity. Depending on the type of activity, however, the business may develop and expand beyond the organizational framework of the small business association. The system was therefore changed in December 1999 to enable small business associations to become limited and joint-stock companies without having to suspend business, thus allowing them to make uninterrupted use of their business achievements and facilities. In the period up to December 2000, 36 small business associations registered as joint-stock or limited companies. Below, we describe the case of one cooperative that sought to expand its business by becoming a joint-stock company.

Case 24: Cooperative seeks to expand business by becoming joint-stock company

Cooperative A is a manufacturer and wholesaler of high-quality precious wood. Following the amendment of the Law concerning the Organization of Small and Medium Enterprise Organizations, A registered in June 2000 to change from being a cooperative association to a joint-stock company. The change enabled A to improve the efficiency of management, and the new company is now considering going public at some stage in the future. A was established in 1972 by 10 manufacturers and wholesalers of precious wood as a “whole cooperative association”. 2) Since then, it has manufactured and marketed plywood made from high-quality wood, such as alcove posts and ceiling boards. Business grew steadily since its establishment, and the workforce grew to over 130. As the scale of business grew, however, improving the efficiency of management and raising funds became important issues.

Becoming a joint-stock company would enable the association to concentrate management authority in the board of directors to an extent, and also enable it to raise funds by going public. Because of the absence in the past of provisions allowing a small business association to become a joint-stock company, however, becoming a joint-stock company entailed the somewhat complex process of first liquidating the association before forming a new joint-stock company. Given that this would also require the association to suspend its business activities and expose it to taxation of liquidated assets, it had not previously embarked on such a course of action. The amendment of the Law concerning the Organization of Small and Medium Enterprise Organizations in 1999, however, enabled an association to become a joint-stock company simply by registering itself as such. The association therefore held a general meeting in May 2000 at which the decision was taken to become a joint-stock company, and one month later the association was registered. In the future, A intends to raise funds for business expansion by going public.

2) Cooperative associations are associations formed by member SMEs in order to jointly manage the business they had engaged in previously in whole or in part in order to improve the scale of business and improve productivity. An association formed to consolidate the entire business of members is called a “whole association”, and an association formed to consolidate some of the business of members is called a “partial association”.
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(2) Revision of business structures
Because of the increasing severity of the problems faced by SMEs caused by the change in conditions faced by SMEs, how to build a business structure enabling swift decision-making in response to the rapidly changing business environment has become an important question. There are for example many cases where there is sufficient communication concerning important day-to-day business matters at SMEs where there is strong trust with shareholders and there is no separation of ownership and management. Accordingly, meetings of shareholders and boards of directors could be effectively simplified and streamlined by dispensing with the procedures for calling meetings and making use of media such as e-mail. For SMEs that repeatedly employ capital increases over a short period of time and actively seek to attract and keep hold of valuable human resources with the aim of going public, it would be effective to enable them to effect capital increases regardless of the authorized capital limit. Authority regarding the issue of stock options and the like could likewise be effectively transferred from shareholders’ meetings to the board of directors.

At present, the Legislative Council is debating making far-reaching amendments to corporate law, and the revision of corporate structures in the light of the IT revolution and the facilitation of financing have been raised as issues on the agenda. It is vital too that SMEs should actively grasp the opportunities presented by reform, and incorporate such a forward-looking approach into the design of their own management structures.

(3) Theoretical armory of managers and proprietors
Amid the dramatic transformation of social and economic structures, there is a growing recognition that enterprises must analyze the situation they face and their competences using objective analytical methods, rather than relying on experience and intuition, to develop suitable business strategies. Against the background of this awareness, a growing number of SME managers and proprietors have been going to graduate school in order to acquire the latest management skills and knowledge. Around 700 fresh students enroll at business colleges each year, among whom are a growing number of SME managers, proprietors and employees of SMEs.1)

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1) Startup Venture National Forum Survey and Recommendation Committee’s *Education of Entrepreneurs for the 21st Century*. According to this report, enrolment in classes in entrepreneurship in recent years has been characterized by the growing number of managers and proprietors who have succeeded in starting up one business and have enrolled as mature students at graduate schools in order to further enhance their skills.
Section 3 Issues within industries

1. Manufacturing

According to the Survey of Business Conditions in the Small Business Sector conducted by the Small and Medium Enterprise Agency and JASMEC, the biggest business problem faced by small and medium manufacturers is “stagnation of demand”. However, a large proportion of manufacturers also cite “responding to changes in product needs” (Fig. 211-1). In order to cope with such changes, it is important to “improve the various service functions” offered to customers premised on the assumption that the quality of products themselves is increased. Below, we describe a company that revamped quality control throughout the company, and a company that actively improved service functions.

(1) Company-wide action on quality control

SMMs have to date taken steps to maintain and improve quality, improve reliability of delivery, and reduce delivery times in each division in response to the demands of companies such as parent companies. However, quality control, which is of fundamental importance in manufacturing, has not always been thoroughly implemented on a company-wide scale. Below, we describe a company that went back to the question of “quality” as a result of moves to acquire ISO certification, as a consequence looking not only at quality control within each department, but also taking a broader approach and revamping the company’s entire structure in order to improve quality control. We also look at a case of organizational revitalization through the joint use by companies in different industries of the public ISO certification support system, use of which is staged to suit each company’s own conditions.

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**Case 25: Prompted by the acquisition of ISO certification, company revitalizes organization following thorough discussion of quality control**

A Ltd. is a manufacturer of electrical components based in Tokyo with a workforce of 41. Following steps to acquire ISO certification, a forum was provided for discussion by and between individual divisions. This stimulated employee awareness, and radical action was taken to improve the business flow and change the allocation of manpower. Periodically providing such a forum for discussion raised basic awareness among employees and awareness of business operations. Because of the imminent acquisition of ISO certification, there was an improvement in quality control and increase in employee motivation.

**Company attempts to acquire ISO certification**

Pressured by its parent company to become ISO9000 compliant, the company decided to acquire ISO certification in order to radically strengthen its quality control system. The company had had an in-house manual for 30 years, but the content had lost any real meaning and had not been properly implemented. The stress was therefore placed on organizational integration in order to become ISO compliant, and on restructuring the organization unhindered by existing business processes.

The president distributed to the company’s employees a manual on the acquisition of ISO9000 series certification, which they carefully read for themselves until it was dog-eared. The company also sought the services of consultants. Rather than accepting the advice of one consultant unquestioningly, it chose what it considered to be the best advice from a number of consultants. Based on this information it created an organizational setup for the acquisition of ISO certification. Action was taken throughout the company to acquire ISO certification, with all employees being involved in discussion of the preparation of a manual on 18 occasions, thereby eliminating friction between divisions and improving understanding of other departments. In this way, the company made effective use of the knowledge of individual employees in the development of the new organizational setup.

**Effects after acquisition of ISO certification**

The acquisition of ISO certification had the direct effect of improving credit with other companies, generating new business (advertising the fact that it was ISO compliant led to quicker deals being made), and reducing the number of claims. ISO compliance also had the effect of ensuring the penetration throughout the company of (1) training and education of employees, (2) greater motivation of employees, and (3) the spread throughout the company of the management’s thinking. The president is therefore satisfied that the acquisition of ISO certification has had extremely important consequences. However, there was concern that following the acquisition of ISO certification, employees might become less motivated. Attention was therefore paid to continued discussion within and between departments so as to continue to stimulate organizational improvements.

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1) See “Section 1: Becoming a self-sustaining enterprise” of this chapter regarding the stagnation of demand.

2) In the U.S., the “Six Sigma” top-down system of quality control is being introduced. The aim of this system is to ensure the risk of inferior quality having an adverse impact on business does not exceed a certain numerical value in order to fully, rather than partially, optimize quality control.
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Case 26: Public organization provides incremental support for group acquisition of ISO certification

Chamber of commerce and industry A does not simply provide subsidies to enterprises to cover the cost of acquisition of ISO certification. Instead, it adopts a step-by-step approach toward motivating companies, dividing support for acquisition into four stages (introductory seminars, training on adoption, follow-up training, and practical study groups), and subsidizing half the cost of participation. In addition, it advertises for companies to participate in study meetings as a group in order to promote the exchange of information among various companies and motivate competition between them.

In order to help SMEs respond to the globalization of economic activity, it provides support for the acquisition of ISO certification to dynamic, ambitious enterprises and enterprises that seek to continue to grow further in the future. It considers the acquisition of ISO certification to mean not simply compliance with international standards, but rather an important choice as a means of improving an enterprise’s business position. Traditionally, the guidance activities of chambers of commerce and industry have tended to consist of outsourcing consultancy services to outside experts. A, however, developed its own graded system of ISO acquisition at its own cost, starting with promoting a revolution in outlook among managers and proprietors.

At each stage after introductory seminars, enterprises, consultants and A’s own managers have an opportunity for joint discussion, and enterprises and A work together in finding solutions to problems. The opportunity for a number of companies to engage in discussion as a group at each stage allows companies to stimulate each other, thereby increasing their motivation.

Using A’s system of support for acquisition of ISO certification, six SMEs have succeeded as a group in acquiring ISO9000 series and ISO14000 series certification, and A feels that the program has yielded concrete benefits in terms of improved credit, improved internal structure, and training of successors at participating enterprises. A is taking independent steps to further expand business support for SMEs by having enterprises that have succeeded in acquiring ISO certification play a vanguard role, expanding support for interested enterprises, and providing a forum for exchange between ambitious enterprises.
(2) Improvement of service functions
The customers—principally large enterprises—that place orders are cutting their workforces and outsourcing business, and it is increasingly common for divisions such as material procurement divisions to be shorthanded1. In the small business sector, it is important that enterprises not only hone their own technologies, but also act as coordinators to meet the needs of large enterprises and other customers. Three ways in which SMMs can exercise their service functions are (1) by SMMs with key technologies playing a leading merchandising role, (2) through providing comprehensive inventory control in unison with customers and suppliers, and (3) by improving their ability to deliver in small lots in order to meet latent needs. Below we describe the cases of some SMEs that have responded in just such a way.

Case 27: Company coordinates procurement of materials for customers, thereby increasing orders

Based in Tokyo and with a workforce of 68, A Ltd. processes high-tech components on consignment. By coordinating the companies receiving a broad range of orders from large enterprises, it has set itself apart from its competitors. Large enterprises, when placing orders with outside suppliers for supplies of materials, machining, welding and other processes, generally place orders with different SMEs. However, there is strong demand for supplier-coordinators to take responsibility for ordering from SMEs with key technologies. A alighted on the idea of playing a coordinating role because of its position on the side of the customer. Customers—principally large enterprises—had as a result of successive streamlining lost much of their design and production technology capabilities, and had run into a shortage of production and development engineers. They therefore tended to outsource even their material procurement systems. For example, when large enterprises placed orders with outside suppliers for parts, they often placed orders with a number of SMEs for each process. However, large enterprises are most interested in the quality of parts ordered, and it is more efficient to concentrate responsibility in one enterprise. Recognizing the potential demand for such a service among SMEs, A set itself apart from other companies by establishing a network of SMEs.

Case 28: Company accesses new types of wholesale and retail outlets through comprehensive inventory control

A Ltd. is a Fukuoka-based producer of sake and shochu with a workforce of 61 that attempted merging with new forms of wholesaler and retailers (convenience stores and chain stores, etc.) popular with end-users. It succeeded in accessing outlets popular with end-users by developing a comprehensive inventory control system essential to such new forms of business unhindered by conventional business processes. In recent years, deregulation of the liquor licensing laws has led to the entry into the alcohol wholesale and retail business of businesses from other sectors. The advances made by such new entrants have been remarkable, and traditional businesses such as stores run by individual proprietors have faced severe competition. As brewers such as A had built close ties with such traditional outlets, the growth in new types of outlets weakened their sales networks, forcing them to develop new outlets among these new entrants. In order to gain access to these new outlets, A’s president recognized the importance of thorough inventory control and the need to harmonize business processes with those of new wholesalers and retailers in order to gain their custom, and led moves to match up the information environment at different enterprises.

1) According to the Ministry of Economy, Trade and Industry’s Basic Survey of Japanese Business Structure and Activities (1999), enterprises outsourcing production account for 67.7% of all manufacturers, and the proportion of the sale cost price accounted for by outsourcing cost was up 1.2% (from 23.5% to 24.7%) on the previous year.
Case 29: Company succeeds in tapping small-lot demand (personal homes, etc.) by revamping concrete construction and transportation techniques (Fig. 213-1)

Hokkaido-based A Ltd. is a concrete manufacturer with a workforce of 60. By adopting “wet-mixing” (using concrete mixers as production plants), expanding the area of operations by dispersing the supply bases for concrete mixers, and cutting costs by centralizing management at head office, the company has succeeded in tapping into demand from small users (e.g. for personal homes and small construction sites).

The company radically reformed its manufacturing and transportation techniques by (1) adopting wet-mixing, (2) developing “network plants” (NPs), and (3) concentrating control at an operation center. Regarding firstly (1), it developed an effective method of production for serving small users (with the wet-mixing method, mobile mixers serve as production plants) that enabled the efficient production and transportation of good quality products without allowing itself to be hindered by conventional thinking in the cement industry. (2) was developed independently by A. Unlike conventional plants, eight compact plants like automatic vending machines provide the necessary materials to the mixers. As for (3), each sales-driver keeps the operation center up to date by cellular phone (i-mode), and two employees at the operation center give directions to the next NP headed for and place of delivery. Not bound by traditional methods of production, the company thus developed a system that kept quality at a constant level, and reduced costs, such as capital investment, personnel, manufacturing and inventory costs, while improving the efficiency of methods of production and transportation. At the same time, it made efficient use of large-volume concrete mixers to establish a system of transporting products on time.

Fig. 213-1 Reduction of inventory and improvement of customer service through drastic reform of production and transportation methods

Targeting of market: (existing) large users → (new: A Ltd.) business with small users (personal home and small construction sites)

Reform of cost structure: radical reform of production and transportation methods

Adoption of wet-mixing
- ISO-compliant quality system
- All mobile mixers used as production plants

Development of NPs
- Developed independently by A
- Compact plants supply necessary materials to mixers like automatic vending machines

Central control at operation center
- Directions given to mixer sales-drivers via i-mode
- Mixer operation optimized by two employees

Flexible response to changes in demand, improvement of customer satisfaction

Reduction of capital investment, personnel, production and inventory costs

Source: Compiled by the Small and Medium Enterprise Agency.
2. Construction

The biggest business problem faced by small and medium construction enterprises in recent years is the prolonged stagnation of public-sector demand (Fig. 211-1). While the size of the construction market has been declining since 1992 (Fig. 213-2), the number of licensed builders has been steadily increasing, reaching a record high of around 586,000 by the end of March 1999. Because of the maturation of the market and increase in the number of contractors, earnings in the construction industry are declining. According to Small Business Management Indices published by the Small and Medium Enterprise Agency, the ratio of profit to income from completed projects in the construction industry, which was 2.6% in FY1993, has declined since FY1994, and fell to 0.3% in FY1999. According to a survey by Tokyo Shoko Research, Ltd., the number of bankruptcies in the construction industry in 2000 was 6,214, accounting for 33% of the total. This is high proportion given the number of construction enterprises and their contribution to GDP.

In view of the prolonged slump in demand, we describe below the cases of companies that have reaped success by opening up new markets, such as by taking orders for construction of office and plant from foreign firms and the private sector rental housing market.

![Fig. 213-2 Trend in income from completed projects](image)

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Case 30: Company achieves growth by tapping new markets such as market for private-sector rental housing

A Ltd. is a Niigata-based middle-tier construction company with 108 employees. Traditionally dependent on public works orders from government agencies, it expected the financial difficulties of local governments to cause public works and construction demand from the government sector to stagnate. It managed to grow its business, however, by tapping into demand in other markets, such as the private-sector rental housing market. From FY1995, the company began suggesting to owners of idle land that it should build rental housing on such land for management by the landowner. The construction of private rented housing began contributing to growth in the company’s sales from FY1996. The company also forged ties with medical and welfare institutions and engaged actively in the construction of proprietary old people’s homes and group homes, which other companies in the prefecture had not moved into. It also matched the owners of idle land with prospective tenants within and from outside the prefecture, thereby winning construction orders. As a result of such moves to move into new markets, the company’s sales have continued to grow since FY1998. According to the company’s president, “Free consumer access in the future to information regarding the price and quality of new and used housing as in the U.S. will open up a new market and increase business opportunities.”

Case 31: Construction design office masters Western-style project management techniques and increases orders from foreign affiliates in Japan by optimizing procurement of materials

A Ltd. is a construction design office in Tokyo with five employees. It designs and builds offices and stores at attractive prices by procuring cheap materials from overseas as well as from within Japan. It acquired Western-style project management skills through its procurement of materials from overseas, and succeeded in winning construction orders for offices and plants from foreign firms in Japan. Told by one foreign company that it wanted to reduce costs by installing double glazing to keep costs down because of the high cost of heating and air conditioning with just one pane of glass, it looked overseas as well as in Japan to procure materials as cheaply as possible, ultimately importing the glass and frames from Canada. It has subsequently procured cheaply from around the world to cut construction costs, such as by importing wood from Canada and marble from Italy. As its reputation for lowering costs spread, it began to win orders from overseas, principally from foreign general contractors. In the process of negotiating contracts for business orders from North American and European firms and procuring materials from North America and Europe, the president noticed that the services sought from Japanese construction companies by Western companies expanding into Japan differed considerably from those sought by Japanese companies. In the case of construction orders placed in Japan, it is normal for orders to be placed as a lump package with contractors (particularly general contractors), bundling all risks concerning, for example, price, quality and construction period. In Europe and North America, however, customers seek to keep detailed track of management, quality control and cost control rather than leaving everything to the contractor. When A was established, there were few companies capable of adapting to this Western-style method of project management (construction management), and the company succeeded in expanding its business by actively seeking outs orders that could not be met by other companies.
3. Transport

Many small and medium transport providers (railway, road passenger, road freight, water transport, air transport and other passenger and freight industries) also recognize the slump in sales to be a problem.\textsuperscript{1)} Looking at ordinary freight truck transport services, which account for the largest number of enterprises in the transport sector, the quantity of freight has remained steady since the collapse of the bubble economy (Fig. 213-3). Because of the large number of new entrants into the market, however, business revenues have remained flat (Fig. 213-4). Amid these circumstances, companies need to escape from the “conventional wisdom” of the industry. To serve as an example, we describe below the case of a company that has succeeded in setting itself apart from its competitors.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Fig_213-3.png}
\caption{Change in volume of road freight}
\end{figure}

Source: Ministry of Land, Infrastructure and Transport, \textit{Transport White Paper.}
Note: Compiled from former Ministry of Transport, \textit{Statistical Yearbook of Motorvehicle Transport.}

\textsuperscript{1)} According to the National Life Finance Corporation’s \textit{National Survey of Trends in the Small Sector} (December 2000), the commonest business problem faced by small transport providers (businesses with fewer than 30 employees) was “slump in sales”, which was cited by 39.2% of respondents. This was followed by “decline in profits”, which was cited by 36.5%.
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Fig. 213-4 Trend in truck business revenues

Source: Japan Trucking Association, Truck Transport Data 1999.

Case 32: Company achieves growth by ignoring standard practice in the industry and outsourcing transportation of non-standard merchandise

Osaka-based A Ltd. is a transport company that has achieved growth by outsourcing to drivers with a certain level of know-how the transportation of merchandise beyond the scope of delivery services.

After working in sales with a home delivery company, the company’s president began his new business by looking for shippers to match up with acquaintances. Although initially dependent on his network of contacts, the large number of companies advertising for delivery staff in newspapers that he noticed gave him the idea of tapping into this area of demand.

He found that companies advertising for delivery staff in most cases needed transporters to deliver merchandise not covered by ordinary delivery companies. However, the delivery of such items generally required a certain level of know-how. In the case of the delivery of consumer electronics products, for example, customers need additional services after delivery, such as unpacking, installation and connection of aerials, etc.

A therefore began taking orders for transporting items outside the scope of home delivery services, and outsourced drivers (or prospective drivers) with the adequate know-how concerning the transportation of that kind of product.

Because the received wisdom until then had been that it was impossible to outsource the transportation of such products, A’s reputation began to spread. By entering business contracts with more and more drivers, he gradually expanded the range of products he could transport, and profits grew.
4. Miscellaneous service industries

Sales among small and medium service providers have been stable overall since the collapse of the bubble economy, and ordinary profit too has risen some 20-50% compared with before the bubble (Fig. 213-5).¹ In the miscellaneous service industry, however, users needs have changed dramatically, and consumers are now more eager to economize.

According to the Ministry of Public Management, Home Affairs, Posts and Telecommunications Statistics Bureau’s Establishment and Enterprise Census of Japan (1999), there are a large number of food service providers (800,000), laundry providers, hairdressers and bathhouses (410,000) and hotel and other accommodation providers (80,000) in the small miscellaneous service industry. Below, therefore, we look at the cases of companies in hairdressing, cleaning, hotel and food services industries (typical sectors of the small miscellaneous service industry) that have actively responded to the diversification of consumer needs.

Fig. 213-5  Trends in business performance in the small service industry
(1985=100)

Note: SMEs are corporations with capital of under ¥50 million.

¹) Compared with the business and specialist service sectors, business conditions are harsher in the consumer service sector, where there has been a decline in the number of business establishments. According to the Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Survey on Service Industries, the number of business establishments in the consumer service sector fell 1.3% between 1994 and 1999, and business revenues only grew by 17.5%. In comparison, the number of business establishments in the business service and specialist service sectors rose 13.6% and 5.2% respectively, and business revenues rose 47.4% and 46.8%. For details, see Appendix Table 213-1.
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(1) Barbers and beauticians
95% of the barbershops in Japan are small enterprises with a workforce of four or fewer, making the barber industry a typical self-employment business. However, the number of barbershops and barbers has barely changed over the past two decades (Figs. 213-6~7). Spending on barbers’ services has also been in decline since peaking in 1993. Per household spending on barbers’ services reached a record ¥9,956 in 1993, since when it has declined. By 2000 had fallen by 19% from its peak to ¥8,023 (Fig. 213-8). Because of the slump in demand, there are signs of barbers moving into the comparatively more robust beautician industry1) (i.e. becoming combined barbers and beauticians).

Case 33: Barbershop increases customer by moving to the suburbs and entering the beauty salon industry

A Ltd. was a barbershop with four staff located in front of a provincial city station in Yamaguchi Prefecture. By moving to a more popular shopping center in the suburbs and expanding into the beauty salon business to meet customer needs, it expanded its customer base.

Changes in business conditions prompt change in line of business
A was a typical barbershop, run as a sole proprietorship in a provincial company city that always made a small profit. Due in part to the deteriorating performance of the company that was the central presence in the city and the appearance of large discount stores along a national bypass in the suburbs, however, the number of customers in the station area declined. Due to a failure to attract young skilled barbers, A also became unable to offer customers perms and hair coloring services, and gradually lost its younger customers to beauty salons.

As a result of the consequent dramatic decline in sales and ordinary profit in FY1995, the company decided to revamp its business.

Plan to move to the suburbs and into the beauty salon business in search of customers drawn up and implemented
Having managed and analyzed its customer data by computer, the company knew that the decline in its customers was due to their drift to the suburbs and its inability to cater to the demands of younger customers. After seeking the advice of a business consultant, therefore, the company drew up plans to move to the suburbs, where there were more customers, and to move into the beauty salon business in order to meet customer needs.
In February 1996, it informed two of its staff that it was moving into the beauty salon business, and they left amicably in May. Their place was taken by two beauticians. Because beauty salons must be able to provide detailed follow-up services and have good fashion sense as well as skills in order to compete, the decision was taken to employ specialist beauticians.

Current state of change in business
The company moved its store to the suburbs in May 1996 and at the same time began offering beautician services. Despite a fierce struggle due to having moved into a new field, the number of beauty salon customers steadily increased. Despite a fierce struggle due to having moved into a new field, the number of beautician customers has steadily increased, and sales are stabilizing.

1) The number of beauticians and beauty salons has increased over the past 20 years (Figs. 213-7, 213-9).
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Fig. 213-6 Change in number of barber shops (business establishments)


Fig. 213-7 Change in number of barbers and beauticians

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Fig. 213-8 Annual spending on barber services per household


Note: All households nationwide.

Fig. 213-9 Change in number of beauty salons (business establishments)

(2) Dry-cleaning services

Demand for domestic cleaning services in Japan is declining. According to the Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Statistics Bureau’s Annual Report on the Family Income and Expenditure Survey, the average laundry bill per household peaked at ¥19,243 before going into decline in 1992 and subsequently falling around 35% in the eight years to ¥12,456 in 2000. These figures show that consumers are economizing on dry-cleaning services (Fig. 213-10).

There has also been an increase in the number of dry-cleaning agencies operated jointly with supermarkets and convenience stores, which are seeking to increase their customer bases. According to a survey conducted by the All Japan Laundry and Drycleaning Association, the number of ordinary stores with their own dry-cleaning facilities was 48,103 in 1999, and the number is gradually declining. By comparison, the number of cleaning service agents has been rising since 1992, and is now 115,896.

The business environment faced by dry-cleaning stores is thus changing dramatically, but there is still plenty of potential for improving profits. Below, we describe the case of a dry-cleaning cooperative that improved its merchandise management methods and raised productivity using IT.

Fig. 213-10 Annual laundry bill per household

![Graph showing annual laundry bill per household from 1985 to 2000.](source)


Case 34: Dry-cleaning cooperative adapts POS system to own line of business to reduce delivery times and ratio of loss of merchandise

Cooperative A is a dry-cleaning cooperative in Tokushima Prefecture. It radically revamped its business, raising merchandise control and productivity by introducing a POS system, and introducing new services such as discount services. The cooperative has been in business since 1970. It recently came under pressure due, among other things, to the appearance of large stores, and so set about revamping its business. A major problem turned out to be the loss of items due to poor merchandise control.

The cooperative concluded that merchandise control would be improved if it were to introduce a POS system of the kind used for merchandise control in the retail business. However, there were few precedents for a POS system being used by small and medium-sized dry cleaners. The cooperative therefore revamped its business while developing its own POS system adapted to its own line of business in cooperation with a system provider.
It ultimately required more than two years from selection of the system provider before the system entered operation. The new system went into operation in July 1998. Under this system, when a customer brings in an item of clothing, the employee enters the type and number of items via a terminal at each store. This eliminates the task of filling out and filing slips, thus almost halving the time it takes to deliver an item.

At the same time as data are inputted, a barcode tag is printed and attached to the item. This barcode makes it easy to check where an item is by scanning at each source and destination, thus reducing loss of items. Inputted data are also sent to the plant. Using these data, each plant can tell what types and quantity of clothing has arrived each day, enabling efficient work plans to be drawn up and so reducing costs.

The information inputted at each store is collected at the head office and used in designing new services, such as services targeted at individual customer segments (see Case 69) and discount services.

The new information system is being progressively introduced at each store, simplifying merchandise control and raising productivity.

(3) Hotel business

According to the Ministry of Land, Infrastructure and Transport’s Annual Survey of the Tourism Industry, spending on travel by households in Japan has remained approximately level since 1993 (Fig. 213-11). The average number of days stay of Japanese nationals has remained at around five days over the past few years (Fig. 213-12). The number of Japanese travelers overseas is also increasing (Fig. 213-13), and so the situation faced by hotels in Japan remains severe. Even in this saturated market, however, there are examples of enterprises that have succeeded in setting themselves apart from their competitors by paying closer attention to customer needs.

Fig. 213-11  Trends in spending on travel

2. Total annual consumer spending per household on accommodation (accommodation expenses and package travel expenses), travel expenses (rail, air and other transport) and suitcases converted to value in 1999.
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**Fig. 213-12** Average number of overnight travel trips and days stay per Japanese national

![Graph showing average number of overnight travel trips and days stay per Japanese national from 1995 to 1999.]

- **Overnight travel trips**
  - 1995: 4.83
  - 1996: 4.87
  - 1997: 5.26
  - 1998: 5.24
  - 1999: 4.97

- **Days stay**
  - 1995: 2.51
  - 1996: 2.43
  - 1997: 2.62
  - 1998: 2.69
  - 1999: 2.58

**Source:** Ministry of Land, Infrastructure and Transport, *Annual Survey on the Tourism Industry*.

**Fig. 213-13** Trend in number of Japanese travelers overseas

![Graph showing trend in number of Japanese travelers overseas from 1985 to 1999.]

- 1985: 4,948
- 1986: 5,516
- 1987: 6,829
- 1988: 8,427
- 1989: 9,663
- 1990: 10,097
- 1991: 10,634
- 1992: 11,791
- 1993: 11,934
- 1994: 13,579
- 1995: 15,298
- 1996: 15,986
- 1997: 16,803
- 1998: 15,806
- 1999: 16,358

**Source:** Ministry of Land, Infrastructure and Transport, *Annual Survey on the Tourism Industry*.

**Note:** Compiled based on Ministry of Justice statistics by the Tourism Department of the former Ministry of Transport’s Transport Policy Bureau.
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Case 35: Hotel eliminates gap in services between individual employees through acquisition of ISO9002 certification

A Ltd. is a Hokkaido-based hotel operator with 170 employees and capital of ¥50 million. Seeking to become ISO9002 compliant in order to eliminate the disparity in level of service between individual employees, A reformed its operations and prepared service manuals, and was certified in 2000.

Eliminating the disparity in level of service between individual employees
A sought to improve the quality of services throughout the 1990s, but failed to eliminate the disparity between individual employees. Quite by coincidence, the company’s president heard about ISO at around that time. Learning that ISO9000 means “continuing to set one’s own goals and question whether services are being provided consistently in accordance with goals”, he concluded that compliance might help to eliminate the gap in services between employees, and immediately set about acquiring certification.

Comprehensive reform of business and development of service manuals
The company began training in-house inspectors at the end of 1998. Between February and April 1999, it provided training for all employees, auditing its business operations in parallel. For three months from May, manuals on quality, work procedures and various forms were prepared, and these were repeatedly used and amended. Because employees were used to the conventional way of doing things and it was feared that they might continue to follow the conventional way of doing things if the system was introduced only half-heartedly, it was recognized that business operations had to be thoroughly revised and the skills and compliance of employees improved. The company was inspected in December 1999, and certified as ISO9002 compliant in January 2000.

Acquisition of ISO certification enables the provision of same quality of service by all employees
The development of service manuals enabled the same level of services to be provided even when personnel changes were made. They also served to clarify the responsibilities and authority of managers, and are expected to improve management capabilities. The company considers ISO certification as only the starting point, and recognizes a continuing need to maintain and improve quality through twice-yearly inspections by other divisions.

(4) Ordinary restaurants
Looking at trends in the number of business establishments providing mainly meals in the ordinary food service business, it can be seen that whereas specialist stores are doing relatively well, performance among ordinary restaurants (restaurants serving set meals, bowls of rice with toppings, and noodles, etc.) is declining. Over the longer term too, the trend is striking (Figs. 213-14-15).
The turnover of businesses in the ordinary restaurant trade is rapid. The startup and closure rates of business establishments between 1996 and 1999 were 9.7% and 15.5% respectively, well above the average (4.1% and 5.9%).
The ordinary restaurant trade is thus one of the most difficult in which to survive. Nevertheless, there are some SMEs that have succeeded in growing by adopting their own unique business approaches. Below, we introduce one such company that has succeeded by paying close attention to its women customers.
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Fig. 213-14 Trend in number of business establishments in the ordinary food service industry (excluding coffee shops)

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>1999</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary restaurants</td>
<td>87,129</td>
<td>82,034</td>
<td>-5.8</td>
</tr>
<tr>
<td>Japanese restaurants</td>
<td>38,662</td>
<td>39,039</td>
<td>1.0</td>
</tr>
<tr>
<td>Western-style restaurants</td>
<td>29,871</td>
<td>31,523</td>
<td>5.5</td>
</tr>
<tr>
<td>Chinese restaurants</td>
<td>61,814</td>
<td>61,727</td>
<td>-0.1</td>
</tr>
<tr>
<td>Yakiniku restaurants</td>
<td>19,613</td>
<td>20,497</td>
<td>4.5</td>
</tr>
<tr>
<td>Oriental restaurants</td>
<td>3,237</td>
<td>3,829</td>
<td>18.3</td>
</tr>
<tr>
<td>Soba and udon noodle restaurants</td>
<td>34,996</td>
<td>34,526</td>
<td>-1.3</td>
</tr>
<tr>
<td>Sushi restaurants</td>
<td>45,105</td>
<td>42,496</td>
<td>-5.8</td>
</tr>
<tr>
<td>Others</td>
<td>34,056</td>
<td>33,294</td>
<td>-2.2</td>
</tr>
</tbody>
</table>


Note: “Others” indicates the total number of hamburger restaurants, okonomiyaki restaurants and other ordinary restaurants.

Fig. 213-15 Trend in number of ordinary restaurants (business establishments)

5. Wholesale sector

(1) Present and future issues
According to the Ministry of Economy, Trade and Industry’s Census of Commerce (1999), there were approximately 423,000 small and medium wholesale outlets1), accounting for 99% of the total. Annual sales came to ¥309 trillion, equivalent to 62% of total sales. Comparing next the number of outlets and annual sales in 1997/94 and 1999/97, it can be seen that although the decline in the number of outlets has slowed more among SMEs than large enterprises, the slump in annual sales is in fact more conspicuous, and they are threatened by a severe business environment (Fig. 213-16).

In recent years in particular, the slump in demand has grown particularly marked. According to the Survey of Business Conditions in the Small Business Sector conducted by the Small and Medium Enterprise Agency and JASMEC, 50% of all small and medium wholesalers consider the “stagnation of demand” to be a business problem (Fig. 211-1). Behind this stagnation of demand appear to be the following factors.

Reason for focus on women
It is conventional wisdom in the food service industry that a restaurant will succeed if it can attract women customers. Compared with men, women are more discerning about not only taste and price, but also information about dishes, tableware, interiors and cleanliness. Around half of the company’s customers are women, and 70% of the 50,000 or so questionnaires received from customers each month are also from women. The president sees every single questionnaire himself and is sensitive to customer responses, earning a high reputation among customers.

Woman’s perspective (1): Stress on handmade family cooking made from healthy ingredients
Women are highly health conscious, and are also very concerned about what they eat. The president pays particular attention to the nutritional balance of meals so that customers can eat breakfast, lunch and dinner at the chain’s restaurants, and uses healthy ingredients. For example, the company uses organic rice, soy and Worcester sauce without colorings and additives, and free-range eggs. Responding to the comments expressed in customer questionnaires, the company displays the brands and producers of ingredients, and the menus give the calories per dish. Dishes are prepared at each store, with the emphasis on “handmade”.

Woman’s perspective (2): Restaurants located on second floor and in basements near fast food outlets
Women customers are said to always congregate at fast food outlets. The company therefore purposefully locates its restaurants near fast food outlets. It very rarely opens a restaurant on the first floor, however, as it has found that women tend to prefer not to be seen when eating. The company therefore actively locates its restaurants in basements and on second floors.

Woman’s perspective (3): Low-cost management
Women are highly sensitive to price, and as most of A’s set meals are priced between ¥600 and ¥700, they are around 30% cheaper than meals at family restaurants. This is because of thorough containment of costs. For example, tenants of basements and second floors of business buildings are required to pay one third as much security as tenants on first floors. The company also limits the range of dishes it offers. Menus are composed of set meals and seasonal specials, and there are only around 35 items on menus. This makes it easier for dishes to be prepared, and also limits the range of ingredients required, thus reducing costs. As a result of adopting such an original approach, the company’s turnover has steadily grown.

Case 36: Table d’hôte restaurant succeeds by paying close attention to female customers’ needs

A Ltd. is the Tokyo-based operator of a chain of specialist table d’hôte restaurants (mainly family Japanese restaurants). The company’s particular focus is on the needs of women in their twenties and thirties, and by revamping the way its restaurants are run from a woman’s perspective, it has succeeded in generating popularity among customers, and especially women.

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1) Small and medium wholesalers are here defined as stores with 99 or fewer employees.
2) Reduction of suppliers among retailers and makers

As seen in 1), business conditions are severe in the retail sector as well. Amid such circumstances, there are signs of retailers improving efficiency by being more selective in their choice of wholesaler suppliers. According to a questionnaire survey conducted by the Small and Medium Enterprise Agency, between 40% and 50% of retailers had reduced the number of their suppliers greatly or somewhat over the past five years. The number of suppliers used is thus being steadily, albeit gradually, narrowed down (Fig. 213-17). Moreover, this trend is expected to continue (Fig. 213-18).

Fig. 213-16 Number of wholesale outlets and annual sales compared with previous survey

![Number of wholesale outlets and annual sales compared with previous survey](image)

Note: Business establishments are identified under the 1999 survey, and the proportion compared with the previous survey calculated on a time series basis.

Fig. 213-17 Business relations with wholesale suppliers in the retail sector (trends over the past five years)

![Business relations with wholesale suppliers in the retail sector](image)

Source: Small and Medium Enterprise Agency.
As asked whether any major changes would be needed in distribution channel policies in the future, around 70% of manufacturers responded that they would continue to focus on distribution via wholesale channels, but that they would also gradually increase the emphasis on distribution via retail channels (Fig. 213-19). This suggests that manufacturers too will gradually increase direct sales to retailers in the future while continuing to take wholesalers as a starting point for distribution.

**Fig. 213-18 Trade relations with wholesale suppliers in the retail sector (future intentions)**

<table>
<thead>
<tr>
<th>Daily necessities and cosmetics wholesalers</th>
<th>Greatly reduce</th>
<th>Somewhat reduce</th>
<th>No change</th>
<th>Increase</th>
<th>No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.3</td>
<td>36.7</td>
<td>39.5</td>
<td>6.7</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Confectionery wholesalers</td>
<td>8.6</td>
<td>32.9</td>
<td>46.2</td>
<td>6.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Processed food wholesalers</td>
<td>12.9</td>
<td>32.1</td>
<td>35.2</td>
<td>10.5</td>
<td>6.2</td>
</tr>
</tbody>
</table>

Source: Small and Medium Enterprise Agency.

**Fig. 213-19 Distribution channel policies of manufacturers (future changes in basic policy)**

<table>
<thead>
<tr>
<th>(%)</th>
<th>Continue to maintain focus on distribution via wholesale channels</th>
<th>Continue to maintain focus on distribution via wholesale channels while gradually increasing emphasis on distribution via retail channels</th>
<th>Reduce relative importance of distribution via wholesale channels and make direct ties with retailers main focus of policy</th>
<th>Scrap policy of distribution via wholesale channels and replace with direct links with retailers</th>
<th>No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.4</td>
<td>68.5</td>
<td>16.7</td>
<td>5.6</td>
<td>1.9</td>
<td></td>
</tr>
</tbody>
</table>
(2) Role required of small and medium wholesalers

Given the above, there are two things that small and medium wholesalers must do in the future. Firstly, they must bolster their retail support. Because a recovery in performance among client retailers translates directly into increased demand for their wares for small and medium wholesalers, and sustainable business depends on the support of client retailers, small and medium wholesalers must provide active business support for retailers and acquire their confidence.

Secondly, they must take advantage of their position as intermediaries between manufacturers and retailers, which means strengthening their intermediary functions to encourage the smooth flow of information. This is described below in “(2) Enhancement of data matching functions”.

1) Enhancement of retail support

Asked about their wishes concerning the sales support activities of wholesalers in the future, there was strong support for the provision of various forms of retail support, foremost being the collection and provision of merchandise data contributing to the differentiation of merchandise in retail stores (Fig. 213-20).

In order to effect an improvement in business conditions in the wholesale sector, an improvement in the performance of client retailers is essential, and wholesalers must themselves provide active business support for retailers.

In order to do so, they need to provide exact indications to client retailers of the appropriate type, price, time and quantity of merchandise to handle by improving the efficiency of their own management and enhancing their merchandising functions. When providing retail support, the use of IT provides a useful means of integrating and handling large amounts of data.

Below, we describe the case of a company that has succeeded in obtaining the backing of retailers by providing retail support in the niche confectionery market leveraging its private brand.

![Fig. 213-20 Future views of retailers concerning the sales support activities of wholesalers](image-url)
A Ltd. is a company in Hiroshima Prefecture with a workforce of 189 and capital of ¥20 million. It is a specialist confectionery wholesaler that, armed with its own logistics system and private brand, provides space allocation support for the confectionery counters at retailers that are normally regarded as something of a waste of space. The reason why it succeeded in gaining the support of retailers is because it provided retail support for niche confectionery sections enabling gross margins to be increased.

Comprehensive cost cuts to increase gross profits based on retail support

The company formed a joint confectionery wholesaler supply and merchandise development group with itself at its core in order to reduce logistics costs, while at the same time setting about developing its own private brand. Because prices and distribution routes are determined by the plan proposer itself, private brands can be handled more cheaply than national brands, translating into a higher rate of profit. By adopting such an approach, A was able to preserve its advantage over existing wholesalers, who tend to focus more on national brands.

Because of the strong awareness of the importance of cutting costs, the company launched a logistics system developed by itself whereby makers are automatically faxed when there are undelivered products.

Successful development of retail support system enabling increase in gross profits

Large supermarkets normally regard confectionery counters as nothing more than side purchases. This, combined with the difficulty of maintenance of merchandise, means that gross profit per unit of sales floor area of confectionery counters is relatively low. Confectionery therefore tends to be regarded as a waste of space. A, however, alighted upon the niche of increasing the gross profits from confectionery sections, which large supermarkets had not previously addressed, and set about proposing to retailers ways of allocating space in order to raise gross profits from confectionery. The company had developed a system capable of unit control of the merchandise it stocked, and this it upgraded to enable the unit sales and gross profit rate of each store for each type of merchandise to be calculated.\(^1\) It also built up know-how by, for example, conducting trials at client retail stores in order to determine the most efficient arrangement of merchandise. As a result of providing retail support of this kind, the company succeeded in winning the support of retailers by increasing the gross profit margin of confectionery at actual client retail stores.

2) Enhancement of data matching functions

Under the stable, long-term business practices prevalent in the retail sector, the stress has until now been placed on the merchandise supply function, whereby merchandise supplied by manufacturers was sold to retailers. In the future, however, wholesalers will need to take advantage of their position as intermediaries between manufacturers and retailers in order to facilitate the flow of information (by matching up information from manufacturers and retailers) and actively providing such information to manufacturers and retailers.

We have seen how retailers want wholesalers to provide a variety of information through retail support (Fig. 213-20). Likewise, however, manufacturers want wholesalers to support the smooth flow of information by giving retailers information about their own products, and to provide feedback from retailers, such as “determination of trends in retail sales and proposal of sales promotion plans to manufacturers”, and “provision of product information regarding e.g. product development concepts to retailers” (Fig. 213-21).

In relation to logistics, meanwhile, whereas retailers want wholesalers to provide “analysis and provision of information on logistics costs” and “development and guidance on logistics system” services as well as the conventional wholesale functions of “delivery ratio”, “regular delivery”, “bulk delivery” (Fig. 213-22), there is also strong demand among manufacturers for “efficient wholesaler logistics activities to enable reduction of logistics costs of retailers (Fig. 213-23). If wholesalers match up information for manufacturers and retailers and facilitate the smooth flow of information in this way, they should be able to respond to such demands for reducing logistics costs.

Wholesalers must therefore give themselves a raison d’être by gathering and matching information and providing information exactly suited to the needs of retailers and manufacturers, as well as fulfilling their traditional role as distributors of merchandise.

---

1) The company manages the prime costs of each item, wholesale costs and profits and other information regarding the merchandise it handles by computer. By combining these data with time-series data on unit sales at individual retailers, it can calculate the gross profit rate for each store and type of merchandise.
**Chapter 1 — Business innovation by small and medium enterprises**

### Fig. 213-21 Manufacturers’ wishes concerning future merchandising activities of wholesalers (top five)

<table>
<thead>
<tr>
<th>Wish</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination of trends in retail sales and proposal of sales promotion plans to manufacturers</td>
<td>50.0</td>
</tr>
<tr>
<td>Provision of product information regarding e.g. product development concepts, to retailers</td>
<td>42.6</td>
</tr>
<tr>
<td>Collection and loading regarding spread of new products on retail sales floors</td>
<td>38.9</td>
</tr>
<tr>
<td>Monitoring of consumer demand trends in area and area marketing by wholesalers</td>
<td>35.2</td>
</tr>
<tr>
<td>Establishment of merchandising support system for manufacturers</td>
<td>27.8</td>
</tr>
</tbody>
</table>

Source: Small and Medium Enterprise Agency
Notes: 1. Totals exceed 100 due to multiple responses.
2. Respondents chose three of nine merchandising activities that they wanted wholesalers to undertake.

### Fig. 213-22 Wishes of retailers concerning logistics activities of wholesalers

<table>
<thead>
<tr>
<th>Wish</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement and promotion of delivery ratio sought by company</td>
<td>71.4</td>
</tr>
<tr>
<td>Regular delivery sought by company</td>
<td>68.1</td>
</tr>
<tr>
<td>Bulk delivery</td>
<td>62.4</td>
</tr>
<tr>
<td>Analysis and provision of information on logistics costs</td>
<td>42.4</td>
</tr>
<tr>
<td>Development and guidance on logistics system</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Source: Small and Medium Enterprise Agency
Note: Top five of eight questions asked of retailers regarding which a large proportion of respondents chose “active provision sought” or “if possible.”
Below we look at the case of a company that focused on building up a high-quality lineup by passing on merchandise data from manufacturers to consumers via retail outlets while at the same time supporting the effective development of products by manufacturers by providing feedback from retailers to manufacturers. We then move on to describe the case of a company that facilitated the smooth flow of information and achieved low-cost operations by developing a system for taking orders online from suppliers and sales outlets while at the same time improving the efficiency of its own logistics operations.

---

**Fig. 213-23 Manufacturers’ wishes concerning future logistics activities of wholesalers (top five)**

<table>
<thead>
<tr>
<th>Activity</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficient wholesaler logistics activities in order to enable retailers to cut logistics costs</td>
<td>42.6</td>
</tr>
<tr>
<td>Lot response to orders placed</td>
<td>40.7</td>
</tr>
<tr>
<td>Logistics services enabling retail store stocks to be reduced</td>
<td>25.9</td>
</tr>
<tr>
<td>Operation of automatic merchandise supply system based on sales data of retailers</td>
<td>25.9</td>
</tr>
<tr>
<td>Reliable delivery of merchandise suited to sales promotion activities and bargain sales of retailers</td>
<td>24.1</td>
</tr>
</tbody>
</table>

Source: Small and Medium Enterprise Agency.

Note: 1. Totals exceed 100 due to multiple responses.

2. Respondents chose three of 10 logistics activities that they wanted wholesalers to undertake.
Case 38: Wholesaler seeks to develop high-quality lineup by matching up data between producers and consumers

A Ltd., which is based in Tokyo and has a workforce of 98, is a specialist wholesaler dealing primarily in dry goods and dried noodles. It believes the key to its existence lies in supporting the effective development of products by producers by providing feedback from retailers to producers, and in passing on merchandise information from producers to consumers via retail outlets. The dry goods and dried noodles in which A deals are not always of the same quality throughout the year, and are subject to an extent to the vagaries of the weather. By strengthening relations with suppliers, such as farmers and collectors of cargo, it maintains goods relations so that they supply it with better quality produce on a priority basis. The company considers the provision of feedback on consumers to producers to be important to maintaining a high-quality lineup, and so suggests to producers product sizes and ways of packing produce to meet consumer needs. The company also sometimes becomes involved in joint package design with producers as well as planning merchandise taking into consideration market tastes. It then provides information regarding, for example, product design concepts for planned products and seasons for merchandise (dry goods) to retailers.

Focus on employee education in order to maintain supply of high-quality merchandise

The company considers it essential to raise the specialist knowledge of employees in order to maintain the supply of high-quality merchandise, and therefore periodically holds study meetings concerning the merchandise it deals in. It has also developed an environment to encourage highly experienced employees to pass on information, e.g. by enabling employees to share knowledge about ways of handling goods, types of merchandise, methods of cooking, and tastes, etc., and by actually tasting samples. In order to promote the spread of knowledge about merchandise and further improve its human resources, the company also prepares pamphlets about the merchandise it handles. In this way, the company maintains the supply of high-quality merchandise by having employees with specialist knowledge develop areas of production around the country, and is highly rated by the chain stores that are its customers.

Case 39: Company achieves low-cost operation by effective in-house merchandise control at the unit level and obtaining the understanding of suppliers and outlets

A Ltd. is a company in Tokushima Prefecture with 29 employees. It was the first in the handicraft wholesale business to introduce an online order system, thereby achieving low-cost operation. Underlying the successful development of such a system were (1) the subcategorization of in-house merchandise control standards at the unit level and development of an environment enabling the use of POS terminals, and (2) steps taken to ensure the understanding of the system among suppliers and outlets.

Subcategorization of own control standards at unit level

The company used to obtain and deliver orders by repeatedly visiting each handicraft material store, which meant that productivity per sales employee was low and costs were high. After thinking about how the company could survive in the industry, the president subcategorized the company’s merchandise control standards to cover not cases but individual units, enabled collective control of merchandise via POS terminals. The president also made it possible to deal in fractions by, for example, determining prices by which cloth could be sold in units of 10cm. Because the handicraft material industry is characterized by the large variety and small quantity of materials traded, many items have no barcode (JAN code). The company therefore urged vendors to adopt barcodes. As a result, the unit level of orders placed and received was matched with the level of operation of the information system.

Company seeks understanding of suppliers and outlets, and develops online order system

Supplier-makers and vendors discussed electronic data exchange (EDI) on a number of occasions and there were also briefings for explaining the need for JAN codes, as a result of which agreement was reached on compliance. At the same time, the company introduced an EDI system with outlets, and succeeded in eliminating the need to fill out delivery slips. In order to deal with deliveries to outlets that do not wish to participate in EDI, the system has been developed to enable delivery slips to be automatically outputted by reading the JAN code after output of merchandise based on order memos. As a result, suppliers, A and outlets were linked up by EDI, thus enabling various improvements in efficiency, such as by (1) streamlining through prevention of mistakes concerning price and reduction of price search time and elimination of need to issue delivery slips by hand, and (2) reduction of work on billing for accounts receivable and inputting of accounts payable. The company thus succeeded in achieving low-cost operation. For customers and suppliers, the sharing of accurate merchandise data, reduction of costs and reduction of work errors served to increase confidence in the company.
6. Retailers

(1) Current situation

The number of small and medium retailers is now around 1,393,000, equivalent to 99% of the total. A breakdown of these retailers reveals that 75% have between one and four employees, from which it can be seen that the majority of small and medium retailers are small retailers with between one and four employees. Annual turnover of small and medium retailers is ¥105 trillion, which accounts for 73% of total retail sales.

Looking at the Ministry of Economy, Trade and Industry’s Census of Commerce, the number of retail stores in Japan has continuously decreased since 1982. Annual sales too have stagnated since 1991, reflecting the depressed state of the market as a whole. Annual sales in FY1999 in particular registered a decrease for the first time since the Census of Commerce was first conducted (Fig. 213-24).

Turning next to look at changes in the number of stores by size of workforce and annual sales, it is apparent that there is a large difference in trends depending on the size of workforce. Looking first of all at the number of stores by size of workforce, it can be seen that whereas the number of medium-sized retailers (retailers with between 5 and 49 employees) and large retailers (retailers with 50 or more employees) has continuously increased, the number of small retailers had dropped considerably since 1982 (Fig. 213-25). Regarding trends in annual sales by size of workforce, the annual sales of large retailers have continuously increased and those of medium-sized retailers have tailed off in recent years, while those of small retailers began to decline in 1991 (Fig. 213-26). It can thus be seen that small retailers are undergoing a marked decline.

Regarding conditions in shopping districts, where many small retailers are located, the Small and Medium Enterprise Agency’s Survey of Shopping Districts (November 2000) showed that 39% of shopping districts say that business has declined recently, and 53% said that business has stagnated.2) About 90% altogether therefore say that business has declined or stagnated.

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**Fig. 213-24** Trends in number of retail stores and annual sales (1982=100)

Source: Ministry of Economy, Trade and Industry, Census of Commerce.

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1) Small and medium retailers are here defined as stores with 49 or fewer employees.
2) 2% of shopping districts said that business is “prospering”, 53% said that business is “stagnating”, and 39% said that business is “declining”. No response was received from 6%.
Chapter 1 — Business innovation by small and medium enterprises

Fig. 213-25 Number of stores by size of workforce (1982=100)

Source: Ministry of Economy, Trade and Industry, Census of Commerce.

Fig. 213-26 Annual sales by size of workforce (1982=100)

Source: Ministry of Economy, Trade and Industry, Census of Commerce.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

(2) Business problems and responses of small and medium retailers

According to the Small and Medium Enterprise Agency’s Basic Survey of Commercial and Manufacturing Structure and Activity (1998) (Figs. 211-2, 213-27), the most serious problems faced by small and medium retailers relate to the intensification of competition, viz. “cheap competition” (41%) and “competition from large stores” (35%). According to the Survey of Shopping Districts, the most commonly cited serious problem faced by shopping districts is “lack of attractive stores” (73%) (Fig. 213-28). “Improvement and revitalization of individual stores” is therefore important (Fig. 213-29).

Fig. 213-27 Business problems of small and medium retailers

Notes: 1. Enterprises were asked to give multiple responses concerning the business problems they faced, and only the top five responses for retailers as a whole are shown.
2. Figures indicate percentage of enterprises that said that they had business problems.

Fig. 213-28 Proportion that cited as “serious problem”

Note: Top 10 of the 26 questions thought to be major problems for shopping districts cited as serious problems by the largest proportion of enterprises.
It may be concluded from the above that small and medium retailers have found it increasingly difficult to cope with competition in terms of price and range from other sources, especially large stores, in recent years due to the decline in the number of stores that consumers find attractive.

A relatively large proportion of small retailers with 1~4 employees, which have suffered a marked decline in recent years, identify the lack of a successor as a business problem (Fig. 213-27). It can be seen, therefore, that the option of managing a small retailer is insufficiently attractive for managers and proprietors, leading as a result to succession difficulties.

Small and medium retailers thus face a variety of business problems. In order to solve these problems, it is necessary first of all for individual stores to take action to improve their drawing power in order to assist such action by individual stores,

1) Action by individual stores

As noted above, the biggest business problem faced by shopping districts, “lack of attractive stores”, relates to individual stores (Fig. 213-28). In order to improve the business of small and medium retailers, therefore, it is first necessary for individual stores themselves to take action. The key to store development in the small and medium retail sector is how to increase the attractiveness and customer drawing power of a store with only limited business resources.

In (a), therefore, we look at the case of a store that has forged particularly close links with customers and the local community to improve its customer drawing power. We then move on in (b) to examine a store that has increased its drawing power by boosting its competitiveness by adopting a collaborative approach.

(a) Close links with the community and customers

Small and medium retailers as a rule enjoy close ties with the community and their customers, enabling them to provide goods and services more closely tailored to their needs. It is difficult for small and medium retailers to compete with large stores in terms of price and range, making it important that they leverage their local ties in order to win the further support of consumers.

Below, we look at a vegetable store that has expanded sales by supplying organic vegetables giving prominence to producers, a pharmacy that has increased its custom by giving detailed advice to the elderly and other local customers, a bicycle shop that has succeeded in increasing sales of highly reliable bicycles by selling online, and a toy shop that has increased its drawing power by making sure it does not run out of stock and limiting its range to popular low-priced products.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

Case 40: Company succeeds in increasing sales by supplying organic vegetables and enabling shoppers to see who produced them

A Ltd. is a vegetable store in Tokyo with three employees that has succeeded in increasing sales as a specialist retailer of organic vegetables and rice.

All the price cards used in A’s store feature the name of the producer. The proprietor, B, who changed tracks from being a vegetable wholesaler, says “Whether it’s vegetables or rice, we make sure that the name of the producer is prominent in order to reassure shoppers, who feel that produce is safe if they can see who made it.”

In addition to featuring the names of producers on price cards, A also invites producers in to the store once a month to talk about their produce.

Although the issue of organic vegetables is now highly topical, they still do not play a central role in the distribution of agricultural produce. A’s line of business is therefore by no means an easy one. B, however, reasons that “in order to sell pioneering goods, the proprietor must act in a sense as a missionary”. Guided by this principle, he is working to develop a store that helps people lead healthy lives.

Case 41: Pharmacy distinguishes itself from its competitors by giving detailed advice to the elderly

A Ltd. is a pharmacy with one employee in a local shopping district in Tokyo. It has succeeded in winning the trust of its customers and increasing sales of drugs by offering advice to the elderly.

A number of other competing pharmacies are to be found in the same shopping district. A is not as cheap as its competitors in terms of price, but is instead used by customers attracted by its superior service. Particularly popular with elderly customers is the detailed, reliable advice given by A’s pharmacist. The way in which A increased the number of its elderly customers was as follows.

A employed a highly skilled pharmacist capable of giving apt advice two years ago, resulting in an increase in the number of elderly customers using the pharmacy. Elderly people come to seek advice on health matters that they are worried or unsure about, and A’s pharmacist is careful to explain in easy-to-understand terms, patiently and more than once where necessary.

People now face a surfeit of information on health, much of which is of interest to the elderly. A’s pharmacist explains this information in plain language, and provides advice suited to each person’s physical condition. There is a tendency, for example, for only the positive side to certain foods to be broadcast on television. At A, however, customers can find out about the negative aspects as well, and find out whether or not such foods suit them. A also caters to people who may have sought the advice of a doctor regarding a health-related matter that they were concerned about, but not properly understood what they were told. Customers who forget or wish to check something that they were told are also welcomed by A, which explains things thoroughly and as often as is necessary to allay customers’ concerns. At such time, A pays attention to building up a long-term relationship rather than immediately selling the customer a particular product, and this is one reason why the pharmacy has succeeded in winning the confidence of the elderly.

A also offers a delivery service for delivery of heavy and bulky everyday items, and this too has proved popular with the elderly. In this way, A has developed services that bring it closer to its elderly customers, thus distinguishing itself from its rivals.
While small and medium retailers face a variety of business problems, they often find it difficult coping with these problems independently because of their limited business resources. One solution is for them to supplement their limited resources through cooperation with other enterprises. Cooperation is particularly important in that it enables small and medium retailers to make up for their weak points, such as their limited lineup and lack of price competitiveness. With this in mind, we look at the case of a voluntary chain in i), and cooperation among small and medium consumer electronics stores designed to enhance competition in ii).

i) Voluntary chain

One problem with voluntary chains in Japan is their strong “voluntary” nature, which makes it difficult for leadership to be exercised. Below, we look at one example of the development of private brands and reduction of logistics costs through the development of a system enabling a chain’s headquarters to exercise leadership, and an example of the development of a chain by local small and medium-sized supermarkets leveraging their strong local ties.

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1) Voluntary chains are organizations set up by a number of retailers scattered throughout a variety of locations (including in some cases wholesalers) in order to modernize retailing through joint operations determined by member retailers by means of a permanent chain system that respects the individuality of each retailer.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

Case 44: Creation of headquarters with strong leadership powers to pursue development of private brand and improvement of logistical efficiency

Group A is a voluntary chain of middle-tier, small and medium-sized supermarkets based in Tokyo. The headquarters exercises leadership over the group’s 200 members throughout the country, pursuing the development of private brands and the reduction of logistics costs. In order to improve leadership functions, the group has made the headquarters into a joint-stock company, enabling more rapid decision-making.

Launch of development of private brand
A new low-cost brand (consisting largely of processed foods and household goods) was launched in February 2000, and 51 items have so far been developed. All costs, from procurement of raw materials through to logistics, were revised down, resulting in prices being around half of those of national brands. With regard to national brand merchandise, the group is taking action to lower purchase prices through direct plant delivery of popular items.

Joint delivery center established to reduce costs
The group has combined the sales force of its members’ 3,000 stores, and sought to reduce purchase prices by buying stocks in bulk. The headquarters decided that the most efficient way for the group’s headquarters to further minimize merchandise logistics costs and streamline the receipt, inspection and display at stores would be to establish a joint delivery center capable of supplying full lines in three temperature bands. A combined logistics center was therefore established in Chiba Prefecture in February 2000. This drastically reduced the number of vehicles required to deliver merchandise to stores. Periodic delivery in bulk also cut work in stores and receipt of goods, and further improved the lineup in stores.

Case 45: Development of chain with close local ties

Cooperative A operates a voluntary chain that only supermarkets with close local ties could have created. The cooperative was originally established by 11 local vegetable stores for joint sourcing of stocks of confectionery. Meetings were initially held each week. Despite the difficulty of attending meetings in the evening as well as operating stores during the day, the members worked together to establish a joint sourcing system because of the cost savings this would generate. Joint sourcing was subsequently expanded to encompass dry and chilled foods and general merchandise. Fruit, vegetables, fish and meat, however, continued to be purchased on an individual basis.

The cooperative’s representative director explains, “Almost all the members had begun as vegetable stores, and so knew about purchasing supplies and had a good eye for choosing fruit, vegetables, fish and meat. The presence of customers buying such items is a strength of local small and medium-sized supermarkets, and offers them a way of surviving against larger competition.”
2) Measures by stores and city centers

(a) Measures to improve stores’ customer drawing power

As explained in an earlier section, for small and medium retailers to face up to their business problems requires first of all that individual stores take steps to improve their own business position. Given that the principal problems faced by individual stores in shopping districts are “low awareness of involvement of businesses” (65%) and “lack of dynamism due to succession difficulties” (62%) (Fig. 213-28), it is important that small and medium retailers located in shopping districts should take action as shopping districts as a whole to address these problems. Because of the fact that over 80% of shopping districts say that the number of customers has fallen compared with five years ago,1) there is a particularly urgent need for steps to be taken to attract shoppers back to shopping districts. Many of the steps that can be taken to improve the attractiveness of shopping districts relate to physical infrastructure, such as the improvement of streets through the provision of street lighting, use of colored paving, and separation of roads and sidewalks, and the provision and maintenance of parking facilities. In this section, however, we focus on a shopping district seeking to attract elderly shoppers by adapting to the needs of an aging society in i), a shopping district aiming to improve its customer drawing power by adopting IT in ii), and a shopping district working to attract customers that do not normally visit shopping districts in iii).

i) Attracting elderly shoppers by adapting to the needs of an aging society

One interesting way in which shopping districts have begun trying to increase their customer drawing power and revitalize business is by attracting elderly customers to individual stores by means of meeting their diverse needs and contributing to the creation of a more comfortable living environment.

Below we look at one shopping district located near care service facilities that has succeeded in attracting shoppers by issuing care service coupons to elderly users, and the case of a shopping district that has established a specialist store stocking all kinds of health products and daily necessities for the elderly to encourage elderly shoppers to shop there and at other stores throughout the shopping district.

1) According to the Survey of Shopping Districts, 5% of shopping districts said that the number of shoppers had increased compared with five years ago, 12% said that the number had remained unchanged, 81% said the number had declined, and 2% gave no response.
Case 47: Shopping district hopes to increase number of elderly shoppers by issuing care service coupons

Shopping district association A in Kyoto Prefecture hopes to raise the number of elderly shoppers that it attracts by positioning itself as an “elderly friendly” shopping district and attracting shoppers from neighboring care service facilities by means of issuing care service coupons to elderly users.

A began issuing care service coupons (mainly to the elderly) in April 2000, which it distributed to stores throughout the shopping district. An advice center was set up in the shopping district in order to provide advice to elderly persons who had received service coupons at stores and to recommend various care facilities. The hope was that residents who visited the neighboring facilities would also visit the shopping district.

The association’s executive decided to issue coupons when it discovered following a statistical survey of the local resident population conducted in order to revitalize business that while many elderly people lived near the shopping district, there were few elderly shoppers. A thus realized that it could not be particularly attractive to the elderly, and set about portraying itself as more “elderly friendly”.

Case 48: Store specializing in rich range of goods for the elderly established

Shopping district A in Fukuoka Prefecture operates a specialist store called the Otassha Club. Set up in what was a vacant store, the Otassha Club stocks a range of common daily necessities and health products targeted at the elderly. A’s hope is that by establishing a store specializing in a full range of products for the elderly, it will be able to increase the number of elderly visitors that visit other stores in the district.

Although stores of this type are also operated by some general trading companies, it is very rare for them to be found in shopping districts.

In order to win the custom of the elderly, the shopping district concluded that it was necessary to stop trying to follow youth fashions, and instead act as a “one-stop shop” for services and daily necessities that would make elderly shoppers want to use the shopping district. However, it is difficult to do all one’s shopping at just one store in a shopping district. Using store space that happened to become available at the right time, the shopping district decided to establish its own specialist store—the Otassha Club—to enable elderly shoppers to shop for daily necessities, such as expendable supplies, nursing care goods, nursing care equipment, and clothing designed with the needs of the elderly in mind, in just one location.

Items such as shoes with Velcro fastenings that are easy to put on and take off, colorful stickers, and light magnifying glasses, often become topics of conversation when elderly people come together. However, there had not previously been anywhere nearby bringing all these products so that they could all be easily bought in one location. The Otassha Club as a consequence enjoys a flourishing reputation with shoppers, and many shoppers comment delightedly that “they have everything here” and “at last we have our own shop”. The store also serves as a meeting place for the elderly, and it is taking active steps to meet the needs for products of the elderly discovered as a result of the establishment of the Otassha Club.

ii) Improvement of customer drawing power through use of IT

Use of IT is spreading, and shopping districts too are making use of this new technology to upgrade and revitalize small and medium retailers. Below we look at a shopping district that has used IT to encourage people to shop there by developing its own original brand and setting up a homepage in order to raise its profile.
iii) Targeting shoppers who do not visit shopping districts

There are many shopping districts that have stores with regular long-time customers, but which are nevertheless not used at all by some consumers living nearby.\(^1\) The case described below is that of one shopping district that is endeavoring to increase its drawing power to attract such consumers and.

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**Case 49: Shopping district develops its own original brand and establishes homepage to boost publicity**

Shopping district A in Tokyo aims to increase the number of shoppers that visit by developing its own original brand and establishing a homepage to boost publicity. Many of the stores in the shopping district still rely on face-to-face selling, and there are many shoppers who feel safer buying certain products at certain stores. Focusing on this reputation for reliability among consumers, A sought to develop several healthy products containing as few additives as possible to create its own original brand. Starting with the core concept of making a range of "healthy" products, the brand was subsequently developed by individual proprietors each innovating in their own way. The products, which largely reflect the views of housewives, are designed to appeal to consumers today, enjoy an excellent reputation with residents living nearby.

In order to advertise this original brand, designed to reflect the views of local residents, the shopping district launched its own homepage. This provides details about the brand, and also provides a map of the shopping district and explains the origins of the name and history of the district. Products can also be bought online. However, as most consumers visit the shopping district after accessing the homepage, this original brand and home page have served as advertising for the shopping district, increasing the number of visitors.

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**Case 50: Shopping district uses group interviews to determine the views of consumers who do not use it to change thinking of individual stores**

Shopping district A in Tokyo has made active use of group interviews\(^2\) to determine the views of consumers who do not use it, and hopes to use the results to change the thinking of individual stores and attract such consumers. Among the steps taken by A to increase drawing power have been the provision of parking, launch of points cards, and preparation of shopping maps. Then in 2000, in order to determine the shopping district’s future course, the shopping district commissioned a consulting company to conduct a survey of consumers. The survey used the group interview method. However, the technique was adapted slightly by the shopping district in order to actively reach out to determine the views of consumers who did not ordinarily use the shopping district. In order to encourage such consumers to respond, an anonymized group interview format was adopted, and participants were rewarded for their time.

The survey showed that whereas regular customers had an extremely high opinion of individual stores in the shopping district, consumers who did not use the shopping district tended to feel that they were treated differently from regular customers, and that the entrances to stores were narrow and uninviting. The results thus showed that they were put off by the attitude of shopkeepers toward customers and the atmosphere of stores, and consequently did not go back to the shopping district. Because attitudes toward customers and store atmosphere can be largely rectified through relatively minor adjustments of thinking and rearrangement of store interiors, the shopping district seeks to make itself more inviting to win new customers by providing guidance and organizing study meetings for stores in the area.

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1) According to the Opinion Survey Concerning Retail Stores, etc. conducted by the Cabinet Office in 1997, 43% of consumers said that they hardly ever or never used shopping districts.

2) See Appended Note 213-2 regarding group interview techniques.
(b) Measures to raise overall drawing power of city centers

In order to raise customer drawing power, the most important thing is that individual stores seek to innovate aware of their involvement in shopping districts, and to support such moves by taking action to improve the overall drawing power of shopping districts as a whole. One issue that is commonly regarded as a problem by shopping districts, however, is the decline in the population in their area of business (cited by 57% of shopping districts), and this is a problem that is not easily addressed by shopping districts acting independently (Fig. 213-28). In order to deal with this problem, therefore, steps need to be taken to raise the customer drawing power of not only individual shopping districts, but also of entire city centers. An important question in this regard is how to make city centers more attractive overall to as to make themselves more attractive and appeal to consumers on an everyday basis.

With these points in mind, we look at the case of a third-sector project located near an existing shopping district that is increasing the overall drawing power of a city center working in friendly competition with individual stores in the area’s shopping districts.

As the previous example illustrates, individual stores and shopping districts need to work together to promote

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**Case 51: Third-sector project leads shopping districts in achieving joint goal of improving city center drawing power**

In City A in Shiga Prefecture, a third-sector initiative, B Ltd., has led existing shopping districts in achieving the joint goal of improving the city center’s overall customer drawing power by engaging in friendly competition with shopping districts and staging joint events such as local exhibitions.

**Background to the establishment of B**

B was established in 1988. A’s city center at the time was seriously impoverished due to the development of large stores in the suburbs. The survival of the city center’s trademark buildings, which had survived from the Meiji period, consequently became an issue. The maintenance and preservation of these buildings was in a sense the task of existing shopping districts in the region, but at the time they lacked sufficient resources to do this.

B was established as a glass business by a team led by a manager not involved in commerce who lived near a shopping district in the area. B was established as a center for urban development of A and to help preserve buildings in the city center.

Leadership was initially exercised by C, who was the president of a warehousing company. Being dissatisfied with the traditional “town outlook” of existing shopping districts, he had not been involved in their activities, and concentrated on his own independent activities.¹)

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¹) B started out by running a glass shop, but later became involved in glass studios and galleries, a glass museum and the restaurant business. In addition to C’s leadership, B’s success in the glass business was due to the fact that, although a third-sector initiative, more than half of its funding came from the private sector. It thus succeeded in successfully combining the business skills of a president from the private sector with the creditworthiness of the government sector. Other important factors were the active recruitment of women staff in order to appeal to young women customers, the focus on the training of staff (e.g. by sending them for training overseas), and the development of stores to preserve the traditional townscape. The project’s success has thus been due to a combination of factors.
urban development in order to increase the overall drawing power of city centers. However, the impoverishment of shopping districts in recent years is due in part to structural factors, viz. the “hollowing out” of city centers due to a number of structural factors, such as rapid motorization, changing consumer lifestyles, population migration to the suburbs, and the consequent movement of commercial and public facilities to the suburbs. There are thus limits to what can be achieved by individual shopping districts acting independently. It is because of this that the Law on Improvement and Vitalization in City Center (known in full as the Law on Integrated Promotion of the Development and Improvement of City Centers and vitalization of Commerce in Central City Centers) was introduced in July 1998. The aim of this law is to achieve synergies through the development and improvement of city centers and the revitalization of commerce and cooperation between them. Below, we describe the establishment of meeting and educational facilities for residents in front of a city center station in order to raise the city center’s drawing power. The revitalization of business under the Law on Improvement and Vitalization in City Center requires

### Case 52: Improvement of city center drawing power through establishment of meeting and learning facilities for city residents

City A in Hokkaido established in front of the city’s main JR station a community plaza to serve as a local community hub along with a local government network center. It was designed to serve as a meeting and learning place for city residents and a center for the introduction of IT in the area. Using these facilities as a springboard, various steps have been taken to make the entire area more attractive.

A, which dates back to the early Meiji period, was forced to take action to maintain its drawing power in the face of competition from its larger neighbor, recognizing that the decline of the city center was not merely an economic problem, but also presented a cultural crisis because of the threat to the region’s traditions and cultures. In addition to its existing development program for the square in front of the station, therefore, the city joined forces in 1997 with the local chamber of commerce and industry and federation of shopping district development associations to launch a fresh revitalization program ahead of the anticipated introduction the following year of the Law on Improvement and Vitalization in City Center.

The local government network center consists of conference rooms fitted with audio-video equipment, an exchange center, multimedia hall, and other such meeting facilities. These are used for popular computer classes, introduction the following year of the Law on Improvement and Vitalization in City Center.

The local government network center consists of conference rooms fitted with audio-video equipment, an exchange center, multimedia hall, and other such meeting facilities. These are used for popular computer classes, lectures using high-quality audio-video equipment and sound facilities and video screenings, and films screened on large screens and using high-definition TV facilities.

that action be taken in order to raise the overall customer drawing power of city centers by, for example, developing the townscape over a wide area in accordance with an integrated concept, and creating attractive shopping districts that treat the entire city center as one big shopping mall. TMOs have an important role to play in leading such efforts.

The basic process of revitalization of city centers by TMOs is as follows: (1) formulation of basic city center revitalization plans by the municipality (copies of which are sent to the central government); (2) preparation of a TMO initiative by the part intending to become a TMO for approval by the municipality (the organization approved by the municipality becomes a TMO); (3) the TMO combines the individual plans for the project to create a single TMO plan, obtains the approval of the central government, and sets about actual implementation of the plan. As of March 2001, 379 basic plans had been submitted by municipalities, and 118 TMO initiatives had been prepared. With TMOs leading the way, individual plans for the development of facilities and tenant mix programs are now at the implementation stage. However, it has been noted that TMOs themselves face a number of problems, such as the need to strengthen their own business base and the shortage of skilled staff (Fig. 213-30).

Because of the need to take a long-term view of the revitalization of city centers, it is too early to say, less than three years after the law entered effect, what level of success such activities should have. Nevertheless, because of the shortage of staff with specialist knowledge, there has arisen the problem that concrete business plans have not been laid down for TMO projects. Below, therefore, we look at the system for urban redevelopment in the U.S., which provides one model for city center revitalization activities in Japan, and the role of planners in this system.

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1) TMOs are defined under the Law on Improvement and Vitalize in City Center as vehicles whereby associations and chambers of commerce and industry and third-sector initiatives are approved by a municipality to plan, modify and implement the integrated and systematic development of commercial agglomerations in central city centers.

2) TMO initiatives and TMO plans are legally respectively called “small and medium retailer upgrading project initiatives” and “small and medium retailer upgrading project plans”. As there is no requirement that the central government be informed of TMO initiatives, the figures given in the main text are estimates determined by the Small and Medium Enterprise Agency.
Because of the naturally different environments and historical development of cities in Japan and the U.S., the example described below is not entirely applicable in Japan. In order to ensure successful town management, however, it is necessary that Japanese TMOs and the town managers who support them should be given further responsibility and authority, and that the conditions be created to assess and reward them appropriately. It is also important that an environment be developed to enable the training of town managers with sufficient skills and ability to play such a role.

**Fig. 213-30 Concerns regarding the operation of TMOs (top five)**

![Bar chart showing concerns regarding the operation of TMOs (top five)]

- Difficulty funding TMOs' operating expenses: 83.2%
- Difficulty hiring staff: 60.6%
- Figures such as local businessmen dying out: 46.5%
- Difficulty forming a local consensus: 40.3%
- Shortage of information about support systems: 15.5%

Note: Totals exceed 100 due to multiple responses.

**Case 53: Local governments headhunt highly experienced planners for a large fee, and give them the responsibility and authority to pursue centralized urban redevelopment (U.S.)**

The most important characteristic of urban redevelopment in the U.S. is the fact that local governments headhunt figures with long experience and a proven track record with shopping center developers and shopping center management companies, whom they employ for a high fee as planners to take part in negotiations with private-sector developers. Planners are given considerable control over budgets, personnel and the conclusion of contracts with companies, and are assessed each year to make them accountable for their performance.

The Federal Urban Redevelopment Program launched in order to counter the decline of central city centers in the U.S. after the Second World War prohibited local governments from negotiating with private-sector developers at the planning stage. As a consequence, the redevelopment plans developed independently by local governments suffered the defect of lacking in market viability. Urban development that spread undertaken by local governments in the latter half of the 1970s was undertaken in a form that reflected a reexamination of this defect.

In order not to repeat the mistakes of the Federal Urban Redevelopment Program, local governments began to negotiate with private-sector developers from the planning stage. However, such negotiations required not only conventional knowledge of planning and regulations concerning land use, but also planners with a wide range of experience and knowledge.

Planners draw up urban development plans using their own experience and that of private-sector developers, offer various incentives to developers, and themselves lead the execution of urban redevelopment projects.

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3) Town managers use knowledge of urban planning and commercial revitalization to provide advice and guidance to organizations such as TMOs. The term is a general one for persons who engage in the actual business at TMOs, and is not a qualification such as that of “small business consultant”.
7. Industrial agglomerations

(1) Industrial agglomerations in transition
Manufacturers are found throughout Japan, and are distributed in a variety of ways. Often they are found concentrated within a relatively small area. These concentrations are called “industrial agglomerations” in Japan. The conventionally recognized advantages of industrial agglomeration are (1) ease of procurement of parts and materials, (2) ease of access to market and technological data, (3) smooth division of labor, and (4) their value as seedbeds for startups. However, existing industrial agglomerations have been severely affected by structural changes in the domestic market, such as the maturation of existing markets and changes in the needs and purchasing outlook of consumers, and the impact of the hollowing out of industry due to the shift overseas of manufacturing, and the increase in imports of manufactured products from overseas.

It was against this background that the Regional Industrial Agglomeration Activation Law (known officially as the Law on Temporary Measures for Activation of Specific Regional Industrial Agglomerations) was introduced in 1997. The purpose of this law is to provide various forms of support for “A-type agglomerations” (basic technology industrial agglomerations consisting of manufacturers of parts and trial products, etc. underpinning Japanese manufacturing) and “B-type agglomerations” (specific SME agglomerations consisting of SMEs located in areas of production and company towns supporting regional economies) in the form of subsidies, low-interest loans and tax breaks when developing new technologies and products and opening up new markets.

In the following section, we describe the changes occurring in industrial agglomerations through an analysis of the current situation of industrial agglomerations that have received assistance under the Regional Industrial Agglomeration Activation Law.\(^1\)

1) Performance of industrial agglomerations at the macro-level
Value added by manufacturing industry in Japan as a whole between 1995 and 1998 registered a decline of 3.3% from ¥119,269.3 trillion to ¥115,279.9 trillion. Over the same period, the number of employees declined 4.4% from 10.88 million to 10.40 million.

The value added during this period by A-type agglomerations in 25 regions, however, registered a decline of 5.5% from ¥38,284.7 trillion to ¥36,179.2 trillion, and the number of employees declined 6.3% from 3.01 million to 2.82 million. Also over the same period, the value added by B-type agglomerations in 81 regions\(^2\) registered a decline of 4.9% from ¥39,398.3 trillion to ¥37,480.5 trillion, and the number of employees declined 6.9% from 3.33 million to 3.10 million.

From the fact that the trend in the value added and number of employees of both A-type and B-type agglomerations was below the national average, it may be concluded that conditions faced by industrial agglomerations at the macro-level remain as harsh after the introduction of the Regional Industrial Agglomeration Activation Law as before.

If one looks at the rate of growth in value added per employee in A-type and B-type agglomerations and nationwide, however, one finds that it is much higher for B-type agglomerations than the national average. Moreover, while lower than the national average, the rate of growth for A-type agglomerations was below the national average, it may be concluded that conditions faced by industrial agglomerations at the macro-level remain as harsh after the introduction of the Regional Industrial Agglomeration Activation Law as before.

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2) Variation in performance of industrial agglomerations

If industrial agglomerations are next classified into their respective types, one finds considerable variation in the rate of growth in the value of shipments between 1995 and 1998, even among industrial agglomerations of the same type (Fig. 213-32).

According to the results of a questionnaire survey of agglomeration regions, more than half said that business was depressed across the board (16%) or in parts (40%). From this it can be seen that regional industrial agglomerations are somewhat depressed overall. Even in regions where conditions were considered to be depressed, however, it is apparent that there was some variation. At the same time, however, business conditions were buoyant across the board in 0% and buoyant with some variation in 14% of agglomerations, indicating that there is a recognition that even in regions where conditions in agglomerations are buoyant, not all companies in the region are in a strong position (Fig. 213-33).

To summarize, industrial agglomerations are not yet out of the slump at the macro-level, but even among industrial agglomerations of the same type, there is some variation between regions, and between companies in the same region. This indicates that as a result of various changes due to the transformation of the economic environment in Japan, there are limits to what conclusions may be drawn from macro-level analyses of the condition of industrial agglomerations. At the regional level, however, even in agglomerations where the value of shipments and number of employees has stagnated, there are some companies that have succeeded in improving their business performance.
Fig. 213-32 Performance in terms of shipments by type of agglomeration


Note: 88 of the 106 A-type and B-type agglomerations for which figures are available have been plotted.

Fig. 213-33 Regional business sentiment in industrial agglomerations

(2) Business innovation by individual enterprises in agglomerations

Although as remarked above industrial agglomerations are still in the doldrums at the macro-level, at the micro-level individual enterprises are desperately innovating to survive. As a result, there has emerged some variation in performance in industrial agglomerations. Business innovation is being undertaken in a variety of ways. Some enterprises, for example, are attempting to meet customer demands by further cutting costs, while others are further upgrading their own technologies in order to gain the confidence of customers. In this section, however, we turn to look at a number of companies that have succeeded in innovating because the proprietor has exercised leadership and led the company to develop new products and move into new fields without restricting itself to the lines of business, types of products and order relations traditionally peculiar to an industrial agglomeration.  

Individual companies in industrial agglomerations are said to have a strong herd instinct. Case 54, however, describes the case of a company that succeeded in setting its products apart and developing new products by using specialist designers and determining the needs of consumers through after-sales service.

The strengths of industrial agglomerations is that they are also the location of support bodies, such as chambers of commerce and industry, that play an active coordinating role and provide technical support, and in addition accumulate know-how thereon. Case 55 describes the case of a company that has made it possible to move into the uncharted territory of biotechnology by making active use of such institutions and building up its network of contacts.

Case 54: Company succeeds in developing new products by using designers and determining consumer needs through finely tailored after-sales services

A Ltd. is a manufacturer of Western-style metal tableware located in the Sanjo-Tsubame region with a workforce of 40. It has succeeded in diversifying its business and switching to domestic markets by (1) putting the emphasis on design by leaving product planning to younger employees and using specialist designers to create its own range of tableware products, and (2) enhancing after-sales services in order to gain a detailed understanding of customer views and develop self-help devices for the disabled.

Younger employees and specialist designers used to develop attractively designed tableware

Because of the high proportion of metal tableware that it exported, A was hit hard by the slump in exports following the rapid appreciation of the yen from 1985, and was uncertain whether the firm would survive. The president therefore actively sought to win fresh orders from wholesalers in Japan, but was completely unsuccessful. He became keenly aware that wholesalers would not buy the company’s tableware if it was just like that of other companies, and that the company had to come up with products that wholesalers would want to buy. He therefore decided to start developing tableware such as tea utensils and daily necessities.

The president left the task of product planning in the hands of his son and other younger employees, and a designer in Tokyo was commissioned to produce the designs. The president says that “One of the reasons for our success was the fact that we drew on their individuality by basically leaving them to do as they wanted”. The new tableware was shown to wholesalers and retailers at the planning stage, and production begun once orders had been received.

Development of tableware for the disabled through monitoring of consumer needs through after-sales services

The next product the company decided to make was spoons for the disabled made using shape memory polymer (polyurethane plastic) for the handle. As the president’s own daughter has an impaired hand, he had himself long tried to produce a product to enable her to enjoy eating meals herself. As a result of providing after-sales service and dealing with claims, the company gained a detailed understanding of the diverse, individual needs of customers. In addition, through his own participation in a network for parents with disabled children, the president became aware of the pressing day-to-day needs of such children. It was by combining this knowledge that the company succeeded.
(3) Moves to rebuild cooperative ties between companies in industrial agglomerations

As noted above, now that industrial agglomerations are losing their dynamism, proprietors and managers need to demonstrate leadership at individual enterprises in order to encourage business innovation. Some of the enterprises that are successfully innovating in this way are leveraging one of the inherent advantages of agglomerations, which is the close proximity to a company of a variety of other companies. Below, therefore, we focus on cases of the active use of outside resources leveraging the strengths of industrial agglomerations through (1) building new systems for outsourcing, and (2) developing new inter-enterprise networks.

1) Creation of new systems of outsourcing

For manufacturers, concentrating business resources on core technologies and outsourcing other business offers an effective way of maximizing a company’s strengths. The development of new systems of outsourcing in industrial agglomerations requires, however, not the creation of new keiretsu affiliations, but rather the development of systems for the co-prosperity of industrial agglomerations as a whole that consequently contribute to a company’s own business.

Below we examine the case of a company that has reaped synergies strengthening its business base by outsourcing and at the same time supervising an inter-industry exchange forum and consulting service in order to raise the capabilities of its suppliers.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

Case 56: Outsourcing of non-core technology and raising of level of suppliers and customers through provision of consulting service

A Ltd. is a company with a workforce of nine based in the Hamamatsu region. It places a strong emphasis on its core surveying, planning and design capabilities, and outsources actual manufacturing to other companies. In order to improve the level of its products, however, the company recognizes the importance of raising the level of the suppliers it outsources to and companies in the vicinity, and so plays an active role in coordinating cooperation and consulting services. The company's founding president, B, established the company after leaving a major motor manufacturer in 1987. Building on the mechatronics skills that B had mastered in his former job, the company specialized in the design and development of combined laser, sensor and computer control technologies. At the outset, the company took orders for the production of trial products from B's former employer and other major manufacturers. As orders gradually declined, however, the company switched to producing planning proposals. Proposing plans for trial products that major manufacturers would want to buy, required the priority allocation of business resources to investigation, planning and design. The company therefore switched to outsourcing actual production. The companies to which it outsourced were largely located in the technologically advanced industrial agglomeration of Hamamatsu, and to a lesser extend in the neighboring areas of Toyohashi and Mikawa.

B concluded that it was necessary to build strong ties with neighboring companies in order to maintain its outsourcing system and grow the company's business. The company therefore provides know-how on investigation, planning, design and marketing to other SMEs. B also decided that it would contribute to the revitalization of the region and be in A's own interests if the company itself were to coordinate cooperation. In order to coordinate cooperation on the development of new products and technologies, therefore, the company plays a leadership role by, for example, coordinating an inter-industry exchange forum consisting largely of young entrepreneurs in the region and supervising network activities.

2) Development of new inter-enterprise networks

Despite differences in size and content, there have existed a number of inter-enterprise networks in industrial agglomerations for some time. However, these networks have mainly revolved around cooperation based on the concept of economies of scale regarding, for example, joint orders for raw materials. The socioeconomic environment of today is changing however, transforming the importance of inter-enterprise networks. There are thus emerging enterprises seeking to build such networks from a new perspective.

Below we describe the case of an inter-industry group that established a company to coordinate efforts to solve various manufacturing-related problems to answer the question of how best to produce products to win the support of consumers.

Case 57: Inter-industry exchange group jointly funds establishment of company to coordinate manufacturing activities in cooperation with chamber of commerce and industry

A Ltd., which is based in the Higashi-Osaka region and has 15 employees, is a joint venture established by an inter-industry exchange group centered in the city of Higashi-Osaka. Because of the Higashi-Osaka region's prominence as a center for manufacturing, the chamber of commerce and industry receives a variety of manufacturing-related orders and inquiries. A was established as a subcontractor to take up such inquiries from within and outside the region, and undertake the development and trial production of products.

Limited company established financed jointly by inter-industry exchange group

The inter-industry exchange group established in April 1998 by Higashi-Osaka City through public subscription originally had 13 members and now has 21. It discovered in the process of visits to group members' plants and the organization of study meetings over the period of around one year that planning and development at individual companies and other inter-industry groups had in many cases not progressed to the manufacture and marketing of actual products. Unlike other inter-industry exchange groups, the group therefore decided to create a company to actually undertake solving the various manufacturing-related problems so as to take advantage of each other's core technologies and specialist fields, and thus A was established in April 1999.

The company flexibly coordinates each stage, from introducing the most suitable company to the conclusion of contracts, in response to inquiries regarding, for example, the development and trial production, combined processing and unit production of products in a variety of fields, starting with the inquiries received by the chamber of commerce and industry. For these services it receives a fixed commission, which provide its source of income.
(4) Moves to form new industrial agglomerations: software industry agglomerations

1) Growth of software industry around cities

The spread of the Internet in recent years has also led to the emergence of a variety of Internet and IT-related enterprises and the growth of new agglomerations around urban areas. There are thus now forming agglomerations of content-related enterprises, such as makers of animations and video game software, in addition to more conventional software and data processing service providers.

According to a survey by the Ministry of Land, Infrastructure and Transport, there were around 33,000 software enterprises¹ as of January 2001. Rather than being evenly distributed around the country, however, these tended to be concentrated in large cities and rail terminals in major provincial cities (Fig. 213-34). The reasons for most Internet and other IT-related enterprises being concentrated in urban areas of at least a certain size are as follows.

(a) Developed infrastructure

Urban areas are superior to other regions in a number of respects, including (1) developed public transport network with a railway terminal at its hub, (2) the presence of a variety of human resources and enterprises (e.g. technical colleges for educating human resources, specialist services to assist startups and business innovation, and client companies), (3) ease of use of leased lines for Internet access, and (4) a 24-hour business environment (e.g. large numbers of 24-hour restaurants and stores nearby, and 24-hour use of buildings and facilities occupied by an enterprise). Those who use the Internet and do business using the Internet also tend to be comparatively young. However, urban areas function as centers of information for the young, and so they have the advantage of making it comparatively easy to access information.

(b) Ease of cooperation

Once a certain number of IT-related enterprises agglomerate in a city for the above reasons, this creates a variety of advantages, the first being the flexibility of cooperation among enterprises. The Internet business requires a variety of high-level skills in areas such as systems development, design and marketing. However, few Internet businesses have access to all these skills right from the startup stage. There thus arises a need for flexible

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**Fig. 213-34 Software industries concentrated around railway terminals**

<table>
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<tr>
<th>No. of business establishments within a radius of 1km (approx.)</th>
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<tr>
<td>500 or over</td>
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<td>100 or over</td>
<td>Shizuoka City</td>
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Notes: 1. Compiled by the Ministry of Land, Infrastructure and Transport based on NTT Townpages data.
2. Software enterprises are defined here as (1) software businesses, (2) data processing businesses and (3) Internet businesses in NTT Townpages.

¹) Software enterprises are here defined as (1) software businesses, (2) data processing businesses and (3) Internet businesses listed in NTT Townpages.
cooperation between enterprises in slightly different lines of business, and one advantage of agglomerations is that they enable such needs to be met. The second advantage is face-to-face communication. The exchange of software-related information is essential in the IT business, and access to fresh information of this kind is first achieved through direct communication, which also happens to be the fastest method of communication. Another effect of agglomerations is that they strengthen the sense of solidarity among entrepreneurs who share the same vision.

2) Actual state of software industry agglomerations
(a) Internet and software relationship
Japan’s largest IT and Net agglomeration is probably “Shibuya Bit Valley”, which is the area around Shibuya-ku in Tokyo, including Aoyama and Akasaka, where there are concentrated many enterprises engaged primarily in Internet content production and the Internet business. At one time, there was a boom in interaction activities such as business parties, and a number of support organizations were established as entrepreneurs sought to build networks with other venture entrepreneurs and backers such as investors. Now, however, there are signs of reorganization as individual groups are formed for each plan and project.

Concentrating on the formation of an agglomeration of Internet and software-related businesses along the Chuo line from Shinjuku to the Tama area, there has been developed the “Mitaka Industry Plaza” (in Mitaka City) to serve as a center for exchange and support that also relates to urban development. In this area, in addition to support for startups and small and medium ventures, there is also support for technology transfers and support for matching enterprises up with each other and with key local figures in industry and academia, and other such support services are provided. Two typical programs of a similar nature are Yokohama’s “Yokohama SOHO Incubation Center”, which provides a variety of agency services to assist content businesses and SOHO entrepreneurs, and Chiba’s “World Business Garden” (WBG), which forms the hub of a widespread agglomeration along the Keiyo line.

Other concentrations of IT and Internet-related businesses outside Tokyo and the surrounding area are the “Sapporo Valley Core” (in Sapporo), “Kanazawa i Planet” (in Kanazawa City), “Nagoya Mid Valley” (in Nagoya City), “Osaka Beta Valley” (in Osaka City), “Hiroshima GOCCOO” (in Hiroshima City), and “Fukuoka D2K” (in Fukuoka City). There SMEs and ventures led largely by young entrepreneurs are engaged in dynamic business activities by interacting and teaming up with other businesses. Agglomerations where there are particularly large concentrations of software businesses include “Sapporo Technopark” in Sapporo City (a principal feature of which is the level of networking of technical experts due to cooperation between industry and universities), and “Softpia Japan” in Ogaki City in Gifu Prefecture, which has one of the country’s most advanced communications infrastructures.

(b) Animation and video game software businesses
Two distinctive Japanese industries with strong growth potential in overseas world markets are the animation and video game software industries. Agglomerations in these industries are formed by deeply layered networks of producers formed by SMEs and especially creators and designers.

Around 90% of Japan’s animation production enterprises are concentrated in Tokyo. Of the 250 or so production enterprises located in Tokyo, around half are concentrated in a stretch of land from the Seibu Shinjuku line along the Ikebukuro line to Chuo line. Because of the concentration of animation businesses along the Chuo line, steps are underway in Suginami-ku to take advantage of the presence of leading animation authors to encourage fresh cooperation and enable fresh exchanges and transmit information on the theme of animations.

The game software business revolves around a very few leading platform companies, around which are located SMEs providing software and content. Of the 300 or so video game software producers whose location is easily ascertainable, around 70% are located in the Tokyo metropolis, and around 25% are concentrated in Shinjuku-ku and Shibuya-ku. Centered around a hub of leading platform and production companies and studios, individual creators, artists and designers can be found in the surrounding area operating their own studios and ateliers, forming a tightly knit network of businesses that share the various production processes.26

2) The figures in the main text were calculated based on data from Dentsu Institute for Human Studies, Annual Report on Information Media, 1999.
Section 4 Business innovation in the information age

1. State of introduction of IT by SMEs

An examination of the state of use of the Internet by SMEs over time shows that the proportion of enterprises that are online has followed an upward trend, and was around 70% as of August 2000 (Fig. 214-1). Use of this basic component of IT among SMEs is thus steadily growing. Asked for their reasons for using the Internet, the reason most commonly cited by enterprises currently online was “sending, receiving and sharing information”. Among those considering implementation, the main reasons given were “sale of own products and services”, “receipt and placement of orders with specific companies”, “receipt of complaints”, “publicity via website” and “advertising for suppliers via website” (Fig. 214-2). In the small business sector, too, some SMEs are actively sharing information internally and externally via the Internet, and a growing number are also making active use of the Internet to sell online and increase the quality of services. Asked about the concrete effects of the adoption of IT, however, while the most commonly cited effects were “rationalization and improvement of efficiency of business” and “sharing of information internally”, only a small proportion of SMEs cited “launch of new services” and “acquisition of new customers”, lower in comparison with large enterprises (Fig. 214-3).

While SMEs are growing increasingly interested in adopting IT, there is also a growing need for innovation to ensure that this translates into improved performance and strengthening of business position.

Fig. 214-1 State of use of the Internet (by industry)

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<td>All industries</td>
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<td>Online</td>
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<td>Under consideration</td>
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<td>22.0</td>
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<tr>
<td>Not planned</td>
<td>13.9</td>
<td>28.1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online</td>
<td>73.3</td>
<td>54.7</td>
</tr>
<tr>
<td>Under consideration</td>
<td>14.9</td>
<td>21.6</td>
</tr>
<tr>
<td>Not planned</td>
<td>11.8</td>
<td>23.7</td>
</tr>
<tr>
<td>Non-manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online</td>
<td>65.7</td>
<td>45.7</td>
</tr>
<tr>
<td>Under consideration</td>
<td>18.5</td>
<td>22.3</td>
</tr>
<tr>
<td>Not planned</td>
<td>15.8</td>
<td>32.0</td>
</tr>
</tbody>
</table>


1) According to the Fuji Research Institute Corporation’s First Questionnaire Survey on Electronic Commerce conducted in November 2000, 43.7% of large enterprises (enterprises with capital of ¥100 million or more) rated electronic commerce as “effective” compared with just 29.5% of SMEs (enterprises with capital of ¥100 million or less). However, 7.4% of SMEs compared with just 5.6% of large enterprises rated EC as “highly effective”. It would appear that SMEs have on average not reaped the full benefits of use of the Internet, but those that have rate the Internet as highly beneficial.
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Fig. 214-2 Purpose of use of the Internet (online enterprises)

Note: Totals exceed 100 due to multiple responses.

Fig. 214-3 Effects on enterprise of introduction of IT (proportion of enterprises that answered “effective” in one form or another)

Source: Compiled by the Small and Medium Enterprise Agency based on Cabinet Office, Effects of the Introduction of IT on Productivity (October 2000).
Note: SMEs (large enterprises) are classified according to size of workforce: under 300 (300 or more) in manufacturing, under 100 (100 or more) in the wholesale sector, and under 50 (50 or more) in the retail and services sector.
2. Case studies of introduction of IT

IT is being increasingly adopted in the small business sector, and SMEs are beginning to utilize IT in a variety of ways. By pooling the personal skills and business and sales know-how of employees and sharing information, for example, anyone can immediately access information accumulated by the organization, enabling enterprises to eliminate the duplication of tasks by employees and concentrate resources on core business. For small enterprises, establishing an attractive homepage to attract the interest of customers offers a way of raising an enterprise’s profile and image, enabling it to open up new avenues of demand. SMEs are also actively becoming involved in e-commerce with both ordinary consumers (BtoC) and other businesses (BtoB), and beginning to take advantage of the Internet to increase sales and earnings. It is also important that enterprises look at ways of revamping existing business by introducing IT and upgrading their business management.

Below we look at ways in which SMEs have used IT to innovate and share data to improve efficiency, receive and place orders using e-commerce, and upgrade business management (reform business operations and organization) (Appended Table 214-1).

(1) Sharing of information and improvement of efficiency

In the day-to-day bustle at SMEs, communication and information sharing by and between the president and employees can sometimes be neglected. Concentrating the unspoken knowledge accumulated by each individual employee and the various scraps of information acquired by employees through experience, however, enables the level of skills and knowledge among employees to be raised. For small enterprises too, which were in the past capable only of transmitting information over a limited area, the creation of networks within the enterprise and with other enterprises contributes to the establishment of homepages and the improvement of the image of the enterprise and the industry itself. SMEs too are beginning to make active use of IT as a means of changing awareness within the company and improving the enterprise’s image.

Below we look at some examples of steps by enterprises to share information and raise employee motivation, deal with complaints and customer needs for use in product development, improve business efficiency and concentrate business resources on meeting customer needs, and build inter-enterprise networks in order to improve the company’s image.

Case 58: Information sharing among employees speeds up processing of complaints

A Ltd. is a wholesaler of precision equipment and retailer of environmental and disaster-prevention emergency system equipment in Niigata Prefecture with a workforce of 40. Operating reports used to be circulated in paper form and correspondence between sales offices conducted by fax. As a consequence, even valuable information had to be transmitted mechanically one way only, making it difficult to quantitatively analyze customer data. Introduction of a LAN in the company, however, made it easier to search data, thus speeding up the processing of complaints. In order to make maximum use of the know-how and knowledge of engineers and sales staff and improve the company’s ability to propose solutions to customer needs, the company introduced groupware and established a bulletin board that could be accessed by all employees. For some time, efforts had been made to leave a record of measures for dealing with complaints by preparing detailed operating reports. The effective use of groupware, however, enabled all employees throughout the company to instantaneously type complaints and keep track of their number, improving the company’s response to customers.

1) Provision of products and services via the Internet.
2) According to the joint Survey of the Size of the Electronic Commerce Market in FY2000 conducted by the Ministry of Economy, Trade and Industry, Accenture and the Electronic Commerce Promotion Council of Japan (ECOM), the BtoC e-commerce market was estimated to be worth ¥13 trillion in 2005 (¥824 billion in 2000), and the BtoB e-commerce market was estimated to be worth ¥110 trillion (¥22 trillion in 2000).
3) According to “The Digital Economy”, a report published by the U.S. Department of Commerce, the causes underlying the growth in BtoB e-commerce are “reduction of purchasing costs”, “reduction of inventory”, “reduction of cycle time”, “efficient customer services”, “reduction of sales and marketing expenses” and “generation of new sales opportunities”.
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Case 59: Company turns mass of data into huge searchable database to reveal hidden customer needs

A Ltd., which is based in Osaka Prefecture and has 40 employees, used to keep the information it built up in the course of its business on paper in the form of written records. These filled some 50,000 pages of A4 paper. Because the company needed to be able to use this huge quantity of information more effectively, it set about categorizing it to create a more easily searchable database. The database’s functions included a selection list for opening up new accounts, various methods of responding to existing clients, and methods of dealing with problems arising in relation to sales agents. The system gave instantaneous access to data, revealing hitherto hidden customer needs.

A, which manufactures ultrasonic cleaning devices and developed a technique for removing solder from masks, was established in 1991. Because of the general lack of information about the industry, the company placed top priority on communication with business agents and focused on making use of customers’ views to produce better products. The president required staff to keep a written record of information acquired in their day-to-day business activities. These records gradually grew and grew in volume until the company set about turning the data into electronic format and adding search functions, thus making it possible for anyone to access quantitative, objective customer data that employees had formerly each kept in vague written form.

Case 60: Company focuses business resources on customer response by progressively introducing IT from simple functions in order to raise business efficiency

A Ltd., a linen supplier in Tokyo, introduced IT beginning with the easiest operations first, adopting functions one at a time rather than introducing complex functions in one go. Seeking to become a company that made unconscious use of IT by introducing IT incrementally, it has succeeded in creating the groundwork for focusing business resources on responding to customer needs by increasing information sharing among employees and thereby improving business efficiency.

The company adopted the strategy of raising business efficiency and concentrating business resources on areas of core competence by focusing on “improving efficiency by eliminating waste” and “sharing information” with the aim of pushing ahead the adoption of IT in the company. It adopted a top-down approach to the progressive introduction of IT and, considering it to be important that systems development be undertaken by a company that was thoroughly familiar with the company’s own mechanisms, it set about developing the necessary mechanisms, it set about developing the necessary systems itself. However, there was initially considerable opposition to such changes and new ways of doing business from employees who were used to the old way of doing things, and so use of IT did not immediately take off among employees. The president therefore decided to introduce IT by starting with the operations that were most amenable to its introduction. IT was thus introduced initially so that, for example, (1) employees had to report for work by entering their timecards, and (2) pay slips were sent by e-mail, and e-mails would continue to be sent by the president until employees responded by e-mail. In this way, use of IT gradually began to spread among employees.

Through this process, the company built up a 210,000-item customer database and increased the sharing of information on labor management matters, thus increasing business efficiency, enhancing call center functions (collective management of outside calls whereby operators take calls from customers and pass them on to the person responsible by voice mail or e-mail), and thereby centralizing the work of employees and smoothing the handling of responses to customer inquiries. By introducing IT in stages and responding more closely to customer needs, the company has been able to better focus its business resources.

Case 61: Company aims to raise position in industry by online publicity

A is an exchange network of painters in Saitama Prefecture with 43 employees. It is a national network launched by the president of B Ltd., who decided it was essential to improve the industry’s image. The network’s online bulletin board provides information on developing best practice regarding business flow between member companies and measures for dealing with unscrupulous painters in order to raise the profile of the painting industry among ordinary consumers, thus raising the awareness of member companies and the status of the painting industry itself.

Via B’s own website, B’s president encourages painters throughout the country to register to form A, which was made up of a nucleus of seven companies that agreed with the president’s aims. The network is also headed by B’s president, who has sought to expand the network and raise value added. This network has enabled small, medium and micro businesses without sales networks and which had previously been unable to advertise their own techniques to actively publicize themselves nationwide via the network’s website and so gain a foothold for expanding the range of the painting business.
(2) Use of e-commerce to place and take orders
E-commerce enables companies to open up hitherto inaccessible markets, build new business relations, and improve their business advantages. Below we describe how companies have made use of e-commerce to open up markets and develop new business relations.

1) B2C e-commerce
By taking advantage of the interactive nature of the Internet, companies can raise the quality and targeting of the information they put out in order to acquire a secure customer base even for niche products and services. Below we look at cases of companies using the Internet to meet customers' need by, for example, (1) improving customer satisfaction through warm communication designed to appeal to people who are tired of goods and services, (2) uncovering latent needs through mutual communication by providing appealing information designed to pique people's intellectual curiosity, and (3) providing a forum where customers can voice their real opinions so as to create and develop a community enabling latent, undiscovered needs to be uncovered.

We also examine the case of a company that teamed up with a number of businesses on the Net to improve quality and develop trust in order to respond to a broad range of customer needs.

Case 62: Company wins customers hearts by responding conscientiously to e-mail orders and sending warm e-mails
A is the sole proprietor of a business marketing roasted coffee via the Internet in Kyoto Prefecture. As he does not have an actual bricks-and-mortar store but instead does all business online, he places considerable emphasis on dialogue with customers via the Net. In order to do business successfully online, he considers it important to respond conscientiously to orders by e-mail. When e-mail orders arrive, he e-mails out confirmation of receipt, contacts the customers when an order ships, and again contacts the customer once payment has been received. In this way he demonstrates to the customer his sincerity in order to build up a secure customer base.

The proprietor is quite a coffee expert who believes that real coffee should be roasted after receipt of an order. Quitting his white-collar job, he started in business selling roasted coffee. He acquired high-quality roasting equipment and developed his own supply routes. The Internet offered him a way of reaching his market, and right from the start he was conscious that quality was the determinant of success. He launched his business thinking that the orders would start to come in as soon as he set up a homepage. When he set up a site, however, he initially received no orders or inquiries. Learning from this, he recognized that it might take some time until an order was received and his business got off the ground. He therefore set about improving the design of his homepage to make it more attractive, registering and providing links to other sites in order to raise recognition and responding closely to customer needs, and thereby successfully rebuilding his business.

Case 63: Company opens up new market by expanding network of information about goods about which little information reaches ordinary consumers
A Ltd. is a company with nine employees based in Shiga Prefecture dealing in magnetic products. Realizing that it is just such little known products as magnets that are the most interesting, the company launched a homepage and e-mail magazine in order to provide more information about magnets and excite the interest of ordinary consumers. As well as providing detailed, illustrated information about the properties and methods of manufacturing magnets, the company also provided information of interest to users not specifically interested in buying, thereby tapping into ordinary consumers' latent desire, opening up a new market, and increasing orders.

The company also has a site especially about the products it handles for ordinary consumers. This is made as entertaining as possible, including bits of interesting information about magnets and their history and featuring a Q&A section. The number of visitors to the site has as a consequence steadily grown. Information has been gathered from people ranging from children to university professors with specialist knowledge, resulting in the formation of a community.
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Case 63: Company opens up new market by expanding network of information about goods about which little information reaches ordinary consumers (Continued)

Users to the site posted ideas on how to use magnets, such as the use of magnets to keep birds away make magnetized water, and the web of information spread. People have as a result of seeing this information decided that they want to buy a magnet, and this has translated into growth in orders. The company concentrated in the past on time-consuming small lot production and sale of products for analysis equipment. However, sales have declined in recent years. In order to overcome this decline, therefore, sales staff were also assigned to homepage development as well as their normal duties as part of plans to target ordinary consumers as well as the company’s traditional corporate market. Employees also responded conscientiously to individual inquiries, and as a consequence the company succeeded in tapping into demand from ordinary consumers.

Case 64: Company encourages formation of online community in order to improve receipt of information from customers (Fig. 214-4)

A Ltd., a knitwear planner, manufacturer and distributor in Tokyo with nine employees, launched a separate company specializing in BtoC business online and set about attracting more information to form an online community based on the shared likes and interests of ordinary customers. The site features information about products and how to make one’s own T-shirts, online articles, and an interactive section for visitors to introduce their own original T-shirts in order to make the site more appealing. The aim behind the site is to find out about the latent needs of customers and so contribute to expanding sales. The company, whose main line of business is OEM production of printed T-shirts, is one of the industry’s leaders, and is highly competitive in terms of delivery times, quality and price. Feeling on the one hand that there were limits to how far the market for daily clothes would grow, and sensing on the other that there was strong interest among consumers in design and quality, however, the company’s third president established a separate company. The purpose of this company was to handle proposals for products from customers and discover customers’ needs via an Internet site for receiving and sending information to and from individuals. While creating customized products for individuals is more time consuming than OEM production, acquiring a discerning customer base gradually brought the company to the attention of magazines, and its reputation spread by word of mouth, translating into increasing orders. The formation of an online community makes it possible to bring together customers with relatively similar needs, enabling companies to tap into niche markets.

Fig. 214-4 Formation of online community in order to improve communication with customers

A Ltd.

Main line of business
OEM production of printed T-shirts

- Highly competitive in terms of delivery times, quality and price
- Leading position in the industry

Aims of new business
- Utilization of consumers’ ability to develop and plan the design of products
- Provision of lifestyle ideas and creation of new market by A

Synergies
- Vitalization of main line of business through appearances in media
- Growth of demand from ordinary users in community and growth in orders in main line of business

Potential for development of products with customer involvement

Establishment of separate company
Establishment of Z.com information site for ordinary consumers

- Information about products
- Online articles by celebrities
- Introduction of T-shirts made by consumers (customers) themselves
- Support for establishment of T-shirt shop by popular site administrators

Consumers
Discovery of latent needs
Ideas for use

Creation of new market
Formation of community

Source: Compiled by the Small and Medium Enterprise Agency.
2) Expansion of BtoB business

The Internet makes it easier to find new customers without being restricted by existing business relations. Below we describe one company that has achieved steady growth in orders via the Internet.

Case 65: Development of trust through rigorous selection by design office of specialist contractors based on price and techniques from standpoint of customer

A Ltd. is a design office in Tottori Prefecture with three employees. In order to better meet a wide variety of customer needs, it undertakes everything from design to construction from the point of view of the customer. It requires builders, interior decorators, electrical contractors and other specialist contractors to submit competitive tenders and disclose their prices and methods. A then puts together this information to put to the client in order to build up confidence in customers and contractors.

In order to improve customer satisfaction, the company first used an Internet mailing list to promote the smooth flow of information among companies participating in construction, and invited specialist contractors to register in order to coordinate the companies involved in construction. Work has traditionally generally been passed on to specialist contractors via homebuilders, building contractors or their subcontractors. In order to cut out waste costs, A tried bringing together specialist contractors itself in order to better meet customer needs. By linking these companies up via the Internet, the company sought to encourage effective cooperation and the essential exchange of information for business, and is working to thus distinguish itself from its rivals by coordinating the pooling and supplementing of each contractor’s business resources.

Case 66: Online technical advice - number of orders received increased by allotting four hours per day

A Ltd. is a Saitama-based manufacturer of metal molds and mold parts with a workforce of 24. In order to escape from being a subcontractor, it began taking orders online. It also began providing online access to its technical knowledge and offering detailed technical advice four hours a day, thereby succeeding in raising recognition of the company and the company’s creditworthiness. Now steadily responding to customers’ latent needs, the company receives just over 70% of its sales via the Internet.

Since its establishment in 1964, the company has been involved in metal processing and metal mold production as a subcontractor to a major manufacturer. The company’s late founding president was the type of craftsman who was keen to show off his skills, and was weak on the business side of things, such as negotiating prices and wages with the parent company. The company therefore undertook work for the same charge for many years, and prices were almost the same 25 years after the company was established. At the president’s son’s suggestion, however, the company set up a homepage and began taking and placing orders online, and forming links with similar types of sites. The number of orders subsequently began to grow until the stage where the company was able to reduce its low-margin subcontracting business with the large manufacturer (which had accounted for over half of sales). Underlying this success was the maintenance and expansion of a network of contacts made in a variety of settings (such as inter-industry exchange meetings), the collection of valuable information online, and detailed response to online customer inquiries, which gradually raised recognition of the company.
(3) Improvement of business management  
(Radical reorganization of business and organization based on new way of thinking)

In order to make more effective use of the functions of IT, it is necessary to rethink business and organization from a new standpoint.

With this in mind, we look at how companies have rethought their business and organization as a result of the introduction of IT in order to (1) speed up customer response, (2) enhance the ability to offer customer solutions, and (3) place greater emphasis on high value-added business.

Case 67: Reorganization of existing business and expedition of customer response by employment of outsiders (Fig. 214-5)

A Ltd. is a sock wholesaler in Osaka Prefecture with 84 employees. As the biggest problems it faced were returns of products and elimination of stock, the company embarked on revolutionizing ordinary business practices in the industry by using external human resources, revising its business relations and sharing POS data with partner enterprises along the supply chain from production to sale. By reforming existing business processes without being trammeled by conventional thinking, the company was able to establish a system of fine inventory control that enabled it to respond flexibly and speedily to swift changes in sales patterns by, for example, taking orders for small lots (from one pair) and shrinking delivery times (to 1–2 days).

While suffering like other companies in the apparel trade from the problem of dealing with returned products, the company had not previously attempted to improve the accuracy of inventory control, and had instead taken the conventional approach of tackling the problem in the short-term by adding the loss due to returns and inventory to the unit price of products. In order to eliminate the increase in loss and inventory costs relating to returns, which were the biggest downward factor on profits, it was essential to reform conventional forms of doing business and industry practices. The company therefore offered a position to an acquaintance of the president, B, who had no knowledge of the sock industry but was highly experienced in systems development and proper inventory control techniques.

B initially flatly turned down the offer on the grounds that he had no knowledge of the sock industry. However, the president enthused him by explaining that the task needed a professional systems expert in order to drastically shake up the company’s way of doing things. The president gave B authority and responsibility and also the task of rethinking the company’s suppliers. He narrowed down the company’s suppliers and outlets, creating a franchise chain, introduced a system of inventory, sales and supply control using POS terminals installed at each store, and also integrated the methods of settling accounts and mode of doing business to improve their efficiency. Although there was initially some resistance from employees who were used to the conventional way of doing things in the industry, the president and B, who was responsible for introducing IT, set about reforming the inefficient aspects of existing business processes. By establishing a logistics center and digital picking system to provide a graphical representation of order information based on POS data in the warehouse, the company also increased the efficiency of shipping and delivery. As a result of these various measures to break down the conventional way of thinking in the industry and active investment in IT, the company eliminated the need for store stocks, which were the main reason for the return of products in most stores.

**Fig. 214-5 Reform of conventional forms of business and industry practices through appointment of outside expert**

<table>
<thead>
<tr>
<th>President</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Unrivalled sock maker</td>
</tr>
<tr>
<td>- Decision to create franchise chain (2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B (outside expert)</td>
</tr>
<tr>
<td>- Specialist in U.S.-style management techniques</td>
</tr>
<tr>
<td>- Introduction of franchise system—adoption of POS system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) Consent due to president's decision</td>
</tr>
<tr>
<td>(1) Resisted by all employees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reform of conventional forms of business and industry practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of outside procurement and information</td>
</tr>
<tr>
<td>Production line - Manufacturers, thread trading companies and dyeing plants supply based on POS data</td>
</tr>
<tr>
<td>Introduction of digital picking system</td>
</tr>
<tr>
<td>Logistics center - Graphic representation in warehouse of order data</td>
</tr>
<tr>
<td>Suppliers franchise chain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sharing of POS data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network of franchise stores</td>
</tr>
<tr>
<td>- Inventory, sales and supply control</td>
</tr>
<tr>
<td>- Standardization of methods of settling accounts and ways of doing business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ideal supply system based on customer needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Need for store inventory eliminated, loss rate reduced to under one tenth</td>
</tr>
<tr>
<td>- Response to orders for small lots, reduced delivery times</td>
</tr>
</tbody>
</table>

Source: Compiled by the Small and Medium Enterprise Agency.
Chapter 1 — Business innovation by small and medium enterprises

Case 68: Company switches from waiting for business to attracting customers by providing sales promotion information matched to customer tastes

A Ltd. is a retailer of CDs and other music software. Located in Kagawa Prefecture, it has 40 employees. By merging its customer database with a POS system, it enabled itself to provide sales promotion information to match the tastes of customers. In addition to the appropriate provision of information face to face in stores based on customer data displayed at cash registers, sales promotion information is conveyed to customers by a number of media, including receipts, the Web and by i-mode. The company has as a result succeeded in building up its customer base by switching from waiting for business to actively attracting customers. In order to compete with large retailers, the company felt the urgent need to build strong local roots and create close ties with customers. It therefore began one-to-one measures for introducing products to customers. Employees had traditionally suggested products to suit the tastes of individual customers and had developed a product database. The skill with which such suggestions could be made depended, however, on the ability of the employee concerned. The company therefore introduced a POS system and set up a customer database, and these were integrated with the existing product database. In order to keep track of customer needs and make effective use of this information, the company is also developing an ASP service for sharing an order system with other companies in the industry.

Case 69: Company begins boosting profitability by upgrading customer management and developing services for individual customer segments (system of special offers for frequent customers)

Cooperative A is a cooperative in Tokushima Prefecture involved in the dry-cleaning business. As a result of the development of IT premised on customer management, A has introduced a system for provision of services to individual customer segments (system of special offers for frequent customers) e.g. increasing discounts for more frequent customers. A has begun sending coupons offering higher discounts to more frequent (core) customers under a system of progressively higher discounts for more frequent customers. These are sent to individual customers by direct mail. A has also begun offering a range of services aimed mostly at core customers, such as a merchandise storage service, and discounts for extra time taken to deliver clothes at busy times (e.g. at the changing of the seasons). These offers are sent to customers, making sure that they and rival firms do not become aware of the discrimination between customers in service content, in order to build up the core customer base.

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1) Application service providers (ASPs) are principally businesses that provide software functionality (such as general-purpose business software) to users over the Internet or other networks using large servers. In recent years, there has been a growth in ASP services for SMEs provided largely by large vendors. However, use of these services has yet to become widespread among SMEs. (According to the Shoko Chukin Bank’s Survey of Use of the Internet by Small Business (August 2000), only 2.5% enterprises that were online made use of ASP services.)
3. Reasons for the growing business gap in the information age and introduction of IT

Investment in IT entails a variety of costs as well as the initial cost of investment, such as system running costs, the additional cost of upgrading systems, and a variety of other costs such as fresh personnel costs and the cost of the initial period of confusion when systems are first introduced. In order to increase the benefits to businesses of introducing IT, it is necessary that benefits such as (1) reductions in traditional costs through widespread improvements in business efficiency, and (2) access to new markets and such merits should outweigh the cost of investment.

When considering the introduction of IT, some SMEs hold back from investing in IT due to being unable to reap benefits commensurate with the costs (Fig. 211-10). Even if they introduce IT, many SMEs find the effects difficult to understand. This would suggest that the relative novelty of IT as a business tool in the small business sector makes it difficult to gain an accurate picture of its effects.

One survey also shows that almost 70% of companies are dissatisfied in some way with advice on IT investment after the introduction of IT (Fig. 214-6). Because of the difficulty of estimating the effects of the introduction of IT, there are thus signs that managers and proprietors do not always adopt IT suited to their own firm’s situation. It also seems that in not a few cases, SMEs have underestimated the cost of investment in IT, and that as a consequence they have reluctantly invested excessively as additional costs of maintenance and additional cost of introduction have increased.

To summarize, therefore, the main causes of mistakes in the introduction of IT appear to be “introduction of IT in a form unsuited to business (change)”, and “underestimation of the cost of investment in IT”. With these points in mind, we examine the following cases.

![Fig. 214-6 Satisfaction with external sources of advice](chart)

Source: ITSSP Seminar Questionnaire “Questionnaire on the Response to the Information Revolution of Small, Medium and Middle-Tier Enterprises” interim report (October 2000).

Note: Totals exceed 100 due to multiple responses.

1) Enterprises participating in the IT Solutions Square Project (ITSSP; a public project promoted by the Ministry of Economy, Trade and Industry and the Information-technology Promotion Agency, Japan (IPA) in order to encourage investment in IT by e.g. helping to deal with the problems encountered by businesses regarding strategic investment in IT), who would be expected to be strongly interested in introducing IT, were asked about the effects of investment in IT. Only around 40% responded positively, saying that they had achieved continuous commensurate benefits. Around half, on the other hand, said that they had not achieved any benefits but their investment had not been wasted, or that the effects were unclear, suggesting that it is not easy to determine the effects of investment in IT.

2) One way of finding suitable sources of advice about IT in advance would be to make use of the IT Coordinator System. This is a system for providing experts capable of linking IT with business strategy. These specialists act like IT “home doctors” for the business user of IT, and assist in the introduction of IT.
4. Adapting to environmental changes in the information age

Efforts are underway to develop digital government in order to improve the efficiency of government services using IT. As part of this initiative, some 8,800 license and approval applications and other government procedures a year can now be completed online. Legislation has also been introduced concerning electronic signatures and certification, and steps are being considered for improving security technologies, preventing illegal access, and otherwise improving security. The Small and Medium Enterprise Agency is promoting the development of a portal site for accessing information concerning the small business sector, and is developing a business support search site for SMEs called “J-NET21.” Action to develop an integrated site on the Internet for searching for all kinds of information concerning support for SMEs, and enabling access from anywhere to the various information required for the management and provision of daily support activities by and for SMEs and those involved in providing assistance for the small business sector. The Ministry of Land, Infrastructure and Transport plans to introduce an e-bidding system for all construction projects under its direct supervision, and also plans to enable all planning, execution and delivery processes to be conducted electronically by introducing continuous acquisition and lifecycle support/electronic commerce (CALS/EC) system (integrated public works support system). Plans are also in progress to lay optic fibers to create the infrastructure for cheap, high-speed telecommunications, and there are hopes that there will appear online consumer electronics products that will greatly increase convenience. The external environment is thus changing not only business, but also the living environment. For SMEs, structural changes in terms of the full-fledged development of the IT infrastructure and dramatic changes in the state of the external environment bring with them increased business opportunities.

1) ERP packages are packages that standardize software capable of integrating a variety of functions, such as manufacturing, marketing, logistics and accounting.

2) Action to develop an integrated site on the Internet for searching for all kinds of information concerning support for SMEs, and enabling access from anywhere to the various information required for the management and provision of daily support activities by and for SMEs and those involved in providing assistance for the small business sector.

3) Business-related agreements regarding e.g. names used for goods when companies do business with each other, order slips, price negotiations and methods of payment, etc.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

(1) Response to changes in relationships of trust
Electronic commerce conducted via networks is expected to increase in the information age. Even in cyberspace, however, it is important that relationships of trust should be formed. Up until now, there has been a tendency for a tacit sense of security to develop through repeated and sustained business dealings based on face-to-face contact. Online business, however, which makes a nonsense of national boundaries and the barriers of distance, requires that new relationships of trust be formed with unseen parties. In order to form such relationships, it is necessary to actively disclose the details of one’s own business, and one important method of doing so is to actively engage in information disclosure using an external credit agency (Appended Table 214-2)1) and registering the details of one’s own business.

(2) Risk management in the network age
Using IT in order to cope with a variety of business problems also brings with it a variety of menaces (Appended Table 214-3), such as the threat of interference and sabotage (due e.g. to illegal access and viruses) and the failure of IT-related equipment, making it important that appropriate countermeasures be taken to improve security2) Doing business online also exposes a company to slander and defamation on the Internet, information leaks, and other risks that can easily shake confidence in a company and its core competences to the foundations. It is also essential when doing business online to take into consideration a variety of risks concerning, for example, quality and default on payments. Where it is difficult for SMEs to acquire human resources with a high level of specialist skills regarding e.g. the Internet, it is possible to make effective use of external resources by, for example, employing specialist providers of services such as crisis management services for businesses. Below, therefore, we look at the case of an SME that provides crisis management agency services for businesses.

Case 72: Corporate crisis management support service warning of rumors on the Internet

A Ltd., a software development venture in Tokyo with 36 employees, alighted on the idea of using the search engine that it developed to contribute to corporate security, and so launched a corporate crisis control support service. This took the form of reducing the burden on companies by using its strength in data distinction to create a database of sites that might damage the image of companies, thereby providing efficient access to information about slander and defamation concerning a company posted on homepages and bulletin boards.

The company initially developed filtering software for sale to schools and ordinary households for filtering out harmful content. Realizing the increasingly serious risk to the Internet society of slander, defamation and leaks concerning companies, however, the company decided to contribute to corporate risk management by collecting negative information about individual companies by expanding the scope of use of its own search engine. The strength of A’s service lies in the data distinction know-how that it has built up, and its focusing of business resources on technology to ascertain whether content is harmful to a company. The company has also recently started to become involved in providing an advice service on how to deal with harmful content, and is becoming actively involved in developing new support services for corporate management in the network age by further increasing its information search functions.

1) Private-sector enterprises that provide credit ratings and handle corporate data on ordinary companies for a fee.
2) According to the Questionnaire Survey on Electronic Commerce conducted by the Fuji Research Institute Corporation in November 2000, the commonest problem hindering the spread of e-commerce, cited by around 60% of respondents (multiple responses allowed), was “concern about security”.

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5. Toward further growth: Eliminating the digital divide

The recent rapid development of IT has made the shortage of technical experts responsible for introducing IT in companies (i.e. the shortage of IT experts) and the raising of the information literacy of ordinary employees particularly pressing problems for the small business sector. In response, the Government has been advancing a variety of measures to counter the emergence of a digital divide designed in order to improve information literacy in SMEs and close the gap in opportunities to make use of IT. One area of activity being stepped up in order to close the digital divide is public vocational training. As there was in the past a strong tendency for vocational training to be used by blue collar workers in manufacturing to upgrade their technical skills and acquire public qualifications, there were few training courses suited to the needs of non-manufacturing and industry in general, and wide use was not therefore always made of such training by enterprises. However, there are some SMEs that are making effective use of public vocational training programs by, for example, opting for order-made courses and making use of courses as a group.

In order to enable more SMEs to make use of public vocational training in the future, individual training facilities need to tailor their courses more finely to training needs, and also take a more active approach to directing information at users. On the user side, companies need to set aside time for skills development by employees and provide opportunities for use of training services. They also need to take active steps to inform training facilities of their training needs.

1) Current state of public vocational training

Public vocational training for employees of SMEs is provided by individual prefectures and local public bodies. Some of the more practical training is provided by public vocational training facilities under the jurisdiction of the Ministry of Health, Labour and Welfare, which are well-equipped with facilities and staff (Appended Table 214-5). Training facilities providing a wide range of courses covered basic through to applied training include polytech centers (vocational skills development promotion centers) and polytech colleges (vocational skills development colleges and vocational skills development junior colleges).

As described above, public vocational training has until now been focused largely on manufacturing industry, and use among SMEs as whole has tended to be limited. Because of the importance to businesses across all industries of training in IT, which has been boosted in recent years, however, the scope of use of public vocational training by companies in all industries, including non-manufacturing, needs to be expanded.

2) Examples of use of public vocational training by SMEs

For SMEs, the merits of use of public vocational training include: (1) the low cost of such courses due to their being public; (2) the availability of more practical training due to the well-developed facilities and staff; and (3) the ability to progressively raise skills by combining the courses taken due to the wide range of levels of training on offer. In order to make use of such courses, however, it is important first of all to both be aware of the content, and to take courses suited to one’s own company’s situation in consultation with the provider.

Below we look at some examples of the use of public vocational training by SMEs as one way of meeting the challenge of providing IT training for employees.

1) Made-to-order courses

Public vocational training facilities such as polytech centers and polytech colleges offer a wide variety of training courses. However, these ready-made programs may not always offer exactly what users want, or adjustments may need to be made to the timing or scheduling. In cooperation with providers, therefore, some SMEs take made-to-order vocational training courses.

Below we look at some SMEs that are developing the skills of employees-focusing on IT skills-by making use of made-to-order training courses put together by polytech colleges.

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1) The “digital divide” refers to the gap in the use of IT, and the consequent widening gap in incomes and employment opportunities.
2) According to the Questionnaire Survey of Electronic Commerce conducted by the Fuji Research Institute Corporation in November 2000, “shortage of human resources” was cited as an impediment to e-commerce by 30.4% of SMEs, but just 22.7% of large enterprises.
3) According to the Survey of the State of Private-Sector Education and Training conducted by the Ministry of Health, Labour and Welfare in May 1999, 8% of all workers had used “public vocational skills development facilities” at OFF-JT (education and training temporarily away from ordinary work duties).
4) The administrator is the Employment and Human Resources Development Organization of Japan, an affiliated organization of the Ministry of Health, Labour and Welfare.
2) Group use
For small enterprises with few employees, it is often difficult to take advantage of training seminars during working hours. If requested by users, polytech centers do provide seminars at weekends and in the evening, but often only where there is a sufficient number of participants. Because of their small size, it is therefore difficult for small enterprises to take training seminars. An effective solution in such cases is for a number of enterprises in the same region and with similar business problems to use training courses as a group. Below we describe how one group of SMEs has taken advantage of IT training at a polytech center.

Case 73: Emphasis on employee independence and use of made-to-order public vocational training

A Ltd. is a Gunma-based company with capital of ¥30 million and a workforce of 220 whose main line of business is the sale and maintenance of copiers. Each year, it sends one or two of its employees to the business management department of a polytech college to take made-to-order vocational training courses in order to enable its employees to acquire IT skills and develop their vocational abilities. Although sending employees to an outside educational establishment during working hours might be expected to hinder normal operations, the company takes care to ensure that the burden on other employees is not increased by, for example, using job rotation to cover for the number of employees going to college. It has also adopted a system of advertising for applicants from within the company to determine which employees to send for training.

Concrete effects of made-to-order training
Courses taken at polytech college business management departments last for one year, and the curriculum spans not only IT, but also a wide variety of other business skills, such as marketing and accounting. In all, 15 subjects must be taken. These courses are taken in conjunction with made-to-order courses, which are conducted on a man-to-man basis with college lecturers. The company handles a total of 100,000 items (including parts) in the course of its copier sale and maintenance business. However, it has succeeded in establishing an inventory control system built around the employees that have undergone IT training at polytech college. By developing a system of centralized storage, shipping and inventory using barcodes, the company has improved the efficiency of its operations, reducing work time by some 30%.

Case 74: Industry group trains team leaders and supplies unique IT training to member companies using public vocational training facilities

A is an industry grouping consisting of 190 companies, most of which are small and medium manufacturers located in Yokohama City. Since 1999, a number of representatives have been sent to a polytech center to undergo training in IT, and these have formed the hub of a team set up by the association to provide IT training.

Establishment of IT training course by industry association
The IT training provided by polytech centers covers a wide variety of levels, ranging from the operation of PCs to training in skills for improving clerical efficiency. On the whole, however, these are targeted at people with a degree of basic knowledge and skills. Because many of the employees of the association’s members are middle and old-aged people with no knowledge of how to use a computer, however, the training offered by polytech centers is too advanced. Moreover, in some cases employees were unable to take the training in IT that they desired at polytech centers. The association therefore set up a unique IT training system, whereby a number of employees with basic knowledge and skills in IT were sent to undergo training in IT at a polytech center and then became instructors for training beginners. Employees who undergo training at a polytech center also acquire know-how about teaching the use of PCs as well as acquiring skills concerning how to use equipment. When providing training, the association borrows equipment and space taking advantage of vacant classrooms at the polytech center. These courses last for three days, and are taught by two of a total of six instructors. 10 places per course are advertised, and over 30 courses have so far been held.
(3) Measures by public vocational training facilities
Steps are being taken to bolster IT training provided by public vocational training facilities in Japan in order to eliminate the digital divide. Although measures are ongoing, some training facilities are tailoring their IT training courses to more closely meet the demands of local enterprises. In the future, it is hoped that individual training facilities will develop their IT training courses and reach out more to users by strengthening their PR activities. Below we look at two examples: one of a public vocational training facility in Japan that provides training in IT on weekends and in the evening in response to user needs, and one of a community college in the U.S. that offers vocational training courses in cooperation with local enterprises in order to meet their needs.

Case 75: Japanese Public vocational training facility providing IT training in evenings and on holidays in response to local business needs
The employees that SMEs really want to send for education and training are frequently also those with the most important duties. Because of the consequent difficulty of sending such employees for training during working hours, there is a strong demand for seminars in the evening and at weekends. Polytech center A also actively provides made-to-order training and education to meet such needs, and, if requested by enterprises or employer associations, sends its instructors to enterprises to hold seminars on the spot. A also endeavors to develop its training courses by sending its staff to enterprises to determine their training needs and adapt existing model courses accordingly. Although there is a strong demand for basic training in IT concerning, for example, the introduction and use of e-mail in the company and basic operation of office equipment, training courses are also designed to meet a wide range of needs because of the growing use of online methods of payment and taking and placing of orders by local wholesalers and manufacturers, and the increasing need of manufacturers for IT training to enable them to take part in e-tenders for public works.

Case 76: U.S. community college that offers vocational training programs to meet local business needs
Philadelphia Community College in Pennsylvania is contracted by organizations such as businesses, government agencies and NPOs to provide vocational training to meet local needs. Over a period of 15 years, it has provided a diverse range of education and training in fields such as basic skills, computers, sales and marketing to over 100 organizations and more than 100,000 employees. Most of the vocational training programs taught by the college are given to committees formed of college and university staff, program participants and employees of related enterprises. Educational content is revised twice a year in order to better meet actual needs. Local businesses also develop educational programs, provide funds and send instructors, cooperating fully in the provision of vocational education and training. Moreover, as the provision of vocational training for employees is seen as an important income earner, the college also aggressively reaches out to businesses through its PR activities. In addition to the college’s main campus, the college has over 30 local bases, including three local centers, a high school, church, and old people’s center. In order to increase convenience and meet a diverse range of training needs, the college additionally provides courses via TV and e-mail. There are over 1,100 community colleges in the U.S. with a total of some 5.5 million students. As well as providing first-term courses for four-year colleges and life-long learning opportunities in the form of hobby and community classes, these colleges also teach wide-ranging vocational curricula to enable employees to acquire the vocational skills required by local employers.
Chapter 2  Startups: Present and future

Section 1  General trends in startups

The small business sector is the source of the Japanese economy’s dynamism. Because of the decline in the startup and closure rates in recent years, however, there are fears of a decline not only in the small business sector, but also in the vitality of the Japanese economy. Startups therefore have an important contribution to make to the economic vitality of Japan.

1. Trends in startup and closure rates

Let us look first at the startup and closure rates for all industries according to the Ministry of Public Management, Home Affairs, Posts and Telecommunications Statistics Bureau’s Establishment and Enterprise Census of Japan. Looking at trends in the startup rate and closure rate calculated based on the number of business establishments taking into consideration the number of enterprises and establishment and closure of establishments by existing enterprises, the closure rate has exceeded the startup rate since 1986, and, although according to the most recent survey the startup rate is increasing, the markedly higher increase in the closure rate has increased the gap between the startup and closure rates (Figs. 221-1~2). Breaking down the startup and closure rates for sole proprietorships and companies (business corporations), it is apparent that whereas the startup and closure rates based on the number of sole proprietorships have followed roughly the same pattern as the startup and closure rates based on the number of enterprises, the latest survey indicates the closure rate based on the number of companies overtook the equivalent startup rate in 1996, and the rise in the closure rate has become particularly conspicuous (Figs. 221-3~4). Looking next at the startup and closure rates for business establishments in each industry (industrial division), the industries contributing to both the startup rate and closure rate are “retail”, “food services” and “services”. The industries contributing to the closure rate, however, are “construction”, “manufacturing” and “wholesale” (Fig. 221-5). In industries where the startup rate is now high compared with other industries, the startup rate is markedly lower now in “food services” and also somewhat lower in “services”, “manufacturing” and “wholesale” compared with 20 years ago (Fig. 221-6).

Looking at the startup and closure rates calculated based on the number of business establishments freshly covered by unemployment insurance in order to determine trends in the startup and closure rates in each year, it can be seen that although the startup rate constantly exceeds the closure rate, the gap between the two was smallest in FY1999 (Fig. 221-7). Despite some variation in the figures concerning the startup and closure rates due to differences in the statistics that form the basis for calculations, both are low.

Fig. 221-1  Trends in startup and closure rates based on number of enterprises
(non-primary industries, annual averages)

![Trends in startup and closure rates](chart.png)

Source: Compiled from Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Statistics Bureau, Establishment and Enterprise Census of Japan.

Notes:
2. Number of enterprises = number of companies (business corporations) + number of sole proprietorships
3. See Appended Note 221-1 regarding method of calculation of startup and closure rates.
Chapter 2 — Startups: Present and future

Fig. 221-2 Trends in startup and closure rates based on number of business establishments (non-primary industries, annual averages)

Source: Compiled from Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Statistics Bureau, Establishment and Enterprise Census of Japan.
Notes: 1. Based on business establishments including establishments and closures due to establishment, closure and transfer of branches and plants.
3. See Appended Note 221-1 regarding method of calculation of startup and closure rates.

Fig. 221-3 Trends in startup and closure rates based on number of sole proprietorships (non-primary industries, annual averages)

Source: Compiled from Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Statistics Bureau, Establishment and Enterprise Census of Japan.
2. See Appended Note 221-1 regarding method of calculation of startup and closure rates.
Although it is necessary to bear in mind the fact that international statistics on startup and closure rates are not standardized. Bearing this point in mind, according to the U.S. Small Business Administration’s *The State of Small Business: A Report of the President*, the startup rate in the U.S. has ranged between 12% and 15%, and the closure rate has been between 11% and 13% over the past 10 years, both high compared with Japan (Appendix Table 221-2). According to the European Union’s *The European Observatory for SMEs Fifth Report 1997*, the Japanese startup rate is low compared with other countries (Appendix Table 221-3).

**Fig. 221-4  Trends in startup and closure rates based on number of companies (non-primary industries, annual averages)**

![Trends in startup and closure rates](image)


2. See Appendix Note 221-1 regarding method of calculation of startup and closure rates.

**Fig. 221-5  Startup and closure rates and contributions by industry (industrial division)**

<table>
<thead>
<tr>
<th>Industry</th>
<th>No. of business establishments, 1999</th>
<th>Annual startup rate (%)</th>
<th>Annual closure rate (%)</th>
<th>Startup rate (point of contribution)</th>
<th>Closure rate (point of contribution)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>4,160</td>
<td>1.9</td>
<td>4.1</td>
<td>0.001</td>
<td>0.003</td>
</tr>
<tr>
<td>Construction</td>
<td>612,150</td>
<td>3.0</td>
<td>4.8</td>
<td>0.029</td>
<td>0.048</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>689,194</td>
<td>1.9</td>
<td>5.3</td>
<td>0.022</td>
<td>0.065</td>
</tr>
<tr>
<td>Electricity and gas, etc.</td>
<td>3,809</td>
<td>3.0</td>
<td>4.7</td>
<td>0.002</td>
<td>0.003</td>
</tr>
<tr>
<td>Transport and telecommunications</td>
<td>166,251</td>
<td>5.7</td>
<td>6.5</td>
<td>0.15</td>
<td>0.17</td>
</tr>
<tr>
<td>Wholesale</td>
<td>444,879</td>
<td>4.9</td>
<td>7.4</td>
<td>0.034</td>
<td>0.051</td>
</tr>
<tr>
<td>Retail</td>
<td>1,416,696</td>
<td>4.3</td>
<td>6.8</td>
<td>0.022</td>
<td>0.060</td>
</tr>
<tr>
<td>Food services</td>
<td>804,957</td>
<td>6.1</td>
<td>7.5</td>
<td>0.078</td>
<td>0.096</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>101,731</td>
<td>4.6</td>
<td>6.6</td>
<td>0.079</td>
<td>0.11</td>
</tr>
<tr>
<td>Real estate</td>
<td>285,341</td>
<td>3.8</td>
<td>4.8</td>
<td>0.048</td>
<td>0.022</td>
</tr>
<tr>
<td>Services</td>
<td>1,655,661</td>
<td>4.2</td>
<td>4.8</td>
<td>1.08</td>
<td>1.24</td>
</tr>
<tr>
<td>Non-primary industry</td>
<td>6,184,829</td>
<td>4.1</td>
<td>5.9</td>
<td>4.14</td>
<td>5.92</td>
</tr>
</tbody>
</table>


*Notes:* 1. Startup (closure) rate = annual average number of business establishments established (closed) / number of business establishments in 1996 x 100 (%)
2. Point of contribution = Startup and closure rates for all non-primary industries x proportion of business establishments established (closed) in industry concerned
3. Because startups and closures cannot be calculated where a business establishment changes industry, the change in the number of business establishments between 1996 and 1999 does not match the number of startups minus the number of closures when broken down at the industry level.
Chapter 2 — Startups: Present and future

Fig. 221-6  Startup rate by industry (based on business establishments)

Source: Compiled from Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Statistics Bureau, Establishment and Enterprise Census of Japan.

Note: Startup rate = annual average number of establishments established during period / number of establishments at start of period (1978, 1996) x 100 (%)

Fig. 221-7  Trend in startup and closure rates based on number of business establishments covered by unemployment insurance


Notes: 1. Startup rate = number of establishments newly covered by unemployment insurance in fiscal year / number of establishments covered by unemployment insurance at end of previous fiscal year x 100 (%)
2. Closure rate = number of establishments that cease to be covered by unemployment insurance in fiscal year / number of establishments covered by unemployment insurance at end of previous fiscal year x 100 (%)
3. Establishments covered by unemployment insurance are establishments established under Article 4 of the Law on Collection of Labor Insurance Premiums and Article 5 of the Employment Insurance Law.
2. Measures by large enterprises as seedbeds for startups

In Japan, the low startup rate is thought to be due to a combination of factors, including the large potential impact on one’s livelihood of failure in business, the strong preference for “salaryman” white-collar employment, the averseness to economic risk of the national character, and the shortage of knowledge, skills and business know-how required to start up in business. However, as some studies suggest that the level of employment and value added created by recently established enterprises is relatively great,1) encouraging startups is important to Japan’s economic development. Startups can take a variety of forms: startups by students and housewives with no work experience, expansion into new areas of business by successors at SMEs, spin-offs from large enterprises, and so on. One interesting development in recent years has been the active use of in-house venture programs by large enterprises. These programs are systems for supporting startup activities in new areas of business within existing enterprises. They enable large enterprises to act as seedbeds for new ventures, and they provide an effective means of encouraging startups by middle-aged and older workers who would not otherwise become entrepreneurs due to concerns about the risk of failure. This is because large enterprises act like incubators, enabling the use of their business resources and access to funding at the time of startup. The advantages for entrepreneurs are therefore considerable.

The active use being made of in-house venture programs suggests a growing number of large enterprises feel a strong need to revitalize their own businesses and develop more entrepreneurial human resources through starting up in new areas of business. In this context, therefore, we look below at cases contributing to the enhancement of the “startup seedbed” functions in the in-house venture programs introduced in recent years.

Case 77: In-house venture program to revitalize company and ultimately create independent spin-off

A Ltd. is a major general electrical manufacturer in Tokyo that has established an in-house venture program intended to revitalize the company through startups in new areas of business. The emphasis of the program, which was designed based on a study of the programs previously introduced by other large enterprises, is on the development of healthy operations from a long-term perspective taking into consideration how to integrate risk and returns through the startup of new businesses.

Outline of system

Under A’s in-house venture program, the company solicits suggestions for new ventures from within the company, which it uses to move into new areas of business by creating independent spin-offs. By promoting the creation of new ventures in areas that, while important and promising, are difficult to start up in a timely fashion, the company aims to motivate employees and revitalize the company. The company acts as an incubator by providing funds and temporary office space to ventures, whose incorporation and operation is the responsibility of the employees who proposed them. In order to test their skills as presidents, proposers are required to submit business plans and undergo a three-stage screening process of (1) screening of documents, (2) primary screening also covering outside venture capital, and (3) final screening by a venture investment committee. A maximum of one year is provided as a preparatory period before startup, and ventures are as a rule expected to be able to stand on their own two feet in the future. The program gives some flexibility, however, allowing entrepreneurs to be treated as being on loan until the third year, for example. Where a venture does not register an annual surplus within the first three years and cannot eliminate cumulative loss within five years, the company is liquidated.

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There are also emerging growing numbers of employees who themselves spin-out to form a venture in order to effectively utilize resources that are often buried away at large enterprises, even if they do not establish a startup using an in-house venture program. It is to be hoped that startups of this kind will become widespread in Japan as well. Below, we describe the case of a successful spin-out established after marketing (e.g. to develop products with clear sales points).

Case 78: Successful spin-out after clarification of product sales points

The president of A Ltd., a company in Yamanashi Prefecture with five employees, previously worked as a development manager at a company where he succeeded in developing software that had the dual benefits of being easy to handle and reducing programming time to meet customers’ need for shorter processes. Although the new product was clearly targeted and had specific sales points, he left the company because he was dissatisfied with its marketing system, and created a spin-out venture using the fruits of development at his former employer. Despite having been only just established, A is now enjoying steady growth.

Content of new business
At his former company, the president was responsible for the successful development of software for computer-controlled manufacturing systems, which was subsidized by a grant covering the cost of development of technology contributing to the creation of new industries under the FY1998 supplementary budget. The new product provided the necessary programs for shortening processes in order to cope with large variety, small lot production. It is necessary to write programs for computer-controlled manufacturing equipment each time a process is changed. However, the new product offered the dual benefits of reducing programming time by 30%, and making it easier to expand operations due to the ease of creation of programs by persons with no programming experience. It was therefore ideally suited to new business.

Events leading up to startup
What made him decide to go independent after the successful development of the product was his former employer’s failure to establish a clear policy and establish a system for marketing the product, despite the company’s success in this new area of business. Driven also by the desire not to see his efforts as one responsible for development go to waste, he decided to go independent in order to show, if only by selling one of the new product, that the newly developed product could contribute to society. He therefore broke away in July 2000. Now, just a little while after being established, the company is steadily growing, and is also in talks regarding newly developed software.
Section 2  Small and medium enterprises responding to new social needs

1. Elderly services

The introduction of the public long-term care insurance system has encouraged enterprises in the private sector to become involved in providing nursing care services, and many enterprises have entered the nursing care market (Fig. 222-1).

The aging of the population has created demand for a variety of services for the elderly in addition to nursing care. The provision of elderly services is a role well suited to SMEs for the following reasons:
- The large variety of needs requiring that goods and services for the elderly be finely tailored to meet individual needs.
- The need for strong local ties in order to accurately determine customer needs.

In this section, we look at a number of companies that have grown by actively taking advantage of these characteristics of SMEs to meet new needs.

(1) Companies marketing products and services to meet diversity of needs

Population aging has focused attention on the variety of needs of the elderly for assistance in daily life. Below we examine the cases of companies that have created products and services finely tailored to meet the elderly’s diverse needs for “colorful, easy to wear clothing”, “health and independence”, and “human contact”.

Fig. 222-1  Trends in number of nursing care providers

Source: Social Welfare and Medical Service Corporation.
Based in Hokkaido and with two employees, A Ltd. is a manufacturer of clothing for the elderly and disabled. By building up its know-how by organizing weekly study meetings regarding the elderly, and visiting old people’s homes every week to listen carefully to elderly people’s needs, the company has been able to develop products and achieve steady growth in sales. A originally used to manufacture work clothes for use in various industries and occupations. After making clothes for a physically disabled acquaintance, however, the company began manufacturing clothes for the elderly and disabled. To this end, the president established a study group called the “Silver Uniform Study Team” to study the needs of the elderly and disabled. People such as university professors, city officials, welfare workers and presidents of design companies are asked to give talks and take part in the group’s meetings in order to enable the group to build up knowledge.

The company also visited old people’s homes every week for a year to build up trust and interview residents. As a result of these interviews, the company learnt that whereas carers want the elderly to wear plain clothes that do not show up the dirt, what the elderly themselves really want to wear are clothes in bright colors. It thus discovered that the elderly had quite unexpected needs. Focusing on the knowledge acquired through the study group and the true needs of the elderly, the company began trial production using a subsidy from a public body. It had the residents of a home try out the trial products, and, after making final improvements regarding the color and materials used based on the results of questionnaires completed by wearers, the company set about full-scale production.

**Fig. 222-2 Company succeeds in long-term development of clothing suited to the tastes of the elderly**

### Silver Uniform Study Team
- University professors
- City officials
- Talks given by welfare workers, etc.

### Facilities such as old people’s homes
- Elderly people
- Helpers

### Public body

Accumulation of knowledge

Visits for interviews

True needs

Grant for production of prototypes

A Ltd.
Manufacture of work clothes

Manufacturing of clothing for the elderly

**Case 79: Company succeeds in long-term development of colorful, easy to wear clothing popular with the elderly (Fig. 222-2)***
Companies with close local ties enabling them to accurately determine customer needs

A growing number of companies are providing LTCI-related services. Some are in difficulties, however, because they have been unable to accurately determine users’ needs. There are, for example, a number of factors that affect capacity utilization of helpers, such as the fact that demand for services tends to be concentrated at certain times, and users sometimes make sudden cancellations. Ingenuity is therefore required in order to run a steady business providing domiciliary services. Below we examine the cases of a number of companies that have steadily increased the number of their customers by using their close local ties to accurately ascertain customer needs.

Case 80: Company ties up with medical practitioner to provide much needed but neglected home dental visits (dental hygiene)

Although not widely known, neglect of dental hygiene can lead to a number of conditions, such as swallowing difficulties and pneumonia. Seeing that the dental hygiene was therefore a problem for elderly people who were unable to visit a dentist, A Ltd., a company in Chiba Prefecture with 81 employees, began planning home dental services. Not being a medical corporation, the company is prohibited from providing medical treatment. Treatment is therefore provided by referring the patient to a medical practitioner. However, all other services the company provides itself, such as rental of medical equipment, provision of dental assistants, and referral of new patients. The company’s approach suits the desire of the elderly to be healthy and independent. In addition to demand for visits to individual homes, there is also a strong need for such services from elderly patients in hospitals and residents of old people’s homes and other facilities. The number of the company’s customers is thus steadily rising.

Case 81: Provision of high-quality services meeting elderly need for human contact

A Ltd. is a company in Osaka Prefecture with 30 employees that provides nursing care and other services to meet a variety of needs targeted at affluent older people. It originally provided babysitting services, but broadened out to provide housekeeping and nursing services to meet the needs of the housewives who made up its clientele. As its services are targeted at the more affluent, 90% of its orders are for “human contact” services not covered by long-term care insurance (LTCI), such as shopping and accompaniment on trips. As users bear the full cost of services themselves, they are extremely demanding. By allocating employees who have undergone thorough training to take fixed responsibility for each household in order to meet these needs flexibly, however, the company has succeeded in providing services that satisfy user expectations.
Case 82: Company stabilizes business by conducting market research and narrowing down the regions entered (Fig. 222-3)

A Ltd. is a home-help service provider in Tokyo with 36 employees. While some providers are struggling, having used large amounts of capital to launch services nationwide, A has narrowed down its focus to three locations in Tokyo, where it has established offices. By focusing instead on quality control of services, the company has succeeded in steadily growing its customer base and stabilizing its operations.

The president was prompted to establish the company when he discovered when caring for his mother that there was a shortage of good quality care services. Right from the start, the president has believed that the keys to success in the home-help service business are quality of service and the choice of regions that allow the efficient provision of services.

The company began by narrowing down the regions it would enter in order to ensure efficient service provision. It ascertained the number of elderly from population statistics, and conducted a survey of home-help care needs in each region.

It next analyzed the number and capacity of existing providers in the regions where it judged there was sufficient demand, and conducted a survey regarding whether there was room for it in these region’s markets. As a result, it narrowed its focus down to three locations, where it established offices.

Regarding service quality, the company was certified as being ISO9001 compliant in order to overcome problems such as the gap in level of services between individual helpers. By preparing manuals on quality and operating procedures and drawing up a variety of forms for work, the company ensured that quality was unaffected by the replacement of individual employees.

This strategy proved an outstanding success, and the company’s customers are steadily growing in number.

Fig. 222-3 Company stabilizes business by conducting market research and narrowing down the regions entered

- Determination of number of elderly from population statistics
- Ascertainment of home-help needs in each region

- Analysis of number of existing providers
- Analysis of service capacity

Finalized
- Regions entered
- Number of offices

- Provision of uniform level of service
- Discrimination from other companies

- Certified as ISO9001 compliant

Increase in number of customers through maintenance of close ties with community
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

### Case 83: Group home wins confidence of families and increases profits by maintaining close local ties and teaming up with local medical institution

A Ltd. is a group-home operator in Kyoto Prefecture with 25 employees. By teaming up with a local hospital, it has succeeded in gaining wide-ranging cooperation in the form of e.g. access to specialist staff and the acquisition of specialist skills and knowledge. As A leaves the health care of residents entirely in the hands of the hospital, it can function as a facility offering combined medical and residential services, which is particularly reassuring to families with elderly members suffering from dementia. As a result, the number of users has grown.

A was originally a designer of machinery and electrical equipment with 15 employees. Because of the growth in the size of the elderly service market (due to factors such as the shortage of facilities for persons in need of care), the company decided to enter a completely new line of business to establish and run a group home. Being a completely new line of business, however, the company found it difficult gaining access to specialists and acquiring know-how about running a group home. Unable to cope entirely by itself, A began looking to tie up with a local hospital. Its interests matched those of one hospital that had been looking for an intermediate care facility between hospital and home to provide for the large number of persons in need of care who no longer required treatment but were still incapable of independent living at home. To keep down the cost of building a group home, the company renovated a disused facility. Teaming up with a hospital enabled the company to provide finely tailored services for individual users, such as health supervision, as a result of which the number of users has steadily grown.

According to the president, “If private enterprises with sufficient financial and human resources are allowed to operate care houses in the future, we hope to expand our business further”.

### Case 84: Word of high-quality home repairs suited to customer needs spread via the grapevine, leading to growth in turnover (Fig. 222-4)

A Ltd. is a company in Osaka Prefecture with three employees that repairs and remodels homes to suit to customers’ needs at different ages and disabilities by carefully interviewing customers and utilizing the knowledge and know-how it has accumulated. The company’s reputation for providing high-quality services has spread by word of mouth, increasing custom.

The company became involved in home repairs and remodeling as a result of the president, who is himself disabled, realizing that there many elderly and disabled people would be able to live independent lives if just small modifications were made to their homes. In 1998, when the company was established, the word “barrier free” was still little known in Japan, and the only way of acquiring information was to become involved in study groups, such as those organized by public bodies. The company carefully interviewed customers who placed orders after seeing sales leaflets distributed at facilities such as nursing homes, hospitals and city and ward offices, and also gained a variety of information from specialists such as attending physicians and therapists regarding needs at different ages and disabilities. It thus acquired the know-how required to undertake actual repair and remodeling work. The company’s reputation for providing the highest possible service suited to the individual needs of customers spread by word of mouth, and orders are steadily growing.

According to the president, “If private enterprises with sufficient financial and human resources are allowed to operate care houses in the future, we hope to expand our business further”.

Fig. 222-4 Company that provides high-quality home remodeling service tailored to customer needs
Believing that the care managers who draw up care plans are the key to success in the sale of a wide variety of care goods, Kagawa-based A Ltd. is increasing sales by organizing weekly study meetings for care managers to raise understanding of care goods and encourage their incorporation into care plans.

The company used to rent and dry-clean items such as towels and sheets before moving into the sale of care goods. The senior managing director responsible for sales of care goods took the lead in discussing welfare with home-helpers, health visitors and others who would later become care managers in order to develop human relations.

In order to succeed in selling care goods, the company concluded that it would become even more important in the future to focus on the care managers responsible for drawing up care plans. To raise awareness of care goods and encourage their incorporation into care plans, therefore, the company began to organize weekly practical study meetings on the care environment involving representatives of manufacturers as well as care managers, many of whom were insufficiently aware of the great contribution care goods can make to elderly people’s lives and their ability to lead independent lives, or who thought such products were unnecessary. Having built up close relations with them from before the launch of LTCI, many care managers, despite being swamped by their everyday work, took part in these meetings. Through them, relations with care managers were further strengthened, and the knowledge, experience and confidence of the company’s employees were increased. As a result of these efforts, the company’s users and sales are growing, notwithstanding the higher cost of rental and purchase of sales goods compared with other companies.

Fig. 222-5 Company increases sales by organizing study meetings for care managers

<table>
<thead>
<tr>
<th>Cooperation with manufacturers of care goods</th>
<th>Use of care goods in care plans</th>
<th>Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care good study meetings</td>
<td>Provision of information</td>
<td></td>
</tr>
<tr>
<td>Development of trust</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in sales and rental of care goods</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Environmental business

The Japanese economy’s dependence on mass production, mass consumption and mass generation of waste has resulted in environmental problems such as global warming and the issue of waste disposal, increasing the need for the development of a recycling-based socioeconomic system that harmonizes economic and environmental needs. As a consequence, the Basic Law for the Establishing of the Recycling-based Society was introduced in June 2000. A variety of other laws were promulgated and went into effect in conjunction with this law, and measures put in place (Appended Table 222-1).

The environmental business is a future growth field. According to a survey by the Ministry of Economy, Trade and Industry, the environmental market was worth some ¥21 trillion in 1998, and provided around 880,000 jobs. By 2010, however, the market is projected to be worth some ¥38 trillion and employ around 1.36 million people, and particularly strong growth is expected in the recycling and waste disposal markets (Fig. 222-6).

SMEs are as a consequence beginning to become involved in new areas of business to cope with environmental problems, foremost of which being recycling. Customers of recycling service tend to be government agencies and local residents, who have a high environmental awareness, and it is important to develop recycling services that suit their needs. Characteristic of SMEs are their faster decision-making than large enterprises, flexibility and maneuverability.

The purpose of this section is to provide an overview of SMEs that have taken advantage of these characteristics along with their local ties to become involved in the recycling business. Because of the undeveloped nature of business such as recycling services, SMEs entering this field are also confronted by a variety of issues (Fig. 222-7). In order to resolve these problems, SMEs that have entered the recycling business are in some cases making use of external business resources to make up for the resources that they lack. We shall therefore also explain about SMEs that have adopted a slightly different business strategy to other companies (Fig. 222-8).

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**Fig. 222-6 Forecast size of environmental business market**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pollution prevention/ environmental protection</th>
<th>Waste disposal</th>
<th>Recycling</th>
<th>Environmental restoration and creation, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>2.2</td>
<td>3.9</td>
<td>12.6</td>
<td>1.6</td>
</tr>
<tr>
<td>2010</td>
<td>4.2</td>
<td>5.8</td>
<td>22.4</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Source: Ministry of Economy, Trade and Industry.

1) Of the various areas of the environmental business engaged in by SMEs, the focus of this section is on recycling.
2) Some studies indicate that SMEs expect the environmental market to grow as a result of the development of environmental legislation and increase in environmental awareness.
3) Factors such as the need to ascertain and meet the needs of government and local residents mean that SMEs entering the recycling business need to have other aims in addition to simply making a profit.
**Fig. 222-7 Future issues in the environmental business**

<table>
<thead>
<tr>
<th>Technologies and facilities</th>
<th>Production systems</th>
<th>Marketing</th>
<th>Public aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment of technical experts</td>
<td>Adoption of production facilities</td>
<td>Establishment of production system (including outsourcing)</td>
<td>Access to part and material procurement routes</td>
</tr>
<tr>
<td>Licensing of outside technologies</td>
<td>Establishment of production system (including outsourcing)</td>
<td>Establishment of production system (including outsourcing)</td>
<td>Establishment of production system (including outsourcing)</td>
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<td>Establishment of production system (including outsourcing)</td>
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<td>Establishment of production system (including outsourcing)</td>
<td>Establishment of production system (including outsourcing)</td>
</tr>
<tr>
<td>Adoption of production facilities</td>
<td>Establishment of production system (including outsourcing)</td>
<td>Establishment of production system (including outsourcing)</td>
<td>Establishment of production system (including outsourcing)</td>
</tr>
<tr>
<td>Recruitment of sales staff</td>
<td>Development of sales systems</td>
<td>Establishment of sales operations</td>
<td>Establishment of sales operations</td>
</tr>
<tr>
<td>Enhancement of advertising activities (including use of Internet)</td>
<td>Use of Internet marketing</td>
<td>Use of Internet marketing</td>
<td>Use of Internet marketing</td>
</tr>
<tr>
<td>Sales tie-ups with distributors</td>
<td>Use of Internet marketing</td>
<td>Use of Internet marketing</td>
<td>Use of Internet marketing</td>
</tr>
<tr>
<td>Use of public funds</td>
<td>Use of public funds</td>
<td>Use of public funds</td>
<td>Use of public funds</td>
</tr>
<tr>
<td>Use of public research institutions and support centers</td>
<td>Use of public funds</td>
<td>Use of public funds</td>
<td>Use of public funds</td>
</tr>
</tbody>
</table>


Note: Totals exceed 100 due to multiple responses.

**Fig. 222-8 Situation surrounding environmental business**

- **Solution**
  - Mass production, mass consumption, mass waste society
  - Creation of recycling-based society and economy

- **Consumers (local residents)**
  - Cooperation in sorted collection of reuse and recycling, purchase of environmentally friendly products

- **Central and local governments**
  - Business taking advantage of the characteristics of SMEs
    - Swift, flexible decision-making
    - Close local ties
    - Development of slightly different business strategy
    - Tie-ups with large enterprises, etc.

- **Promulgation and entry into effect of various laws**
  - Basic Law for Establishing of the Recycling-based Society
  - Amended Waste Disposal Law
  - Law of the Promotion of Effective Utilization of Resources
  - Container and Packaging Recycling Law
  - Home Electronics Recycling Law
  - Food Recycling Law
  - Green Purchasing Law, etc.

- **Environmental business of SMEs**
  - Market size: ¥21 trillion
  - Employment: 880,000

- **Increase in environmental awareness**

- **Demand**
  - Public demand
  - Central and local governments

- **Observance of regulations**

Source: Compiled by the Small and Medium Enterprise Agency.

Note: This figure illustrates the content of the main text, and does not cover all the points concerning environmental business.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

Case 86: Company raises awareness of own products by leveraging strengths and targeting publicity at customers with a high environmental awareness

A Ltd. is a company in Osaka Prefecture with 21 employees that developed recyclable food containers using its paper processing technology to escape from its dependent position as a subcontractor. Believing there exists demand even for high-priced products among customers with high a level of environmental awareness, the company took advantage of its maneuverability to become involved in focused sales activities and recycling through, for example, participation in volunteer activities. By thus increasing awareness of the company’s products among consumers, the company is gradually increasing demand for its products.

Company seeks to escape subcontracting relationship following entry into recycling business

The company’s principal line of business was the processing of paper for food packaging as a subcontractor to a large enterprise. However, it had no say in the determination of factors such as price and delivery times. In around 1991, it heard the news of a residents’ movement protesting that a local valley was being filled with food containers such as expanded polystyrene waste, which was destroying the environment. Using its many years of experience of paper processing, the company set about developing a type of recyclable food container made of paper instead of expanded polystyrene. After a process of trial and error, the company succeeded in developing a 95% recyclable type of food packaging.

Discovery of new demand through active participation in NPO activities, etc.

Because of the larger number of production processes and quantity of labor required to manufacture the product compared with expanded polystyrene alternatives, cost became a problem. However, the company knew that trying to compete by producing a cheap product that, though made of paper, was not recyclable would result in the same situation as when it was a subcontractor, and decided that this was not a viable strategy in the long run. Leveraging its strengths, therefore, the company actively undertook promotional activities. By becoming involved in volunteer and NPO activities, for example, the president himself could actually witness how paper was sorted and recycled while at the same time engaging in PR to advertise the company’s product, see how the reduction in the volume of waste reduced disposal costs, and convey to customers the advantages of using the company’s product. The company’s product was featured on the homepages of NPOs and other organizations, and the company also approached chambers of commerce and industry, as a result of which the company succeeding in finding outlets for its products.

The product was consequently used for the food trays used by food stalls at local festivals, and was featured in newspapers and magazines, leading to a gradual increase in inquiries from schools, shopping centers, local governments and so on.

The company’s president considers recycling to be important to the creation of a recycling-based society, and hopes in the future that consideration will be given to measures to clarify the definition and classification of waste. His hope is that his company’s activities will make some contribution to the creation of such a society.

Case 87: Company contributes to the community as well as reducing costs through providing cheap organic produce by composting own kitchen waste

A Ltd. in Ibaraki Prefecture teamed up with an agricultural cooperative corporation to collect kitchen refuse from its supermarkets to turn into fertilizer at a nearby research institute’s composting plant. Neighboring farms use the recycled compost to produce organic agricultural produce, which is then sold to local consumers via A’s supermarkets at a low price, thus benefiting not only A but also the local community as a whole.

Pursuing business that benefits the company, business partners and society

In order to strengthen its business base and identity as a middle-tier supermarket with close local ties, A sought to develop a system that would benefit local producers, A itself and local consumers by providing a new service with local roots.

A, which had long been considering providing a full-fledged organic agricultural produce home delivery service, spoke with the representatives of an organization delivering produce directly from farms with which it had contacts, and in the process discovered the existence of an agricultural cooperative cooperation that sought to promote environmentally responsible farming. This association believed that the key to revitalizing agriculture lay in composting kitchen refuse to improve soil, and providing safe, good quality agricultural produce at as low a price as possible while preserving the lateral ties of farmers. A’s president shared this view.

Merits for A

Under this system, the kitchen refuse generated every day by A’s supermarkets is collected three times a week (the ton on each occasion) and transported to a nearby research institute for composting. This system has reduced A’s disposal costs by 45%.
Case 88: Company ties up with large enterprise in line with business strategy of leveraging unique product

A Ltd., a company in Fukuoka Prefecture with five employees, developed a chain-type paper shredder because of dissatisfaction with existing shredding methods. Despite his technical skill, however, the president was poor on the sales side, and so the company tied up with a large enterprise in line with a business strategy of outsourcing sales and maintenance.

Launching sale of products developed
The president’s line of business was carrying out online wiring work and making terminal generators for banks. However, he learnt from the banks with which he did business of their dissatisfaction with the shredders that they used to dispose of documents that had exceeded their storage data. Having searched both in Japan and overseas and found that all shredders had basically the same functions, he reasoned that there must therefore be a problem with all existing products, which meant there was a gap in the market that he could fill. After a process of trial and error, the company succeeded in developing a new product with a mechanism for crushing paper while still bound.

Because of the company’s weakness at sales, it began looking for a partner via media such as newspapers that would take responsibility for sales in its place. Taking maximum advantage of having developed such a product before anyone else, the company began negotiating with large enterprises from a position of strength.

The company looked for a company that would not only intercede between itself and consumers, but also one that would perform maintenance directly for consumers. It found and tied up with a large enterprise that met these conditions. Since the tie-up, regard for the performance of A's products has grown, and they have been adopted for use by central government agencies.

Case 89: Company succeeds in strengthening customer base by tapping into and concentrating business resources on niche market through positive customer approach

A Ltd. is a company in Tokyo with 22 employees that has for many years been provided simple analyses of, among other things, the water quality of rivers and concentrations of residual chlorine. It decided, however, to actively approach and tap into the demand of government agencies and enterprises with a high environmental awareness. It produced a sample based on these needs that it supplied to customers. The company thus succeeded in building a system for concentrating business resources on a niche market that was unattractive to large enterprises, both for technical reasons and because of size, thereby securing demand.

Development of products after careful research into customer needs
The company began to conduct simple analyses because of demand from various quarters (particularly government) when the issue of pollution became a social problem. Having produced samples to exactly match the needs of government and private-sector customers that were well received, it set about commercial production. Because the products were produced in small lots and large varieties, and required considerable expenditure on R&D, the company had hardly any rivals.

Customers attracted by low price and convenience
The product is characterized by its ease of use. A hole is made in a tube and water drawn up like a syringe in order to measure the concentrations of constituents. The product is highly rated for its ease of use, and has begun to be used by government agencies and companies in order to measure rough concentrations for drainage control, environmental surveys, and control of water quality in aquaculture. The company has now developed and manufactures over 200 kinds of products, such as pH test paper, test paper for analyses, simple water quality testing equipment, and other simple analysis equipment in order to meet customer demand.
Section 3  Stimulating startups: Expanding the frontiers of business

1. Unearthing business seeds

Because of the situation in the U.S. in recent years, where universities are visibly contributing to economic revitalization, expectations of universities in Japan too are rising. There are high hopes that universities will contribute to the creation of new industries and employment and the revitalization of the economy, both by generating valuable technical seeds for society that can then be licensed to the private sector, and by producing new business ventures. In this section, therefore we first examine the traditional forms of cooperation between universities and industry in Japan, before moving on to look at recent developments in this area.

(1) Current state of cooperation with universities

Cooperation between universities and industry in Japan often takes the form of personal links between individual members of staff at universities and enterprises. In this context, there are cases of SMEs with advanced technological capabilities that have succeeded in developing technologies in cooperation with universities. Below, we examine one such case.

Case 90: Company succeeds in applying own technology in new field in partnership with university

A Ltd., which is a company based in Chiba Prefecture with 22 employees that was established to manufacture paintbrushes, was consulted by a researcher troubled by the lack of a world-class DNA analysis device. As a result, the company teamed up with a university to use its own machinery production technology to develop such a device.

Background to development of DNA analysis device based on researchers’ needs

A is a company boasting outstanding automation technology, such as control system software that it developed itself, that had dramatically changed its line of business three times by developing pioneering technology to meet changing needs. It embarked on the development of a DNA analysis device after being consulted by researchers at a university that was one of its customers, who were troubled by the lack, both in the U.S. as well as Japan, of equipment ideally suited to DNA analysis work. Because the company was knowledgeable about the production of equipment and machinery but knew nothing about DNA, it developed a device by having the university use prototypes and obtaining the advice of researchers at the university. B, who became A’s president after working with a large domestic chemical manufacturer, had gained experience of taking orders for and developing equipment to meet researchers’ needs at his previous place of employment, and the fact that he therefore had a deep understanding of the urgent problems of researchers was one factor behind the company’s success.

New business attracts interest of large enterprises

Utilizing its proprietary automation technology and know-how, the company completed a prototype for a completely new type of genome analysis device in April 1999, attracting the strong interest of the market leader in immune system testing and other leading domestic chemicals companies. At present, the company produces products using its original technology on an OEM basis for large enterprises (under the partners’ brand name).

1) “Seeds” are the technologies and know-how, etc. that serve as the source for the establishment of ventures and business innovation at existing enterprises.
Throughout Japan, there are regions where university-led groups have been in place for over 10 years for coordinating cooperation between industry, government and universities. Below, we look at a network formed to enable cooperation between industry and universities led by a nucleus of university staff\(^2\) with a strong awareness of the importance of such cooperation.

### Case 91: Establishment of university-led network to facilitate cooperation between industry, universities and government

A is a network system in Iwate Prefecture formed as a forum for exchange and network between industry, universities and government on science, technology and R&D in the prefecture. Staff at university B with a strong awareness of the need for industry-university cooperation lobbied enterprises and local governments to set up forums and research groups in each field of technology, and a network was established with a joint research center at its hub. The network system currently coordinates industry-university-government activity, generating a number of joint research projects and providing the foundations for smooth cooperation between industry, universities and government.

**Background to establishment of system and organizational characteristics**

A group of university staff who recognized the importance of lateral ties began meeting on a casual basis for a drink in a familiar setting. The meetings gradually grew to encompass more and more people with similar aims, and led eventually in 1992 to the establishment of the A network system. Born of such circumstances, A’s organization was characterized by its voluntary nature based on the aim of contributing to the region and assisting SMEs, out of which spontaneously emerged a network system. University B principally provides support for engineering fields and organizes various research groups. In recent years, however, the range of its activities has grown. The establishment of the organization’s secretariat at the university has allowed university staff to take the initiative and, with government playing a supportive role, engage in activities with a high degree of freedom.

**Results of joint university research**

University B, which is at the network’s hub, is establishing itself as a university that is open to SMEs, contributing to the development of the region’s small business sector and providing friendly advice and expert support to businesses throughout the prefecture. The following is one example of the technological seeds generated by the organization’s research groups that are commercialized by SMEs.

**Successful commercialization of seed generated by research group through industry-university-government cooperation**

A university professor with a seed created by research group and the president of C Ltd., a software developer in Iwate Prefecture with 16 employees, teamed up to conduct research after becoming acquainted through the A network system, as a result of which C successfully developed a digital landscaping software package for generating computer graphics of natural landscapes. As this software is capable of generating highly accurate graphics of topographical features and shapes of objects such as trees, it is expected to be adopted for a variety of applications, including films, computer games and landscape simulations for civil engineering projects.

Recent years have seen a growing level of cooperation between industry and universities throughout Japan. If one looks at the state of industry-university cooperation in the small business sector, however, one finds that although most collaboration is with public research institutes and universities, there is a large gap compared with large enterprises in terms of “cooperation with universities” (Appended Table 223-1). Nevertheless, a wave of new technology licensing organizations, or TLOs, which have made such a contribution to economic regeneration and the creation of employment in the U.S., have been established in Japan, and there are growing hopes that these will provide the driving force for the creation of new industries through the licensing of technologies from universities and similar entities. TLOs are organizations that match up the technological seeds of universities\(^3\) and the needs of enterprises in order to enable technology to be successfully licensed. Because of their growing role in recent years in industry-university cooperation, we examine below the current state of TLOs and future challenges that need to be addressed.

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\(^2\) “Staff” are professors, assistant professors, lecturers and assistances.

\(^3\) “Universities” is here used to mean universities, institutions used jointly by universities and technical colleges.
Present state and problems of TLOs

1) Present state of TLOs

The entry into effect of the University-Industry Technology Transfer Law in August 1998 and subsequent introduction of further legislation has prompted rapid growth in the establishment of TLOs by universities in recent years (Appended Note 223-2). In order to promote technology transfers from universities to entrepreneurs and enterprises in the private sector, TLOs obtain the results of research by researchers at universities, apply and acquire patents, and license their use to enterprises. Expenses such as the cost of patent applications are covered by income from licensing royalties. TLOs also control patents by, among other things, dealing with infringements of rights and reappraisal, and contribute part of their earnings to universities and researchers to promote further research. TLOs approved by law receive support in the form of grants and subsidies under the Industrial Infrastructure Improvement Fund.

The activities and record of TLOs in Japan are explained in Appended Table 223-3. Below, therefore, we focus on the problems associated with TLOs.

2) Problems of TLOs

(a) Problems with TLOs from the perspective of SMEs (Fig. 223-1)

An important question when SMEs use TLOs is the extent to which TLOs satisfy the needs of business. SMEs have a strong tendency to seek useful technological seeds that can be applied commercially immediately. TLOs, however, are unable to keep a detailed track of what kind of research has been undertaken at a university as a whole. As a consequence, there is sometimes insufficient marketing of enterprises’ needs regarding, for example, what kinds of technologies enterprises seek, making it difficult for SMEs to find attractive seeds.

It is important that TLOs obtain many patents likely to satisfy business needs, and for industry and universities to work together to generate successful technology transfers. In order to do so, however, TLOs need to have the human resources capable of serving as coordinators, and to strengthen their coordination capabilities in order to act as a bridge between industry and universities and match universities’ technological seeds with the needs of enterprises.

Examining the state of use from the perspective of satisfaction of needs, it is apparent that more frequent use is made of a wide range of support activities, ranging from joint research to distinguish a company’s products and develop new areas of business, to advice on the development of technology and the commissioning of analyses and studies to provide theoretical proof. In order to ensure the successful transfer of technology too, it is important first of all that TLOs engage in more PR work and public awareness programs in order to attract the interest of the small business sector.

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Fig. 223-1 Problems with TLOs from the perspective of SMEs

<table>
<thead>
<tr>
<th>Item</th>
<th>Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty of finding seeds</td>
<td>- Detailed track not kept of the research of universities as a whole</td>
</tr>
<tr>
<td>Lack of service functions</td>
<td>- Cannot attract the attention of enterprises due to insufficient PR and profile raising activities regarding technology transfers</td>
</tr>
<tr>
<td></td>
<td>- Shortage of coordinators (people with specialist knowledge of technology transfers and matchmaking skills)</td>
</tr>
<tr>
<td></td>
<td>- Importance of not only technology transfers, but also support for commercial application by enterprises</td>
</tr>
</tbody>
</table>

Source: Compiled by the Small and Medium Enterprise Agency.

---

1) “Licensing” means the granting of a working license for patents.
(b) Problems regarding activities of TLOs
TLOs’ technology licensing activities require the use of experts in the transfer of technologies through the licensing of patents, patent lawyers for handling patent application procedures, lawyers for dealing with patent disputes and contracts with enterprises, and so on. Such human resources cost money, and can be in particularly short supply in the provinces.
Technology licensing is not the only important activity required of TLOs when matching universities’ seeds with the needs of enterprises. TLOs must in addition coordinate joint research between universities and enterprises and research commissioned by enterprises, and also work with universities in supporting enterprises in their efforts to commercialize a technology after it has been licensed. However, TLOs have not always taken sufficient action in this regard. Transfer of national patents and the like to TLOs and enterprises is also as a rule effected by general competitive tender, and this too has hindered their use in industry. It has therefore become apparent that concrete regulation is required to enable the wide use of national patents, etc. in industry, and, in certain cases, the transfer to TLOs and enterprises of national patents, etc. by optional agreements.

3) Systems of industry-university cooperation in the U.S.
Since the entry into effect of the Bayh-Dole Act in 1980 (Appended Note 223-4), many new technologies have been created in the U.S. based on research at universities, and these have led to the creation of employment and the revitalization of the economy. According to a survey by the Association of University Technology Managers, Inc. (AUTM), the economic effects of technology transfers from universities in FY1999 were worth approximately $41 billion, and created around 270,000 jobs. Some of the income from intellectual property such as patents used for technology transfers has in addition been passed on to individual researchers at universities, creating an important incentive for researchers. An examination of the licenses granted by universities in the U.S., meanwhile, shows that 60% are granted to SMEs and startups, thus contributing to the creation of business ventures (Fig. 223-2).

Fig. 223-2 Recipients of licenses granted by U.S. universities (1999)

<table>
<thead>
<tr>
<th>Licensees</th>
<th>Startups</th>
<th>SMEs</th>
<th>Large enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of licenses</td>
<td>12%</td>
<td>51%</td>
<td>37%</td>
</tr>
<tr>
<td>Type of license</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive license</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-exclusive license</td>
<td>38</td>
<td>836</td>
<td></td>
</tr>
<tr>
<td>No. of licenses</td>
<td>346</td>
<td>743</td>
<td>457</td>
</tr>
</tbody>
</table>

Source: Compiled from AUTM Licensing Survey FY1999.
Notes:
1. A survey was made of universities by the Association of University Technology Managers, Inc. (AUTM). Responses were received from 134 universities.
2. SMEs are enterprises with fewer than 500 employees. Large enterprises are enterprises with 500 or more employees.

1) The AUTM is a nonprofit organization made up of experts in technology transfers at universities, research institutes and hospitals, along with patent lawyers and lawyers, etc.
Industry-university cooperation in the U.S. takes the form of a type of system whereby technology generated by research at universities is licensed for commercial application. In order for this system to function effectively, various rules are laid down regarding, for example, the treatment of intellectual property rights relating to the fruits of research and the business activities of university staff, and TLOs have developed as an interface between universities and enterprises. It is necessary to bear in mind that some technologies transferred from universities to business are not always commercialized. The conduct of research based on technology transfers is not simply a question of licensing. It is also important that enterprises commission and conduct research in association with universities in order to ensure that the research undertaken by universities reflects the needs of industry, and it is when such steps are taken in conjunction with technology transfers that there emerges a suitably comprehensive collaborative relationship between industry and universities (encompassing also cooperation on research and the establishment of business ventures). There are also cases in the U.S. of the fruits of research being successfully applied commercially as a result of universities leading investment in technological seeds by playing the role of venture capital. Below we examine the case of a fund being established to enable a university to invest in technological seeds prior to their commercialization.

**Case 92 TLO establishes fund to invest in commercialization of technology seeds**

The University of California System has established an industry-university cooperative research program to enable the university to lead investment in technological seeds prior to their commercial application. This program consists of six strategic matching grant programs for strategic investment in six fields, and total funding of US$43 million, US$22 million of which is allocated to investment in biotechnology. An important feature of the program is that it provides financing in the form of a fund for investment in specific fields determined at the university’s independent discretion.

**Reasons for success of TLOs in the U.S.**

One of the reasons cited for the success of TLOs in the U.S. is the development of a system for investment in cutting-edge technology and research by universities themselves. Regarding much of the research that comes forth from universities, the markets—such as venture capitalists and pharmaceutical companies—are incapable of making clear investment decisions. Until the actual payment of royalties or the transfer of technology through, for example, the granting of working licenses, investment in technological seeds prior to commercialization is essential. 93 research projects have been funded by the University of California’s research fund in two years, and the majority of projects have been conducted by university researchers and research groups at biotechnology ventures. Research funds made available under this system play an important role in encouraging the commercial application of the technological seeds held by universities.

(3) Enabling the effective implementation and use of R&D activities

1) Use of “patents” as part of business strategy

Growing globalization is rapidly fueling competition to discriminate products from one’s competitors’, and the importance of R&D activity is naturally growing in the small business sector as elsewhere. At the same time, however, it is important that companies protect the fruits of their R&D through the use of patents and use them to distinguish their products from their rivals’. Acquiring patents raises problems such as the cost. As using patents offers an effective choice for stabilizing and raising a company’s business position, we look below at how patents can be effectively used as a part of business strategy.
1) Stock options give directors and employees the right to purchase shares in their own company at a predetermined price. They are classified

achieve growth after

up afresh in business. The key point, however, is how to

changing line of business is in many senses like starting

It is no exaggeration to say that for SMEs, drastically

Case 93: Company acquires patents in pursuit of product safety and quality

A Ltd. is a specialist manufacturer of medical and pharmaceutical packages. Located in Tokyo, it has a workforce of 350 and capital of ¥150 million. As a result of thorough R&D and product inspections, the company produces only the safest and most reliable products to meet users’ demands. As a part of this, the company seeks to actively patent its manufacturing technologies.

Focus on product R&D in pursuit of safety
Since its establishment, the company has consistently focused on R&D to produce extremely safe and reliable products. Even today, despite the weakness of the economic recovery, the company is investing several billion yen in R&D. It carefully confirms whether the products it produces meet users’ quality requirements, and markets

2) Stock options for attracting human resources
It is no exaggeration to say that for SMEs, drastically changing line of business is in many senses like starting up afresh in business. The key point, however, is how to achieve growth after “startup”. Below, therefore, we look at one company that has achieved growth by using stock options to attract skilled human resources and further increase competitiveness after successfully changing its line of business as a result of R&D.

Case 94: Use of stock options to achieve further growth

Based in Akita Prefecture and with a workforce of 32, A Ltd. was established as a manufacturing subcontractor. Following a variety of hardships, it succeeded in converting to become a maker of semiconductor testing equipment. In order to achieve further growth and built up its own technology, the company successfully used stock options to attract technical experts. It also uses stock options to increase the motivation of employees ahead of going public.

Background to do-or-die change of line of business
When originally established, the company assembled magnetic heads as a subcontractor plant to a major manufacturer. Orders dried up, however, as a result of the company transferring its production operations overseas and manufacturing in-house. Convinced by this that there was no hope of growing as a subcontractor, the president, after much worry, came to recognize the growth potential of the semiconductor industry, and so relaunched the company as a developmental manufacturer, which had been his aim when the company was established. After deciding to enter the market, the company interviewed large numbers of users and cautiously drew up product standards. Once it was sure of a product that users would buy, it set about development, focusing on the development of functions that would set it completely apart from other competitors. As a result, the company succeeded in its “do-or-die” attempt to switch to another line of business. In 1997, the company was recognized under the New Business Law, enabling it to gain a loan guarantee from the Industrial Infrastructure Improvement Fund (which was established as a support measure under the law) and increase the cap on stock options.

Utilization of stock options to achieve further growth
The offer of stock options led to an acknowledged expert on image processing technology joining the company, as a result of which it is now developing micro-substrate and next-generation semiconductor package applying an original, ultra high-resolution image processing system, and in FY2000, the company was recognized under the Law for Facilitating the Creation of New Business. In the future, the company plans to expand overseas by manufacturing and marketing a system to meet automation needs for even more microscopic semiconductor package testing, and aims to capture at least 10% of the global market for testing equipment. The use of stock options attracts outstanding human resources, gives to employees who have shared in the company’s successes and travails a share of the profits, and increases motivation ahead of the company’s plans for going public.

1) Stock options give directors and employees the right to purchase shares in their own company at a predetermined price. They are classified into stock options covered under commercial law, stock options covered under special laws, and pseudo-stock options (neither of the first two and not covered under commercial law).
3) Use of public support system

A frequent problem for an SME working on the commercial application of a university’s technical seeds and developing a new area of business is how to raise the necessary funds for development. While a common solution is to obtain a subsidy for joint research, below we look at one company that obtained funding for development through fiscal finance.

**Case 95: Company succeeds in developing commercial application of technology seed through loan secured with intellectual property**

A is a government-approved TLO in Hokkaido that in July 2000 granted a license for a mixer to B Ltd., a manufacturer of snow-melting equipment for commercial and domestic use based in Hokkaido with 56 employees. A common problem faced by companies when trying to commercialize universities’ technological seeds is the question of how to raise the necessary funds. B Ltd. did so by means of a loan secured with intellectual property provided by the Hokkaido branch of the Development Bank of Japan (DBJ), which enabled it to engage in new business development.

**Outline of new business and technology transfer (Fig. 223-3)**

B’s new business is the development of a snow-melting system that uses the gyration of an aerated jet stream.

Because of the problem of the disposal in the sea of snow that is difficult to melt that has accumulated without being snowplowed away, it developed a new product to meet the need for a means of melting snow more quickly.

**Loan secured with intellectual property**

The loan made to B was the first made by the Hokkaido branch of the DBJ for a patent licensing project to commercialize a patented technology borrowed by a private enterprise from another party under a licensing agreement. However, a loan was provided for the new project by discounting projected earnings from the patented technology and technological capabilities of B from the current value to determine security.

**Fig. 223-3 Outline of new business and technology transfer**

Source: Compiled by the Small and Medium Enterprise Agency.
2. Enhancement of business support systems

Recognition has grown in recent years of the importance of business incubation activities as an effective means of encouraging startups and business growth. Following the success of such activities in the pioneer in this field, the U.S., they are spreading throughout the world. Business incubation programs are programs that bring together inside staff and outside experts to provide a comprehensive and varied range of business support services in order to assist the startup and growth of businesses with new ideas and technological seeds. Japan, which has low startup and closure rates by international standards, has a strong need for incubation activities in order to provide steady support for new businesses.

(1) Business incubation

1) Incubation activities in Japan

An important figure in incubation activities is the incubation manager (IM), who provides business support for entrepreneurs with a technical background who are less proficient on the business side of things. Below we look at an example of the active provision of business support regarding the sale of products and other matters.

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**Case 96: Incubation manager acting as a bridge to business**

The startup support center established in city A in Iwate Prefecture in 1995 has two IMs from a private enterprise background who boast a combination of know-how, contacts and knowledge regarding support for entrepreneurs. Their job is to provide appropriate advice and suggestions to entrepreneurs seeking assistance. They provide support from a variety of angles, both technical and managerial, to incubator residents, and also sometimes go with entrepreneurs around the country as they pitch their wares. Provision of such business support by the center has proved successful, with 10 enterprises succeeding in commercializing technologies, and six independent enterprises having achieved spectacular sales.

**IM activities**

The center offers a variety of finely tailored support services for resident enterprises, covering everything from product planning and development to sales. An entrepreneur seeking advice about product development will be introduced to a public institution, such as Iwate University, while an entrepreneur who needs advice about finding new outlets will be helped by drawing up a list of outlets. In order to help them open up new markets, entrepreneurs may if necessary be accompanied by an IM to visit customers, even in some cases where the customer is outside the prefecture. By acting alongside resident enterprises, the IMs thus provide practical guidance and support concerning sales and marketing methods that may not be a forte of entrepreneurs. That the center is capable of providing such support is because of the employment of IMs from the private sector with experience of marketing and developing technology. These IMs use the contacts with individuals at private enterprises and universities that they built up during their time in the private sector, and match up the merchandise and product development needs of resident enterprises with the technological seeds of universities and the like.

**Characteristics of the center**

The center was established and is run by A as an incubator in order to incubate technologically advanced “R&D-type enterprises” and “business ventures” attempting to expand into new areas of business, and to contribute to the creation of distinctive local enterprises and the development of local industry. The center, which considers its mission accomplished only when an enterprise has succeeded in standing on its own two feet, is confident that, with its wide information network and considerable support know-how, it is capable of providing support suited to the actual circumstances of a variety of enterprises.

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1) As defined by the National Business Incubation Association (NBIA). The word “incubator” often refers to the facilities and other physical forms of assistance provided to enterprises.

2) Experts who provide various advice and external support services to resident enterprises of all incubators.
There are a growing number of incubators in Japan too focusing on support services rather than the provision of physical facilities that, in the process of accumulating various know-how, aim to invest in the enterprises that they support and enable them to go public. Below we look at one such case.

**Case 97: Incubator provides support for residents through capital participation**

Science park A, which was Japan’s first science park when it was established in 1989 (Appended Note 223-5), provides incubation services. Through repeated trial and error, it has accumulated considerable know-how on support activities, and the focus of its activities is now on the provision of business incubation services. It has come up with the idea of providing special support for R&D-type enterprises with clear business plans and strong growth potential, and provides investment in enterprises seeking to go public.

**Business incubation activities**

There are three main planks to the science park’s business incubation activities: support for startups, business support, and education and training. Startup support consists of the provision of facilities to enterprises according to their stage of growth, and education and training take the form of courses at a management school, with a particular focus on education for entrepreneurs from a technical background who in many cases lack basic knowledge of business. In terms of business support, the science park offers a variety of tools designed to encourage the growth of enterprises using external networks, combined with investment in high-tech ventures expected to go public using the startup support know-how it has acquired to date. The first investment business partnership was formed in 1997.

**Science park’s direction**

The science park’s goal is to encourage growth in startups and stimulate economic growth by incubating high-quality ventures, and to provide entrepreneurial success stories. Its strategy in the future is to place the focus more on selecting the enterprises with the best growth potential rather than broad startup support in order to provide better targeted support. It is also aware of the need to develop its structure so as to ensure business support does not lag behind the speed of business.

As is apparent from the above cases, business incubation activities are broad in scope, and take a variety of forms. In the U.S. in the 1980s, there emerged incubators focusing on the provision of physical facilities, and incubators focusing on business development through the provision of support services. The latter can take the form of a variety of levels of support, such as accounting and tax affairs support, all kinds of marketing and management support, technical support, access to loans (funding support) and, in some cases, capital participation in enterprises receiving support. In Japan, instances are beginning to emerge of incubators supporting growth through capital participation. With these activities in mind, we turn next to a comparison of incubation activities in Japan and other countries.

2) International comparison of business incubation activities

While the lack of statistics and common global standards concerning incubation activities limits the accuracy of any quantitative picture of incubation activities around the world, Fig. 223-4 provides some comparison of the incubation activities in a number of countries. The level of such activity in terms of number of incubators and number of enterprises being incubated is overwhelmingly greatest in the U.S. Regarding the quality of activities, it is apparent from the following points that services in Japan are less developed than in Europe and North America. The first point regards the comparative shortage of specialists at incubators in Japan. This is apparent from the fact that the average number of staff, which indicates the level of specialist staffing at incubators, is highest in Europe, followed by the U.S. Japan is thus relatively further behind in terms of input of human resources. The second point concerns the breadth of scope of support. Whereas support in Europe is concentrated on high-tech enterprises, support in Japan is often provided for both high-tech and low-tech enterprises. Because of the differing elements of support required by high-tech and low-tech enterprises, incubators in Japan must provide a wider range of support, which makes them more difficult to run. The third point is the low level of cooperation between industry, universities and government compared with the U.S. and Europe.
3) General condition of business incubation in Japan
The number of both public and private-sector incubator facilities being established has risen dramatically over the past couple of years (Fig. 223-5). Prompted by the entry into effect in February 1999 of the Law for Facilitating the Creation of New Business, which provides comprehensive support for new areas of business at the regional level, public-sector incubators have sprung up across the country, while private-sector incubators have been established largely in major cities (principally Tokyo). Private-sector incubators are themselves new businesses, and their mode of operation is expected to change in the years ahead. The commonest operators of public-sector incubators are third-sector initiatives, followed by nonprofit corporations and prefectures, while the commonest operators in the private sector are investment and consultancy businesses (incubation businesses), followed by real estate and construction firms, and educational foundations.1) Regarding the type of support provided, 34% of public facilities and 50% of private facilities provide no intangible support services (Fig. 223-6). Because business incubation activities are programs for providing a full range of business support services rather than bricks-and-mortar facilities, there is a strong need in Japan to work on the development of such intangible support services for incubator residents.

1) Japan Association of New Business Incubation Organizations, General State of Incubators in Japan (November 2000). 33.3% of public-sector incubators are operated by third-sector initiatives, 30.2% by nonprofit corporations, and 16.4% by prefectures. 43.2% of private-sector incubators are operated by incubation businesses, 25.0% by real estate and construction companies, and 13.6% by educational foundations, etc.

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**Fig. 223-4 International comparison of incubators**

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>U.K.</th>
<th>Finland</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of incubators</td>
<td>850</td>
<td>90</td>
<td>54</td>
<td>203</td>
</tr>
<tr>
<td>No. of incubator residents</td>
<td>6,458</td>
<td>1,710</td>
<td>—</td>
<td>2,247</td>
</tr>
<tr>
<td>Average no. of staff</td>
<td>2.8</td>
<td>5.8</td>
<td>6</td>
<td>0.7</td>
</tr>
<tr>
<td>Scope of support</td>
<td>Primarily mixed use (IT/biotech and others)</td>
<td>Primarily high-tech (IT and biotech)</td>
<td>Specialize in high-tech (IT and biotech)</td>
<td>Primarily mixed use (IT/biotech and others)</td>
</tr>
<tr>
<td>Service functions</td>
<td>Large number of outside staff and companies providing specialist business support</td>
<td>Effective ties with Business Link (government-affiliated support agency)</td>
<td>Well-developed service functions provided in cooperation with universities</td>
<td>Weak service functions due to shortage of specialists</td>
</tr>
<tr>
<td>Relations with universities and society</td>
<td>Led by universities. Strong ties with industry and universities Strong ties with NPO activities</td>
<td>Lead by local governments, etc. (local development corporations). Strong ties with industry and universities</td>
<td>Led by central government. Strong ties with industry and universities</td>
<td>Led by local governments. Weak ties with industry and universities</td>
</tr>
</tbody>
</table>

Source: Compiled by the Small and Medium Enterprise Agency.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

Fig. 223-5  Trend in establishment of incubators

![Trend in establishment of incubators](chart)

Source: Compiled from Japan Association of New Business Incubation Organizations (JANBO), *General State of Incubators in Japan* (November 2000).

Notes: 1. Incubators in operation as of November 1, 2000.
2. Incubators are facilities designed to promote growth of startups and recently established enterprises and enterprises seeking to expand into new areas of business by providing them with the resources that they lack (e.g. support services and provision of low-rental space).
3. Public-sector incubators are incubators that are maintained and run by public agencies (central government, local government, nonprofit corporations, third-sector initiatives, chambers of commerce and industry, etc.)

Fig. 223-6  Forms of support provided by public and private-sector incubators

Forms of support provided by public-sector incubators

![Forms of support provided by public-sector incubators](chart)

Source: Compiled from Japan Association of New Business Incubation Organizations (JANBO), *General State of Incubators in Japan* (November 2000).

Note: See Fig. 223-5 regarding details of the survey.
4) Overseas activities
Overseas too, support services have not always been well developed right from the start, and the various systems have each developed in their own ways. Below, therefore, we look at those programs that have focused on the need for integrated action throughout a region and that provide useful lessons for the development of a supportive environment for startups and growth in Japan.

Case 98: Overseas regions that have concentrated the location of biotech industries through local government leadership

Scotland is growing as one of the U.K.’s leading regions for biotech industry. The concentration of biotech industry in the region has been achieved as a result of the formation of a comprehensive system of support for startups and growth through the preparation of strategy and numerical targets by local governments, active encouragement for the commercial application of research seeds by universities, the provision of biotech specialists in organizations under local control, and strong ties with related organizations.

Growth led by local government (Scottish Enterprise)
The driving force behind the growth of biotech industry in Scotland has been the Scottish Enterprise network, which is responsible for economic development. The enterprise provides support for growth in a wide variety of fields, providing an infrastructure to support not only the development of business ventures, but also to encourage the commercial application of research, formation of joint ventures, investment, development, promotion of exports, and development of incubation centers. At the Pentlands Science Park, which is backed by the enterprise, support is provided not only for incubator facilities, but also for everything from technology development through to business matters, and advice is provided by specialists.

Scottish Enterprise forms network involving universities
One reason for the enterprise’s success against the background of cuts to public research funding is the encouragement of the commercialization of research seeds by universities. In addition to employing liaison and business support staff, universities also establish clear policies and procedures regarding the commercial application of research, and seek to maintain the motivation of researchers and support staff. Specialist staff also play an important role as agents in the formation of networks with local bodies and firms outside universities and overseas agencies. It is no exaggeration to say that this comprehensive system of support for startups and growth in the biotech industry has been built on the bedrock of the steady development of networks by them.

Case 99: Overseas region where universities play leading role in encouraging formation of high-tech startups

Finland entered a severe economic crisis at the beginning of 1990s. However, it succeeded in changing its industrial structure, and has enjoyed strong growth since 1994. One factor underlying this success has been the development of a system of support for local business ventures, ranging from identifying their needs for the application of technology to support for startups and growth further down the road. The business incubation activities of universities play an important role in this system.

Finnish government’s zeal for startups
Finland went through a major transformation following the economic crisis of 1990. One reason for this was the adoption as a matter of national policy of the promotion of startups. A series of measures were adopted to this end by government agencies such as the Ministry of Trade and Industry (MTI), National Technology Agency (TEKES), Finnish National Fund for Research and Development (SITRA), Ministry of Education and Science, and Ministry of Labor.

Strong awareness at universities of the need for cooperation with industry
A further factor was the large reduction in university budgets following the economic crisis and the consequent action of university staff and officials to build cooperation with industry in order to acquire funds for research. The strong ties between industry and universities is now one of Finland’s distinguishing characteristics. Joint research between universities and startups based on university research have become commonplace, and spinouts of high-tech ventures have increased.

1) Liaison here means that between industry and universities.
(2) NPOs, etc.
Nonprofit organization (NPO) activity has grown significantly in Japan as elsewhere in recent years, marked by the establishment of the NPO Law, or Law on the Promotion of Specific Nonprofit Activities, in 1998. NPO activities currently revolve largely around (1) welfare services, (2) environmental services, and (3) “social education”. However, there are also gradually emerging NPOs whose principal objective is to provide business support. Because of the nationwide shortage of human resources capable of providing support for startups and business innovation, the emergence of such NPOs is to be welcomed. Below we look at an NPO that seeks to provide business support, and a financial institution that provides loans not simply on the basis of profit considerations.

Case 100: Establishment of NPO platform to provide “one door system”

A is an individual who is endeavoring to create a national NPO organization. He went into action after first determining the geographical range for activities (covering e.g. the cities of Matsudo, Kashiwa and Abiko on the Joban line in Chiba Prefecture), bringing together universities and local shopping districts as well as NPOs, and establishing an NPO support center (community business support center) in April 2000 based on the concept of creating a “one door system”. A one-door system is a system designed to bring together a comprehensive range of services, including (1) training, (2) fundraising and (3) business consultancy services, in one place. There are NPOs that have begun providing business support in cooperation with local communities and universities in Hokkaido, Akita, Saitama and Kyoto as well. However, A’s aim is to “create similar concrete plans in areas throughout Chiba and link them up to create a network”.

Case 101: Credit association provides loans based on business plans motivated not simply by profit considerations

Inspired by former West Germany’s Eco-Bank, credit association A in Tokyo established a “Citizens’ Bank” system in 1989. The Citizens’ Bank system is based on the idea of contributing to the local community, and is designed to support people undertaking activities contributing to, for example, the environment, welfare, and women’s employment. Consulting services are provided for drawing up business plans, and unsecured loans worth up to ¥10 million are provided. (Interest is payable at the long-term prime rate.) A subsequently established a venture financing system called the Frontier Bank in FY1997, which is intended to give interested individuals the chance to start up in business. To date, 30 loans have been made under the system. The terms of loans are roughly the same as under the Citizens’ Bank system (unsecured). However, interest rates are set somewhat higher given the risk involved. (Rates are progressively reduced and exemption granted as business develops.) A’s director believes that profit is not a company’s only objective, and hopes in the future to provide support for “citizens’ ventures” through the two systems.
The above forum, which is chaired by Reona Ezaki, was established in March 2000 with the aim of bringing together not just entrepreneurs and academics, but people from all walks of life in order to raise public awareness of entrepreneurship by, among other things, stimulating popular debate on how to encourage entrepreneurship, recommending policies for reforming various social systems, and publicly recognizing model entrepreneurs and entrepreneur support organizations. Among the recommendations made in FY2000 that were announced in March 2001, it advocated (1) the enhancement of training for "business practitioners" at graduate schools (including science colleges), (2) expanding the student internship system to cover business ventures, and (3) the provision of opportunities to meet suitable entrepreneurs at each stage of education (from elementary school through to high school) in order to create outstanding entrepreneurs with creativity and business skills.

One project conducted in the same year was the "Comparative Survey of Entrepreneurial Awareness in Major Countries (United States, United Kingdom, France, Germany, Republic of Korea, Japan)". This survey found (1) that people in Japan had a higher opinion of entrepreneurs in general than in the other countries surveyed, but that (2) people still had strongly negative views, evidenced by the low level of support for a member of one’s family starting up in business, and (3) strong family opposition to younger people (aged 18–25) starting up in business, suggesting that there is a low level of entrepreneurship among students.

This forum is to continue with its activities in preparation for releasing its final report in FY2001.

Reducing the emphasis on rote learning has long been recognized as an important priority in education. An important question, however, is "How is the knowledge acquired in school used in actual society?" It is in this context that attention has begun to be focused on education in entrepreneurship for children, the aim of which is to encourage children to think and act for themselves through experience of business.

One well known, leading example overseas is that of Thatcherism in the U.K., which made education in entrepreneurship for children a part of the State’s industrial policy, and considered it important that children should be taught business skills and gain business experience no matter what career they wanted to pursue.

Throughout Japan, trials are underway based on initiatives in the classroom targeted at children ranging from infants through to high-school students. Below we look at one company that has based its business on encouraging the uptake of education in entrepreneurship, taking the U.K. as a model.

Tokyo-based A Ltd. operates schools in entrepreneurship for infants and lower grade elementary school children using educational materials developed by Scotland in the U.K. The company’s activities to date have been characterized by their being adapted to meet the local community’s need for the development of shopping districts. In 2000, after launching a school in Osaka, the company started a school in entrepreneurship called "Kids’ Mart" in a shopping district in Setagaya-ku in Tokyo.

The company’s president explains that the aim of education in entrepreneurship is to train people who are capable of becoming self-employed, and hopes that in the future such education will become a part of the school curriculum in Japan.
3. Facilitating business inheritance through "second startups"

As already seen, structural change in the shape of the aging of proprietors is affecting many SMEs. Unable to find a successor to remain in business, some SMEs are forced to close down (Fig. 211-1). Even if they do not have to close down, many SMEs cite finding a successor as a business problem (Fig. 211-2). For SMEs, selecting a successor and business succession are serious business problems for individual SMEs, and at the same time an important policy issue that, like startups, bears on the economic dynamism of Japan as a whole.

Recognizing its significance as a business problem capable of affecting the corporate value of SMEs, we focus in this section on the question of facilitating smooth business succession from the point of view of the maintenance and reproduction of business resources. Because business succession is an issue that has a strong bearing on successors as well as proprietors, an overview is provided below of measures by both proprietors and successors in relation to business succession. We then move on to consider changes in the environment affecting business succession.

(1) SME proprietors face up to the problem of finding successors

Many small business proprietors when considering passing on their business to their children think about how and when to do so. Because there are also beginning to emerge proprietors who are not particularly concerned whether it is their own children who inherit their business, we divide our overview into three parts regarding (1) planned transfer of business to proprietors’ children, (2) the nurturing of successors, and (3) consideration of a wider choice of possible successors.

1) Planned transfer of business to proprietor’s child

Survey findings indicate that the commonest reason for business succession is the death of the previous proprietor. The question of business succession is an issue that is the exclusive concern of small business owner-proprietors. In the case of recent startups, however, a business may not have acquired sufficient know-how regarding business succession as a business resource, and there is also an increased risk of errors by management regarding, for example, the timing of succession and the choice of successor. Because of this, the determination by the proprietor of a policy regarding succession and the taking of appropriate action from a medium to long term can have a considerable bearing on whether or not an enterprise sinks or swims after succession.

Fig. 223-7 Top seven actions taken or being taken regarding business succession

Source: Osaka Chamber of Commerce and Industry, Questionnaire Survey Regarding Business Succession (March 1998).

Note: Totals exceed 100 due to multiple responses.

1) See Part 2 Chapter 1 Section 1 regarding the aging of the self-employed.
2) Corporate value is the market value of an enterprise, or the various business resources that underpin the competitive advantage that gives it its market value. These various business resources are considered to consist of human resources, business know-how, commercial rights, corporate brand image, credit, financing ability and profitability, etc.

3) National Life Finance Corporation Research Institute, Questionnaire Survey of Business Succession, etc. (October 1999). The main reasons given for business succession were death of previous proprietor (69.0%), announcement of retirement of previous proprietor (14.7%), own request for change (8.1%), illness or accident to previous proprietor (6.1%), other (2.0%).
Regarding actions taken or being taken in preparation for business succession, the most commonly cited is “making known proprietor’s readiness”, followed by “encouraging attendance in industry association meetings” and “encouraging participation in seminars for proprietors, etc.” (Fig. 223-7). Proprietors need to have a clear policy to ensure smooth business succession, and should lay down an explicit policy for gaining the understanding of employees and other concerned parties regarding planned steps and the proprietor’s inheritance of the business. Where in the case of an individually-owned enterprise the proprietor and successor are parent and child, there exists the potential for the ability of the successor to be over- or underestimated. Another problem is that the proprietor may not be able to pass on a business exactly when he wants because the successor is not ready. Below, therefore, we examine the case of a company that learnt from having overestimated the planned successor, who was the proprietor’s child, and proceeded to adopt a more planned approach to succession by training a successor using outside human resources and having the successor attend business dealings with outside parties.

Case 102: Company learns lesson of overestimating successor and adopts more planned approach to succession

A Ltd. is a machinery manufacturer in Kyoto Prefecture with 85 employees. The proprietor plans to hand over the business to his son in the near future. However, the planned successor was appointed as an executive without having employed him on the factory floor or ensured his readiness to manage the company. Learning from having overestimated the planned successor, the company has now adopted a more planned approach to succession by, for example, making use of outside human resources to educate the successor. Use of third party as bridge between generations
Partly because of the proprietors’ friendship with each other, the planned successor joined a leading manufacturer of measuring equipment following his graduation from university. A’s proprietor sent him with the intention of preparing him as the next proprietor and giving him the chance to pick up managerial know-how. As everyone was aware of the relationship between the two proprietors, however, the son ended up receiving special treatment. He was also treated with kid gloves when he returned to A. Being father and son, personal feelings affected the business relationship between the two, and they frequently had heated discussions in front of employees. Because of the possible impact on employee morale, the company called in a former bank expert as an adviser. He acted as intermediary between the proprietor and planned successor, and also took responsibility for the planned successor’s education. Through the adviser, the proprietor was able to convey to the successor his position. Informing employees that the proprietor’s son was to succeed to the business
A’s proprietor enabled the planned successor to learn about manufacturing and financial matters and the business environment of the industry by (1) actively involving him in private-sector training courses for managers and business visits of government agencies on the proprietor’s behalf, (2) having him attend negotiations with banks and meetings with tax accountants, and (3) having him deal with customers in his stead. By such means, he also made it known both within and outside the company that he planned his son to succeed to the business.

2) Training of successors
Proprietors can prepare their children as successors both internally, and by making additional use of outside agencies. Below we look at companies that have made use of both methods to train their successors.
(a) In-house development: working together with successors
When a proprietor trains a successor in-house, it is important to ensure that authority is transferred in stages, and that the successor is exposed to a wide range of work and operations.\(^1\) If the enterprise’s future course is unclear, however, there is a danger that the successor’s morale could be harmed. It is therefore necessary for the enterprise’s future direction to be made explicit. In doing so, it is important that the successor be made fully aware of the proprietor’s business philosophy and business policy.

Even where the proprietor and successor are parent and child, however, their business philosophies and policies may not always coincide. For example, the results of one questionnaire survey of actions taken by successors after taking over the reins of a business shows that the commonest step is to establish a new business philosophy.\(^2\) Proprietors and successors each have their own approaches and ways of thinking as proprietors and successors. If they each stick to their own approaches, however, business successions do not go smoothly.

If having each experienced different business environments proprietors talk about business based only on their past experience, and successors talk about business solely from a theoretical perspective, it is difficult for them to reach a common understanding. In order to discover a way forward for a business, therefore, it can therefore be effective (1) for the proprietor and successor to solve business problems together based on the assumption that control of the business is to be transferred, and (2) to involve a third-party to act as a bridge to resolve differences of opinion between the proprietor and successor (Case 102).

Regarding what a proprietor should do after the reins of a business have been handed over, 68.1% say “remain with the company to assist the successor”, 22.3% say “leave the company and only give advice when consulted by the successor”, and 4.7% say “take no part at all in the business”. Whichever course of action is taken, it is important to establish a line regarding the role of the proprietor after succession and his involvement or otherwise in the business in order to ensure a smooth succession.\(^3\)

Case 103: Business problems reduced by proprietor and successor setting aside time to work together

A Ltd. is a marine produce wholesaler in Kyoto Prefecture with 15 employees whose profitability was improved as a result of the previous and current proprietor discussing the company’s business problems together and focusing on improving its business relations. By thus setting aside time to work together, the former proprietor was able to make sure that his successor was ready, ensuring that the succession was a smooth one.

**Improvement of profitability as a result of sharing of duties between previous and present proprietors**
The company had long faced the problem of being unable to recover funds from customers as expected, as a result of which reducing the consequent interest burden became a problem. It therefore ceased doing business with companies that had an adverse effect on its finances, and introduced the use of a sales contract for companies with which it had formerly done business on credit with no contract. These steps the company had deliberately introduced in stages prior to succession. Partly because the other proprietors were of the same generation as the previous proprietor, who had successfully managed the business at a time of continuous economic growth, there was fully expected to be resistance to the introduction of the idea of sales contracts. Negotiations with customers were led by the present proprietor. However, roles were also shared with the previous proprietor, who, for example, sought the understanding of the proprietors of the company’s customers. Skilful use was also made of the present and current proprietors’ respective positions and relations with customers. As a result, business that had previously been conducted inefficiently on credit was gradually improved.

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1) According to the Shizuoka Prefecture Association of Small Business Organizations’ *Survey of Successor Problems* (July 1998), the main means cited of preparing successors in-house were “progressive transfer of powers” (19.1%) and “exposure to a wide range of work and operations” (17.1%).

2) National Life Finance Corporation Research Institute, *Questionnaire Survey of Successors* (July 1996). The top seven responses concerning steps taken after succession (multiple responses allowed) were “development of new customers” (42.1%), “expansion and establishment of new stores and plants, etc.” (22.8%), “establishment of new business philosophy” (21.9%), “entry into new field” (20.8%), “adoption of computers and high-tech equipment” (19.7%), “cessation of business with customers on poor terms” (14.5%), and “improvement of corporate welfare” (10.8%).

An effective means of preparing the successor to take over a business is for the proprietor and successor to work together on determining the enterprise’s future direction. With this in mind, therefore, we look next at the case of a company that succeeded in reducing its business problems by setting aside time for the proprietor and successor to work together and divide up responsibilities.

(b) Use of outside agencies: clarification of aims of use

Another option for preparing successors in addition to training in-house is to make use of outside agencies by, for example, having potential successors study with customers, suppliers and companies in the same industry, participate in inter-industry exchange forums of second and later generation managers and proprietors, and take courses for successors organized by financial institutions (Fig. 223-7). Studying with customers, for example, enables successors to gain a clearer and more rapid understanding of changes in business and customer needs, and so adapt the company’s business appropriately.

It is important that successors be given a clear sense of purpose when use is made of outside agencies. Below, therefore, we look at one company that has made use of outside agencies in its own business as a means of preparing a successor to take over the reins of power.

Case 104: Use of outside agencies as a means of preparing a successor

Based in Kanagawa Prefecture and with a workforce of 240, A Ltd. is a provider of port transport and oil equipment maintenance services. In the near future, the proprietor plans to hand over the business to his son. As one means of preparing his successor, the company is making use of outside agencies. Rather than simply sending the planned successor to an outside agency, the company is gaining a tool for dealing with challenges that need to be solved in order for the company to expand into a new field of business.

Use of outside agency where independence rather than passivity is required

In order to give his planned successor the habit of approaching things from the same point of view as other employees, the company’s proprietor exposed him to work on the ground and then in the personnel and accounts divisions. Because of significant changes in the environment and the growing knowledge and expertise required of proprietors even in the small business sector today, the proprietor decided that turning to systematic education at an outside agency offered an additional means of preparing his successor. The planned successor is therefore now attending a course for successors organized by a financial institution in the private sector. The course is taught in the form of seminars by a university professor. Students are given practical themes, such as “How to Utilize IT in Business” and “Getting Ideas for New Business”, which they discuss.

The company’s planned successor is discovering the merits of collecting the latest information from experts in various fields, cooperation with universities, and the development of human networks. For example, the company plans to enter the environmental market in the future, and the successor’s training is considered to have provided an effective means of solving the technical problems that the company will face in this field.

While the planned successor is attending college, the proprietor fulfils his duties for him, and so there is no adverse impact on the company’s day-to-day business.
3) Consideration of wider range of choice of business successor

Surveys show that the most widely favored choice of successor is a relative of the proprietor. The lower the age of the proprietor, however, the less pronounced this tendency (Fig. 223-8). Among the reasons for small business proprietors not choosing to hand over to their children are (1) the shortage of successors due to the fall in the birthrate, (2) less interest in succeeding to a business because of concern about a company’s future or its business, and (3) the avoidance of problems with shareholders (heirs) upon the death of the proprietor.1) Thus although there remains a strong preference for proprietors to hand over to their children, this is changing, and proprietors are starting to choose from among their employees and outside sources, rather than limiting themselves to blood relatives, as a means of maintaining and reproducing an enterprise’s business resources. Some studies also suggest that in addition to seeking successors from employees and outside sources, a majority of proprietors also now consider mergers and acquisitions (M&As) to be an effective means of passing on a business (Fig. 223-9).2)

Whichever choice is made—proprietor’s child, internal or outside human resources, or M&A—the importance of laying down a clear course of action on business succession and conveying the proprietor’s wishes to employees remains unchanged. At such time, it is necessarily to pay particularly close attention to relations with interested parties. A relationship of trust must therefore be built with employees who are senior to the successor and young employees who will act as the next proprietor’s right-hand men, and understanding must be developed with customers and financial institutions. With these points in mind, we examine below the case of a proprietor who appointed someone from outside the company rather than relatives or employees to take over due to a change in the outlook of the proprietor.

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**Fig. 223-8 Attitudes regarding business succession in the future (by age of proprietor)**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Intend to appoint relative of proprietor as successor (%)</th>
<th>Plan to appoint from outside due to absence of suitable person in the company (%)</th>
<th>Intend to close down due to poor prospects (%)</th>
<th>No plans regarding business succession (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ages</td>
<td>21.6</td>
<td>7.2</td>
<td>17.1</td>
<td>2.3</td>
</tr>
<tr>
<td>Thirties or under</td>
<td>9.5</td>
<td>14.3</td>
<td>66.7</td>
<td>4.8</td>
</tr>
<tr>
<td>Forties</td>
<td>28.0</td>
<td>30.0</td>
<td>3.0</td>
<td>28.0</td>
</tr>
<tr>
<td>Fifties</td>
<td>38.6</td>
<td>18.6</td>
<td>9.5</td>
<td>22.7</td>
</tr>
<tr>
<td>Sixties</td>
<td>56.0</td>
<td>23.0</td>
<td>4.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Seventies or over</td>
<td>76.1</td>
<td>15.2</td>
<td>2.2</td>
<td>6.5</td>
</tr>
</tbody>
</table>


Note: Because of the small number of proprietors aged 20 or under, they were grouped with proprietors in their thirties or under.

1) According to the results of the National Life Finance Corporation Research Institute’s *Questionnaire Survey of Business Succession, etc.* (October 1999), the commonest response given for not inheriting a business from the previous proprietor (multiple responses allowed) was “wanted to start business in which one was oneself interested” (36.1%), followed by “no future” (33.3%), “no local growth prospects” (23.2%), and “already employed” (13.9%).

2) Mergers and acquisitions in the broad sense refer to all corporate tie-ups involving the movement of capital. In the narrow sense, M&As are acquisitions (through the purchase of shares and transfer of business) and mergers. In this section, we use the term in the broad sense. Regarding business successions through the use of M&As, see “(3) 1) M&As as a means of business succession”.

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The proprietor of A Ltd., a company in Niigata Prefecture with 87 employees, had hoped to keep the business in the family. Because of the severe conditions faced by the company and the absence of a successor, however, the company advertised for a successor on the Internet in 1999. In 2000, the company solved its succession problems by appointing an outsider as planned successor. In doing so, the company sought to maintain the transparency of the succession by involving employees and others in the selection of a successor.

Appointment of outsider as successor changes proprietor’s views

The proprietor initially hoped to keep the business in family hands, and sounded out his three children. None, however, were interested. He also tried his employees, but they too were not interested. The company was involved in manufacturing products such as seals and rubber stamps. A fall in demand for seals due, among other things, to the growth in e-commerce meant that the company faced a severe environment. Deciding, therefore, that the manager of today needs to combine flexibility, decisiveness and unfettered thinking in order to diversify and expand a company’s scope of business, the proprietor concluded that it would be better to appoint an outsider as planned successor, rather than finding a successor from among his family or employees.

Using its homepage, the company advertised for a successor, describing its situation in detail and requiring applicants to submit their curricula vitae and reasons for applying, along with a report explaining their reaction to the company’s philosophy and how they would utilize it if they were appointed proprietor.

Interested parties also involved in order to ensure transparency of the selection process

Responses were received from 20 applicants. These were narrowed down to eight, who were interviewed as a couple by company executives along with representatives of the company’s correspondent bank and tax accountants. The applicant finally chosen as a result was the former branch manager of a major petroleum company. The reasons for his selection were (1) the fact that he had been responsible for reconstructing affiliated service stations and had considerable knowledge regarding the management of SMEs, and (2) his depth of understanding of the company’s business philosophy, which were highly rated by all, including the company’s employees. The planned successor is currently working with the company as executive director of operations, and is slated to take over the business within a year.
(2) Business succession as business opportunity for successors
How a successor revitalizes a company after succession is vital to its survival. Below, therefore, we provide a general overview of business succession as seen from the perspective of successors, looking at how successors can respond flexibly to changes in the business environment facing their company by (1) establishing a new business by taking advantage of succession as an opportunity for self-realization using their own skills and abilities, (2) reforming a company’s organization to suit their own style, and (3) responding flexibly to changes in the business environment facing their company by adopting the use of IT in part of management.

1) Creation of new business by successor
One of the main problems encountered by successors when succeeding to a business is that of dealing with employees from the predecessor’s time. Skillfully dealing with such employees smoothes the way for starting a new business. 1) Although a successor still requires strong leadership skills and cool judgment, the startling changes in the environment mean that the management and the abilities of proprietors come under question as never before. A proprietor therefore needs to have the ability to reconsider the growth potential and future prospects of a company’s core fields by gaining an objective picture of the business environment faced, the ability to nurture the human resources to determine and solve the company’s business problems, the planning ability to flexibly put together strategies based on these abilities, and the ability to grasp opportunities and get things done.

Below we describe the case of a successor who has gained an objective understanding of his company’s business environment, created a new business, and motivated employees as an example of how the abilities required of successors differ depending on changes in the times and the business environment.

Case 106: Successor takes over on condition that he can start up new business, sets about overcoming business problems

The proprietor of A Ltd., an organic chemical manufacturer in Osaka Prefecture with 33 employees, is a second son, and was not originally interested in taking over control of the company. He eventually did so in 1997, however, on condition that he could start up a new business rather than taking over the previous proprietor’s business as it was. His focus after succeeding to the business was to improve the company’s financial position, and he is currently working on solving the company’s business problems while motivating its employees.

Business succession on condition of starting up new business
After graduating from university, the present proprietor joined a leading functional chemical materials manufacturer, where he was involved in a starting up in a new area of business. Three years after joining the company, he was sound out by the previous proprietor regarding becoming his successor. Partly because he was not attracted by the core business at the time, which was the manufacture and sale of products such as thinners, and did not feel the business had much future, he continued to turn down the offer. Two years later, however, convinced by the previous proprietor’s enthusiastic persuasion, he agreed to join A provided that, instead of inheriting the business as it had been established by the previous proprietor, he could concentrate entirely on building a new business in order to change the company into an R&D oriented enterprise that dealt in higher value-added products.

Initially when the current proprietor jointed the company, the previous proprietor took responsibility for financial matters, purchasing supplies and solvent business, while the current proprietor was responsible for R&D and the new business of developing alternatives to CFCs and electronic circuit cleaning agents. When sales from the new business managed by the current proprietor overtook those from the solvent business, the current proprietor was in charge of the majority of business, and so succeeded to the business as a whole.

Proprietor raises business awareness and motivation among employees
From his experience as a managing director, the current proprietor was aware of the importance of cashflow. He therefore hired an experienced financial expert in order to translate his thinking and awareness of the issue into concrete action. He did so by showing employees how, for example, raising the profit ratio, reducing the payback period and switching from bills to cash settlement translated into improved profitability, thus raising awareness of business and management among employees.

1) According to the Osaka Chamber of Commerce and Industry’s Questionnaire Survey Regarding Business Succession (March 1998), the top three problems cited regarding business succession (multiple responses allowed) were “dealing with executives from the predecessor’s time” (33.4%), “maintaining and acquiring the confidence of customers and suppliers” (32.8%), and “dealing with employees” (27.6%).
2) Development of new business organization by successors

A successor who is simply the child of the proprietor and lacks the skills required to run a business could not only hinder growth, but even threaten an enterprise’s very existence. As well as knowledge of a company’s production technologies, products and materials, a proprietor today—even in the small business sector—also needs broad vision and advanced, specialist skills and abilities in a variety of fields, including the ability to negotiate with outside suppliers and outlets, and labor management skills.

As described earlier, employees from the time of the previous proprietor need to be handled skillfully if business succession is to be smooth. A problem in the small business sector is that employees may be used to a long-established style of business, making it difficult to adapt swiftly and flexibly to changing conditions.

Successors need to be able to “recycle” an enterprise’s intangible business assets—assets such as the trust of employees, customers and financial institutions to which it is impossible to give a monetary value—and to move away from the type of strong leadership often seen in the small business sector to create a business organization that functions as a team capable of coping with the increasingly advanced, specialized nature of business. It is from this standpoint that we examine below the case of a successor who developed a “market-in” (customer oriented) type of business organization.

**Case 107: Development of market-in business organization through expansion into new field in line with clear business philosophy**

The current proprietor of A Ltd., a Kagawa-based company with 145 employees that manufactures and markets sheet and printed surface testing equipment, felt that, as the company’s second proprietor, he should develop the basis for a new venture. He thus adopted the business philosophy that “the customer comes first” in the development, manufacture and sale of new products. Unsure whether amid the increasing specialization and sophistication of the company’s business the company really did put the customer first, he resolved to reform the company’s business organization.

**Business philosophy generated created by oneself**

When the present proprietor succeeded to the business, the company manufactured lubricant supply systems to prevent the abrasion of equipment such as rolling stock wheels. Learning at a seminar that products have a finite lifespan and that makers must constantly create new products or come to a dead-end, however, he developed a new product. Although he believed that products are sure to sell provided that they meet customers’ needs, the product did not sell well because of the company’s lack of a track record. The company had had a tradition of developing its sales channels itself since the time of the previous proprietor, and so the current proprietor decided to strengthen the sales division, and adopted the principle of “the customer comes first” as the company’s business philosophy.

**Development of market-in type business organization**

As the company’s customers were located all around Japan, it had responded by establishing sales and service operations as close as possible to the customer. But even though the company had adopted the principle of putting the customer first, the way divisions, i.e. the sales, design and production divisions, traditionally concentrated on their own areas of responsibility meant that this was difficult to achieve. Thus the design division would design a product sought by the sales division product exactly in accordance with the required specifications, and production would then be left entirely to the production division. The proprietor thus came to believe that insufficient regard was in fact being paid to the customer. In September 1999, therefore, he integrated the sales, design and production divisions according to industry and type of product (an internal structure that he called the “product manager system”), and assigned employees to each. This allowed the company to determine customer needs more rapidly and made each employee more aware of the industry to which they were assigned, enabling them to consider what they themselves should do and to discuss as a team how to solve problems (Fig. 223-10). Sales this year are projected to be up 25% on the previous year. The current proprietor is dedicated to creating a corporate ethos and philosophy, and establishing the mechanisms (systems and organization) required to achieve it.
3) Business succession in order to introduce IT
As a result of the changes in customer needs and the business environment in recent years, the adoption of IT is becoming an important business issue, and how successfully this issue is addressed can affect the corporate value of firms of all sizes, including SMEs. Because of the prominence of information networks in business today, there are beginning to emerge enterprises that hand over control to a proprietor proficient in IT who has the ability to use multimedia and computer networks to raise the level of existing business and increase value added, and the vision to use IT to rethink a company's operations.

Considering how the need to introduce IT can thus hasten business succession, we examine below the case of a business that was succeeded to by the proprietor's son (who was engaged in introducing the use of IT in part of the company's management) in order to adapt.

Fig. 223-10 New system of organization introduced by A Ltd. (outline)

Source: Compiled by the Small and Medium Enterprise Agency based on interviews.
Note: This figure illustrates the content of interviews, and does not cover all the points concerning the abilities required of successors.

Case 108: Early transfer of business to child proficient in IT in order to cope with changes in environment

Led by the current proprietor, A Ltd. (a company in Yamanashi Prefecture with 22 employees) had been adopting digital technology since before the reins of the business were handed over. However, because of the unexpectedly rapid rate of change in the conditions faced, which made it essential that the company adopt the use of IT in order to survive, it was decided that the current proprietor, being especially proficient in IT, should quickly succeed to the business in order to pursue the development of new business.

Flexible response to major changes in industry
A was an old printing company established during the Meiji period. In the printing industry, the development of digital technology had transformed printing technology and production processes. The previous proprietor felt that this technology represented an unprecedented threat to the industry, and feared that the company would be enable to grasp new business opportunities, and that business would deteriorate without a proprietor at the helm who had a proper grasp of the demands and opportunities of this new age. In this respect, he decided, the current proprietor was the ideal candidate. He had been quick to recognize the impact that digital technology would have, had participated in study IT study groups in Silicon Valley in the U.S., and had worked as a seminar instructor at the booth of a foreign computer company in Japan.

Prior to succeeding to the business, the current proprietor had launched a homepage design and database service, sales from which had grown to account for around one third of the company's total turnover. He thus already had a track record as a business leader. When he became proprietor, this had the effect of easing friction with employees from the time of the previous proprietor.
flexibly to fierce conditions in the industry that made the adoption of IT necessary.

(3) Development of environment for business successsion

An environment more conducive to business succession is being developed, and SMEs need to take advantage of this environment in order to better maintain and reproduce their business resources. Because of this, we turn next to provide an overview of the environment in relation to (1) M&As as a means of business succession, (2) the introduction of legislation to enable the maintenance and reproduction of business resources, (3) personal assets and business capital, and (4) the development of the tax system as its bears on the question of business succession.

1) M&As as a means of business succession

As a result of changing thinking among proprietors, a growing number of small business proprietors are considering M&As as a means of achieving business succession (Fig. 223-9). Given that one of the main reasons for selling off an enterprise after “enhancement of business position” and “securement of employees’ employment” is “business succession problems (absence of successor, etc.),” it is not surprising to see that M&As are now being chosen as a means of solving succession problems (Fig. 223-11).

The number of M&As in Japan has risen sharply since 1999 (Fig. 223-12). In the U.S. and Europe, M&As have been widely used as a means of strategic restructuring of business, and their use has been far more prevalent than in Japan (Figs. 223-13~14). The main methods of M&A in Japan have until now been (1) share transfers, (2) underwriting of new shares, (3) sale of business, and (4) mergers. Methods are now diversifying, however, with use beginning to be made of methods such as stock swaps, management buyouts (MBOs) and management buyins (MBI) (Appended Note 223-6).

Turning to look at the steps being taken by public bodies to ease business succession, the Osaka Chamber of Commerce and Industry established in 1997 an anonymous M&A market for privately-held companies as a means of solving the succession problems of SMEs. Since 1998, this market has been run jointly in cooperation with the Kyoto and Kobe Chambers of Commerce and Industry. In a similar move, the Tokyo Chamber of Commerce and Industry established the “Tokyo M&A Support System” in 1999 (Fig. 223-15).

Below we examine solutions to the problem of business succession from the standpoint of using the sale of business and transfer of shares to maintain and reproduce business resources.

**Fig. 223-11 Reasons for sale of business**

![Graph showing reasons for sale of business](image-url)


Note: Totals exceed 100 due to multiple responses.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

Fig. 223-12 Trends in number of M&As (by market from 1995)

![Graph showing trends in number of M&As by market from 1995 to 2000. The graph includes data for in-in, in-out, out-in, and out-out M&As.]

Source: RECOF, MARR.
Note: In-in M&As are between Japanese enterprises, in-out M&As are acquisitions of foreign firms by Japanese firms, out-in M&As are acquisitions of Japanese firms by foreign firms, and out-out M&As are overseas M&As involving companies in which Japanese companies have a stake or which have been acquired by Japanese companies.

Fig. 223-13 Trends in number of M&As in the U.S. (from 1995)

![Graph showing trends in number of M&As in the U.S. from 1995 to 2000. The graph includes data for M&As between U.S. companies and acquisitions of U.S. companies by companies of any nationality.]

Source: Thomson Financial.
Note: Completed M&As only.
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Fig. 223-14 Recent trends in M&As in Europe (number of deals)

Source: Ministry of Foreign Affairs, A Survey of M&As Involving European Companies (March 2000).
Note: Cross-border A deals are M&As between companies that are both of European nationality, and cross-border B deals are M&As where the acquiring company is non-European and the acquired company is European.

Fig. 223-15 Tokyo Chamber of Commerce and Industry M&A support system

Source: Tokyo Chamber of Commerce and Industry homepage (http://www.tokyo-cci.or.jp/).
Notes: 1. All information disclosed and transmitted is anonymized until the signing of a confidentiality agreement between the negotiating parties.
2. Registered advisers are specialist M&A agencies registered with the Tokyo Chamber of Commerce and Industry. (20 companies such as banks, brokerages, audit corporations and M&A consultancy firms are registered.)
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Case 109: Enhancement of business base through establishment of enterprise for sale of core business

A Ltd. was a long-established manufacturer of metal products whose core business was sold off to C Ltd., a company in Osaka Prefecture with 40 employees established as a joint venture with listed company B Ltd., because of A’s current proprietor’s concern about A’s prospects when he succeeded to the business. The sale of business to this company when it was established ensured the company’s survival and provided access to the other company’s business techniques, which in turn strengthened the company’s business base.

No place for long-established firm
A’s current proprietor is the company’s third, and the previous proprietor’s son-in-law. He took over the business in 1996 when the previous proprietor retired on health grounds, but judged that A’s business prospects were poor and that continued efforts to maintain the company’s independence could-notwithstanding its long-established name-close off growth opportunities. He therefore set up a team to consider entering a business tie-up or sale to another company, and registered as having a “seller need” on the Osaka Chamber of Commerce and Industry’s M&A market. Through a broker, A had previously been involved in a sales tie-up with B, which planned to enter the metal product manufacturing business. The relationship did not have the desired effects, though, and so A decided to enter an M&A deal with B through C. However, as B did not intend to take over assets that did not generate cashflow or any business other than A’s core business, the current proprietor of A formed C as a joint venture with B to which A’s metal product manufacturing business was transferred by sale of business.

Own business base strengthened
As a requirement of B at the time of sale of A’s core business, the current proprietor requested that all employees in that division should be inherited by the newly established C. B indicated that it understood that for the transfer of business to be effective all employees should be taken on as they were, which would serve to motivate employees and enable manufacturing and marketing activities to continue without delay. Management of C was in addition left in the hands of A’s current proprietor. Management of C by the current proprietor differed from that during the time of A’s previous proprietor in that: (1) the terms of trade were improved, (2) cashflow could be calculated on a monthly basis because of the transparency of the business (which was due in part to B’s request for sales targets and performance reports), and (3) personnel and labor management was improved by the fact that employees of C could undergo training alongside B’s employees. By thus developing the infrastructure for developing employees’ skills, the current proprietor is strengthening C’s business base.

Case 110: Company restructures finances out of bitter past experience and achieves business succession through share transfer

In order to solve the problem of finding a successor and recruit employees, A Ltd., a manufacturer of instrumentation and control equipment based in Osaka Prefecture with 20 employees, sought to effect a share transfer with B Ltd., a manufacturer and distributor of various kinds of control equipment. As a result of restructuring its finances because of a bitter past experience of A’s proprietor, A succeeded in effecting a share transfer with B in a comparatively short period of time, enabling a smooth business succession. Another factor in addition to the health state of A’s finances was the good match between the needs of A and B.

Switch to share transfer from business expansion under own steam
A initially considered expanding its business under its own steam by acquiring another company, and registered as having a “buyer need” at the Osaka Chamber of Commerce and Industry’s M&A Support Center. However, A’s proprietor did not want to run the company as a family business, and so, due to the lack of a suitable candidate among the company’s employees, he began to consider selling the company when the question of finding a successor raised its head. A’s proprietor had a clear understanding of A’s condition and had restructured the company’s finances. This was due to (1) his brush with bankruptcy at a previous place of employment before A’s establishment, and (2) a capital tie-up with C Ltd., a leading manufacturer of communications and measuring equipment that had a high opinion of A’s technological strength in order to hire employees.

Key to success was financial restructuring
Some companies in the small business sector have a low awareness of the importance of disclosure and keeping track of a company’s financial position. A, however, recognized the enormous importance of disclosure and accurate data on financial position to building good relations with other companies and to its own survival. Thus less than two months after the first talks, the company reached an M&A deal.

In addition to A’s good financial position, other factors underlying the company’s success included (1) A’s position as a manufacturer, which meant that its needs matched well with those of B, which wanted to strengthen its manufacturing operations, (2) A’s proprietor’s stress on the company’s survival and growth rather than the price of the sale, (3) B’s proprietor’s respect for A’s way of doing business and consequent desire not to force its philosophy on A, and (4) good disclosure on both sides.
2) Legislation relating to maintenance and reproduction of business resources
Not only are small business proprietors’ views on business succession changing. Legislation is also being introduced to encourage flexible corporate reorganization in response to changes in the economic environment. For example, merger procedures were streamlined in October 1997, the ban on pure holding companies was ended as a result of the amendment of the Antimonopoly Law in December 1997, a stock swap system was introduced in October 1999 as a result of the amendment of the Civil Rehabilitation Law in April 2000 and an amendment to Commercial Law in April 2001 (Appendix Table 223-7). Amid these changes, small business proprietors are making use of M&As as one means of business succession and discovering the advantages for maintaining and reproducing their companies’ business resources (Appendix Note 223-8).

There may continue to be an increase in the number of proprietors who recognize that they should not limit themselves to achieving business succession independently, and that they cannot avoid doing an M&A deal in order to ensure their company’s survival and maintain and increase its corporate (business) value, enabling both proprietors and employees to benefit by generating returns for the founder and securing employment for employees. Although even today there are still some small proprietors who have a negative view of M&As as “sellouts” and “takeovers”, there is probably strong latent demand for M&As as an effective means of reorganizing business resources (Appendix Table 223-9). There are a variety of options for achieving business succession, such as M&As, that allow companies to maintain and reproduce their business resources, even where they have difficulties finding a successor or overcoming business problems on their own. One such option is an M&A through a stock swap, an example of which is described below.

Fig. 223-16 Sale of business through filing for civil rehabilitation

Source: Compiled from the Small and Medium Enterprise Agency homepage (http://www.chusho.meti.go.jp) and others.

1) See Part 1 Chapter 1 “4. Bankruptcy trends” regarding the number of applications under the Civil Rehabilitation Law. Once civil rehabilitation proceedings have been initiated under the Civil Rehabilitation Law, sale of business is possible with court approval (Fig. 223-16). Although only a handful of SMEs have so far received approval, a growing number of companies are expected to make active use of the system after waiting to see how the reconstruction of companies already using the system proceeds.
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### Case 111: Search for match between the strategic needs of buyer and seller in order to reach M&A stock swap deal with OTC-listed company

A Ltd. is a software developer in Kanagawa Prefecture with 47 employees that was faced with the twin problems of finding a successor and dealing with financing difficulties due to the drawn-out recovery of subcontracting payments. Using the new stock swap system introduced through an amendment to commercial law, however, A became a subsidiary of an OTC-listed company, B Ltd., thus laying the foundations to enable it to remain in business.

**Need for prior preparations in order to match strategic needs**

The most important reason why a deal was reached is because A’s proprietor made use of information acquired from an acquaintance who was an expert on M&As in order to successfully match the strategic needs of A and B. From his acquaintance, A’s proprietor obtained (1) advice on how to assess one’s own business and that of a potential partner, and (2) regarding the use of M&As, advice on how to make use of the two parties’ business resources after a deal rather than in order to solve the two’s problems at the time of a deal. Regarding the first point, the company conducted a preliminary study of B’s long-term business prospects, and regarding the second point, the company set about putting its finances in order to give the seller the benefit of a higher share price at the time of the stock swap. As a result, A and B entered a stock swap deal, relieving A’s proprietor of the need to find a successor as owner-proprietor. The swap also opened the way to raising funds on the market, and in addition enabled A to raise funds from its correspondent banks on better terms because of B’s credit worthiness, thus enhancing its fundraising ability. A’s absorption into B’s group also strengthened B’s manufacturing capabilities and broadened its business.

### 3) Personal assets and business capital

Many SMEs are individual-owned enterprises and family businesses, and proprietors’ personal assets form a necessary element of their business. Looking at the state of ownership of the principal place of business, it can be seen that a large proportion of establishments are owned in the name of an individual, and this proportion increases the smaller the workforce (Appended Table 223-10). The mixing of personal assets and business capital means that there is a large risk of a small business proprietor losing his own personal assets in the event of a business failure, and also makes it almost inevitable that the proprietor must choose one of his own children to succeed to the business in order to keep his personal assets in the family. Although there is nothing wrong with children as successors, it is necessary to be aware of the need to practice proper financial management and keep personal assets and business capital as separate as possible if a proprietor cannot or does not (due to a change in thinking on succession) choose to have a child succeed to the business.

### 4) Taxation and business succession

It has been argued that the burden of inheritance tax when a child inherits a business due to the death of the proprietor hinders smooth business succession. The FY2000 tax system was therefore amended to reduce the interest tax rate for deferred payment of inheritance tax, thereby reducing the burden of interest tax where payment is deferred for a considerable period. The fairness of valuation of unquoted shares was in addition improved by (1) revising the share valuation method to lower the asset factor and place greater emphasis on profitability, and (2) revising the official notice requiring that the uniformly identical allowance for the safety of an assessment should be differentiated according to size of company (Fig. 223-17). The FY2001 tax system was also amended to expand exemption of specific small-scale lots for business and residential use from inheritance tax (Fig. 223-18), and raise the basic deduction for gift tax from ¥600,000 to ¥1,100,000. These measures contribute considerably to facilitating business succession. The specific nature of the problems faced by SMEs given the actual circumstances of business succession therefore needs to be clarified, and further consideration needs to be given to measures for

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1) See Appended Table 223-11 regarding the method of valuation of unquoted stock.
2) The upper limit for the exemption to taxation of specific business lots (80% reduction) was raised from 330 square meters to 400 square meters, and the upper limit for the exemption to taxation of specific residential lots (80% reduction) was raised from 200 square meters to 240 square meters. “Specific business lots” are land that meets certain conditions, such as lots provided for business use by the deceased that are owned continuously as a result of inheritance by the person who inherited the business of the deceased. “Specific residential lots” are land that meets certain conditions, such as lots provided for residential use owned continuously by the spouse of the deceased and coresident family.
3) The maximum non-taxable amount for exemption from gift tax of funds for home purchases was at the same time raised from ¥3,000,000 to ¥5,500,000.
Fig. 223-17 Main changes in taxation in FY2000

Reduction of interest tax in event of deferred payment of inheritance tax
(until December 1999 → January–March 2000 → from April 2000)

Proportion of real estate or shares, etc. is 75% or more: 4.2% → 2.5% → 2.2%
Proportion of real estate or shares, etc. is 50% or more: 5.4% → 3.3% → 2.2%
Proportion of real estate or shares, etc. is under 50%: 6.6% → 4.0% → 3.6%

(Remarks) Improvement of fairness of valuation of unquoted stock
Revision of method of calculation by comparison with similar industry companies

<Current system>
Share price of similar industry companies × \[
\frac{\text{dividend comparative value} + \text{profit comparative value} + \text{net worth} \ (\text{book value}) \ \text{comparative value}}{3}
\ × 0.7
\]

<Revised system>
Share price of similar industry companies × \[
\frac{\text{dividend comparative value} + \text{profit comparative value} \times 3 + \text{net worth} \ (\text{book value}) \ \text{comparative value}}{5}
\ × \begin{cases} 0.7 \text{ (Large enterprises)} \\ 0.6 \text{ (Medium-sized enterprises)} \\ 0.5 \text{ (Small enterprises)} \end{cases}
\]

Source: Compiled by the Small and Medium Enterprise Agency.
Notes: 1. The comparative value is the ratio compared with the value per share of the companies covered and listed companies (sample).
2. See Appended Table 223-11 for an outline of the method of valuation of unquoted shares.

Fig. 223-18 Changes to the tax system in FY2001
(tax exemption of specific small business and residential lots)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Specific business use</td>
<td>200m² or under 40%</td>
<td>200m² or under 60%</td>
<td>200m² or under 70%</td>
<td>200m² or under 80%</td>
<td>330m² or under 80%</td>
<td>400m² or under 80%</td>
</tr>
<tr>
<td>Specific residential use</td>
<td>200m² or under 30%</td>
<td>200m² or under 50%</td>
<td>200m² or under 60%</td>
<td>200m² or under 80%</td>
<td>200m² or under 80%</td>
<td>240m² or under 80%</td>
</tr>
</tbody>
</table>

<Before revision>
Specific business lot

<After revision>
Specific business lot

Source: Compiled by the Small and Medium Enterprise Agency.
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developing the necessary environment, taking into consideration the taxation of business assets in other countries.\(^1\) As described earlier, M&As will also likely play an important role as a means of facilitating business succession.

As a survey on important points at the time of business succession indicates, however, there are also issues that many companies can address themselves on an individual basis, such as improving the business ability of successors and enhancing their business base (Fig. 223-19).

![Fig. 223-19 Important points at time of business succession](image)

Source: Extract from Tokyo Metropolitan Management Consultant Office, Corporate Activity and Future Business Development of Companies during a Prolonged Slump (March 1999).

\(^1\) In Germany, for example, measures are in place to reduce taxation of business assets provided that the business is continued for at least a certain period following inheritance. In the case of the U.K., business assets are in effect exempt from inheritance tax.
Section 4 Assessment of small business support measures

The Government has in recent years adopted a number of measures to promote support for the small business sector as a source of employment and new markets. Of these various measures, the focus of this section is on describing the situation and identifying issues to address regarding three types of support center for SMEs and small business innovation research (SBIR). The three types of support center for SMEs were established in conjunction with the change in approach from top-down “guidance” measures implemented by the State and local governments, to support provided utilizing the abilities of the private sector, while SBIR is a product of the concept of providing integrated support for SMEs from the R&D stage through to the commercial application of technologies.

1. Three types of support center for SMEs

   (1) Current assessment of functions required
   The economic environment faced by SMEs is changing dramatically, greatly increasing the importance of intangible business resources such as business and management know-how, technologies and information. SMEs’ business problems have at the same time grown more diverse and complex, rendering administrative “guidance” much less effective. In order to provide effective support under such conditions, it is necessary to put in place mechanisms to enable timely access to consulting services of a certain quality to deal with the business problems of SMEs based on the use of experts in the private sector. The Small and Medium Enterprise Support Law was therefore introduced in May 2000, setting in train support programs centered around three types of support center for SMEs—local support centers for SMEs, prefectural support centers for SMEs, and national support centers for SMEs—in order to provide finely tailored one-stop1 support services for a variety of SMEs (Fig. 224-1). These have added to the armory of government services two new functions, viz. (1) continuous nearby support, and (2) support suited to a diversity of needs. These support services form a central plank of small business support measures, and consultations at support centers for SMEs are steadily rising (Fig. 224-2). As the development of such forms of support has only just begun, however, the operation of support centers for SMEs is currently still evolving by a process of trial and error as efforts are made to realize their latent capabilities. Below, therefore, we consider what shape support centers for SMEs should take in the future while providing an overview of actual cases.

Fig. 224-1 Three types of support center for SMEs

<table>
<thead>
<tr>
<th>National support centers for SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefectural support centers for SMEs</td>
</tr>
<tr>
<td>Local support centers for SMEs</td>
</tr>
<tr>
<td>SMEs</td>
</tr>
<tr>
<td>Finely tailored support for complex business needs, such as public offering of stock as well as advisory services and dispatch of specialists No. of centers: 8</td>
</tr>
<tr>
<td>Provision of expert solutions to variety of small business problems (advisory services, dispatch of specialists, assessment of business viability, etc.) No. of centers: 48 (as of end March 2001)</td>
</tr>
<tr>
<td>Base of nearby support for SMEs providing advisory services and wide range of information No. of centers: 209 (as of end March 2001)</td>
</tr>
</tbody>
</table>

Source: Compiled by the Small and Medium Enterprise Agency.

1) Locations where access can be had to all kinds of support.
1) Nearby continuous support
One of the forms of support provided by support centers for SMEs is support for startups. The success of such support is determined by the number of enterprises whose business actually gets off the ground after startup, rather than simply the number of startups. It is therefore necessary to provide follow-up after startup until a business gets off the ground. Thus some local support centers for SMEs, which are located nearest to SMEs, take advantage of their geographical position to provide continuous support. Because it is managers and proprietors who make business decisions at enterprises, care is taken to ensure that the support provided does not go beyond the appropriate scope of advice. Because local support centers for SMEs have a fulltime staff of one coordinator, the questions of whether centers are sufficiently staffed to provide continuous support and how they should cooperate with exiting organizations, such as chambers and associations of commerce and industry, must also be looked at. Startups require great effort on the part of supporters as well as entrepreneurs. Next we look at an example that vividly demonstrates the need in some cases for follow-up after startup until a business gets off the ground.
1) Business feasibility assessment committees provide services such as specialist advice and investigations and assessments of the viability of SMEs in Gifu Prefecture has provided follow-up as well as advice at the time of the startup, taking advantage of its geographical position to provide continuous support to SMEs.

Opening of convenience store

The person seeking advice, who intended to establish A convenience store (located in Gifu Prefecture with two employees), became concerned about how to do so. As a result, he already had a degree of knowledge about the content of franchise agreements. As a result of being recommended by the center to prepare a business plan, he drew up a schedule leading up to the store’s opening and financing plans. He was also given advice on a number of occasions regarding matters such as the timing of retirement and retirement money. As soon as he retired, the client immediately exchanged contracts with the franchise headquarters, and went there twice for training while the site was being readied and the store built. During this time, the center’s consultant kept track of the store’s state of progress and the business conditions of rival stores, and provided various necessary advice and information about opening a store.

Follow-up after startup

With the headquarters’ backing, the store opened on schedule toward the end of August. An opening ceremony was held, attracting large numbers of customers and setting the store off to an auspicious start. Despite maintaining higher than expected sales, however, the changing of the seasons and road works near the store had an adverse impact, placing the store in difficulties. The center’s consultant therefore makes a detour on consultation days to check on the number of vehicles parked at the store, and drop into the store when the proprietor is there to give advice regarding the state of business and problems. Asked for advice regarding the adverse impact on business of the loss to other stores of a number of university students working part-time before the end of the year, for example, the consultant provided advice on solving the problem, putting the proprietor in touch with the university’s student affairs section. The consultant also gives the client articles concerning the opening of convenience stores in neighboring prefectures as a source of information for future strategy.

2) Support suited to diversity of needs

The economic environment faced by SMEs is changing dramatically, with customers’ needs growing more diverse and sophisticated. In order for SMEs to be able to meet these needs, they first need to innovate, and to do so they need services to enable them to obtain objective assessments of their business as a whole. Because of the growth in competition as a result of increasing economic globalization, it is also important that they raise value added through R&D and the development of new products using specialist knowledge, such as cutting-edge technology, in order to survive. The diversification of avenues of financing have also made it necessary for SMEs planning to go public to have a knowledge of capital policy. Below, therefore, we take a look at support centers for SMEs from this point of view.

(a) Objective overall assessment of business

It is extremely useful to SMEs to be able to obtain objective assessments of their business plans from a variety of angles. However, SMEs in Japan have few opportunities to obtain objective, specialist, multi-faceted assessments of their business as a whole. To address this problem, therefore, many prefectural support centers for SMEs have established business feasibility assessment committees1) that use their expertise to uncover technologies and know-how hidden away in a prefecture and assist their commercial application. These committees have met a total of 74 times nationwide, and, despite some variation in the level of activity, are now active in all blocks (Fig. 224-3). It is hoped that even more enterprises will become involved in these committees, whose establishment at all prefectural support centers for SMEs throughout the country should improve their usefulness for SMEs. One means of encouraging a better response from SMEs will be to offer a tangible incentive to SMEs that respond. Below, we look at how one prefectural center offers its own unique incentive to encourage SMEs to respond to its business feasibility assessment committee.

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1) Business feasibility assessment committees provide services such as specialist advice and investigations and assessments of the viability of the business plans of SMEs and entrepreneurs seeking to establish startups in terms of their commercial promise, technological level, and originality of know-how.
II — Action required of small and medium enterprises in order to adapt smoothly to economic structural change

Fig. 224-3 Number of meetings of business feasibility assessment committees

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of Meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hokkaido</td>
<td>3</td>
</tr>
<tr>
<td>Tohoku</td>
<td>7</td>
</tr>
<tr>
<td>Kanto</td>
<td>20</td>
</tr>
<tr>
<td>Chubu</td>
<td>6</td>
</tr>
<tr>
<td>Kinki</td>
<td>11</td>
</tr>
<tr>
<td>Chugoku</td>
<td>2</td>
</tr>
<tr>
<td>Shikoku</td>
<td>15</td>
</tr>
<tr>
<td>Kyushu/Okinawa</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

Source: Compiled by the Small and Medium Enterprise Agency.
Note: Number of meetings between May 2000 and the end of January 2001.

Case 113: Incentives provided to increase response to business feasibility assessment committee

In order to increase interest in its business feasibility assessment committee, the Fukui Prefecture Support Center for SMEs launched a unique project called the “New Business Frontier Award 2000”, an independent project launched by Fukui Prefecture in FY2000 to provide subsidies for outstanding business plans. By making the judging of the award one of the tasks of the business feasibility assessment committee, the center intends to raise the committee’s status and make the center more attractive.

The New Business Frontier Award 2000 is open to enterprises and individuals engaging in new business activities in the prefecture. Entrants submit business plans, the best of which receive an award and various kinds of support. There are two awards: a grand prize and a runner-up prize. The recipient of the grand prize receives three kinds of support: (1) a subsidy covering half the expense (up to a maximum of ¥1 million) of commercialization in the first year, (2) a subsidy for the rent of an office or store, etc., and (3) intensive business, technology and marketing support. The winner of the runner-up prize receives the third kind of support.

The center encouraged A Ltd., a company in Fukui Prefecture with 4 employees that had received various support regarding, for example, thinking on business plans since its establishment, to enter the New Business Frontier Award 2000. A consequently sent in an entry to the business feasibility assessment committee, and was given an “A” when the committee met in December 2000. It was also awarded the New Business Frontier Award 2000 runner-up prize. After receiving the prize, the company continued to receive advice from the center, principally concerning the issues that had been identified by the committee. The center is also publicizing A’s business plan.

1) The Fukui Prefecture Support Center for SMEs uses three grades: A, B and C. An “A” grade indicates “considerable business potential”, a “B” grade indicates “borderline business potential”, and a “C” grade means “try again”.

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(b) Provision of advanced technical advice

The requests for advice from enterprises require that advisers have a high level of technical expertise concerning, for example, cutting-edge technology. As it is difficult for support centers for SMEs to provide such advice independently, active cooperation is required between centers and also with other bodies, such as universities and public research institutes. Although prefectural support centers for SMEs are the best positioned to form ties with local universities and public research institutes because of their location, the next case we look at is that of a local support center for SMEs that provides a diverse range of support and whose parent organization is a third-sector initiative originally set up to promote cooperation between industry and universities.

Case 114: Provision of diverse support through cooperation with local university

The operator of the Aizu Local Support Center for SMEs is a third-sector initiative set up to promote industry-university cooperation centered around Aizu University. Working in cooperation with Aizu University, the center is providing a variety of support, including assistance with development, trials, core technology, human resources and funding, to A Ltd., a local company in Fukushima Prefecture with seven employees. A, whose main line of business is software development, was especially interested in breaking into the school education market. As it first inquired about development, the center provided advice concerning distance learning systems sought in schools based on data on IT education at elementary and junior high schools with which the center has ties. A, which had been looking for an opportunity to determine the usability of the educational content of its system, conducted a trial at a local junior high school to which it had been introduced by the center. Consulted about the core technology for the system, the center introduced A to researchers at Aizu University, who set up a joint research team, and provided assistance with the application for a subsidy to promote industry-university cooperation from NEDO (New Energy and Industrial Technology Development Organization). Also consulted by A regarding the recruitment of instructors to encourage uptake of the system, the center introduced SOHO businesses receiving startup support from the center to help secure the necessary human resources, and also assisted the startup of B Ltd., a Fukuoka company with 11 employees whose task was to sell and encourage uptake of the system.

(c) Advice on capital policy

Some startups seek to go public through initial public offerings (IPOs\(^1\)). In order to do so, enterprises must form relations with many companies, including venture capitalists, audit corporations and brokerages. Some enterprises that want to go public therefore find it difficult choosing the proposal best suited to them from among many proposals due to a lack of information and knowledge. In order to ameliorate this situation, support centers for SMEs must sometimes act as interpreters or translators of specialist knowledge, and sometimes serve as advisers to work together alongside SMEs to find a way of solving their various business problems. Below, we look at an example of support of this kind.

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\(^1\) Initial Public Offering.
Case 115: Advice on relations with venture capitalists for SMEs aiming to go public (Fig. 224-4)

A Ltd. is a company in Kumamoto Prefecture with 17 employees that had already been approached by a number of venture capitalists when it began seeking to go public. However, it was unable to choose the best proposal due to a lack of knowledge. It therefore visited the Tokyo National Support Center for SMEs in order to obtain advice on relations with venture capitalists.

A Ltd., whose main line of business is the development of flight simulation software, became interested in going public after being approached by a number of venture capital firms. Not having acquired much knowledge about going public, however, it visited the Tokyo National Support Center for SMEs in July 2000. The center provided A with practical advice, including advice on how to prepare mentally for going public. Although A had already received a number of proposals from several venture capital firms, it did not have the necessary knowledge to make a decision, and so wanted an explanation of the various proposals. In order to enable the client to understand the proposals, the center explained the basic terminology and the general investment and capital policies of venture capital firms, and offered advice on how to build relations with them. The client then entered individual negotiations with venture capital firms, while the center continued to follow actual progress and provide neutral advice by e-mail and phone regarding the president’s concerns and worries concerning the content and choice of proposals.

Fig. 224-4 Case of SME seeking to go public through IPO

Source: Compiled by the Small and Medium Enterprise Agency.
Further development of three types of support center for SMEs

1) Positive action by support centers
In order for support centers for SMEs to provide appropriate, timely support, it is important that they take action to discover the potential needs of proprietors. The current focus, however, is on responding in detail to requests for advice, and dealing with cases passed on from other support centers for SMEs, and so stress also needs to be placed in the future on discovering SMEs’ needs, although this is easier said than done. Nevertheless, it is important that centers learn to make the best use of their business support resources to maximize client satisfaction. The key in this regard is how to use information and assessment feedback from SMEs that have received support. It is also important to enhance and improve support center for SMEs services by, for example, placing a higher priority on discovering SMEs’ support needs. We therefore look next at the development of a system for determining client satisfaction.

Case 116: Tracking of client satisfaction through improvement of online specialist advisory functions

The Akinai Aid program, which offers a 24-hour online advice service, has a system allowing clients to assess the responses given by experts, enabling a track to be kept of client satisfaction with services. The Akinai Aid program of the Osaka City Support Center for SMEs is a startup support program providing mainly online expert advice. After checking the information on the center’s experts at the center’s homepage, clients can choose an adviser from among the 60 or so business consultants and other advisers registered with the center. The 24-hour online advice service not only guarantees a reply from the selected expert within 48 hours, but also allows clients to give the expert’s advice one of three grades. Those who wish to do so can also fill in an assessment form, enabling a track to be kept of client satisfaction with services.

The center offers a number of other programs in addition to Akinai Aid, including “b-mart”, which provides a forum for generating business opportunities, “e-liaison”, which links up enterprises and universities, and “IT@BRIDGE”, which provides IT support for SMEs. Apart from a few Osaka city officials, these services are run largely by staff from the private sector. The center also collaborates with local industry and public bodies, such as Osaka City, depending on the field of the program. Underlying the center’s success in bringing together so many business support resources in one location has been backing of this kind from Osaka City and local industry.

2) Constructive views of users
From the several cases described so far, it can be seen that any assessment of activities of support centers for SMEs requires that a very considerable number of indicators must be taken into consideration, ranging from the content and methods of provision of advice and numerous measures underpinning the provision of support, to cooperation with existing support for SMEs structures and conformity with the needs of the times. The most important thing, however, is that the number of users of support centers for SMEs increase, and that an examination be made of everything from the methods of operation of individual centers to the system design of support center for SMEs programs by obtaining constructive feedback from service users so as to create a process of improvement. Little more than a year has passed since the support system began to be developed in May 2000. Steps to live up to the slogan that support centers for SMEs “have an answer for everything” have only just begun. In order to fulfill the mission of supporting SMEs, however, it is essential to constantly gain and analyze feedback from users.
2. SBIR

(1) Assessment of the U.S. SBIR program

The U.S. SBIR program is a program established in 1982 under which federal government agencies with outside R&D expenditures of at least a certain amount (US$100 million per year) must spend a certain proportion of spending thereon (2.5% in 1998) on SMEs with outstanding R&D capabilities. Currently 10 federal government agencies participate in the program. These each lay down themes for R&D regarding which SMEs are invited to submit research proposals to undertake. The U.S. SBIR program consists of three phases, as shown in Fig. 224-5. Reports on the effects of the SBIR program are published in the U.S. by the GAO and universities. One report by Prof. Lerner of Harvard University offers a quantitative assessment of the long-term effects of the SBIR program based on changes in employment and sales over a decade (1985-1995).

Prof. Lerner’s study

The first analysis is a comparative study of “SBIR companies” and “comparison companies” (Study 1). The results of this analysis indicate that SBIR companies achieved strong growth in terms of employment and sales (Fig. 224-6). However, Study 1 provides only a general overview. As a second analysis, therefore Prof. Lerner conducted a comparative analysis of the effects of the SBIR program from the standpoint of the concentration of financing by venture capitalists (Study 2). For Study 2, the regions covered by Study 1 were divided into those where there was a high level of venture investment in seed (startup stage) and early-stage enterprises, and regions where there was not (Fig. 224-7). The results of the analysis, shown in Fig. 224-7, show that the SBIR program had a strong positive effect on SMEs in regions where there was a high level of venture capital activity, but did not have much effect in regions where the level of venture capital investment was low.

Fig. 224-5 Comparison of U.S. and Japanese SBIR programs

Source: Compiled by the Small and Medium Enterprise Agency.

Note: The feasibility study and R&D stages are those under JASMEC’s program for promoting technical innovation on specific issues.

1) Composed of grants and contracts (similar to the commission system in Japan).
2) Department of Agriculture, Department of Commerce, Department of Defense, Department of Education, Department of Energy, Department of Transportation, Department of Health and Human Services, Environmental Protection Agency, National Aeronautics and Space Administration, National Science Foundation.
3) General Accounting Office
5) Phase II recipients in this section.
6) Phase II non-recipients in the same industry as SBIR companies and with workforces of a similar size.
Fig. 224-6 Results of analysis by Prof. Lerner (Study 1)

Comparative analysis of “SBIR companies” and “comparison companies”
(change over 10 years between 1985 and 1995)

<table>
<thead>
<tr>
<th></th>
<th>Employees</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBIR companies</td>
<td>Increase of 26</td>
<td>Increase of US$5.05 million</td>
</tr>
<tr>
<td>Comparison companies</td>
<td>Increase of 5</td>
<td>Increase of US$1.76 million</td>
</tr>
</tbody>
</table>

SBIR companies achieved growth in sales and employment in excess of comparison companies.


Note: “SBIR companies” are Phase II recipients, and “comparison companies” are Phase II non-recipients in the same industry as SBIR companies with workforces of a similar size.

Fig. 224-7 Results of analysis by Prof. Lerner (Study 2)

Comparative analysis of “SBIR companies” and “comparison companies” in regions with a high level of venture capital investment and regions with low venture capital activity (change over 10 years between 1985 and 1995)

<table>
<thead>
<tr>
<th>Regions with high venture capital activity</th>
<th>Employees</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBIR companies</td>
<td>Increase of 47</td>
<td>Increase of US$9.03 million</td>
</tr>
<tr>
<td>Comparison companies</td>
<td>Decrease of 5</td>
<td>Increase of US$1.23 million</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regions with low venture capital activity</th>
<th>Employees</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBIR companies</td>
<td>Increase of 13</td>
<td>Increase of US$2.56 million</td>
</tr>
<tr>
<td>Comparison companies</td>
<td>Increase of 10</td>
<td>Increase of US$2.02 million</td>
</tr>
</tbody>
</table>

The SBIR program had a strong positive effect on SMEs in regions with a high level of venture capital investment.


Note: “SBIR companies” are Phase II recipients, and “comparison companies” are Phase II non-recipients in the same industry as SBIR companies with workforces of a similar size.
Prof. Lerner’s conclusions

Over a period of 10 years, SBIR companies achieved a higher level of growth in employees and sales than comparison companies, but the superiority of performance was not the same across the board. A gap in growth in both employees was observed only in the case of SMEs in regions where there was a high level of venture capital activity. The effects of the SBIR program on the performance of companies in other regions was relatively smaller by comparison.

(2) Current state of the Small and Medium Enterprise Technology Innovation System (“Japanese SBIR”)

February 1999 saw the establishment of a similar program in Japan under the Law of Facilitating the Creation of New Business passed in December 1998. This was the Small and Medium Enterprise Technology Innovation System, or “Japanese SBIR”. Under this program, which is designed to provide comprehensive support for SMEs and other businesses up to the commercialization stage, the State and corporations with special status provide such businesses with subsidies and grants (specific subsidies, etc.) funded from the research and development budget for the development of new technologies leading to the creation of new business. Two features of this program are its emphasis on the commercialization of the results of R&D by SMEs, and the fact that it enables the application of special measures under the Small Business Credit Insurance Law (insurance program for opening up new areas of business), special measures under the Small and Medium Enterprise Investment Corporation Law (expansion of scope of eligibility), and the Japan Finance Corporation for Small Business’s system of loans for the introduction of innovative technology under the program for the development of new areas of business and technology (loans to provide the necessary funds for business using technology researched and developed funded by an SBIR specific subsidy, etc.) (Fig. 224-8).

**Fig. 224-8  Japanese SBIR program**

- **SMEs**
- **R&D**
- **Specific subsidies, etc.**
- **Ministries participating in SBIR**
- **Corporations with special status**
- **Cooperation**
- **Ministry of Economy, Trade and Industry (Small and Medium Enterprise Agency)**

**Special measures under the Small Business Credit Insurance Law**

- Program for opening up new areas of business
  - Expansion of limit on loan guarantees:
    - Enterprises ¥200 million → ¥300 million
    - Associations, etc. ¥400 million → ¥600 million
  - Expansion of limit on unsecured loans
    - ¥50 million → ¥70 million
  - Establishment of program of unsecured loans not requiring third-party surety
    - ¥20 million

**Special measures under the Small Business Investment Company Limited Law**

- Enterprises eligible for investment from SME investment corporations even in the case of:
  - The establishment of a joint-stock company with capital in excess of ¥300 million
  - Raising of funds required for business activities by a joint-stock company with capital in excess of ¥300 million

**Japan Finance Corporation for Small Business’s system of loans**

- **Scope of loans**
  - Business conducted using technology researched and developed funded by an SBIR specific subsidy, etc.
- **Conditions of loans**
  - Maximum of ¥270 million in the case of equipment funds (excluding site costs), application of special rate (3). Base rate for all others.
  - **Term of loans**
    - Maximum of 15 years, or 7 years in the case of long-term operating funds (grace period: maximum of 2 years)

**FY2000 expenditure target:** approx. ¥13 billion

Source: Compiled by the Small and Medium Enterprise Agency.
1) The search for ways of increasing effectiveness
Even considering the considerable differences that exist between Japan and the U.S., Prof. Lerner’s conclusions described in (1) provide valuable lessons for the Japanese SBIR program. Particularly intriguing is his finding that the effects of the SBIR program are strongest where there is a high level of venture capital activity. Despite the comparatively different backgrounds to financing in the U.S., where most financing is through direct finance, and Japan, where most financing is raised through indirect finance, it can be seen from this analysis that the ability to provide funds for commercialization is significant. Given that the ultimate policy aim behind the SBIR program is to create new industries and employment by supporting business activities using new technologies, there is a need to strongly support and promote the commercialization stage after the conduct of R&D by SMEs in order to raise the program’s effectiveness. In this respect, investment by venture capitalists provides an important means of raising funds in order to pursue commercialization. In order to promote investment by venture capitalists, it is necessary to improve the investment attitude of venture capitalists in response to the improved ability to extend credit under the program.

2) The need for post-assessment
From the standpoint of the assessment of policy, there is a need for some form of post-assessment and feedback based on the results in order to make the Japanese SBIR program better than at present. A variety of methods of post-assessment are available. However, if the method introduced in (1) is applied, there are currently a number of statistical issues that need to be considered.

(a) Availability of data on employment and sales
Among the various specific subsidies designated under the Japanese SBIR program, there are some, such as grants relating to the project to promote the development of technological innovation in specific fields, regarding which data on matters such as employment, value of sales and capital investment are recorded for five years after the completion of R&D. A certain amount of data on SMEs required to enable comparisons with SMEs using the Japanese SBIR program is also available from private-sector think tanks.

(b) Availability of data on venture investment and loans
Data on venture investment and loans is also collected in the case of a number of specific subsidies designated under the Japanese SBIR program. However, similar data cannot be obtained for all specific subsidies covered by the system. Furthermore, there are no databases in Japan similar to those in the U.S. regarding companies invested in compiled based on the replies of venture capitalists found in the U.S. As a consequence, there is a need for private-sector think tanks to develop such databases on financing.

In his study, Prof. Lerner compares employment and sales with those 10 years previously. The Japanese SBIR program was only established a couple of years ago, and very few SMEs have completed the R&D phase. Given the likelihood of many enterprises completing this phase in the near future, however, prior preparations must be made to enable the necessary data for post-assessment to be gathered. In doing so, the understanding and cooperation of SMEs and other agencies involved in the program will be indispensable.

1) Granted by JASMEC.
Appendix

Present situation and issues regarding determining the actual situation of the richly diverse small business sector
Chapter 1 Trends in business conditions

1. Current problems with statistics on small and medium enterprises

There are over five million SMEs in Japan, accounting for 99.7% of the enterprises in the country. The small business sector is diverse, making it difficult identifying overall trends. The question then is: Do current statistics on SMEs paint a proper picture of trends in the small business sector? To answer this question, we look at two indicators commonly used for measuring trends in the small business sector: the business conditions DI for SMEs, and manufacturing production indices by size of firm.

(1) SME business conditions DI

Diffusion indices (DI) of business conditions are frequently used to determine trends among SMEs, and are now released by a number of organizations (Fig. 311-1). A closer look shows, however, that improvements need to be made with regard to immediacy, sampling and compilation of regional breakdowns if overall trends in the small business sector are to be determined more swiftly and accurately.

1) Immediacy of statistics

The conditions faced by SMEs are constantly changing, and implementation of policy can be difficult unless trends can be quickly and accurately ascertained at a time when business conditions are particularly finely poised. Most surveys of business conditions are quarterly surveys, however, making it difficult to accurately determine trends on a monthly basis. Moreover, the few monthly surveys that are conducted are of only small samples.

Fig. 311-1 Main surveys of business conditions among SMEs

<table>
<thead>
<tr>
<th>Title</th>
<th>Small and Medium Enterprise Agency/JASMEC</th>
<th>Bank of Japan</th>
<th>Japan Finance Corporation for Small Business</th>
<th>National Life Finance Corporation</th>
<th>Shoko Chukin Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td>Member enterprises</td>
<td>Enterprises in general</td>
<td>Customers</td>
<td>Customers</td>
<td>Customers</td>
</tr>
<tr>
<td>Sample size</td>
<td>Approx. 19,000</td>
<td>SMEs: approx. 4,700</td>
<td>Approx. 14,000</td>
<td>900</td>
<td>Approx. 10,600</td>
</tr>
<tr>
<td>Date of survey</td>
<td>5th day of last month of quarter (12th in April only)</td>
<td>Date of response during one-month response period</td>
<td>Last day of each quarter</td>
<td>Middle of each month</td>
<td>10th of last month of quarter</td>
</tr>
<tr>
<td>Date of survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional statistics</td>
<td>yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Main DI</td>
<td>Business conditions: &quot;improved&quot; - &quot;deteriorated&quot; Compared with same period a year earlier, original values *Quarter on-quarter changes and standard DI also surveyed</td>
<td>Business conditions: &quot;good&quot; - &quot;bad&quot; Standard, original values</td>
<td>Business conditions: &quot;improved&quot; - &quot;deteriorated&quot; Year on year, seasonally adjusted</td>
<td>Sales: &quot;increased&quot; - &quot;decreased&quot; Month on month, seasonally adjusted</td>
<td>Business conditions: &quot;good&quot; - &quot;bad&quot; Year on year, original values</td>
</tr>
<tr>
<td>Size of enterprises</td>
<td>SMEs</td>
<td>Small enterprises only</td>
<td>SMEs</td>
<td>Covers some companies other than SMEs</td>
<td></td>
</tr>
</tbody>
</table>

1) Diffusion index. Respondents are given a choice of three responses. The proportion that choose negative responses (e.g. “deteriorated”, “decreased”) is then subtracted from the proportion that choose positive responses (e.g. “improved”, “increased”).
2) SME samples
The samples used for all the surveys each have their own characteristics that must be taken into consideration when interpreting the results.
- Population
  Where the survey population differs from the general small business population, there is a risk of sample bias. This can occur, for example, where the enterprises surveyed are members or customers of the surveying entity. The same problem can occur where the survey is limited to enterprises of at least a certain size or excludes sole proprietorships.
- Sampling
  For a survey to be accurate, the enterprises surveyed must be randomly sampled. In practice, however, there is a tendency for enterprises that are more easily contacted to take part in surveys, and companies in industries in which interest in trends is strongest may be over-represented.
- Industrial breakdown of sample
  The industrial breakdown of samples varies considerably depending on the survey (Fig. 311-2). Compared with the actual number of SMEs by industry according to the Ministry of Public Management, Home Affairs, Posts and Telecommunications Statistics Bureau’s Establishment and Enterprise Census of Japan, manufacturers are more strongly represented in most surveys. There is also considerable variation in the proportion of retailers in samples. Where, as at present, conditions in manufacturing are comparatively favorable and the retail sector is depressed, the DI level is higher the higher the proportion of manufacturers. Conversely, the higher the proportion of retailers, the lower the DI level.
  One reason for this difference is that, despite the change in the industrial structure (such as the decline in the importance of manufacturing industry), there has been no corresponding change in the makeup of samples. A further reason is that the makeup of samples tends to resemble that of customers in the case of surveys by financial institutions. There are also cases of samples selected for other purposes being used without being modified to determine business conditions DI. These features are related to the aims of each survey and should not be criticized indiscriminately. When using such statistics, however, it is important to bear in mind their bias.

3) Regional statistics
Despite strong interest in regional trends, few surveys provide regional statistics. Unless sample composition is controlled by region, however, the validity of regional breakdowns is open to question.
  Another problem is that although current statistics provide a comparatively detailed breakdown of

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Fig. 311-2 Breakdown by industry of enterprises surveyed for main surveys of business conditions

Notes:
1. The industrial breakdown of the sample used for the Establishment and Enterprise Census of Japan (1996) matches the industrial breakdown of private enterprises as defined under the Small and Medium Enterprise Basic Law (based on the number of enterprises).
2. Breakdown of only the SMEs surveyed for the Bank of Japan Tankan. Breakdown of all enterprises surveyed for other surveys.
3. Number of respondents for Japan Finance Corporation for Small Business.
manufacturing industry, the categorization of other sectors is less detailed. The service sector in particular covers an especially wide variety of industries, ranging from personal services such as bathhouses, laundry and hairdressing, to business services such as data processing. But despite the differing trends within each sector, they are subsumed together under a single category.

4) Characteristics of the main surveys of business conditions
Bearing these points in mind, therefore, the characteristics of each of the main surveys may be summarized as follows.
- Small and Medium Enterprise Agency/JASMEC, Survey of Business Conditions in the Small Business Sector
  A survey of around 19,000 SMEs as defined under the Small and Medium Enterprise Basic Law. The large sample used also includes small enterprises. There is a possibility of sample bias, however, due to the survey population consisting of members of the surveying entity.
- Bank of Japan, Short-Term Economic Survey of Enterprises in Japan
  Strong focus on enabling comparisons with large enterprises. However, the SMEs surveyed are comparatively large, and sole proprietorships are excluded. No regional statistics are provided on SMEs.
- Surveys by government-affiliated financial institutions
  Surveys conducted of customers. The samples used for monthly surveys are limited in size.

(2) Manufacturing production indices by size of firm
The Small and Medium Enterprise Agency releases Manufacturing Production Indices by Size of Firm, which serve as an indicator of manufacturing activity among small and medium enterprises. Whereas the business conditions DI depends on the subjective opinion of the respondent, Manufacturing Production Indices by Size of Firm provide a means of determining trends on the basis of objective figures on, for example, the value and volume of output. However, there are problems concerning the use of these indices as indicator of trends in the small business sector. The Manufacturing Production Indices by Size of Firm are produced by further processing Industrial Production Indices data compiled from Current Survey of Production produced by the Ministry of Economy, Trade and Industry. (Weighted averages are calculated by weighting the indices for each product category by the proportion of SMEs). In order to reduce the burden on respondents, however, this survey does not cover small business enterprises (the survey is therefore “trimmed”), and the smallest size of establishment surveyed is gradually being increased. Looking at annual trends among large enterprises and SMEs according to the Census of Manufactures, which is the nearest there is to a complete survey for verification purposes, it can be seen that there is a gap in the manufacturing production indices according to the size of firm.

Criticism has been raised that the reason why SMEs’ production index is lower than that of large enterprises is because the production index for SMEs is heavily influenced by trends in specific industries such as textiles. These statistics must therefore be used bearing these problems in mind.

(3) The need to determine trends in tertiary industry
As the structure of industry changes, the proportion of the entire economy accounted for by services and other sectors of tertiary industry is rising. However, the statistics on SMEs have not been modified to keep pace with these changes, and there are no indices of trends among SMEs in tertiary industry. Moreover, original statistics allowing monthly trends to be identified are only available for certain service sectors in tertiary industry.

2. Solutions
With these points in mind, we examine in this section ways of determining trends among SMEs. We start by looking at the business conditions DI, and then move on to the question of ascertaining trends in tertiary industry.

(1) SME business conditions DI
Given that one problem with objective quantitative surveys is that they are trimmed in order to reduce the burden on respondents, one effective solution would appear to be to use DI of business sentiment, sales and so on determined from the results of multiple-choice questionnaires as an indicator of trends among SMEs as a whole (including sole proprietorships).

As already noted, however, current business conditions DI need to be improved in a number of respects. Although difficult to produce, the ideal DI for SMEs would be one designed from the point of usefulness, i.e. one that is more “up-to-the-minute”, is based on more accurate samples, and provides regional breakdowns. Study is required of ways of further increasing the
immediacy of data. It is also important to endeavor to determine the industrial and regional makeup of SMEs more accurately in order to be able to prepare less biased samples. If regional breakdowns can be provided, this will enable trends to be determined more accurately.

(2) Calculation of index of tertiary industry activity by size

Tertiary industry’s share of the economy is increasing, making ascertaining trends among SMEs in this industry an important issue. Tertiary industry is made up of a wide variety of sectors, however, and there is no monthly survey covering all sectors equivalent to the Current Survey of Production produced by the Ministry of Economy, Trade and Industry. The government agencies responsible for each sector each therefore conduct their own surveys, which consequently differ somewhat in the scope of enterprises surveyed, statistics compiled, and timing of release. Despite the fact that service industries account for an increasing proportion of the economy as a whole, only certain industries are surveyed on a monthly basis.

In order to determine trends in tertiary industry as a whole, the Ministry of Economy, Trade and Industry makes full use of alternative statistics to produce the tertiary industry activity index. Below, we look at how this index can be used to produce indices by size of firm.

1) Method of calculation

One index for SMEs in the tertiary sector can be produced by calculating indices by size by weighting the industry indices of the tertiary sector activity index by the proportion of large enterprises and SMEs to produce weighted averages.

An obstacle to calculating the weights is again the lack of statistics. The weights of the tertiary sector activity index are based on the value added according to interindustry relations tables. Because of the difficulty of preparing the value-added weights for large enterprises and SMEs, however, weights were prepared using alternative statistics concerning, for example, the value of sales and number of employees.

2) Results of calculations

A large disparity can be observed between the indices for SMEs and large enterprises (Fig. 311-3). The main reason for this is the dramatic growth in mobile telecommunications and other sectors of the telecommunications industry among large enterprises. (The index for the latest month used in the calculations (September 2000) was 1,047.0 for mobile telecommunications, 120.0 for domestic telecommunications, and 243.6 for telecommunications as a whole.) The situation as regards other industries is shown in Fig. 311-4.

- Services

The gap between large enterprises and SME is widening. This is because of the large proportion of SMEs in the personal services sector, which has been in a prolonged slump, and the comparatively small proportion in the business services sector, which, like the IT sector, has enjoyed comparatively good growth. This tendency is particularly evident in the case of information services, where there has been significant growth.

- Transportation

Amid the general slump in the transport sector, only the air transport sector has enjoyed good growth. As
a consequence, the index for large enterprises has risen higher.

- Wholesale, retail, food services, and real estate

Roughly the same trends can be observed in both the large enterprises and SME, and there is no major difference in index levels. These results suggest that the failure of SMEs to expand into IT and other new fields—both from the perspective of hardware and software—has led to the gap with large enterprises.

3) Index of all industrial activity by size

An index by size of firm was calculated for the construction industry by the same method, and an index

Fig. 311-4 Tertiary sector activity index by size

Fig. 311-5 All industry activity index by size (base year=1995)

Notes:
2. Telecommunications excluded.
of all industrial activity by size produced by combining manufacturing, construction, tertiary industry and the government sector\(^2\) (Fig. 311-5).

4) Future issues
The validity of these calculations must be confirmed by checking them against other statistics. Despite statistical limitations rendering proper verification difficult, limited comparisons are possible. For example, Fig. 311-6 shows findings on the service sector can be compared with the results of the Ministry of Public Management, Home Affairs, Posts and Telecommunications Statistics Bureau’s Survey on Service Industries. If 1994 is taken as the base year (1994=100), then there is found to be no large discrepancy between the index calculated for large enterprises and the results of the Survey on Service Industries in 1989. Growth over a five-year period in the index for SMEs, however, was lower than that in the Survey on Service Industries index, and, as far as comparisons can be made, the same trend is evident in all sectors. A comparison with data on comparable sectors from the Industrial Statistics on Specific Service Industries published by the Ministry of Economy, Trade and Industry reveals the same pattern. This may be due to a variety of reasons, including the possibility that the statistics used for the tertiary sector activity index are more easily affected by trends among large enterprises, and that the activities of SMEs may not be properly reflected due to the limitations of the weighted average method. The various statistics currently available are prepared by each government agency in line with their own objectives. In order to gain a more detailed understanding of the activities of SMEs, it is important to consider developing the necessary statistics.

**Fig. 311-6  Comparison of new trial index by size and results of the Survey on Service Industries**

Note: Nominal sales are adjusted by the price index, and indexed taking 1994 as the base year (1994=100).

\(^2\) For the sake of convenience, the government sector is classified with large enterprises.
Interest has risen in trends in start-ups and closures in recent years, and there is a particularly strong demand for a means of rapidly determining trends in startups, which impact on the dynamism of the Japanese economy. In this section, therefore, we consider as one solution the Internet surveys conducted by private-sector think tanks of IT-related industries, which have a high turnover of companies and are the subject of strong interest.

The first step of the survey is to select the regions where information service enterprises in IT-related industries are thought to be concentrated.1) An Internet keyword search is performed, and a list of companies to be surveyed drawn up. The second step is to e-mail these companies and have them access the server where the questionnaire is posted. According to the results of these surveys, the startup rate between October 1996 and June 1999 was between 12% and 13% in terms of both establishment of enterprises and business establishments. Between July 1999 and December 2000, however, the rate dropped slightly to between 11% and 12% (Fig. 321-1).

This survey is of business establishments, and altogether covers only half as many establishments in the regions concerned as the Establishment and Enterprise Census of Japan, making the validity of the results debatable. At the very least, however, this type of survey would appear to be sufficient for determining recent trends for specific purposes.

When using the Internet, there is a risk of illegal access. Nevertheless, consideration should be paid to use of the Internet for surveys focusing on up-to-the-minute trends in, for example, startups in IT-related industries as in the case of the present survey.

### Fig. 321-1 Survey results

1. **Estimated startup rate**

   **1) Enterprises**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of enterprises</td>
<td>200</td>
<td>71</td>
<td>47</td>
</tr>
<tr>
<td>Annual startup rate</td>
<td>—</td>
<td>12.9%</td>
<td>11.6%</td>
</tr>
</tbody>
</table>

2. **Business establishments**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of enterprises</td>
<td>225</td>
<td>78</td>
<td>51</td>
</tr>
<tr>
<td>Annual startup rate</td>
<td>—</td>
<td>12.6%</td>
<td>11.2%</td>
</tr>
</tbody>
</table>

Source: Mitsubishi Research Institute, *A Survey of Statistical Survey Issues in the IT Industry*.

Note: Startup rate = average annual number of enterprises and business establishments established in each period / number of enterprises and business establishments at end of previous period.

2. **Establishment catch rate of survey**

<table>
<thead>
<tr>
<th>Present survey</th>
<th>No. of business establishments</th>
<th>Establishment and Enterprise Census of Japan</th>
<th>2,634</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catch rate</td>
<td>50%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Comparison of the number of business establishments in the regions surveyed on July 1, 1999 for the present survey and the Establishment and Enterprise Census of Japan.
2. As there was no indication of whether enterprises that did not respond to the survey were in business on July 1, 1999, the overall rate was estimated from that for enterprises that responded.
3. The survey covered industry subcategories “821 software” and “822 data processing and provision”. The Establishment and Enterprise Census of Japan covered all business establishments in intermediate category “82 information services”.

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1) The survey covered Sapporo City, Shibuya-ku in Tokyo, Ogaki City, Kyoto City and Fukuoka City. Despite the difficulty of accurate classification, the enterprises surveyed were those in subcategories “821 software” and “822 data processing and provision” under intermediate category “82 data services and investigation” of the Japan Standard Industrial Classification System. The survey was of 1,550 enterprises (business establishments), and 354 valid responses were received (valid response rate: 22.8%).
2. Present and future issues in determination of causes of bankruptcy

(1) Changes in corporate environment

Amid the prolonged slump following the collapse of the economic bubble, the environment faced by enterprises has changed dramatically. As a consequence, business bankruptcies too have undergone major change. For example, an important cause of bankruptcies during the bubble period was careless management. Recently, however, there has been a sharp decline in the proportion of bankruptcies caused by careless management, and a rise in the proportion of bankruptcies due to factors such as slump in sales (Fig. 321-2). The increase in bankruptcies due to such factors reflects the increasing importance of corporate business strategy, suggesting that the relationship between business strategy and bankruptcy has grown stronger. Unlike during the high-growth period, marketing strategy mistakes, for example, are putting pressure on corporate earnings, and even threaten to put companies out of business. Managers’ judgment and business strategy are now more important than ever.

Fig. 321-2 Trends in causes of bankruptcies

(2) Autonomous factors or heteronomous factors

Causes of bankruptcies can be categorized into those due to errors of judgment by managers and proprietors (autonomous factors), and those due to business conditions (heteronomous factors). Private-sector research agencies define heteronomous bankruptcies caused largely by worsening business conditions as "bankruptcies due to slump", and there is a tendency for the increase in bankruptcies in recent years to be traced to the increase in bankruptcies due to slump. The conclusion is thus that the number of bankruptcies is increasing because of poor business conditions. Because of the fiercer competition within industries and the growing emergence of clear winners and losers now, however, unlike during the high-growth period, there is a possibility that autonomous factors (i.e. errors of judgment by management) may also be causes of bankruptcies due to slump.

Appendix

(3) Reclassification of causes of bankruptcy

Bankruptcies occur as a result of a combination of factors, and it is extremely difficult to pinpoint just one cause. A too detailed breakdown of the causes of bankruptcies by think tanks can result in overlapping factors, thus tending to complicate things. To solve this problem, Fig. 321-3 shows one way of reclassifying the causes of bankruptcy from the perspective of managerial judgment and strategy. Such a system of classification should be of use in the future because of 1) the fact that, as noted above, some bankruptcies treated as bankruptcies due to slump are due to autonomous factors (i.e. errors of judgment by management), and 2) the increasing importance of judgment and strategy in business in recent years.

These causes of bankruptcy cover practically all the key aspects of business strategy and factors that should be stressed by management. Applying this system of classification to the categorization of individual bankruptcies is important not only for the authorities responsible for policy, but also for SME managers and proprietors in general, and many useful lessons can be drawn from it.

Fig. 321-3 Reclassification of causes of bankruptcy

<table>
<thead>
<tr>
<th>Causes of bankruptcy</th>
<th>Specific examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morals of management</td>
<td>Careless management</td>
</tr>
<tr>
<td>Marketing strategy errors</td>
<td>Slump in sales</td>
</tr>
<tr>
<td></td>
<td>Deterioration of inventory situation</td>
</tr>
<tr>
<td>Carelessness of financial management</td>
<td>Excessive capital investment</td>
</tr>
<tr>
<td></td>
<td>Inherited difficulties (accumulated deficit)</td>
</tr>
<tr>
<td></td>
<td>Insufficient capital</td>
</tr>
<tr>
<td>Insufficient legal preparation</td>
<td>Difficulty recovering accounts receivable</td>
</tr>
<tr>
<td></td>
<td>Decline in creditworthiness (loss of customers)</td>
</tr>
<tr>
<td>Inappropriate management of organization and labor affairs</td>
<td>Partial decline in creditworthiness (internal indiscipline due to change in management, etc.)</td>
</tr>
</tbody>
</table>

Source: Compiled by the Small and Medium Enterprise Agency.

1) Tokyo Shoko Research, Ltd. defines bankruptcies caused by slumps in sales, difficulty recovering accounts receivable and inherited difficulties as bankruptcies due to slump.
Small business policies planned for FY2001
This section gives only a broad outline of program content and spending. Details are subject to change.
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The Japanese economy is in a weak state. Unemployment remains high, and personal consumption is also static. Conditions in the small business sector thus remain harsh.

Over the past decade, the environment faced by SMEs has undergone structural change. The number of bankruptcies among SMEs has risen to a high level, particularly in the construction and retail sectors. Closures continue to outnumber startups, and managers and proprietors of SMEs are steadily aging.

At the same time, however, there have been striking new changes that offer SMEs fresh opportunities. The IT revolution is not simply a phenomenon forcing change on a passive small business sector. It is instead something that has transformed the startup environment, dramatically changing views on establishing and developing new areas of business and encouraging SMEs to engage in business innovation and actively engage in new activities.

These SMEs, which form the backbone of the Japanese economy and are regarded as the driving force for the creation of new employment and industries and the revitalization of the Japanese economy, have grown in importance in recent years. The Small and Medium Enterprise Basic Law was therefore amended in December 1999 to revise the definition of SMEs (for the first time in 26 years) and lay down as a principle of policy “the growth and development of diverse and dynamic SMEs”. Under the amended law, three priorities were outlined for small business policy in the future: (1) promotion of business innovation and startups in the small business sector, (2) enhancement of the business fundamentals of SMEs, and (3) facilitation of adaptation to changes in the socioeconomic environment.

To enable measures to be steadily implemented to achieve these priorities, five goals were adopted for the implementation of small business policy in FY2001: (1) adaptation to the IT revolution, (2) further enhancement of the business support structure, (3) promotion of startups and business innovation, (4) revitalization of city centers and the small and medium retail and wholesale sector, and (5) enhancement of business fundamentals.

On the legislative front, a bill to partially amend the Commerce and Industry Association Law was introduced at the 151st ordinary session of the Diet in order to better provide for the merger of commerce and industry associations to enable them to enhance their operating structure, undertake programs in an efficient and effective manner, and enable them to provide more advanced support for startups and business innovation. In order to further develop traditional craft industries, a bill was also introduced to partially amend the Law concerning the Promotion of the Traditional Craft Industries. A further bill was introduced to partially amend the Law on Employment Measures to Facilitate Reemployment in Response to Socioeconomic Changes in order to support reemployment and the development of employment at the regional level.

Subsequent to the reorganization of central government on January 6, 2001, the Small and Medium Enterprise Agency was reorganized into three departments—a director-general’s secretariat, business environment department and business support department—so as to be better able to act swiftly and flexibly in implementing the goals of the amended Small and Medium Enterprise Basic Law.
Chapter 2
Adaptation of SMEs to the IT revolution

It is extremely important to industrial regeneration that SMEs, which form the backbone of the Japanese economy, adapt to and take advantage of the IT revolution by, for example, making active use of IT to improve the efficiency of operations and increase earnings. Comprehensive assistance will therefore be provided so as to ensure that around one in two SMEs are involved in e-commerce on the Internet by the end of FY2003.

1. Support for the introduction of IT by SMEs

1. Raising IT awareness and training of human resources

(1) Seminars and training
   1) Seminars (for approx. 100,000 persons)
      Making use of specialists such as IT coordinators, prefectural support centers for SMEs will strengthen cooperation with organizations such as small business associations and organize seminars for SME managers and proprietors (¥209 million subsidy).
   2) Training (for approx. 30,000 persons)
      Prefectural support centers for SMEs will cooperate with organizations such as small business associations to provide practical training in IT for SME managers and proprietors and help SMEs engage in e-commerce via the Internet (¥356 million subsidy).

2) IT forums
   Forums will be held to encourage the uptake of IT by SMEs and close the digital divide between firms of different sizes. These forums will feature keynote speeches by experts, and showcase SMEs that have succeeded in innovating by introducing IT, panel discussion and exhibits of new products and technologies that make use of IT (¥49 million subsidy).

3) Preparation of resource book on IT use and practice
   Trends in IT and IT use by SMEs will be surveyed and analyzed, and a resource book produced for SME managers and proprietors describing practical uses of IT in an easy-to-understand format (¥70 million grant).

(2) Training of experts
   1) Development of IT-based teaching materials
      IT-based teaching materials will be developed for use in the provision of case-method-based practical training for small business consultants and others involved in providing support for the small business sector (¥167 million subsidy).
   2) Distance training program
      A pilot virtual Institute for Small Business Management and Technology course and satellite broadcasting training will be organized as a means of providing simultaneous training in IT to more SMEs irrespective of location (¥372 million subsidy).

2. Dispatch of IT experts
   JASMEC will dispatch experts on introducing IT (“IT coordinators”) upon request by SMEs (¥109 million subsidy).

2. Development of infrastructure for introduction of IT by SMEs

1. Development of common core software required for IT

(1) Development of IT-based business software
   Support will be provided for a feasibility study on the development of software that takes advantage of new and rapidly developing IT and the development of business application software for consortiums of producers, distributors, outlets and contractors, etc. in the small business sector (¥1.181 billion subsidy).

(2) Fusion of manufacturing and IT
   The introduction of IT by small and medium manufacturers (“Digital Meister Project”) will be promoted by encouraging the objectivization and digitalization of the skills of experienced technicians in manufacturing, the development of skills

---

1) IT coordinators: Specialists capable of providing integrated support for businesses ranging from the formulation of business strategy and planning and financing of IT investment, to the development and operation of systems. Training and accreditation of IT coordinators is the responsibility of the IT Coordinators Association, a nonprofit organization established in February 2001.
manuals, and the development of a common framework (platform) for the integration of CAD, CAM and CAE ($742 million subsidy).

(3) Shopping district revitalization program
Support will be provided for programs undertaken by organizations such as associations and chambers of commerce and industry and shopping district development associations to promote the introduction of IT such as combined systems (e.g. allowing the use of debit cards) and customer data management systems ($1.199 billion subsidy).

(4) Development of business innovation models by small and medium retailers and wholesalers
Support will be provided for feasibility studies on the development of new business models for dealing with new social challenges undertaken jointly by small and medium retailers and wholesalers ($505 million subsidy).

(5) Development of business facilities and software infrastructure of small and medium logistics providers
Support will be provided for projects undertaken by information service providers regarding the development, maintenance and propagation of public databases relating e.g. to the development of product codes and standard information systems that serve as the information backbone for SMEs seeking to improve logistical efficiency ($116 million subsidy).

2. Information provision and support for cooperation promoting IT uptake

(1) Development of technology information networks (techno-knowledge networks)
Apt and efficient technical support will be provided for SMEs by creating a network with the National Institute of Advanced Industrial Science and Technology (independent administrative organization) at its hub that links regional public experimental and research institutes, and by integrating information on technical consultations and other technical information into a comprehensive database ($349 million grant).

(2) Development of portal site (J-net21)
An Internet portal site for searching for all kinds of information of use to SMEs will be developed to give SMEs and those involved in providing support for the small business sector access to necessary information ($541 million subsidy).

(3) Internet information exchange program
The business opportunities available to local businesses will be expanded by having associations and chambers of commerce and industry and prefectural federations of commerce and industry associations create websites to facilitate the exchange of information on individual small businesses and information on local specialties ($700 million subsidy).

Chapter 3
Development of the small business support structure

1. National level

1. Support programs undertaken by national support centers for SMEs
The following projects will be undertaken to develop the business environment and give SMEs and ventures one-stop access to human resources, technology, knowledge and information and other business resources to meet their diverse needs.

1) Advisory services ($564 million subsidy)
2) Dispatch of specialists ($239 million subsidy)
3) Dispatch of incubator managers ($101 million subsidy)
4) Operation of support database ($58 million subsidy)
5) Various surveys ($30 million)
6) Operation of national support centers and enhancement of secretariat functions ($506 million)

2. Support activities undertaken by JASMEC
JASMEC will undertake various support programs (e.g. to support the development of new areas of business, training of human resources and introduction of IT) for SMEs and three types of support center. The following programs will be undertaken in order to provide comprehensive support giving SMEs access to business resources.

1) Advice on the introduction and use of IT ($109 million subsidy)
2) Support for introducing facilities to improve the efficiency of energy use ($995 million subsidy)
3) Provision of information on energy conservation by SMEs as part of measures to
increase disclose of information on the introduction of energy saving facilities (¥209 million subsidy)

4) Provision of information on SME environmental and safety measures (¥347 million subsidy)

5) Support center exchange networks
   a. Establishment and operation of small business support search sites (¥541 million subsidy)
   b. Development of database of guidelines on use of IT (¥56 million subsidy)
   c. Overseas expansion exchange support program (¥23 million subsidy)

6) Funding of cost of IT forums organized under the business innovation exchange program (¥49 million subsidy)

7) Training for small business entrepreneurs and those involved in providing support for SMEs provided by the Institute for Small Business Management and Technology (¥1.332 billion subsidy)

2. Prefectural and ordinance-designated city level measures

1. Support activities undertaken by prefectural support centers for SMEs

Specific support activities undertaken by prefectural support centers for SMEs will be enhanced to develop the support structure for SMEs and improve SME access to business resources in line with the Small and Medium Enterprise Support Law. Led by prefectural support centers for SMEs, three types of support center will cooperate to provide one-stop services for SME entrepreneurs.

   1) Development of support structure
      a. Improved training for support staff such as project managers (¥1.099 billion subsidy)
      b. Administration of business feasibility assessment committees (¥491 million subsidy)
      c. Program to facilitate the development of support structures (¥1.111 billion subsidy)

   2) Advisory services (¥736 million subsidy)

   3) Dispatch of specialists (¥728 million subsidy)

   4) Training and information services
      a. Development of human resources (training) (¥481 million subsidy)
      b. Information services (seminars, courses, exchange meetings) (¥392 million subsidy)
      c. Surveys and analyses (¥312 million subsidy)
      d. Provision of information on transactions (¥631 million subsidy)

   5) Promotion and support of SME cooperation organizations
      a. Support of SME cooperation organizations (¥221 million subsidy)
      b. Support of research and development of SME cooperation organizations (¥275 million subsidy)
      c. Promotion of interaction between SME cooperation organizations (¥228 million subsidy)

2. Establishment of regional platforms

   (1) Support of regional platform activities

   In response to the enforcement of the Law for Facilitating the Creation of New Business in February 1999, prefectures and ordinance-designated cities will develop and promote "regional platforms" that integrate support for local startup activity in 15 new growth fields by sole proprietors, SMEs and ventures covering everything from support for R&D to commercialization. The Government will provide human resources, technology and funding to enable prefectures and ordinance-designated cities to proceed with the development of regional platforms that leverage the unique features of individual regions (¥2.5 billion budget).

   (2) Development of incubator facilities by the Japan Regional Development Corporation

   Funding will be provided through the Japan Regional Development Corporation (JRDC) for third-sector projects for the development of leased business facilities and the development and operation of incubators in advanced research zones under the Law for Facilitating the Creation of New Business. Leased business sites will also be developed at advanced technology industrial zones under this law (¥4.065 billion budget).

   (3) JANBO activities

   The Japan Association of New Business Incubation Organizations (JANBO), a national association of regional platform organizations, will enhance and bolster inter-regional programs at the national level, such as the development of information networks, training of human resources for supporting start-ups, and international tieups.

3. Development of local support centers for SMEs

Support programs undertaken by local support centers for SMEs

Advice centers will be established in large municipalities
throughout the country to provide a convenient source of advice for entrepreneurs planning to start up in business and small business entrepreneurs seeking ways to innovate, and so create a system for responding in detail to requests for advice from small business entrepreneurs. In FY2001, the number of coordinators is increased from one to two, and the following activities will be taken in order to enhance and bolster local advice centers so as to provide advice during holidays, etc. (¥2.535 billion subsidy).

1) Advisory services
2) Specialist consultations with legal advisers, etc.
3) Dispatch of specialists
4) Information services
5) Organization of courses, etc.

Chapter 4
Promotion of startups and business innovation

1. Support for startups and ventures

1. National startup and venture forum
In order to raise public understanding of startups and ventures and create an entrepreneurial environment by cultivating highly creative entrepreneurism and improving various social mechanisms, activities will be undertaken nationwide to bring together experienced entrepreneurs and experts from all sections of society and raise public awareness of startups, ventures and entrepreneurism, such as by awarding public recognition awards to model entrepreneurs and drawing up policy recommendations for the reform of social mechanisms to stimulate public discussion and encourage and raise the status of entrepreneurism (¥294 million subsidy).

2. Venture plaza and venture fairs
(1) Venture plaza
Ventures and potential venture entrepreneurs possess outstanding knowledge of technology and services, but face a variety of problems because of a shortage of business resources, such as funds, human resources and information. In order to help solve these problems, venture plazas will be established throughout Japan to provide a forum for matching ventures with venture angels and business partners (JASMEC budget).

(2) Venture fairs
Venture fairs will be staged in order to extensively exhibit and showcase outstanding services and trial products and support efforts to develop new markets and find new business partners (JASMEC budget).

3. Small and Medium Enterprise Creative Activity Promotion Law (Temporary Law concerning Measures for the Promotion of the Creative Business Activities of Small and Medium Enterprises)
In order to provide support for SMEs seeking to enter new areas of business through startups, R&D, and commercialization of products and services, subsidies, loans and tax breaks will be offered to SMEs engaged in business under R&D business plans approved by prefectoral governors under the Small and Medium Enterprise Creative Activity Promotion Law.

4. Special growth business incubation loans by the Japan Finance Corporation for Small Business
This is a system for supporting ventures with high growth potential that are engaged in opening up new markets using new technologies and providing distinctive goods and services. Ventures are granted exemptions from security conditions and provided with funds in the form of unsecured debentures with stock rights (“warrant bonds”).

Limit: ¥600 million (of which warrant bonds: ¥120 million)

Security exemptions:
Exemption from requirement to secure up to 75% of the value of a loan (up to a maximum of ¥80 million) if a venture lacks sufficient security.

5. New business guarantees by credit guarantee corporations
Credit guarantee corporations will facilitate financing by guaranteeing loans for business involving goods and services and methods of provision that have yet to be widely adopted by SMEs.

Maximum value of loans guaranteed:
Individuals and corporations: ¥200 million
Associations, etc.: ¥400 million

Unsecured limit: ¥50 million

6. Angel tax system (see figure below)
Tax deductions for capital gains on share transfers will
be provided to encourage investment in SMEs and ventures by personal investors known as “angels”. Angels who acquire shares issued by SMEs and ventures that meet certain conditions (e.g. investing heavily in testing and research, and being established less than 10 years previously) and transfer these shares under certain conditions after listing will have the value of their income from transfer of assets reduced to one quarter for tax purposes (through application in combination with the special measures concerning founders’ returns). In the event that angels make a loss, the transfer loss will be carried forward three years from the following year. Application of this system requires the confirmation of the Regional Bureau of Economy, Trade and Industry.

7. Startup seminars and classes
Working in cooperation with prefectural federation of societies of commerce and industry and managing chambers of commerce and industry, the Central Federation of Societies of Commerce and Industry, Japan (CFSCI) and the Japan Chamber of Commerce and Industry will organize seminars and individual consultation services for startups, and also organize short intensive courses (startup classes) for prospective entrepreneurs (¥644 million grant).

8. System for funding of equipment for small enterprises
In order to promote the introduction of equipment needed by small business entrepreneurs to establish startups and strengthen their business fundamentals, the equipment fund loan program and equipment loan program will be continued. Under this system, the funds for loans provided from transfers from the general accounts of prefectures and loans from the State are managed in the form of a special account by prefectures. The lending agencies that administer this system (incorporated foundations wholly financed by prefectures) provide interest-free loans and hire-purchase and lease of the necessary equipment and funds to small business entrepreneurs.

Hardware fund loan program: ¥68.2 billion of loans

9. Marukei loans to new entrepreneurs
The loan program for new entrepreneurs launched in January 1998 will be extended until the end of March 2002 in order to provide financial support for new entrepreneurs with poor credit and security (up to ¥550 billion in Marukei loans).

10. Subsidization of new areas of business
The purpose of this program is to discover and nurture entrepreneurs capable of growing into ventures through the subsidization by JASMEC of small business entrepreneurs opening up new fields and entrepreneurs opening up new markets through the provision of goods and services by innovating, developing new goods and services, and utilizing their own technologies and original ideas (JASMEC budget).

11. Development of incubator facilities
In order to help develop the urban infrastructure contributing to the revitalization of urban economics by creating SMEs and ventures and expanding employment, local governments, third-sector initiatives and PFIs will develop business incubators in areas of high growth potential (advanced technology industrial zones, advanced research zones and specific city centers). Government support will be provided to entities involved in the development of local business incubators (¥800 million budget).

12. Support measures under the Regional Industrial Agglomeration Activation Law
(1) Subsidies provided by entities such as local governments, public corporations and commerce and industry associations for the development of facilities such as cheap rented offices and factories used by local first-time entrepreneurs and SMEs expanding into new fields (¥200 million subsidy).
(2) Subsidies for the development of plans and conduct of surveys for the revitalization of agglomerations

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**Angel tax system**

- Investment by personal investor
- Confirmation
- Profit: Capital gain reduced to one quarter
- Loss: Loss carried forward three years

Hardware loan program: ¥61.2 billion of loans
by prefectures (¥89 million subsidy).

(3) Subsidization of research and development, the development of new products, expansion of markets and similar activities undertaken by individual associations and businesses approved by prefectural governors under business expansion plans and plans to facilitate expansion into new fields (¥546 million subsidy).

(4) Subsidization of training, support for joint research and similar activities undertaken by support organizations such as public research institutes and local industry promotion centers for local SMEs (¥546 million subsidy).

(5) Subsidization of venture plazas organized by prefectures (¥43 million subsidy).

(6) Subsidization of R&D activities undertaken by individual businesses and associations approved by prefectures under upgrading plans and plans for facilitating upgrading (¥96 million subsidy).

13. Financing of investment business partnerships

In order to invest in SMEs in Japan in the early stages of moving into new fields (e.g. by developing new products and new technologies), venture capitalists in the private sector form business partnerships and create limited liability partnerships for investing in SMEs under the Limited Partnership Act for Venture Capital Investment. JASMEC will facilitate the financing of such SMEs and support their sound growth and development by participating as a member of such limited liability partnerships (JASMEC budget).

14. Debt guarantees for corporate bonds by credit guarantee corporations

Under this system, which is designed to open up new avenues of direct financing to small business entrepreneurs and diversify and facilitate fundraising, credit guarantee corporations will grant credit guarantees for corporate bonds (privately placed bonds) issued by SMEs.

**Guarantee limit:** ¥450 million (¥500 million cap on issue value)

¥500 million limit adding together normal guarantees and unsecured guarantees excluding business-stability-related guarantees.

15. Startup guarantees

A maximum of ¥10 million in guarantees will be made available under the Law for Facilitating the Creation of New Business and the Law on Special Measures for Industrial Revitalization (amounting to a total of ¥20 million) as startup guarantees for SMEs starting up a new venture.

**Guarantee limit:** ¥10 million for new business creation and startups respectively

(However, the total of unsecured guarantees relating to general activities, new business creation and startups must not exceed ¥80 million.)

2. Support for business innovation

1. Law on Supporting Business Innovation of Small and Medium Enterprises

The Law on Supporting Business Innovation of Small and Medium Enterprises, which entered effect in July 1999, provides the necessary support for strengthening the business fundamentals of enterprises in industries adversely affected by conspicuous changes in the economic environment, and encouraging business innovation, such as the development or production of new products, development or provision of new services, introduction of new methods of production or marketing of products, new methods of provision of services, and other new business activities undertaken by SMEs in response to changes in the economic environment.

(1) Support of business innovation

The following steps will be taken to support business innovation: subsidization of the development of new products, services, markets or human resources under business innovation plans prepared by individual SMEs, associations or voluntary groups and approved by the State or prefecture; low-interest loans provided by the Japan Finance Corporation for Small Business, National Life Finance Corporation and Shoko Chukin Bank to provide equipment funds and long-term operating funds; special tax measures to reduce taxation of capital investment; interest-free loans provided by JASMEC for upgrading business operations; and special measures under the Small Business Credit Insurance Law (¥2.092 billion subsidy).

(2) Support for enhancement of business fundamentals

The following steps will be taken to help strengthen the business fundamentals of SMEs: special measures taken under the Small Business Credit Insurance Law, and special tax measures, such as low-interest loans for equipment funds and long-term operating funds provided by the Japan Finance Corporation for Small Business, National Life Finance Corporation and Shoko Chukin Bank to provide equipment funds and long-term operating funds; special tax measures to reduce taxation of capital investment; interest-free loans provided by JASMEC for upgrading business operations; and special measures under the Small Business Credit Insurance Law (¥2.092 billion subsidy).
industry associations in industries designated as having been markedly affected by changes in the conditions of competition, trade structure, state of supply of raw materials and other changes in the economic environment.

2. Measures for the development of local industries
   (1) Subsidization of the development of new products, markets and human resources and similar activities undertaken by local public corporations and associations in the interest of revitalization of local industry (¥358 million subsidy).
   (2) Subsidization of the development of products and markets, and similar activities undertaken by local SMEs starting up in business utilizing local resources (¥356 million subsidy).
   (3) Subsidization of the necessary cost of activities such as the organization of study groups by voluntary groups in other fields and industries contributing to local revitalization through e.g. the creation of local industry (¥586 million subsidy).
   (4) National local industry fairs organized to bring together local industry products from around Japan and open up new avenues of demand for local industries (¥201 million subsidy).

Chapter 5 — Promotion of technological development and enhancement of the manufacturing base

1. Promotion of technical innovation
   1. Small and Medium Enterprise Technology Innovation System (“Japanese SBIR”)
      The Small and Medium Enterprise technology Innovation System (“Japanese SBIR”) is a system under which the relevant ministries cooperate to designate as specific subsidies the subsidies and grants for the development of new technology leading to the creation of new industries under the Law for Facilitating the Creation of New Business passed at an extraordinary session of the Diet in December 1998, and to prepare targets for spending on specific subsidies to SMEs in order to expand opportunities for spending on SMEs.

   2. Promotion of business innovation to meet specific needs
      In order to promote the creation of new business and employment and create a dynamic Japanese economy, it is essential to further bolster technological development and create core new industrial technologies. The relevant ministries will therefore cooperate to identify technologies required to meet economic and social needs and ventures, and solicit applications for their development. JASMEC will commission SMEs to conduct R&D on the best proposals (¥4.381 billion grant).

   3. Subsidization of R&D on creative technology and creative technology contributing to regional revitalization
      Half the cost of the materials, machinery and technical guidance required for R&D will be subsidized directly by the State (R&D on creative technology) and two thirds of the cost will be subsidized through the prefectures (R&D on creative technology contributing to regional revitalization) in order to promote R&D on new products and technologies by SMEs and encourage the development of high value-added products by SMEs (¥4.781 billion subsidy).

   4. System of taxation to strengthen the technological base of SMEs
      In order to support R&D by SMEs, the tax system for strengthening the technological base of SMEs allowing for an extra addition to the special tax deduction rate for testing and research by SMEs (from 6% to 10%) will be extended by one year (until March 31, 2002).

   5. Subsidization of development work to commercialize industrial technologies
      Subsidization by the New Energy and Industrial Technology Development Organization (NEDO) of two thirds of the cost of the best technological development proposals selected after advertising widely for applications from private-sector enterprises engaged in development of commercial technologies in strategic fields contributing to the creation of new industries and the solution of social problems (¥4.801 billion subsidy).

   6. Subsidization of joint international R&D by ventures
      In order to promote the creation of new industries and
new employment by developing ventures, subsidies will be provided covering two thirds of the cost of the best proposals for the development of commercial technologies by ventures working in cooperation with overseas companies and research organizations selected from among applications publicly solicited by NEDO (¥300 million subsidy).

7. R&D on SME industrial technology
R&D will be conducted with the involvement of SME technical experts on technology contributing to the international competitiveness and value added of SME products. More specifically, this will involve R&D contributing to the development of the material and ceramic industries, which are made up of SMEs, and the widespread uptake of the results of R&D (¥952 million subsidy).

8. Creation of standards to help strengthen the technological base of SMEs
The purpose of this program is to help concentrate the technical know-how of SMEs and technical information forming the basis for the preparation of JIS standards (such as international standards, etc.), and to support the development of JIS drafts contributing to the stimulation of SME business by choosing the optimum technologies from among them. From FY2001, support will also be provided for research activities, such as the collection, surveying and empirical testing of the necessary information for the preparation of such JIS standards (¥37 million subsidy).

9. Development of SME knowledge base
Reflecting the need for safe and comprehensive control of all kinds of chemicals, the purpose of this program is to develop safety data, standards, testing methods and other matters required for the proper scientific assessment of the risk of chemicals so as to improve the risk management of SMEs and other businesses handling chemical substances (¥143 million budget).

10. Expansion of support for the introduction of technology by SMEs
(1) Greater promotion of activities to foster use of patent data
The purpose of this program is the efficient development of technology by SMEs through the use of a patent data e-library providing free public access via the Internet to data on some 45 million patents. Advisors will also be dispatched to provide advice on the use of the e-library’s search engine in order to enable greater use of the library (¥4.977 billion budget).
(2) Support for the development and commercialization of technologies using open patents
Patent distribution advisers will be sent to intellectual property centers in each prefecture in order to provide advice to SMEs interested in licensing patents. Patent distribution fairs will also be organized to provide a forum for exchange with technology consultants, intermediaries, companies, universities and research institutes interested in licensing out or using patented technology (¥3.834 billion budget).

2. Promotion of cooperation between industry, universities and government

1. Promotion of cooperation between industry, universities and government to develop SME technologies
In order to stimulate the small business sector, promote the creation of new industries, and solve the technical problems faced by local SMEs, businesses, universities and government agencies over a wide geographical area will cooperate on activities centered around government’s public experimental and research institutes to help raise the technological development capabilities of local SMEs and promote the propagation of research findings (¥936 million subsidy).

2. Subsidization of research on industrial technology
As a means for providing positive support to meet the R&D needs of SMEs, the New Energy and Industrial Technology Development Organization (NEDO) will advertise for proposals on research that SMEs expect universities and national research institutes to conduct. Subsidies will be granted for the best proposals for R&D and joint research by researchers at organizations such as universities and independent administrative organizations (¥647 million subsidy).

3. R&D benefiting SMEs conducted by National Institute of Advanced Industrial Science and Technology
The purpose of this program is to make full use of the technical knowledge and networks of National Institute of Advanced Industrial Science and Technology in order to make available to SMEs research undertaken in cooperation with universities of particular benefit to SMEs. The R&D ability and technical potential of National Institute of Advanced Industrial Science and Technology will also be utilized, the latent technologies of SMEs assessed, and guidance provided on courses of research (¥600 million subsidy).
4. “Matching fund” system of subsidization of industry-university cooperation to develop commercial technologies
NEDO will advertise for proposals for research into the joint commercialization by private enterprises and universities of the technological “seeds” of universities. Joint support will be provided for the best proposals by the Ministry of Economy, Trade and Industry and Ministry of Education, Culture, Sports, Science and Technology (¥750 million subsidy).

3. Strengthening of the manufacturing base

1. Development of manufacturing human resource support structure
In order to deal with the problems faced by small and medium manufacturers, such as the aging of experienced engineers and technicians and the drift of younger workers away from manufacturing, support will be provided for cooperation over a wide area between the local manufacturing associations found throughout Japan, and the effective recruitment and training of human resources by SMEs (¥241 million subsidy).

2. Local manufacturing association support activities
Support will be provided for internship programs providing onsite manufacturing training for the young and manufacturing workshops organized by the prefecture-centered local manufacturing associations formed by industry, occupational training organizations and education institutions found throughout Japan (¥120 million subsidy).

3. Technical training by JASMEC
Training will be provided to raise the counseling skills of staff at government’s public experimental and research institutions, and technical training will be provided for small business entrepreneurs at the Tokyo branch of JASMEC’s Institute for Small Business Management and Technology (¥107 million subsidy).

4. Regional revitalization adviser program and other support programs
In order to improve the ability of SMEs to respond to various technical issues, support will be provided for sending regional revitalization advisers with deep knowledge of companies and technology, various consultants and university teachers commissioned by organizations such as public corporations to SMEs that request visits (¥89 million subsidy).

5. Promotion of the uptake and joint use of new advanced technology
In order to promote the use of LSI, now essential to technological development by SMEs, comprehensive support will be provided for LSI development (design, trial production and evaluation), which is difficult for SMEs to undertake themselves (¥504 million subsidy).

6. R&D to facilitate access to SME-related information
SME-related homepages and technical information will be gathered and accumulated at mirror servers at National Institute of Advanced Industrial Science and Technology in seven locations throughout the country, and will continue to be made publicly accessible via the Internet. Data on responses to technical inquiries from SMEs will in addition be collected to create a searchable database as a reference resource (¥350 million budget).

7. Revitalization of basic technology industrial agglomerations
Support will be provided for action by local governments to revitalize basic technology industrial agglomerations that form the backbone of Japanese manufacturing (25 zones nationwide approved). In concrete terms, subsidies covering up to half the cost of programs will continue to be granted to local governments for the development and maintenance of facilities used cooperatively by industry, universities and government as the hub of basic technology industrial agglomerations and research equipment at facilities (¥3,195 billion subsidy).

Chapter 6 — Measures for small and medium retailers and wholesalers

1. Measures for retailers (city centers)

1. Support for basic revitalization plans prepared by municipalities
Subsidies will be provided to cover the cost of research required for the development of basic plans prepared by municipalities (¥501 million subsidy).
2. **Support for the development of TMO initiatives and plans**

Research required for the development of TMO initiatives and the TMO plans of TMOs, etc. will be subsidized (¥750 million subsidy).

3. **Dispatch of specialists for the revitalization of shopping districts in city centers**

Specialists will be dispatched to provide advice as requested by TMOs, etc. and the period of assignment extended to a maximum of 180 days (¥521 million subsidy).

4. **Establishment of consultation and assessment programs for TMO initiatives**

Consultation, assessment and advice will be provided by JASMEC concerning the service content, organizational structure and business fundamentals of TMOs (¥207 million subsidy).

5. **Support for development of facilities**

The necessary cost of the development of commercial facilities (e.g. arcades and colored paving) undertaken by associations in city centers will be subsidized, and subsidies for the development of facades, which previously covered only shop fronts, will be expanded to cover all components (housing and vacant stores) (¥8.3 billion subsidy).

6. **Support for programs for the establishment of business fundamentals by TMOs**

Programs undertaken by TMOs to establish a business base, such as the sale of local specialties and management of parking lots, will be subsidized (¥750 million subsidy).

7. **Revitalization of commerce in city centers (funds)**

Funds will be established in each prefecture for the revitalization of city centers financed by interest-free upgrading loans from JASMEC and contributions from the prefectures. The returns on the investment of these funds will be used to promote various projects and the size of the funds expanded to ¥12.6 billion (total size of funds: ¥66.8 billion).

2. **Measures for retailers (commercial agglomerations)**

1. **Support for enhancing the secretariat functions of shopping districts**

Specialists will be dispatched in response to the request of organizations such as shopping district development associations to provide support (e.g. guidance on business and advice and help with planning), and the period of assignment of specialists extended to a maximum of 180 days (¥124 million subsidy).

2. **Support for revitalization activities of shopping districts**

Support will be provided for activities undertaken by shopping districts to revitalize (e.g. measures for reducing store vacancies and encouraging the use of IT) (¥1.199 billion subsidy).

3. **Support for the development of new business models by small and medium retailers and wholesalers**

Subsidies will be provided for feasibility studies regarding the development of new business models for solving current social issues developed jointly by small and medium retailers and wholesalers (¥505 million subsidy).

4. **Support for the introduction of information systems by small and medium retailers and wholesalers**

In order to encourage the adoption of information systems by SMEs, support will be provided for the development of product databases and pilot projects for the commercialization of software and the development of business application software by consortiums of producers, distributors and outlets (¥1.181 billion subsidy).

5. **Enhancement of competitiveness of shopping districts (funds)**

Funds will be established in each prefecture to form competitive shopping districts financed by interest-free upgrade loans from JASMEC and contributions from prefectures. The returns on the investment of these funds will be used to subsidize software projects undertaken by shopping district development associations, and the size of the funds will be expanded to ¥16.2 billion (total value of funds: ¥68.2 billion).

3. **Small and medium wholesalers: measures to improve the efficiency of logistics**

1. **Promotion of development of small and medium wholesalers**

In order to help small and medium wholesalers strengthen their own functions to cope properly with changes in the distribution structure, measures for the revitalization of small and medium wholesaler in order to promote collaboration and adoption of IT will continue to be pursued.

Promotion of cooperation between local small and medium retailers and wholesalers: subsidies for small and medium wholesalers (¥21 million subsidy)
Support will be provided for research and basic planning, business planning, systems design and pilot projects undertaken in order to contribute to the rationalization of distribution and help strengthen wholesale functions through cooperation with related entities (including those in other industries) by associations of small and medium wholesalers, etc.

2. Promotion of measures to improve the logistical efficiency of SMEs
In order to support activities undertaken to improve the efficiency of logistics by SMEs that are difficult to undertake independently, support will continue to be pursued centering on activities under the Law concerning the Promotion of Efficient Distribution Systems in Small and Medium Enterprises that entered effect in October 1992.
(1) Program to improve the logistical efficiency of local SMEs (¥81 million subsidy)
(2) Dispatch of specialist advisers to improve logistical efficiency (¥39 million subsidy)
(3) Support for the improvement of logistical efficiency and cooperation over a wide area between SMEs (¥222 million subsidy)
(4) Development of infrastructure for the use of IT in logistics by SMEs (¥145 million subsidy)

4. Measures for small and medium service providers
Symposiums will be organized in order to raise the profile of small and medium service providers, social recognition of which is low. Research will also be conducted regarding the shared policy needs and problems of small and medium service providers (¥57 million grant, ¥62 million subsidy).

Chapter 7 — Promotion of mechanisms for cooperation among SMEs

1. Further use of the SME association system
Because of the absence of minimum capital requirements and comparative ease of establishment compared with joint-stock and limited companies, increasing use is being made of SME partnerships by retirees, the elderly and housewives as a simple means of starting up in business. There are also a growing number of cases of SMEs pooling their technologies, human resources and other diverse business resources to cooperate on joint R&D.
The creation of employment and industry through startups will be a core concern of small business policy in the future. To enable even greater use to be made of distinctive SME partnerships, therefore, the system will continue to be appropriately revised, and stress placed on encouraging wider uptake.

2. Enhancement of functions of the National Federation of Small Business Associations
The National Federation of Small Business Associations' partnership system is an organization for enabling various SMEs to supplement one another's business resources. To enable it to become an organization for undertaking flexible activities in order to encourage active business startups and business innovation by SMEs, a wide range of measures will be taken to meet the latent needs of partnerships as well as to encourage the establishment of partnerships and the provision of guidance on administration as in the past.
(1) The environment faced by SMEs has changed dramatically, as exemplified by the IT revolution, and business has at the same time grown increasingly specialized. In order to respond quickly to such changes, training will be provided for specialists such as counselors at the National Federation of Small Business Associations.
(2) The activities of the National Federation of Small Business Associations will be actively revised in conjunction with the introduction of the project assessment program, and effective programs will be developed by implementing priority budget measures to meet partnership needs.

3. Study of optimum mechanisms for cooperation among SMEs to meet contemporary needs
Mechanisms for cooperation among SMEs will be studied and reviewed to match the needs of diverse startups and forms of business, such as LLCs and groups set up independently to enable cooperation between firms in different industries.
1. Promotion of labor measures

1. Stabilization and promotion of employment

(1) Employment measures

While the job-offer to job-seeker ratio has risen since the beginning of FY2000, employment conditions are still harsh, and unemployment remains between 4.5% and 5.0%. Due in part to the effect of policies implemented to date, however, there are growing vacancies in core industries. In order to ensure that this upward trend translates into a steady recovery in employment, a package of emergency employment measures designed to eliminate the mismatch between supply and demand began to go into effect in May. The focus of these measures is on the development of skills and creation of employment in order to rapidly train the necessary human resources for new growth industries and promote steady growth in employment opportunities. This package of measures was followed by the announcement in October of a “new development” policy intended to rejuvenate the Japanese economy. Designed to ensure that the entire labor force is IT literate, the policy incorporates measures to provide support for employers increasing employment of middle and older aged workers through providing learning opportunities for acquiring various occupational skills and employment on a trial basis. Everything is now being put into ensuring the effective implementation of these measures.

The swift and effective implementation of these measures will continue to be pursued in FY2001 in order to create a social infrastructure that enables employment worries to be banished, respects the value and importance of labor, and allows each and every individual to look with hope and confidence toward the future through their work.

(2) Support for the creation of new employment opportunities utilizing the dynamism of SMEs

In order to encourage the creation of new employment opportunities in new growth fields and enable the smooth movement of labor into other fields, comprehensive support, such as the provision of detailed information and advice, will also be provided through seminars and interviews with job hunters held for companies in new growth fields, and by providing information utilizing the information networks of the new lifelong vocational skills development center (“Ability Garden”).

(3) Improvement of employment of construction workers

Starting with the construction employment improvement subsidization program, comprehensive measures will be implemented with the priority being to further modernize the employment of construction workers, promote occupational skills development, promote the employment of younger workers and keep them in the industry, and develop the labor environment to enable the elderly and women to also play a part ($9.304 billion budget).

(4) Employment of the elderly

1) Securement of employment to age 65 through raising the mandatory retirement age and establishing a program for continuing in employment

2) Provision of subsidies for employment of elderly workers

(5) Employment of the disabled

1) Program to promote the employment of disabled persons by companies that do not employ the statutory minimum proportion of disabled workers

2) Provision of subsidies for recruitment and continued employment of disabled workers

2. Training of human resources

(1) Development of skills development programs of employers

1) Promotion of training of human resources responsible for expansion into new fields (startups and expansion into other industries) and increasing value added under the human resource improvement support program

2) Support for mechanisms for the development of occupational skills within firms, such as training courses and forums for those involved in occupational skills development
3) Subsidization of the cost of occupational skills development within firms under the lifelong skills development benefit program

4) Establishment and operation of local occupational training centers and provision of information, advice and assistance regarding the development of occupational skills for SMEs

5) Support for SMEs organizing training in licensed occupations and employers that encourage their employees to take licensed occupation courses organized by licensed occupation training facilities

6) Support for independent efforts at the local level to train skilled workers under the local human resource training initiative

(2) Promotion of public occupational training
Promotion of occupational training for current and former SME employees

2. Promotion of welfare programs

Improvement of employee welfare
(1) Promotion of measures to reduce working hours and improve health and safety

1) Measures to reduce working hours
   a. Strict observance of the 40-hour week
   b. Encouragement of taking of annual paid leave
   c. Reduction of overtime

2) Measures to prevent occupational accidents
   a. Promotion of activities to improve safety awareness among proprietors, managers and workers and independent activities to prevent occupational accidents
   b. Promotion of special health and safety consultations to prevent occupational accidents
   c. Promotion of the “senior safety leader” system
   d. Promotion of safety management activities of specialist contractors
   e. Improvement of guidance for SME general contractors
   f. Promotion of safety models for the construction of residential housing such as wooden houses
   g. Enhancement of worker health programs
   h. Health maintenance programs in small and medium establishments
   i. Mobile physical examinations for employees of SMEs (vibration disorder, etc.)
   j. Promotion of appointment of health and safety managers
   k. Promotion of support for group health and safety activities of small establishments

l. Promotion of the development of a comfortable working environment

3) Measures to improve other working conditions
   a. Promotion of measures to ensure payment of wages, etc.
   b. Promotion of minimum wage
   c. Promotion of measures to improve wage and retirement benefit systems
   d. Implementation of working condition support programs in new establishments
   e. Promotion of various programs under worker insurance
      i. Implementation of worker welfare programs (e.g. provision of insurance benefits for injured workers and bereaved families under accident insurance, and promotion of social rehabilitation of injured workers)
      ii. Pursuit of employment stability, skills development and employment welfare activities under unemployment insurance, and consideration of the application requirements and subsidization rate of SMEs

(2) Development of conditions to enable workers to balance the demands of work and family and to enable women to display their abilities

1) Support to enable workers to balance the demands of work and family
   a. Development of environment to make it easier to take childcare and nursing care leave and return to the workplace
      i. Provision of subsidies for hiring replacements for employees on childcare leave (childcare and nursing care employment stability subsidies) (¥1.067 billion)
      ii. Provision of grants for programs enabling workers to return to the workplace after childcare or nursing care leave (¥367 million)
   b. Development of environment to make it easier for workers providing childcare or nursing care to remain in employment
      i. Subsidization of cost of childcare and nursing care (childcare and nursing care employment stability subsidies) (¥785 million)
      ii. Subsidization of workplace childcare facilities (childcare and nursing care employment stability subsidies) (¥794 million)
   c. Enhancement of support for reemployment of workers who retired due to childcare or nursing care commitments
Small business policies planned for FY2001

Chapter 9

Small enterprise support measures

Law to Partially Amend the Commerce and Industry Association Law

Provisions for facilitating the merger of commerce and industry associations will be laid down to develop the environment for strengthening the operating structure of small commerce and industry association in response to the diversification of needs for small business measures and the broadening geographical scope of regional economic activity.

1. Enhancement of small enterprise support programs

1. Enhancement of support for use of IT by small enterprises, etc.

Seminars and training courses will be actively organized in order to promote the use of IT by small enterprises and similar entities that lack the information and human resources necessary to adapt to the IT revolution.
Chapter 9 — Small enterprise support measures

(1) IT seminars
Prefectural support centers for SMEs will strengthen cooperation with local support centers for SMEs and chambers and associations of commerce and industry, and organize IT seminars for small business entrepreneurs and other managers and proprietors. (Chapter 3 Section 2: information services).

(2) Nationwide training in the use of IT
Organizations such as commerce and industry associations will use local industrial human resource training and guidance programs and programs to promote the development of commerce and industry associations over a wider geographical area and IT training courses will be actively developed to meet the business needs of small businesses ($738 million subsidy).

(3) Internet-based information exchange program
Chambers and associations of commerce and industry and prefectural federations of commerce and industry associations will set up Internet websites to give businesses and consumers within and outside the region access to local information regarding e.g. individual SMEs in the region and local specialties in order to match them up with local businesses and increase local business opportunities ($700 million subsidy).

2. Enhancement of support for startups and business innovation

(1) Local support centers for SMEs (See Chapter 3-3.)
(2) Startup seminars and classes (See Chapter 4-1-7.)
(3) Marukei loans to new entrepreneurs (See Chapter 4-1-9.)

3. Regional economic revitalization and the promotion of activities over a wider geographical area

(1) Regional revitalization activities
Publicly tendered proposals for regional revitalization projects undertaken by chambers and associations of commerce and industry via municipalities will be expanded as required ($825 million subsidy).

(2) Development of young successors, etc.
Activities undertaken by prefectural federations of commerce and industry associations and managing chambers of commerce and industry to promote the activities of young people and women will be developed to enable more advanced activities to be undertaken over a wider geographical area (e.g. training in business know-how, support for the development of entrepreneurs, support for business succession, and training over a wide area to improve skills and qualifications) ($989 million subsidy).

(3) Activities to promote cooperation among commerce and industry associations over a wide area
Chambers and associations of commerce and industry will cooperate to formulate initiatives for activities over a wide geographical area, and conduct surveys and research to assist small businesses in their regions ($539 million subsidy).

(4) Promotion of measures undertaken by commerce and industry associations over wide areas
Prefectural federations of commerce and industry associations will organize activities such as classes and training courses to promote the development of plans to assist commerce and industry associations and small businesses and to advance activities undertaken over a wide area ($338 million subsidy).

4. Expert bank (support for strengthening management and technology)
Organizations such as prefectural federations of commerce and industry associations will cooperate with prefectural support centers for SMEs to give small enterprises access to experts capable of assisting with advanced and specialist issues ($220 million subsidy).

5. Promotion of guidance environment of commerce and industry associations, etc.
The cost of the appointment of secretaries-general responsible for the day-to-day management of commerce and industry associations will be subsidized in order to promote the development of core facilities and spread of activities to improve the business management of commerce and industry associations ($5.779 billion subsidy).

6. Promotion of development of information networks to strengthen support structure
In addition to sharing information required by business counselors providing business support for small businesses, one-stop business services will be developed using information networks to provide access to e.g. the latest market information from various databases ($48 million subsidy).

2. System of business improvement loans for SMEs (Marukei loans)

Because of the continuing poor state of the economy and severe employment conditions, special measures to ease the terms of loans for new entrepreneurs. Sufficient loans will also be made available ($550 billion) in order to facilitate fundraising by small enterprises.
3. **Small enterprise mutual aid projects**

Small enterprise mutual aid projects will continue to be promoted, and promotional measures will be stepped up to achieve the target for FY2001 of 140,000 members. Subsidies will therefore be provided to JASMEC, which is responsible for the administration of this project, to help it carry out its duties (¥6.113 billion subsidy).

4. **Small enterprise equipment fund program (See Chapter 4-1-8.)**

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**Chapter 10**

**Promotion of fair trade and public demand measures**

1. **Rationalization of SME business transactions**

   1. Various courses will continue to be held to improve awareness of subcontracting-related legislation (including the Law on the Prevention of Delay in the Payment of Subcontracting Charges and Related Matters) along with surveying parent businesses and subcontractors in accordance with this law and conducting on-the-spot inspections of parent businesses in close cooperation with the Small and Medium Enterprise Agency and the Fair Trade Commission in order to promote fair relations with subcontractor. Regarding written surveys, a study will be made of methods for improving the accuracy of identification of enterprises strongly suspected of violating the law and improving the efficiency of investigations through the use of IT, and an electronic investigation system will be built.

   2. Alternative dispute resolution (ADR) is becoming increasingly important as a more flexible non-court means of resolving business disputes involving SMEs. Public information activities (e.g. publication of newsletters, organization of forums, mobile advisory services, and preparation of lists of intermediaries and standard resolution guidelines) will be undertaken in order to raise awareness of the functions and effectiveness of ADR (¥24 million grant).

2. **Support to enable small and medium subcontractors to become independent**

   The economic environment is changing dramatically, and subcontracting relations are growing more fluid. In order to support the development of dynamic small and medium subcontractors capable of coping with new patterns of subcontracting and enable them to become independent, competitive businesses, support will continue to be provided for trade mediation services, and follow-up support programs will be implemented.

   1. Provision of business information

      In order to help expand small and medium subcontractors’ markets, organizations such as prefectural support centers will provide support for subcontracting business mediation services by organizing technology fairs, providing information making maximum use of the Internet, and promoting dispute resolution of business claims. Particular attention will be paid to gathering order information in districts where there is a high concentration of information on orders placed from outside the prefecture (industrial zones). This information will then be furnished to small and medium subcontractors to expand business opportunities (¥1.367 billion subsidy).

   2. Emergency large-area business seminars

      Because of the prolonged slump, many companies are reviewing which subcontractors they do business with and planning large-scale reconstruction in order to cut costs. Support will therefore be provided to help small and medium subcontractors diversify their markets by organizing large-area business seminars for small and medium subcontractors in regions at risk of being widely affected regardless of prefecture (¥30 million subsidy).

3. **Access to public demand**

   The “Policy on State Contracts with Small and Medium Enterprises” was passed by the Cabinet pursuant to the Law on Ensuring the Receipt of Orders from the Government and Other Public Agencies by Small and Medium Enterprise as efforts were further stepped up to increase opportunities for SMEs to win orders. Awareness of the purpose of this policy among both companies placing and receiving orders was raised by the Small and Medium Enterprise Public Demand Securement Measures Promotion Council and other bodies. A particular focus is improving awareness among agencies placing orders of the qualified public demand association system so as to ensure greater use.

4. **Fair business opportunities**

   1. Efforts will be made to ensure proper provision of
business opportunities for small and medium retailers through the administration of the Law on Special Measures for the Adjustment of Retail Businesses.

(2) Efforts will be made to ensure proper business opportunities for SMEs through the application of the Law on Securing Business Opportunities for Small and Medium Enterprises by Adjusting the Business Activities of Large Enterprises.

5. Regulation of unfair business methods under the Antimonopoly Law
The Antimonopoly Law will be administered aggressively and strictly, and unfair business methods regulated in order to promote free and fair competition and enable businesses to engage in business activities freely. In order to proactively prevent anticompetitive practices causing harm to SMEs, efforts will be made to raise awareness of the Antimonopoly Law Guidelines on Distribution and Trade Practices (July 1991) and the Antimonopoly Law Guidelines on the Abuse of Predominant Position in the Contracting of Services (March 1998). In order to respond positively to inquiries from SMEs, use will be made of networks for advice regarding the Antimonopoly Law in cooperation with chambers and associations of commerce and industry throughout Japan.

6. Regulation of unreasonable premiums and misrepresentation under the Law for the Prevention of Unreasonable Premiums and Misrepresentation Concerning Products and Services
In order to regulate the provision of unreasonable premiums and misrepresentation of products and services, the Law for Preventing Unjustifiable Lagniappes and Misleading Representation will be strictly applied. Investigations to determine the actual state of affairs will also be conducted in order to improve the representation of premiums in accordance with changes in social and economic conditions. Other steps will be taken to clarify the position in respect of the Law for Preventing Unjustifiable Lagniappes and Misleading Representation in relation to the field of e-commerce.

Chapter 11 — Globalization of the small business sector

1. Facilitation of overseas expansion
(1) Support for SMEs intending to expand overseas
JASMEC, the Japan Chamber of Commerce and Industry and JETRO conduct surveys on overseas expansion by SMEs, provide information, organize seminars and provide advice.
(2) Support for Japanese SMEs overseas
The overseas branches of JASMEC, the Japan Chamber of Commerce and Industry and JETRO will provide counseling, advice, support for international matchmaking and organize seminars for Japanese SMEs overseas.

2. International exchange, etc.
(1) International exchange programs
JASMEC will act as a matchmaker and provide advisory services for SMEs in order to promote business exchanges with overseas organizations. JETRO will promote the regional economy and globalization of SMEs focusing on the expansion of business exchanges within and between regions.
(2) International cooperation
The Government will participate in international conferences, such as those of APEC and the OECD, in order to engage in an exchange of views concerning the development of the business environment for SMEs. In this respect, JASMEC will organize APEC SME workshops, and JETRO will promote industry exchanges with SMEs in APEC. International cooperation will also be undertaken to meet SMEs’ needs.

3. Facilitation of trade
(1) Promotion of imports
JETRO will organize exhibitions of samples of foreign products and trade fairs for exhibiting parts and materials, and provide information on importing. The Japan Finance Corporation for Small Business and the National Life Finance Corporation will provide loans to facilitate imports.
(2) Facilitation of transactions
JASMEC will provide matchmaking services for businesses wishing to do business with companies overseas. JETRO will provide support for participation in overseas trade fairs where typical SME products are exhibited.
1. **Measures to prevent SME bankruptcies**

1. **Enhancement of special advisory services to prevent bankruptcies**
   
   Expert staff such as commerce and industry arbitrators and certified public accountants at the 275 special bankruptcy prevention advice centers established by major chambers of commerce and industry and prefectural federations of commerce and industry associations will provide advice and guidance (particularly regarding financial mediation) for SMEs in financial difficulties. Measures to facilitate reconstruction using the advisory services of lawyers and other experts will continue to be provided to SMEs seeking to reconstruct under the Civil Rehabilitation Law (¥364 million subsidy).

2. **Emergency business stabilization loan program (small business bankruptcy prevention fund)**
   
   In order to stabilize the position of SMEs in financial difficulties because of the bankruptcy of related enterprises, government-affiliated small business financial institutions will continue to provide emergency loans to cover the necessary operating funds to enable SMEs to cope with difficulties recovering business accounts and falls in sales.

3. **Safety net guarantee program**
   
   In order to stabilize the position of SMEs in financial difficulties because of large enterprises filing for rehabilitation, natural disasters, the collapse of financial institutions, and other changes in the environment, financing will continue to be facilitated by providing “safety net” credit guarantees that increase the cap on unsecured guarantees and the scope of eligibility.

4. **Promotion of mutual aid programs to prevent SME bankruptcies**
   
   In addition to the continuation of mutual aid programs to prevent SME bankruptcies, activities to encourage uptake and expand membership will be vigorously pursued in order to achieve the target of 40,000 members for FY2001. Subsidies will therefore be provided to facilitate the execution of these operations to JASMEC, which is the organizing body (¥931 million subsidy).

2. **Anti-disaster measures for SMEs**

1. **Measures against ordinary disasters**
   
   In order to facilitate the recovery of SMEs affected by ordinary disasters such as torrential rain and typhoons, support will be provided in the form of disaster recovery loans and the establishment of advice centers by government-affiliated small business financial institutions for SMEs in regions where the Disaster Relief Law was put into action.

2. **Measures against major disasters**
   
   A large disaster that meets certain criteria laid down under the Law concerning Special Fiscal Aid for Coping with Disasters is designated as a major disaster. Special measures are then implemented, and measures taken to lower interest on disaster loans offered by government-affiliated small business financial institutions (further to a cabinet decision).

3. **Disaster measures**

   1) **Measures against torrential rain and rainstorms between September 8 and September 17, 2000 (Tokai torrential rain)**
      
      The following measures will continue to be taken in order to facilitate the recovery of affected SMEs:
      
      a. Special measures under the Law concerning Special Fiscal Aid for Coping with Disasters
      b. Lowering of interest rates on disaster loans offered by government-affiliated small business financial institutions by cabinet decision
      c. Provision of interest-free loans through the furnishing of interest by the State and local governments

   2) **Measures to cope with the eruption of Mt. Usu and measures to cope with the eruption on Miyake Island and the earthquake off the coast of Nii Island and Kozu Island**
      
      In order to facilitate the recovery of affected SMEs, the following measures will continue to be taken:
      
      a. Lowering of interest rates on disaster loans provided by government-affiliated small business financial institutions by cabinet decision as in the case of a major disaster.
b. Provision of interest-free loans through the furnishing of interest by the State and local governments

3) Measures to cope with the effects of the Hanshin-Awaji Earthquake
In order to facilitate the reconstruction and recovery of affected SMEs, the following measures will continue to be taken:

a. Flexible administration of the disaster recovery loan program by government-affiliated small business financial institutions
b. Facilitation of financing (e.g. through the above and special exceptions to the Small Business Credit Insurance Law)

Chapter 13
Special measures

1. Energy and environmental issues

1. Rationalization of energy use by SMEs
   (1) Provision of information on energy conservation for SMEs
   Research by universities and public research institutes and cases of businesses actively tackling energy problems at the local level will be surveyed and collected, and prefectoral support centers for SMEs used to stage courses and so raise awareness and uptake (¥209 million subsidy).
   (2) Support for the introduction of energy-saving facilities
   Using prefectoral support centers for SMEs, support will be provided by sending experts capable of providing suitable support for the introduction of energy-saving facilities in response to the request of SMEs (¥999 million subsidy).
   (3) Measures to rationalize energy use and improve logistical efficiency
   Subsidies will be provided for activities such as the research, design and trial operation of joint logistics systems operated by associations of small and medium wholesalers. Experts will in addition be dispatched to assist with the study by businesses such as small and medium wholesalers of ways of improving logistical efficiency (¥557 million subsidy).
   (4) Grants for the research and development of new technologies to solve specific issues under the program of subsidization of energy conservation and other technological improvements
   In order to generate new business and employment and create a dynamic Japanese economy, it is essential that new core industrial technologies be generated. Further effort must therefore be put into the development of technology. In cooperation with the relevant government agencies, therefore, JASMEC will solicit for proposals from SMEs and ventures for the development of non-oil energy technologies and energy conservation technologies to meet social and economic needs. JASMEC will then commission R&D on the best of these proposals (¥1.223 billion grant).

2. Provision of information on SME environmental and safety measures
In cooperation with prefectoral support centers for SMEs, JASMEC will provide information on environmental and safety issues at SMEs (e.g. information on environment friendly business, the Law to Promote Control of Chemical Substances and environmental inspections and management) by organizing courses, etc. (¥363 million subsidy)

2. Special measures for individual industries

1. Measures for the textile industry
   (1) Measures to achieve the “five reforms”
   Conditions in the textile industry are now extremely severe due to the surge in imports of textile products from countries such as China. In order to achieve the five reforms specified in the Textile Initiative, therefore, the following core measures will be implemented:
   1) Strengthening of measures to revitalize the areas of textile production from the consumer’s perspective
   2) Development of new markets through the strengthening of support for technological development
   3) Further promotion of textile industry BPRs
   4) Bolstering the international competitiveness of the fashion industry
   5) Development of the infrastructure for the industry’s development as a global textile industry
   (2) Active utilization of general measures for SMEs, etc.
Small business policies planned for FY2001

(1) Comprehensive use of general measures regarding e.g. information, the environment and energy, patents and SMEs, will be used in addition to special measures for the textile industry when implementing the measures described in (1). Because of the large proportion of SMEs in the textile industry as a whole, particular priority will be given to measures for textile SMEs, such as the preparation and development of manuals regarding the use of small business measures in order to improve the usefulness of such measures for textile SMEs.

2. Measures for the development of traditional craft industries

There are throughout Japan many areas of production where traditional craft products are manufactured using traditional skills and techniques. The development of these industries has long been promoted because of their contribution to the quality of life and distinctive character of local communities. Nevertheless, these industries now face a number of problems, such as the stagnation of demand for traditional craft products, declining numbers of employees, and a shortage of successors. The following measures will therefore be implemented centered around the Law concerning the Promotion of the Traditional Craft Industries.

(1) Designation of traditional craft products in consultation with the Industrial Structure Council after investigation and consideration of craft products regarding which applications have been made for designation as traditional craft products.

(2) Subsidization of the following activities (¥993 million budget):

1) Activities undertaken in regions of traditional craft production
   a. Programs to train successors and develop demand undertaken under development plans
   b. Joint programs to develop demand undertaken under joint development programs
   c. New production region revitalization programs undertaken under revitalization plans and cooperative revitalization programs
   d. Local human resource training and exchange support programs and production region producer programs (new) undertaken under support plans

2) Activities undertaken by traditional craft industry development associations
   National traditional craft festivals, human resource recruitment and training programs (registration of producers in areas of production and business matching (new), programs to discover future traditional craft products (new)), demand development programs, national traditional craft product center programs, programs to photograph and video traditional craft products, sales promotion support programs, traditional craft production region survey and consultation programs, and education on traditional craft products for children and school pupils, etc.

(3) Upgrading loans by JASMEC and prefectures
(4) Exemption from office tax (proportionate to assets) of shared facilities established under promotion plans and exemption from special landownership tax pertaining to JASMEC loans under support plan activities

(5) Insurance coverage for the necessary cost of activities undertaken by public corporations under support plans with regard to small business credit insurance provided by JASMEC

(6) The following promotional and public information campaigns undertaken to raise public awareness of traditional craft products in November, which will be designated as “Traditional Craft Month”:
   1) Traditional Craft Month national conference (Matsue City, Shimane Prefecture) and conference in the same region (eight regions nationwide)
   2) Traditional craft plaza
   3) Traditional Craft Month art and essay contest, etc.

3. Measures for the tortoiseshell industry

The following subsidies will be provided for activities undertaken by the Japan Bekko Association as emergency relief for small and medium tortoiseshell work enterprises affected by the prohibition of tortoiseshell imports in 1991 (¥234 million subsidy):

1) Tortoiseshell work skill preservation
2) Hawksbill turtle hatching, release and preservation
3) Resource surveys of producer countries
4) Dispatch of staff to related international bodies
5) Surveys on sustainable use of wildlife

4. Measures for the small and medium general merchandise industry (design preservation activities)

In order to promote the advancement of Japanese manufacturers of everyday necessities (general merchandise), the bulk of which are SMEs and small enterprises, subsidies will be provided for the following activities by the National Federation of Small Business Associations to organizations implementing design preservation programs:

(1) Development of internal and external data
   Collection and provision of internal and external design-related books, magazines, catalogs and industrial property gazettes, etc.

(2) Development of system for protection of designs
Advice centers will be established, manuals on countermeasures drawn up, awareness programs conducted, and support provided for the acquisition of designs and trademarks overseas in order to enhance protection for designs and trademarks.

(3) Support for elimination of imitation designs
Support will be provided for activities complementing the existing protection system by, for example, preventing the distribution of imitation goods and driving them off the market through the establishment and operation by industry of a design protection system.

5. Measures for coal production regions and small and medium mining enterprises
Working in closer cooperation with prefectures and other related local governments and related government agencies, measures to promote the development of coal producing regions will be steadily pursued in line with existing basic development plans for coal producing regions and plans for the implementation of promotional measures in individual coal producing regions, while placing a greater emphasis on measures to encourage development over a wide geographical area.

1) Measures for small and medium businesses
Small and medium businesses have been plunged into business difficulties as a result of the effects of structural adjustment in the coal mining industry. The following funding will therefore be provided for businesses that are migrating or changing their line of business in order to shore up their business position:

a. In prefectures that provide low-interest loans to small and medium businesses in structural adjustment zones, a certain proportion of the value of such loans will be covered by temporary grants for coal producing regions.

b. Special measures under the Small Business Credit Insurance Law (establishment of separate insured limit).

2) Industry promotion measures
The following financial measures will continue to be implemented in order to promote industry in coal producing regions.

In order to secure the necessary funds for mining and industry in coal producing regions, equipment funds and long-term operating funds will be furnished by the Development Bank of Japan.

6. Measures for SMEs in the agriculture, forestry and fishing industries

(1) Modernization of SMEs in the agriculture, forestry and fishing industries

1) Subsidies for enterprises in the agriculture, forestry and fishing industries

a. Cooperation between the food industry and agriculture, which make up the food supply chain stretching from the production through to the processing, distribution and consumption of agricultural produce, will be strengthened. At the same time, action will be taken to promote the recycling of food waste in the food industry and to expand production and consumption of foods to meet the needs of users and consumers and use domestic agricultural produce (¥1.216 billion subsidy).

b. Support will be provided to strengthen business fundamentals contributing to future business innovation in combination with promoting measures to support business innovation under the Law on Supporting Business Innovation of Small and Medium Enterprises.

c. Measures will be pursued to support the development of new fields of business by ventures under the Law for Facilitating the Creation of New Business.

d. In order to help deal with the problems faced by the food industry, support will be provided for (1) the development of technology to contain the amount of food waste generated, enable advanced use of waste, and comprehensively reduce the impact on the environment; (2) the development of technology proposals put forward by enterprises, etc. regarding the development of advanced technology for the manufacture of food, etc. using innovative technologies such as IT and inventory control techniques, and the development of new foods to meet the needs of the elderly; and (3) the development of technology to ensure food safety (¥2.021 billion subsidy).

e. Measures and approaches to changing the structure of the food manufacturing industry in response to changes in food consumption will be studied (¥11 million subsidy).

f. Comprehensive measures encompassing the entire supply chain from production through to distribution and consumption will be pursued in order to improve the environmental friendliness of the food industry. These measures will include promoting the reuse of recycled food resources and the recycling of waste containers and packaging.

With regard to promoting the use of recycled food resources, comprehensive
measures will be implemented under the Law on Promoting the Use of Recycled Food Resources (scheduled to enter effect in FY2001). To this end, steps will be taken to make food businesses, agricultural workers and consumers fully aware of the purpose of this law, and public information activities will also be undertaken in order to raise awareness of measures to promote reuse of recycled food resources. Support will also be provided for systematic reuse by food businesses, recyclers and local governments, and model food recycling facilities will be developed.

In order to promote reuse of food waste such as food leftovers generated by the food service industry, systems will be developed that enable efficient methods of use to be determined from trends in use of food ingredients and leftovers, and manuals will be drawn up to support public information activities for consumers led by the food industry.

In order to promote recycling of waste cooking oil, a waste food oil recycling system will be developed in order to provide a model for other regions in the future, and a model program will be introduced for collecting waste cooking oil generated by households.

With regard to promoting the recycling of waste containers and packaging, measures will be taken to raise awareness and increase use of labeling of materials under the Container and Packaging Recycling Law system and the Law of Promotion of Effective Utilization of Resources among food businesses that are responsible for recycling under the Container and Packaging Recycling Law.

In order to promote comprehensive steps to protect the environment in the food industry, measures will be taken to increase compliance with the ISO14001 international standard on environmental management, promote adoption of environmental accounting, support independent environmental activities in the food industry (such as environmental accounting and labeling), and facilitate the steady implementation of the industrial waste control tagging system in compliance with the revised Waste Disposal Law (¥348 million subsidy).

In order to promote the modernization of the food services industry, subsidies will be provided for R&D undertaken by organizations such as the Food Service Industry Research Center and the adoption of IT in food recycling (¥111 million subsidy).

h. In order to promote the use of wood, action will be taken to develop new uses of wood (e.g. the development of techniques for making effective use of wood components to improve the living environment, the development of innovative new technologies and products for using wood biomass energy and using and reducing the generation of wood waste by soliciting proposals for development, and the development of environmentally friendly technologies for preserving and treating wood materials) (¥839 million subsidy).

i. In order to bolster the business position of companies in the wood industry, measures will be pursued to reorganize and develop excess capacity (e.g. by scrapping excess wood production capacity), and develop facilities required to protect the environment and rationalize processing and distribution operations (¥300 million subsidy).

j. Measures will be implemented to promote organization and cooperation among material producers at the level of individual catchment areas to enable the efficient and stable supply of raw wood in large lots (¥79 million subsidy).

k. In order to promote the use of wood materials in housing, activities will be undertaken to develop housing using local materials through integrated action by businesses in the wood industry, carpenters and building contractors, activities to develop mechanisms for promoting town planning making lavish use of local materials such as wood, and activities to develop techniques for using local materials to build long-lasting homes and renovate homes (¥727 million subsidy).

l. Subsidies will be provided for activities to upgrade quality and hygiene control through the comprehensive adoption of HACCP at all stages, from the production to the consumption of marine food products, as well as new aquaculture techniques (¥134 million subsidy).

m. Subsidies will be provided for activities to promote high value-added production of local marine products through e.g. the joint development of processing and...
manufacturing technologies by marine product processors and fishermen at local government fishery test sites (¥37 million subsidy).

In the marine product processing industry, subsidies will be provided for the development of food product processing mechanization technologies for the development of advanced processing machinery that saves labor at the primary processing stage of marine products (¥81 million subsidy). Subsidies will also be provided for the development of technology for recycling marine product processing waste and technology for processing drainage suited to needs in the marine product processing industry, and the development of marine product processing ecosystem technology for conducting experimental trials (¥79 million subsidy).

In order to promote the effective use of fishery resources and the formation of a recycling-based society, systems and recycling technologies will be developed for collecting in a very fresh condition the leftovers from marine product processing that deteriorate particularly easily (¥18 million subsidy).

2) Loans for enterprises in the agriculture, forestry and fishing industries

a. Funds will be loaned by organizations such as the Agriculture, Forestry and Fisheries Finance Corporation to enable specific agricultural produce producers affected by the liberalization of the agricultural produce market to make business improvements in accordance with the Law on Temporary Measures to Improve the Business of Specific Agricultural Produce Processors.

b. Loans will be provided by the Agriculture, Forestry and Fisheries Finance Corporation for the development of facilities required for the upgrading of control of manufacturing processes of food enterprises in order to promote the introduction of HACCP methods in accordance with the Law on Temporary Measures on Upgrading the Control of Food Manufacturing Processes.

c. Funds will be loaned by organizations such as the Agriculture, Forestry and Fisheries Finance Corporation to promote the cultivation of new varieties for processed raw materials and the development of new uses of specific agricultural, forestry and marine produce and livestock.

d. Food manufacturers and businesses in the agriculture, forestry and fishing industries will build stable business relations, and the Agriculture, Forestry and Fisheries Finance Corporation will loan the funds for the development of the necessary agriculture, forestry and fishery facilities.

e. The Agriculture, Forestry and Fisheries Finance Corporation will provide loans to dairy farmers to improve dairy facilities, and the Agriculture and Livestock Industries Corporation will guarantee the debts of dairy farmer borrowers.

f. In order to rationalize the production and distribution of wood, loans will be provided by the Wood Industry Upgrading Promotion Fund.

g. In order to promote the effective use of underused inshore resources and strengthen the position of the marine product processors that use inshore resources as raw materials to enable them to respond to recent changes in the conditions facing marine produce processors, loans will be provided from marine product processing funds (facility funds) and marine product business improvement promotion funds (operating funds).

(2) Rationalization of food and wood distribution

1) Through the Organization of Food Marketing Structure Improvement (OFSI), small and medium food outlets will collaborate to improve efficiency by rectifying the high-cost structure of the food distribution system, and at the same time promote the development and trials of advanced food distribution systems to realize new services for consumers. Support will also be provided for education, guidance and uptake of the knowledge and skills required to actively implement systems developed by the above and activities tackling new issues, such as safety and environmental health measures (¥219 million subsidy).

2) Support will be provided for action to prepare and pursue strategic regional food distribution vitalization plans in order to improve the efficiency and safety and environmental health by rectifying the high-cost structure of regional food distribution. In tandem with such moves, surveys and analyses will be conducted to clearly ascertain the effects on business (¥41 million subsidy).

3) In order to raise food safety, environmental friendliness and the efficiency of food distribution, support will be provided for the study and implementation of the preparation of guidelines and organization of awareness raising and guidance activities by prefectures
and projects to vitalize the food distribution sector (¥41 million subsidy).

4) Action will be taken to develop facilities for joint backyard operations by food retailers and the development of facilities to improve food safety and convenience for consumers of shared facilities contributing to the improvement of functions and efficiency of food retailers in areas such as city centers (¥194 million subsidy).

5) Loans for the modernization of the retail of fresh food will be provided to food traders by the National Life Finance Corporation. At the same time, loans for the improvement of the food distribution structure will be provided by the Agriculture, Forestry and Fisheries Finance Corporation, and loans for the modernization of commerce will be provided by the Japan Finance Corporation for Small Business and National Life Finance Corporation in order to reduce the burden of interest payments.

6) Reorganization and rationalization of the dairy industry will be promoted, and subsidies provided for the development of dairy facilities enabling a high level of hygiene control (maximum ¥7.837 billion subsidy). In addition, comprehensive implementation of hygiene control in dairy facilities will be promoted (¥8 million subsidy).

7) In order to supply products of clear quality and performance at low cost to meet user needs, the development of seasoning facilities will be promoted and systems for the supply of seasoned materials will be urgently developed by developing efficient seasoning systems. At the same time, the development of core processing and distribution facilities for the supply of wood products will be promoted, and the introduction of leased mechanical facilities will be pursued.

7. Measures for SMEs in the transport industry

(1) Outline of measures for SMEs in the transport industry
Support will be provided for SMEs in the transport industry by, among other things, supporting the enhancement of business fundamentals and business innovation.

(2) Measures to support business innovation
Guidance and support will be provided for the enhancement of business fundamentals and business innovation under the Law on Supporting Business Innovation of Small and Medium Enterprises.

(3) Measures to improve logistical efficiency
Activities will be pursued to raise the efficiency of logistics operations by, for example, developing shared delivery facilities by small and medium truck operators under the Law concerning the Promotion of Efficient Distribution Systems in Small and Medium Enterprises.

(4) Measures for local SMEs
Support will be provided for the advancement and vitalization of shipbuilding-related industries concentrated in regions centered around shipbuilding under the Law on Temporary Measures for Activation of Specific Regional Industrial Agglomerations.

(5) Measures for specific industries
1) Warehousing industry
The modernization of facilities, upgrading of logistics functions and development of joint warehousing operations will be promoted in order to meet more complex logistics needs created by changes in the social and economic environment.

2) Automobile wrecking and maintenance business
In order to facilitate the raising of funds required for the modernization of automobile wrecking and maintenance, loan guarantees will be provided and interest covered by making appropriate use of the automobile maintenance modernization fund program (¥700 million budget).

3) Coastal shipping business
In order to revitalize and improve the position of the coastal shipping industry, the flexibility of joint shipping operations will be increased (e.g. by raising the proportion of vessels built by shipping equipment development consortiums) and the construction and remodeling of coastal cargo vessels to modernize them will be promoted (¥250 million government subsidy).

In addition, the smooth implementation of temporary measures for coastal shipping will be pursued, and structural improvements pursued through the use of special measures concerning the taxation of coastal vessels (¥21 billion government compensation).

4) Port transport business
In order to respond to the diversification and development of logistics needs and changes in international logistics, etc., subsidies will be provided by the Port Transport Modernization Fund.

5) Small and medium shipbuilders and ship industries
The business activities of businesses attempting to create new markets to meet diversifying demands will be promoted. Support will also be provided for the implementation of plans for the improvement of business fundamentals under the Law on Supporting Business Innovation of Small and Medium Enterprises.

In addition, action will be taken to increase the
stability of businesses by taking measures to stabilize employment and credit enhancement measures.

8. Measures for the environmental sanitation business

(1) Measures for the environmental sanitation business
As in FY2000, support will continue to be given in FY2001 for the advancement of environmental sanitation services suited to contemporary needs by environmental health business guidance centers, which were established in order to maintain and raise hygiene levels and protect the interests of users and consumers by improving the soundness of management of environmental sanitation businesses. To achieve this, the following measures will be implemented:

1) Establishment of study groups under business fundamentals support programs to consider issues such as succession, protection of the environment, and collaborative and cooperative activities ($4 million subsidy).
2) Programs for using consumer monitors and holding discussion meetings between consumers and residential health workers to monitor and provide information on the state of residential health and services ($5 million subsidy).
3) Activities to study and implement effective ways of reducing the amount of waste generated in the environmental sanitation business ($5 million subsidy).
4) Urban development programs involving e.g. the establishment of study groups to support the development of work and residential zones (such as shopping areas), conduct of opinion surveys, and sanitation mapping ($10 million subsidy).

In order to raise the dynamism and contribute to the growth and level of hygiene of the environmental sanitation business, subsidies will be provided for independent development by organizations such as the Federation of Environmental Sanitation Associations ($201 million subsidy).

(2) Loans for environmental sanitation related businesses
$253 billion will be made available for environmental sanitation loans by the National Life Finance Corporation. In Okinawa Prefecture, the Okinawa Development Finance Corporation will provide loans of up to $4 billion.

1) Raising of limit on loans
   The limits on loans to the following industries will be raised:
   a. The limit on loans to ordinary public bathhouse businesses (for the renewal of leases or purchase of leased land) will be raised from ¥120 million to ¥150 million.
   b. The limit on loans to the Federation of Environmental Sanitation Associations will be raised from ¥150 million to ¥300 million.
   c. The limit on loans to cleaning businesses (ordinary equipment fund loans) will be raised from ¥96 million to ¥120 million.

2) Addition of items covered by special development interest rates
   Loans for shared equipment used to modernize information systems (environmental sanitation associations and sub-associations in all industries) will be added to the list.

3) Improvement of special exemption loans
   a. The system for provision of loans for the implementation and guidance concerning welfare promotion activities will be enhanced.
   b. In order to extend the coverage of labor environment development and equipment loans to cover women and the elderly, persons developing the environment in accordance with labor environment improvement plans will be added.

4) Improvement of special loans
   The period of eligibility for exemptions to the limit on special loans for the improvement of equipment by small enterprises, etc. (special quota: ¥4.5 million) will be extended.

5) Miscellaneous
   a. Lodging services will be treated as hotel services.
   b. The period of eligibility for special rates of interest for energy conservation equipment will be extended.

9. Measures for small and medium building contractors

(1) Implementation of measures to secure and train human resources
   The Minister of Construction’s Award for Outstanding Engineering will be awarded to outstanding construction engineers, and measures to secure and train human resources will be pursued by the Incorporated Foundation Fund for Construction Industry Promotion and Construction Industry Education Center.

(2) Organization and collaboration
   Measures will be taken to promote greater organization among business cooperatives of small and medium building contractors, and guidance will be provided on the rational management of joint business operations.

(3) Rationalization and modernization
   1) Business innovation by SMEs will be promoted in accordance with legislation such as the Law
on Supporting Business Innovation of Small and Medium Enterprises.

2) In order to promote the spread of expertise in the unique bookkeeping and accounting practices of the construction industry, raise accounting ability, and contribute to the rationalization and modernization of business, construction business accountancy examinations will be held on a trial basis by the Incorporated Foundation Fund for Construction Industry Promotion.

3) Measures will be taken to raise awareness of the Guidelines on the Preparation of Business Improvement Principles in Each Industry formulated in September 1990, and support and guidance will be provided concerning independent action to improve management (e.g. subsidies by the Incorporated Foundation Fund for Construction Industry Promotion).

4) In order to strengthen the business fundamentals of small and medium building contractors, the Incorporated Foundation Fund for Construction Industry Promotion will provide financial consultation services and programs for training successors in the construction industry.

(4) Facilitation of financing
Use of loans from government affiliated small business financial institutions, loans under the Law on Subsidization of Funds for the Introduction of Equipment by Small Enterprises, etc., and deposit loans from construction industry guarantors will be promoted. Loan guarantees will in addition be provided by the Incorporated Foundation Fund for Construction Industry Promotion for loan providers that accept as security the subcontracting payment for unfinished public works undertaken by business cooperatives, etc.

(5) Surveys and research
The Research Institute of Construction and Economy (RICE) and the Incorporated Foundation Fund for Construction Industry Promotion will undertake surveys and research on issues facing the construction industry, and the Incorporated Foundation Fund for Construction Industry Promotion will consider the expansion of the construction expert business strength index (proposed step-up index) and the industries covered.

(6) Rationalization of construction production systems
Action will be taken to further raise awareness and implementation of the “Principles for the Rationalization of Production Systems in the Construction Industry”. At the same time, a new basic policy committee will be established under the Central Construction Production System Rationalization Promotion Council in accordance with the Three-Year Plan for the Structural Improvement of the Construction Industry, and active consideration will be given to the rationalization of the diverse production systems currently in existence.

(7) Modernization of local small and medium residential builders
In order to further the modernization of local small and medium residential builders, comprehensive measures to promote construction of wooden housing will be taken, and support will be provided for business guidance, use of IT in design and calculations, and the training of skilled workers. Particular support will be given for the dispatch of advisers, etc. to facilitate the introduction of housing performance labeling systems under the Law to Promote the Quality Assurance of Housing by Small and Medium Residential Builders.

10. Measures for small and medium realtors

(1) Development of the real estate market
In order to promote cooperation among small and medium realtors and contribute to the development of the real estate market, the functions of designated transaction organizations will be enhanced and their use promoted.

Regarding the system of designated transaction organizations, it is necessary to raise interest among consumers as well as small and medium realtors and to raise consumer confidence in the system. Uptake of the system will also be promoted.

(2) Financial measures for small and medium realtors
Loan guarantees and interest coverage will be provided for equipment fund loans to small and medium realtors by government-affiliated small business financial institutions, and joint facility funds and funds for cooperation among business associations will be provided by the Real Estate Transaction Modernization Center Foundation.

3. Regional improvement measures

1. In order to improve the management of small enterprises in regions covered, subsidies will be provided for advice and guidance services provided by business advisers responsible for regional improvement appointed by chambers of commerce and industry and prefectural federations of commerce and industry associations. In line with the Cabinet’s decision of July 1996, support for business advisers responsible for regional improvement will continue to be systematically shifted to ordinary countermeasures (¥96 million subsidy).

2. In order to promote cooperation and collaboration among SMEs in regions covered, regional improvement upgrading programs funded by upgrading loans will be promoted.
4. Measures for SMEs in Okinawa

With regard to measures for SMEs in Okinawa, ¥76 billion will be allocated for loans to SMEs by the Okinawa Development Finance Corporation. The special loan program will also be expanded, and the terms of loans improved.

Chapter 14
Small business financing and tax measures in the current fiscal year

1. Enhancement of small business financing

1. Loan plans of government-affiliated financial institutions
The Shoko Chukin Bank reports only long-term loans. The scale of loans is planned, and it is possible to exceed this amount to meet actual demand.

2. Enhancement of the credit enhancement system
Steps will be taken to strengthen the business fundamentals of JASMEC and credit guarantee corporations.

2. Amendments to taxation

In view of recent economic conditions, the following amendments will be made to the tax system in FY2001 in order to encourage capital investment by SMEs:

(1) Promotion of capital investment, etc. by SMEs (related to economic measures)
  1) Approximately one-year extension of the small and medium enterprise capital investment promotion tax scheme (until March 31, 2002)
  2) Two-year extension of the deadline (until March 31, 2003) for eligibility for tax measures to strengthen the technological base of small and medium enterprises (one-year extension of the special increase from 6% to 10% of the special tax deduction rate).

(2) Facilitation of SME business succession
  1) Special exemptions to the calculation of the taxable value for inheritance tax of small building lots will be expanded:
     a. The upper limit on the area of specific building lots for business use eligible for special tax exemptions (80% reduction) will be increased from 330m² to 400m².
     b. The upper limit on the area of specific building lots for residential use eligible for special tax exemption (80% reduction) will be increased from 200m² to 240m².
  2) The basic deduction for gift tax will be raised (from ¥600,000 to ¥1,110,000).

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<tr>
<th>Japan Finance Corporation for Small Business</th>
<th>Revised amount planned, FY2000</th>
<th>Amount initially planned, FY2001</th>
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<tbody>
<tr>
<td>National Life Finance Corporation</td>
<td>25,444</td>
<td>20,071</td>
</tr>
<tr>
<td>Shoko Chukin Bank</td>
<td>41,200</td>
<td>32,500</td>
</tr>
<tr>
<td></td>
<td>18,900</td>
<td>19,300</td>
</tr>
</tbody>
</table>

Note: Based on ordinary loans in the case of the National Life Finance Corporation.

<table>
<thead>
<tr>
<th>(¥100 million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment by credit insurance department of JASMEC</td>
</tr>
<tr>
<td>FY2000 budget</td>
</tr>
<tr>
<td>FY2001 budget</td>
</tr>
<tr>
<td>5,987.6</td>
</tr>
<tr>
<td>(5,806.4)</td>
</tr>
<tr>
<td>261.2</td>
</tr>
</tbody>
</table>

| Credit guarantee corporation fund subsidy          |
| FY2000 budget                                      |
| FY2001 budget                                      |
| 300                                                |
| (260)                                              |
| 40                                                 |

Note: Figures in parentheses indicate amounts of investment and subsidies under the supplementary budget.
Chapter 15
Promotion of surveys and public information activities

1. Surveys

Industrial production indices, Bank of Japan wholesale price indices, trade statistics and other statistics will be recompiled in order to determine manufacturing production, shipment and inventory indices by size of enterprise, domestic wholesale price indices by size of enterprise, and the value of imports and exports of typical SME products. In addition, the following surveys will be conducted:

1. Surveys of business conditions in the small business sector, trends in capital investment in the small and medium wholesale, retail and service sectors, and bankruptcies in the small business sector, etc.
2. Preparation of inter-industry relations tables by size of enterprise for industries such as manufacturing
3. Preparatory work on the second basic survey of commerce and industry (scheduled for 2003)
4. Research and investigation of methods of evaluating small business policy

2. Public information activities

1. Public information activities conducted via radio and Internet media

Public awareness of the problems faced by SMEs will be raised through television broadcasts focusing on specific cases in the small business sector in order to give some idea of the self-help efforts being undertaken by SMEs and future courses of action, and to encourage the spread of small business measures. The usefulness of the Small and Medium Enterprise Agency’s website will also be improved, and the number of small business subscribers to e-mail services further increased.

2. Use of print media for publicity

“A Compendium of Measures for Small and Medium Enterprises” will be produced for distribution to local governments and organizations providing guidance for SMEs, etc. to explain and provide a resource for increasing awareness and use of small business measures implemented in FY2001.

In order to promote implementation and uptake of small business measures, pamphlets and leaflets will be produced explaining measures in concise, concrete terms, and these will be widely distributed to SMEs through local governments and other organizations working with SMEs.

3. “Small and Medium Enterprise Agency for a Day” event

In order to hear directly the views and wishes concerning small business measures so that they can be reflected in future government policies, a “Small and Medium Enterprise Agency for a Day” event is scheduled to be held in Osaka Prefecture.
Appended tables and notes

Notes:
1. The business conditions DI is calculated by subtracting the percentage of firms that said business had “deteriorated” compared with the same period a year earlier from the percentage that said business had “improved”.
2. The DI for IT-related manufacturing was determined by combining the DIs for general machinery, electrical machinery and precision machinery manufacturers.
Appended Table 111-2  Trend in number of business bankruptcies
(original figures)

Appended Table 111-3  Breakdown of small and medium business establishments and SME bankruptcies by industry

(1) Breakdown of small and medium business establishments by industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>10.0%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>11.2%</td>
</tr>
<tr>
<td>Wholesale/retail</td>
<td>43.1%</td>
</tr>
<tr>
<td>Services</td>
<td>26.7%</td>
</tr>
<tr>
<td>Others</td>
<td>9.1%</td>
</tr>
</tbody>
</table>


(2) Breakdown of SME bankruptcies by industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>33.5%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>18.8%</td>
</tr>
<tr>
<td>Wholesale/retail</td>
<td>29.0%</td>
</tr>
<tr>
<td>Services</td>
<td>11.2%</td>
</tr>
<tr>
<td>Others</td>
<td>10.8%</td>
</tr>
<tr>
<td>others</td>
<td>9.1%</td>
</tr>
</tbody>
</table>


Note: SMEs are sole proprietorships and corporations with capital of less than ¥100 million.

(3) Number of bankruptcies as proportion of number of business establishments


Note: Number of bankruptcies at the end of each calendar year.
### Append Table 131-1  Amendments to the Temporary Employment Law

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1996</td>
<td>Addition of 10 new categories of business (such as R&amp;D and business planning/drafting) to the existing 16 categories to give a total of 26.</td>
</tr>
</tbody>
</table>
| December 1999 | Services covered liberalized (*“negative list”*)  
- Most services except port transport, construction, security services, medical services and manufacturing services opened up to temporary employment.  
- Assignments in new categories limited to maximum of 1 year.                                                                                       |
| December 2000 | Lifting of ban on temp-to-perm employment services whereby temporary employees are taken on as potential permanent employees and offered permanent employment after their assignment. |

**Reference** 26 fields covered before November 1999

| 1. Software development | 14. Building cleaning services |
| 2. Mechanical design    | 15. Operation, inspection and maintenance of buildings and facilities |
| 3. Operation of broadcasting equipment, etc. | 16. Guide, reception and parking lot management services |
| 4. Direction of broadcasting programs, etc. | 17. Research and development |
| 5. Operation of office equipment, etc. | 18. Planning and drafting |
| 6. Interpreting, translation and stenography | 19. Production and editing of books, etc. |
| 7. Secretarial services | 20. Advertising design |
| 9. Investigating        | 22. Announcer services |
| 12. Demonstrations      | 25. Sales engineer business |
| 13. Tour guide services | 26. Stage settings and properties for broadcasting programs, etc. |
### Appended Table 131-2  Change in occupational makeup of main industries in the U.S. (Unit: %)

<table>
<thead>
<tr>
<th></th>
<th>Managerial</th>
<th>Specialist</th>
<th>Technical</th>
<th>Sales</th>
<th>Clerical support</th>
<th>Service</th>
<th>Blue collar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing (durables)</td>
<td>12.6 ⇒ 14.3 (1.7)</td>
<td>9.6 ⇒ 10.8 (1.2)</td>
<td>4.1 ⇒ 3.4 (-0.7)</td>
<td>2.5 ⇒ 2.5 (0.0)</td>
<td>10.4 ⇒ 9.0 (-1.4)</td>
<td>1.4 ⇒ 1.2 (-0.2)</td>
<td>59.4 ⇒ 58.9 (-0.5)</td>
</tr>
<tr>
<td>Finance, insurance and real estate</td>
<td>26.3 ⇒ 28.9 (2.6)</td>
<td>3.1 ⇒ 4.1 (1.0)</td>
<td>2.0 ⇒ 1.9 (-0.1)</td>
<td>24.3 ⇒ 24.9 (0.6)</td>
<td>36.9 ⇒ 33.2 (-3.7)</td>
<td>3.6 ⇒ 3.8 (0.2)</td>
<td>3.8 ⇒ 3.1 (-0.7)</td>
</tr>
<tr>
<td>Retailing</td>
<td>8.1 ⇒ 8.7 (0.6)</td>
<td>1.7 ⇒ 2.1 (0.4)</td>
<td>0.6 ⇒ 0.9 (0.3)</td>
<td>41.8 ⇒ 42.1 (0.3)</td>
<td>7.7 ⇒ 6.5 (-1.2)</td>
<td>23.4 ⇒ 23.2 (-0.2)</td>
<td>16.5 ⇒ 16.7 (-0.2)</td>
</tr>
<tr>
<td>Construction</td>
<td>13.0 ⇒ 16.2 (3.2)</td>
<td>1.9 ⇒ 1.7 (-0.2)</td>
<td>0.6 ⇒ 0.6 (0.0)</td>
<td>1.0 ⇒ 0.7 (-0.3)</td>
<td>5.4 ⇒ 4.9 (-0.5)</td>
<td>0.5 ⇒ 0.3 (-0.2)</td>
<td>77.6 ⇒ 75.7 (-1.9)</td>
</tr>
<tr>
<td>Mining</td>
<td>15.3 ⇒ 16.3 (1.0)</td>
<td>11.2 ⇒ 10.2 (-1.0)</td>
<td>3.5 ⇒ 3.1 (-0.4)</td>
<td>0.7 ⇒ 1.8 (1.1)</td>
<td>11.0 ⇒ 8.7 (-2.3)</td>
<td>1.2 ⇒ 1.4 (0.2)</td>
<td>57.3 ⇒ 58.6 (1.3)</td>
</tr>
</tbody>
</table>

Source: Compiled from U.S. Department of Labor, *Employment and Earnings*.

2. Figures in parentheses indicate scale of change over the same period.
Appended Table 211-1  Change in sales DI


Note: The sales DI is calculated by subtracting the percentage of firms that said sales “declined” compared with the same period a year earlier from the percentage that said sales had “increased”.
### Appended Note 213-1  Number of business establishments and business revenues in service industries

<table>
<thead>
<tr>
<th>No. of establishments</th>
<th>Business revenues (¥million)</th>
<th>Growth rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Consumer services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Business services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Specialist services</td>
</tr>
</tbody>
</table>

Source: Compiled by the Small and Medium Enterprise Agency from Ministry of Public Management, Home Affairs, Posts and Telecommunications, *Survey on Service Industries (1999).*

Notes:
1. Included under consumer services are laundry, hairdressing and bathhouse services, parking lot services, other lifestyle services, hotel and accommodation services, entertainment (excluding film and video production services), automobile maintenance, property lease (excluding lease of industrial machinery and equipment and lease of office machinery and equipment).
2. Included under business services are information and investigation services, advertising, other business services, film and video production, lease of industrial machinery and equipment, lease of office machinery and equipment, repair of machinery and furniture, etc. (machinery repair, frame repairs and other unclassified repair services), and waste disposal services.
3. Included under specialist services are law offices, patent offices, notary public offices, conveyancing offices, veterinary services, civil engineering services, design services, writing and art, and private classes.
4. Growth rate is compared with the previous survey (1994).
Group interviews are a method of market research used to reveal the awareness profiles and latent views of subjects by analyzing the language and attitudes that emerge during discussions among subjects. Whereas questionnaire surveys are a method of collecting quantitative data from subjects’ responses to questions, group interviews offer a means of collecting qualitative data about the psychology and values of subjects that are difficult to measure quantitatively.

Outline

- Survey objectives are determined.
- Small groups of 6 to 7 subjects are formed based on group attributes selected to meet the survey objectives.
- Group discussion techniques are employed to allow the subjects to interact in a free and relaxing atmosphere.
- The subjects discuss their frank and honest reactions to specific issues, and these are recorded and analyzed.

The advantage of group interviews is the ease with which they enable the views of consumers to be explored. The disadvantage, however, is that the results can be easily affected by how the interview is organized and the method of analysis. It is therefore important that group interviews and subsequent analyses be conducted by properly trained researchers.
<Sanjo-Tsubame region>
The Sanjo-Tsubame region was a major center for production of Western-style metal tableware for export in the 1980s. The sudden appreciation of the yen following the 1985 Plaza Accord, however, severely weakened the region’s position in export markets. Firms in the region are now fighting to survive by switching to other lines of business, such as the production of houseware.

Source: Ministry of Economy, Trade and Industry, *Census of Manufactures*.
Notes: 1. Compiled based on municipalities (totals for specific SME agglomerations as provided for under the Regional Agglomeration Vitalization Law (Sanjo City + Tsubame City + Yahiko Village + Bunsui Town + Yoshida Town + Nakanokuchi Town + Shimoda Village + Sakae Town)).
2. Business establishments with 4 or more employees.

<Higashi-Osaka region>
In the Higashi-Osaka region, there used to be a concentration of local export-oriented, mass-production industries, such as the drawn wire, wire netting and screw industries, that grew up during the high growth period. These industries have been in decline since the oil crisis, however, and it is becoming increasingly difficult for the region’s firms, concentrated as they are in the same industries, to survive and switch to other lines of business. Aiming to reduce the region’s dependence on “local” industries, cities and chambers of commerce and industry in the region are focusing on supporting the development of new fields of business by individual enterprises.

Source: Ministry of Economy, Trade and Industry, *Census of Manufactures*.
Notes: 1. Compiled based on municipalities (totals for specific SME agglomerations as provided for under the Regional Agglomeration Vitalization Law (Osaka City + Sakai City + Moriguchi City + Hirakata City + Yao City + Neyagawa City + Kawachi-Nagano City + Matsubara City + Daito City + Kadoma City + Higashi-Osaka City + Shijonawate City + Katano City + Mihara Town)).
2. Business establishments with 4 or more employees.
In the Hamamatsu region is concentrated a combination of three core industries—the textile, musical instrument, and motorcycle and automobile industries—along with a wide variety of SMEs in basic technology fields. The region is now in difficulties, however, because of the protracted slump in the textiles industry since the 1970s, the slump in sales of musical instruments due to the maturation of the market and decline in the birthrate in the 1980s, and the slump in the automobile industry due to the collapse of the bubble economy following the high-yen slump of the 1990s. Building on the region’s unbroken tradition of entrepreneurship, the industrial agglomeration has gradually been rebuilt as firms in the region have responded by switching to, entering and starting up in new growth fields, such as the manufacture of optical lasers and control systems.

Source: Ministry of Economy, Trade and Industry, *Census of Manufactures*.

Notes: 1. Compiled based on municipalities (totals for basic technology industrial agglomerations as provided for under the Regional Agglomeration Revitalization Law (western part of Shizuoka Prefecture) (Hamamatsu City + Iwata City + Fukuroi City + Tenryu City + Hamakita City + Kosai City + Asaba Town + Fukuda Town + Ryuyo Town + Toyoda Town + Toyooka Town + Maisaka Town + Arai Town + Yuto Town + Hosoe Town + Inasa Town + Mikkabi Town)).

2. Business establishments with 4 or more employees.
Append Table 214-1 Stages of adoption of IT

1st stage
- In-house data sharing and improvement of efficiency of operations

2nd stage
- Application to receipt of orders (e-commerce, etc.)

3rd stage
- Upgrading of business administration (revision of operations and organization)
## Appended Table 214-2 Main business data providers and data handled

### Fee-charging databanks

Databases of corporate data (including domestic SMEs) and research services

<table>
<thead>
<tr>
<th>Name of provider</th>
<th>Related information</th>
<th>Tokyo Shoko Research, Ltd.</th>
<th>Nikkei Keizai Shim bun</th>
<th>Ministry of Finance</th>
<th>Moody’s</th>
<th>Dun &amp; Bradstreet</th>
<th>Standard &amp; Poor’s</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>statements</td>
<td>COSMOS1</td>
<td></td>
<td></td>
<td>Nikkei basic business file (28,000 companies)</td>
<td></td>
<td></td>
<td>Research Insight (GLOBAL) (at least 10,000 companies)</td>
</tr>
<tr>
<td></td>
<td>(400,000 companies)</td>
<td></td>
<td></td>
<td>Corporate News International (3,900 companies)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COSMOS1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1,140,000 companies)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>indicators</td>
<td>COSMOS1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(400,000 companies)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COSMOS2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1,140,000 companies)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>statements</td>
<td>CCR (company credit report file) (350,000 companies)</td>
<td>Tokyo Shoko Research corporate data (1,090,000 companies)</td>
<td>Nikkei basic business file (28,000 companies)</td>
<td>Corporate News International (3,900 companies)</td>
<td></td>
<td>*D&amp;B company survey report</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Corporate credit survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other specific</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corporate data</td>
<td>CCR (company credit report file) (350,000 companies)</td>
<td>Tokyo Shoko Research corporate data (1,090,000 companies)</td>
<td>Nikkei basic business file (28,000 companies)</td>
<td>Corporate News International (3,900 companies)</td>
<td></td>
<td>*D&amp;B company survey report</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*TSR Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Small and Medium Enterprise Agency (compiled based on Ministry of Economy, Trade and Industry, FY1999 Database Register Compendium).

Notes:
1. Only Ministry of Finance data are available free of charge.
2. * indicates research service.
Appended Table 214-3 Information system security

Types of threat
The threats to information systems and networks may be classified as follows.

<table>
<thead>
<tr>
<th>Types</th>
<th>Threat</th>
<th>Specific instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unintentional</td>
<td>Natural disaster</td>
<td>Earthquakes, fires, lightning, etc.</td>
</tr>
<tr>
<td></td>
<td>Breakdown/disorder</td>
<td>Hardware failures, software problems, communication line disorders, etc.</td>
</tr>
<tr>
<td></td>
<td>Misoperation</td>
<td>Data input errors, incorrect operating methods, etc.</td>
</tr>
<tr>
<td>Intentional</td>
<td>Actions of third parties</td>
<td>Illegal access to systems, destruction of data, wiretapping, etc.</td>
</tr>
<tr>
<td></td>
<td>Actions by other party to communication</td>
<td>Repudiation, etc.</td>
</tr>
</tbody>
</table>

Ensuring security normally means meeting the following three conditions:
1) Confidentiality: Not revealing data to others
2) Integrity: Ensuring that data are not tampered with
3) Availability: Ensuring data can be accessed at all times

Types of intentional threat and recent cases

<table>
<thead>
<tr>
<th>Types</th>
<th>Recent cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaks</td>
<td><strong>Peeking and wiretapping</strong></td>
</tr>
<tr>
<td>Destruction of data</td>
<td>The defacing of government websites has brought this problem to the fore. The Information-technology Promotion Agency issued an urgent warning on February 6, 2001 that “there has been a rash of Japanese websites being defaced”.</td>
</tr>
<tr>
<td>Unavailability</td>
<td><strong>Computer viruses</strong></td>
</tr>
<tr>
<td></td>
<td>A well-known recent example is the “I Love You” worm. 11,109 computer viruses were reported in Japan in 2000, the highest number ever recorded (Information-technology Promotion Agency).</td>
</tr>
<tr>
<td></td>
<td><strong>Denial of service attacks</strong></td>
</tr>
<tr>
<td></td>
<td>A number of major sites, such as Yahoo!, Amazon.com and eBay, were brought down.</td>
</tr>
<tr>
<td>Repudiation and disguise</td>
<td><strong>Fraud, repudiation, impersonation, zombies</strong></td>
</tr>
<tr>
<td>Troublemaking</td>
<td><strong>Slander/defamation, rumor spreading</strong></td>
</tr>
<tr>
<td></td>
<td>In the autumn of 2000, the U.S. Securities and Exchange Commission (SEC) announced legal measures had been taken against 33 corporations and individuals for illegal manipulation of share prices and fraud against investors using the Internet. These fraudulent acts involved the manipulation of share prices through the release of false information via e-mail newsletters, websites, e-mail and bulletin boards by individuals and companies.</td>
</tr>
</tbody>
</table>

Source: Small and Medium Enterprise Agency.
## Appended Table 214-4 Government measures to assist SMEs and close the digital divide

**<Ministry of Economy, Trade and Industry>**

<table>
<thead>
<tr>
<th>Details</th>
<th>Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminars and training</td>
<td>Prefectural support centers for SMEs, chambers of commerce and industry, commerce and industry associations, central association, etc.</td>
</tr>
<tr>
<td>IT seminars for managers (for approx. 300,000 persons) and practical IT training (for approx. 90,000 persons). Practical training in the effective application of IT in business management is also provided for SMEs and small enterprises by chambers of commerce and industry, commerce and industry associations, and central association throughout Japan (for approx. 600,000 persons).</td>
<td></td>
</tr>
<tr>
<td>Forums</td>
<td>Japan Small and Medium Enterprise Corporation (JASMEC)</td>
</tr>
<tr>
<td>IT forums feature keynote speeches by experts, and showcase SMEs that have succeeded in innovating using IT.</td>
<td></td>
</tr>
<tr>
<td>Assignment of specialists</td>
<td>As above</td>
</tr>
<tr>
<td>IT coordinators are sent as requested by companies.</td>
<td></td>
</tr>
<tr>
<td>Environmental development</td>
<td>As above</td>
</tr>
<tr>
<td>Development of SME support services enabling the easy use of various search engines on the Internet (J-net21).</td>
<td></td>
</tr>
<tr>
<td>Trial satellite broadcasts of IT courses and Internet-based virtual courses at the Institute for Small Business Management and Technology.</td>
<td></td>
</tr>
</tbody>
</table>

**<Ministry of Health, Labour and Welfare>**

<table>
<thead>
<tr>
<th>Details</th>
<th>Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancement and expansion of public occupational training</td>
<td>Employment and Human Resources Development Organization of Japan, public occupational training facilities run by prefectures</td>
</tr>
<tr>
<td>Enhancement and expansion of a wide variety of IT education and training courses offered by individual public occupational training facilities covering everything from the basics to specialist knowledge and its application (for approx. 200,000 persons).</td>
<td></td>
</tr>
<tr>
<td>Provision of opportunities to develop skills</td>
<td>As above</td>
</tr>
<tr>
<td>Provision of PCs and instructors at public occupational training facilities available for use by users at weekends and in the evenings as well during the day (for approx. 500,000 persons).</td>
<td></td>
</tr>
<tr>
<td>Training of instructors</td>
<td>As above</td>
</tr>
<tr>
<td>Training programs are held for IT instructors at public occupational training facilities to promote and support IT training within companies.</td>
<td></td>
</tr>
<tr>
<td>Provision of information and advice</td>
<td>As above</td>
</tr>
<tr>
<td>Establishment in each prefecture of regional IT skill development support centers that act as a hub for the regional provision of information and advice.</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Main measures to support SMEs and close the digital divide scheduled for implementation by the end of 2001.*
### Human resource development seminars

- Seminars held at occupational skills development facilities to enable those in employment to acquire the necessary occupational skills and knowledge.
- Courses are designed by facilities taking into consideration the participants’ needs.
- Individual facilities organize order-made seminars to meet the demands of employers’ associations and individual firms.
- Polytechnic centers and polytechnic colleges provide facilities and instructors.

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**Employment and Human Resources Development Organization of Japan**

- **Prefectural centers**
- **Course outline**
  - Management and administrative courses
  - The emphasis of IT seminars is on literacy and basic content.
- **Location**
  - 47 prefectures nationwide
- **Other information**
  - Communication satellite broadcasts are used to enable independently developed seminars to be taken at the “Ability Garden”.
  - Self-improvement and provision of information and advice on development of skills at human resource development corners.

**Lifelong vocational skills development center (“Ability Garden”)**

- **Course outline**
  - Specializes in the development of occupational skills of white-collar workers, and offers small-size classes incorporating advanced teaching materials and training methods.
  - Tokyo
- **Other information**
  - Skill development courses are transmitted by communication satellite nationwide and can be taken at the Employment and Human Resources Development Organization of Japan’s prefectoral centers and polytech centers.

**Vocational skills development promotion centers (Polytech centers)**

- **Course outline**
  - Act as regional centers for the development of occupational skills, and provide training in mechanics, electrical machinery and electronics, housing, and information and communications.
  - Information seminars are more advanced than those provided by the prefectoral centers of the Employment and Human Resources Development Organization of Japan.
  - Chiba Prefecture
- **Other information**
  - Makes available facilities and equipment and organizes development of skills and knowledge and their application.
  - 17 colleges nationwide
- **Other information**
  - Facilities and equipment available to employers’ associations and employers. Advice services also offered.

**Advanced vocational skills development promotion centers (Advanced polytech centers)**

- **Course outline**
  - Technical training is provided in more advanced, cutting-edge fields and skills for technicians and exports on the front-line in companies to keep them up to date with the rapid advances in technology.
  - Chiba Prefecture
- **Other information**
  - Leading role in the provision of information and know-how to other polytech centers.
- **Locations**
  - 60 centers throughout Japan
- **Other information**
  - Makes available facilities and equipment and organizes development of skills and knowledge and their application.
- **Locations**
  - 17 colleges nationwide

**Vocational skills development colleges and vocational skills development junior colleges (polytech colleges)**

- **Course outline**
  - These schools for entrepreneurs offer ready-made and order-made courses in advanced skills and knowledge and their application.
  - Chiba Prefecture
Appended Note 221-1 Calculation of startup and closure rates

Method of calculation of startup rate and closure rate of business establishments between 1996 and 1999 (the same method is used for the calculation of startup and closure rates of enterprises, companies and sole proprietorships)

(1) The Ministry of Public Management, Home Affairs, Posts and Telecommunications' 1999 Establishment and Enterprise Census of Japan classified business establishments according to whether they are continuing in business, started up or closed down.

The number of newly established establishments and number that were closed down are each divided by the period between the surveys (i.e. the date of the 1996 survey (October 1, 1996) to the 1999 survey (July 1, 1999) (33 months/12 = 2.75 years) to determine the annual average number of business establishment startups and closures.

(2) Each is then divided by the number of business establishments in 1996 to determine the startup and closure rates.

* Business establishments by status

Business establishments continuing in business
Business establishments detected by the 1996 Establishment and Enterprise Census of Japan that were still in business on July 1, 1999.

Business establishments newly established
Business establishments established on or after the day following the 1996 Establishment and Enterprise Census of Japan (October 1, 1996), and other business establishments moved from other locations.

Business establishments closed down
Business establishments that closed down on or after the day following the 1996 Establishment and Enterprise Census of Japan, and business establishments that moved to other locations.

* Enterprises covered

a. Sole proprietors
Sole proprietorships excluding branches.

b. Companies
Business companies. (The enterprise industry classification is used for the industrial classification.)

c. Enterprises
Total for the above sole proprietorships and companies.
Appended Table 221-2  Trends in startup and closure rates in the U.S.

<table>
<thead>
<tr>
<th>Year</th>
<th>Startup Rate</th>
<th>Closure Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>13.3</td>
<td>12.0</td>
</tr>
<tr>
<td>1984</td>
<td>14.3</td>
<td>11.8</td>
</tr>
<tr>
<td>1985</td>
<td>14.4</td>
<td>11.2</td>
</tr>
<tr>
<td>1986</td>
<td>14.4</td>
<td>12.2</td>
</tr>
<tr>
<td>1987</td>
<td>13.9</td>
<td>12.5</td>
</tr>
<tr>
<td>1988</td>
<td>13.5</td>
<td>12.5</td>
</tr>
<tr>
<td>1989</td>
<td>13.8</td>
<td>12.0</td>
</tr>
<tr>
<td>1990</td>
<td>13.8</td>
<td>12.0</td>
</tr>
<tr>
<td>1991</td>
<td>13.0</td>
<td>11.6</td>
</tr>
<tr>
<td>1992</td>
<td>13.7</td>
<td>11.4</td>
</tr>
<tr>
<td>1993</td>
<td>13.9</td>
<td>11.7</td>
</tr>
<tr>
<td>1994</td>
<td>14.3</td>
<td>12.0</td>
</tr>
<tr>
<td>1995</td>
<td>12.6</td>
<td>12.0</td>
</tr>
<tr>
<td>1996</td>
<td>12.6</td>
<td>12.5</td>
</tr>
<tr>
<td>1997</td>
<td>12.0</td>
<td>12.0</td>
</tr>
</tbody>
</table>


Notes: 1. The number of enterprises equals the number of enterprises with workers covered by unemployment insurance. Closures due to acquisitions are not included.
2. Startup rate = number of enterprises established each year / number of enterprises in business at the end of each year x 100 (%) 
3. Closure rate = startup rate - rate of increase
Appended Table 221-3  Startup rates based on standard definition, 1988-94
(percentage of enterprises)

Note: As each country’s definition of startup and closure rates differs from the standard definition, the figures were recalculated based on each country’s statistics. The consequent range of error is shown by the vertical line.
## Appended Table 222-1 Outline of legislation for development of a recycling-based economic system

<table>
<thead>
<tr>
<th>Laws and measures</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Law for Establishing of the Recycling-based Society (Entered effect in June 2000)</td>
<td>This law lays down the basic principles for the realization of a recycling-based society that has little impact on the environment. Methods of waste disposal are prioritized in the following order: (1) reduction of emissions, (2) reuse, (3) recycling, (4) heat recovery, and (5) proper disposal. This law also clarifies the roles and responsibilities of central and local governments, businesses and the public, and clarifies the “polluter responsibility” of the public and the “extended producer responsibility” of producers, who have a certain responsibility for products up to the point of disposal.</td>
</tr>
<tr>
<td>Amended Waste Disposal Law (introduced in three stages)</td>
<td>The amended Waste Disposal and Public Cleansing Law. This law is designed to improve the reliability and safety of waste disposal by increasing the responsibility of companies that generate waste (“responsibility to restore to original state”).</td>
</tr>
<tr>
<td>Law of Promotion of Effective Utilization of Resources (Entered effect in April 2001)</td>
<td>Law of Promotion of Effective Utilization of Resources. The aim of this law is to promote independent efforts by businesses at each stage of production, distribution and consumption and to encourage businesses to meet their obligations in order to promote the effective use of resources, reduce waste emissions and help protect the environment.</td>
</tr>
<tr>
<td>Energy Conservation and Recycling Support Law (Entered effect in June 1993)</td>
<td>Law on Temporary Measures to Promote Business Activities for the Rational Use of Energy and the Utilization of Recycled Resources. The aim of this law is to promote the rational and proper use of energy sources and other resources in response to the new economic environment.</td>
</tr>
<tr>
<td>Container and Packaging Recycling Law (Partially effective from April 1997, scope expanded in 2000)</td>
<td>Law for Promotion of Sorted Collection and Recycling of Containers and Packaging. The aim of this law is to reduce the quantity of domestic waste generated and enable the reuse and recycling of containers and packaging by promoting their sorted collection and recycling. Consumers, businesses and municipalities each have their own roles to play.</td>
</tr>
<tr>
<td>Home Electronics Recycling Law (Entered effect in April 2001)</td>
<td>Law for Recycling of Specified Kinds of Home Appliances. The aim of this law is to facilitate the appropriate collection and recycling of used consumer electronics products, the proper disposal of discarded consumer electronics products, and the effective use of resources in order to help protect the living environment and contribute to the sound development of the economy.</td>
</tr>
<tr>
<td>Food Recycling Law (Entered effect in April 2001)</td>
<td>Food Waste Recycling Law. This Law requires that food waste generated by firms in the food manufacturing and food service industries be recycled for use as animal feed, etc.</td>
</tr>
<tr>
<td>Construction Material Recycling Law (Scheduled to enter effect by June 2001)</td>
<td>Building and Construction Recycling Law. Under this law, builders are required to sort materials into various types (e.g. concrete, asphalt, wood, etc.) for recycling when demolishing buildings.</td>
</tr>
<tr>
<td>Green Purchasing Law (Scheduled to enter effect by April 2001)</td>
<td>Environmental Materials Procurement Promotion Law. Under this law, the State and local governments are required to procure products that have little impact on the environment.</td>
</tr>
<tr>
<td>Plan of action for promoting the recycling of waste paper</td>
<td>Under the action plan to promote the recycling of waste paper announced in September 1997, activities such as intensive public awareness campaigns are organized to encourage the recycling of waste paper.</td>
</tr>
</tbody>
</table>

Source: Ministry of Economy, Trade and Industry.
**Appended Table 223-1** Proportion of manufacturers cooperating with external organizations

<table>
<thead>
<tr>
<th>Cooperation</th>
<th>SMEs (%)</th>
<th>Large enterprises (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>with SME in same industry</td>
<td>27</td>
<td>17.3</td>
</tr>
<tr>
<td>cooperation with public research institute</td>
<td>25.9</td>
<td></td>
</tr>
<tr>
<td>cooperation with SME in other industry</td>
<td>33.1</td>
<td></td>
</tr>
<tr>
<td>cooperation with university</td>
<td>24</td>
<td>20.1</td>
</tr>
<tr>
<td>cooperation with large enterprise in same industry</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>cooperation with large enterprise in other industry</td>
<td>64.5</td>
<td></td>
</tr>
<tr>
<td>cooperation with national research institute</td>
<td>17.3</td>
<td>35.5</td>
</tr>
<tr>
<td>cooperation with national research institute</td>
<td>32.5</td>
<td></td>
</tr>
<tr>
<td>cooperation with other organization</td>
<td>10.6</td>
<td>7</td>
</tr>
<tr>
<td>cooperation with other organization</td>
<td>27.3</td>
<td>27.3</td>
</tr>
<tr>
<td>no cooperation with external organizations</td>
<td>26.4</td>
<td>8.2</td>
</tr>
</tbody>
</table>


Notes:
1. Totals exceed 100 due to multiple responses.
2. The survey covered enterprises in manufacturing industry engaged in research and development.

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**Appended Note 223-2** Development of TLO-related legislation

The Law for Promoting Technology Transfer from Universities to Industry (known for short as the University-Industry Technology Transfer Law) entered effect in August 1998.

Summary:
The purpose of this law is to foster the development of technology licensing organizations (TLOs) to promote transfers of research at universities and similar organizations to industry, raise the level of industrial technology, encourage the development of new industries, and stimulate research activity at universities.

The Law on Special Measures for Industrial Revitalization entered effect in October 1999.
Summary: 
The purpose of this law is to reduce the patent royalties payable to TLOs approved under the University-Industry Technology Transfer Law.

The Law to Strengthen Industrial Technical Ability entered effect in April 2000.
Summary: 
The purpose of the law is to enable TLOs to use national university facilities free of charge.

National Personnel Authority Regulation 14-17 was introduced under Article 103 of the National Public Service Law in April 2000.
Summary: 
This enables staff of national universities to take on other work, such as directorships of TLOs.

National Personnel Authority Regulation 14-18 was introduced under Article 103 of the National Public Service Law in April 2000 in conjunction with National Personnel Authority Regulation 14-19.
Summary: 
This enables staff of national universities to be directors of enterprises making use of research findings (14-18) and auditors of joint-stock companies (14-19).
### Appended Table 223-3 Transfers of technology by approved Japanese TLOs

<table>
<thead>
<tr>
<th>Name of organization</th>
<th>Type of organization</th>
<th>Main universities involved</th>
<th>Date of approval</th>
<th>Number of technology licenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hokkaido TLO</td>
<td>Joint-stock company</td>
<td>Hokkaido University</td>
<td>December 1999</td>
<td>4</td>
</tr>
<tr>
<td>Tohoku Techno-Arch</td>
<td>Joint-stock company</td>
<td>Tohoku University</td>
<td>December 1998</td>
<td>7</td>
</tr>
<tr>
<td>Institute of Tsukuba Liaison</td>
<td>Joint-stock company</td>
<td>Tsukuba University</td>
<td>April 1999</td>
<td>1</td>
</tr>
<tr>
<td>Center for Advanced Science and Technology Incubation (CASTI)</td>
<td>Joint-stock company</td>
<td>Tokyo University</td>
<td>December 1998</td>
<td>10</td>
</tr>
<tr>
<td>Circle for the Promotion of Science and Engineering (CPSE)</td>
<td>Incorporated foundation</td>
<td>Tokyo Institute of Technology</td>
<td>August 1999</td>
<td>11</td>
</tr>
<tr>
<td>Nihon University Business Incubation Center (NUBIC)</td>
<td>University body</td>
<td>Nihon University</td>
<td>December 1998</td>
<td>11</td>
</tr>
<tr>
<td>Waseda University Technology Licensing Organization</td>
<td>University body</td>
<td>Waseda University</td>
<td>April 1999</td>
<td>7</td>
</tr>
<tr>
<td>Keio University Intellectual Property Center</td>
<td>University body</td>
<td>Keio University</td>
<td>August 1999</td>
<td>10</td>
</tr>
<tr>
<td>Tokyo Denki University Center for Industrial, Government and Academic Cooperation</td>
<td>University body</td>
<td>Tokyo Denki University</td>
<td>June 2000</td>
<td>0</td>
</tr>
<tr>
<td>Tama TLO</td>
<td>Joint-stock company</td>
<td>Universities in Tama district of Tokyo</td>
<td>December 2000</td>
<td>0</td>
</tr>
<tr>
<td>Yamanashi TLO</td>
<td>Joint-stock company</td>
<td>Yamanashi University</td>
<td>September 2000</td>
<td>0</td>
</tr>
<tr>
<td>Nagoya Industrial Science and Technology Institute</td>
<td>Incorporated foundation</td>
<td>Nagoya University</td>
<td>April 2000</td>
<td>0</td>
</tr>
<tr>
<td>Kansai TLO</td>
<td>Joint-stock company</td>
<td>Universities in Kansai region</td>
<td>December 1998</td>
<td>4</td>
</tr>
<tr>
<td>New Industry Research Organization (TLO Hyogo)</td>
<td>Incorporated foundation</td>
<td>Kobe University</td>
<td>April 2000</td>
<td>2</td>
</tr>
<tr>
<td>Yamaguchi TLO</td>
<td>Limited company</td>
<td>Yamaguchi University</td>
<td>September 2000</td>
<td>3</td>
</tr>
<tr>
<td>Kita-Kyushu Techno Center</td>
<td>Joint-stock company</td>
<td>Kyushu Institute of Technology</td>
<td>April 2000</td>
<td>4</td>
</tr>
<tr>
<td>University Industry Partnership Corporation Kyushu</td>
<td>Joint-stock company</td>
<td>Kyushu University</td>
<td>April 2000</td>
<td>0</td>
</tr>
</tbody>
</table>

**Source:** Compiled by the Small and Medium Enterprise Agency.

**Note:** The number of technology licenses indicates the total number of licenses granted since the establishment of the TLO and does not include option agreements.

### Appended Note 223-4 Bayh-Dole Act

The Patent and Trademark Act Amendments of 1980, known more commonly as the Bayh-Dole Act, allows universities to retain the rights to inventions made as a result of federally sponsored research. It entered effect in 1980, and was amended by the 1983 Memorandum on Government Patent Policy and 1984 Trademark Clarification Act. The Bayh-Dole system was completed in 1987 by the 1987 37CFR (Code of Federal Regulation). This enabled technology “seeds” to be concentrated and accumulated in universities, and also shifted the focus of university research to the needs of businesses, allowing the cooperative division of labor between universities and industry.

### Appended Note 223-5 Science parks

The International Association of Science Parks (IASP) defines science parks as real estate projects that:
1) Have a cooperative relationship with institutions of higher education and research, such as universities.
2) Are intended to promote the formation and growth of knowledge intensive, high-value-added tertiary industry on the site.
3) Continuously provide support (provided by the management of the site) for the improvement of technology and business skills of tenant businesses.
Main methods of mergers and acquisitions

1. Share transfer
   A method of transferring management rights whereby the seller transfers to the buyer existing issued shares in the company being transferred. Cases range from those resulting in a transfer of control to transfers of a minority of shares as part of a capital tieup. A share transfer does not require any complex procedures regarding, for example, the transfer of individual assets, as required when individual business operations are transferred, and can be effected just by issuing share certificates and amending the register of shareholders.

   The rights and relations of the company undergo no change (e.g. in respect of the employment of employees, relations with customers and suppliers, contracts with third parties, and business licenses and approvals).

2. Underwriting of new shares
   The company being acquired makes a preferential allocation of new shares to a third party (the acquiring company). These shares are underwritten by the buyer. In the case of a transfer of existing shares, payment for the transfer is made to the shareholder (i.e. the seller). In the case of the underwriting of new shares, however, the issue value is paid to the issuer, thus boosting the capitalization of the company being acquired.

3. Sale of business
   A method of transfer whereby the business assets pertaining to a particular business are sold to a buyer. Effective for transferring only part of a company’s business, this method is used for transferring a business to a third party, and for reorganizing and consolidating operations by transferring businesses between companies in the same group.

   As only specific credits and liabilities are transferred, there is little risk of there arising accidental liabilities.

   The sale of a business requires that parties to transactions and other relations be appropriately amended. Employees are as a rule also transferred, though this can cause problems regarding, for example, what to do about the retirement benefits payable to employees by the seller.

4. Merger
   A method whereby two or more companies are consolidated into one. A merger can either take the form of a takeover or the establishment of a new company. If the buyer is unlisted, the seller receives shares rather than cash, which makes it difficult for the founder to achieve a return.

5. Management buyout (MBO)
   Similar to the traditional Japanese practice of a proprietor setting up a long-time employee in business, and therefore considered to be more acceptable to Japanese companies.

   This method enables the existing management and outside investors to acquire the right of management of a subsidiary or division of a company, which it is assumed will continue in the same business.

   This method can also be used by SMEs as a means of ensuring succession where the second-generation manager has few controlling shares, and to sell off a business to the management where there is no successor. As the management of the new company is familiar with the business, MBOs represent a comparatively low lending (credit) risk for the financial institutions providing the funding.

6. Management buyin (MBI)
   One form of MBO where an outside management team sent set up by a buyer (composed of persons with experience of the same line of business or experts in corporate restructuring) acquires a business. Employees and a management team are sent in after an investment group, such as an investment company, has acquired a majority of the shares in a company facing problems (such as the lack of a successor, slump in performance or postponement of going public) to participate in the company’s management. The advantage of this method for the recipient is that it ensures succession and strengthens the management structure, and the advantage for the investor is the capital gain from the sale to a third party or going public in the future.

   Because of the involvement of business exports, MBIs offer an effective strategy for companies managed by people with technical knowledge but no management experience, and companies with no directors or employees raised within the company who management skills.

   As MBIs are acquisitions by an outsider, this method means that fees must be paid. There also exists the possibility of being unable to obtain information regarding off-the-book debt. As outsiders are invited into the company, there is the additional risk of friction with existing employees.

Source: JASMEC, Survey of M&As among Small Businesses (March 2000) and others.
### Appended Table 223-7  Development of merger and acquisition legislation

<table>
<thead>
<tr>
<th>Name of law</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifting of ban on pure holding companies</td>
<td>Pure holding companies are defined under Article 9 paragraph 3 of the Antimonopoly Law as &quot;companies whose principal purpose is the control of the business activities of domestic companies through share ownership&quot;. The trend toward deregulation resulted in the ban on the establishment of holding companies that &quot;do not excessively concentrate business control&quot; being lifted. The establishment of pure holding companies will enable the transfer of much of the authority of the &quot;family corporations&quot; so prevalent in Japan to affiliated business corporations.</td>
</tr>
<tr>
<td>(Entered effect in December 1997)</td>
<td></td>
</tr>
<tr>
<td>Streamlining and rationalization of merger procedures</td>
<td>The streamlining and rationalization of merger procedures resulted in the abolition of the requirement to hold general meetings for reporting takeovers and establishing newly merged corporations, and also made it unnecessary to individually notify creditors once a public announcement has been made to creditors in the official gazette and the newspapers stipulated in the articles of association. The patterns of mergers between companies were also revised, doing away with the need, among other things, to obtain court approval in the case of a merger between a joint-stock and a limited company. This is expected to speed up and reduce the cost of M&amp;As.</td>
</tr>
<tr>
<td>(Entered effect in October 1997)</td>
<td></td>
</tr>
<tr>
<td>Easing of requirements regarding notification of the Fair Trade Commission</td>
<td>Prior to amendment, the Antimonopoly Law required that the Fair Trade Commission (FTC) be notified in advance if a company intended to merge or takeover, in whole or in part, important business operations. The consolidation of small companies and mergers between parents and subsidiaries and between affiliates, however, did not have to be reported to the FTC (Article 15 paragraphs 2 and 3 and Article 16 paragraphs 2 and 3 of the Antimonopoly Law). The streamlining of procedures has reduced the burden both on the authorities and on companies.</td>
</tr>
<tr>
<td>(Entered effect in January 1999)</td>
<td></td>
</tr>
<tr>
<td>Stock swap system</td>
<td>The establishment of this system has enabled the partial exchange of treasury shares for shares financed in kind by the company being made a subsidiary so as to create a wholly owned subsidiary. The buyer does not need to raise funds externally, thus reducing the cost of acquisition. Even if there is opposition to an acquisition from shareholders, a wholly owned subsidiary can still be created by passing a special resolution at a shareholders’ meeting. In the event of the sale of unlisted shares, the seller is normally liable for capital gains tax. Under the stock swap system, however, taxation can be deferred until the sale of listed shares received as a result of the swap. The creation of wholly owned subsidiaries below a certain size is covered by a simplified stock swap system that does away with the need for approval by a shareholders’ meeting. In tandem with this system, there was also established a share transfer system for creating a new company owning 100% of treasury shares (i.e. a pure holding company) by transferring all of a company’s treasury shares to a newly established company and taking over the shares of the newly established company instead.</td>
</tr>
<tr>
<td>(Entered effect in October 1999)</td>
<td></td>
</tr>
<tr>
<td>Civil Rehabilitation Law</td>
<td>Enacted in order to help rebuild companies such as SMEs in danger of collapse (Article 1). Under Article 42, SMEs going through a slump can generally manage and dispose of their assets while continuing to engage in business, enabling them to rapidly rebuild by selling off profitable operations and reducing security interests. After the decision has been taken to initiate rehabilitation procedures, a company can sell off a whole or part of its business with court approval independent of the rehabilitation procedures and without the need for a special resolution to be passed at a shareholders’ meeting (Article 43), allowing it to quickly sell off highly profitable operations to buyers and new companies.</td>
</tr>
<tr>
<td>(Entered effect in April 2000)</td>
<td></td>
</tr>
<tr>
<td>Corporate division system</td>
<td>Introduced by an amendment to Commercial Law in 2000. Company breakups can be either bunkatsu breakups or bunsha breakups, depending upon to whom shares in the company that is broken up are allocated. A bunkatsu breakup is where a division is split off from a company to create another company, at which time shares in that company are acquired by the shareholders of the original company. A bunsha breakup is where a division is split off from a company to create another company, and the shares in the company are acquired by the original company. In both cases 1) a special resolution must be passed at a shareholders’ meeting, 2) there is no need for an investigator conducted by an inspector, and 3) all debt is inherited in one lump.</td>
</tr>
<tr>
<td>(Entered effect in April 2001)</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** JASMEC, *Survey of M&As among Small Businesses* (March 2000) and others.

**Note:** This table only shows the laws relating to the main text, and does not cover all M&A-related legislation.
According to JASMEC’s *Survey of M&As among Small Businesses* (March 2000, pp.107-108), the perceived merits of M&As include the following:

- Success in starting up a new business and strengthening manufacturing operations as a result of acquisition.
- The M&A is bearing fruit as a result of the expansion of the user base, acquisition of technical experts and enhancement of the sales force.
- The M&A was initially costly, but sales are steadily rising and it has proved more beneficial than expected. The morale of employees of the company acquired has also improved.
- A sell-off has helped the company remain in business and achieve returns for the founder. As well as speeding up decision-making and strengthening credit, the M&A has offered the opportunity to learn from the business methods of the acquiring company.

At the same time, the following were raised as the main reasons for problems with M&As:

- Difficulty of merging the corporate cultures and management systems of the two companies.
- The other company’s technical level and quality of workforce was less than the feasibility study had suggested.
- Discovery of non-performing loans at the other company.
## Appended Table 223-9 Views on M&As

(Unit: %)

<table>
<thead>
<tr>
<th>&lt;Image of M&amp;As&gt;</th>
<th>Yes, definitely</th>
<th>Yes, somewhat</th>
<th>No, not much</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Effective from point of view of business strategy</td>
<td>46.1</td>
<td>37.7</td>
<td>10.1</td>
<td>6.2</td>
</tr>
<tr>
<td>2) Effective means of ensuring business succession</td>
<td>26.1</td>
<td>37.4</td>
<td>22.4</td>
<td>14.0</td>
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<tr>
<td>3) Strong negative image of “selling out”</td>
<td>14.8</td>
<td>33.3</td>
<td>25.2</td>
<td>26.7</td>
</tr>
<tr>
<td>4) Danger of creditworthiness and continuation in business being affected by leaks regarding M&amp;A</td>
<td>25.3</td>
<td>38.6</td>
<td>24.2</td>
<td>12.0</td>
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<td>5) Effective for listed and OTC registered companies, but unsuited to SMEs</td>
<td>16.3</td>
<td>24.6</td>
<td>29.0</td>
<td>30.1</td>
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<td>6) Unsuitied to the Japanese corporate environment</td>
<td>8.1</td>
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<tr>
<td>7) More effective than starting up a new business from scratch</td>
<td>46.9</td>
<td>40.5</td>
<td>8.5</td>
<td>4.1</td>
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</table>

<table>
<thead>
<tr>
<th>&lt;M&amp;A methods and know-how&gt;</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8) Lack of methods of financing M&amp;As</td>
<td>38.0</td>
<td>39.4</td>
<td>15.2</td>
<td>7.4</td>
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<tr>
<td>9) Shortage of corporate data for M&amp;As</td>
<td>45.5</td>
<td>41.2</td>
<td>9.5</td>
<td>3.7</td>
</tr>
<tr>
<td>10) Don’t know how to assess value of company and business operations</td>
<td>35.4</td>
<td>41.6</td>
<td>13.6</td>
<td>9.4</td>
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<td>11) Don’t know what effects an M&amp;A might have</td>
<td>16.7</td>
<td>29.3</td>
<td>32.5</td>
<td>21.5</td>
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<tr>
<td>12) Lack of understanding of M&amp;A methods and procedures</td>
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<td>44.7</td>
<td>11.1</td>
<td>6.8</td>
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Source: JASMEC, Survey of M&As among Small Businesses (March 2000).
### Appended Table 223-10 Ownership of principal place of business (by size of workforce)

<table>
<thead>
<tr>
<th>Size of Workforce</th>
<th>Owned in name of individual</th>
<th>Owned in name of corporation</th>
<th>Borrowed</th>
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<tr>
<td>Overall</td>
<td>66.1</td>
<td>13.0</td>
<td>20.9</td>
</tr>
<tr>
<td>1–2</td>
<td>78.1</td>
<td>2.2</td>
<td>19.7</td>
</tr>
<tr>
<td>3–4</td>
<td>75.9</td>
<td>4.6</td>
<td>19.5</td>
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<td>5–9</td>
<td>63.8</td>
<td>10.5</td>
<td>25.7</td>
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<tr>
<td>10–49</td>
<td>51.3</td>
<td>31.0</td>
<td>17.7</td>
</tr>
<tr>
<td>50 or over</td>
<td>40.0</td>
<td>40.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>

**Source:** People’s Life Finance Corporation Research Institute, *Questionnaire Survey of Successors* (July 1996).

**Notes:**
1. “Owned in name of individual” means that the site or buildings (or both) of the principal place of business are owned by the proprietor or the proprietor’s family.
2. “Owned in name of corporation” means that the site or buildings (or both) of the principal place of business are owned by a corporation and are not “owned in name of individual”.
3. “Borrowed” means that the site and buildings of the principal place of business are borrowed.
## Appended Table 223-11 Outline of methods of valuation of unquoted shares

### Calculation of value by comparison with similar industry companies

**Valuation**

\[ \text{Valuation} = \frac{A \times (b \times \frac{c}{C} + \frac{d}{D})}{5} \times \text{allowance} \]

**Allowance:**
- Large enterprises: 0.7
- Medium-sized companies: 0.6
- Small companies: 0.5

### Calculation of net worth

**Value of total assets - total liabilities - (inheritance tax assessment of net worth - net worth based on book value) \times liquidation tax rate**

(42%)

### <Size criteria>

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total value of assets (based on book value) and number of employees at end of previous term</th>
<th>Value of transactions (sales) in year prior to end of previous term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large companies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale</td>
<td>¥2 billion or over and over 50 employees</td>
<td>¥8 billion or over</td>
</tr>
<tr>
<td>Retail and services</td>
<td>¥1 billion or over and over 50 employees</td>
<td>¥2 billion or over</td>
</tr>
<tr>
<td>Other</td>
<td>¥1 billion or over and over 50 employees</td>
<td>¥2 billion or over</td>
</tr>
<tr>
<td><strong>Mediums-sized companies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale</td>
<td>¥70 million or over and under ¥2 billion, and over 5 employees</td>
<td>¥200 million or over, and under ¥8 billion</td>
</tr>
<tr>
<td>Retail and services</td>
<td>¥40 million or over and under ¥1 billion, and over 5 employees</td>
<td>¥60 million or over, and under ¥2 billion</td>
</tr>
<tr>
<td>Other</td>
<td>¥50 million or over and under ¥1 billion, and over 5 employees</td>
<td>¥80 million or over, and under ¥2 billion</td>
</tr>
<tr>
<td><strong>Small companies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale</td>
<td>Under ¥70 million and 5 or fewer employees</td>
<td>Under ¥200 million</td>
</tr>
<tr>
<td>Retail and services</td>
<td>Under ¥40 million and 5 or fewer employees</td>
<td>Under ¥60 million</td>
</tr>
<tr>
<td>Other</td>
<td>Under ¥50 million and 5 or fewer employees</td>
<td>Under ¥80 million</td>
</tr>
</tbody>
</table>

Source: Compiled by the Small and Medium Enterprise Agency from National Life Finance Corporation Research Institute, Tax Knowledge to Facilitate Smooth Business Succession.

Note: Companies with 100 or more employees are treated as large companies regardless of the value of total assets and value of transactions.
Supplementary statistical data
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<th>Description</th>
<th>Page</th>
</tr>
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<td>10</td>
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<td>Number of employees in manufacturing</td>
<td>11</td>
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<td>12</td>
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<td>14</td>
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<td>Table 10</td>
<td>Number, employees and sales of wholesale outlets</td>
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<td>Table 11</td>
<td>Number, employees and sales of retail outlets</td>
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<td>29</td>
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<td>Table 23</td>
<td>Summary of budgets for small business measures</td>
<td>30</td>
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Table 1 Number of business establishments and enterprises by industry and size (private)

(1) Business establishments

<table>
<thead>
<tr>
<th>Industry</th>
<th>Size</th>
<th>Year</th>
<th>Small and medium business establishments</th>
<th>Of which small-scale business establishments</th>
<th>Large business establishments</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No.</td>
<td>% of total</td>
<td>No.</td>
<td>% of total</td>
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<tr>
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<td></td>
<td>4,155</td>
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<tr>
<td></td>
<td>1994</td>
<td></td>
<td>611,997</td>
<td>99.9</td>
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<td>Non-primary industry total</td>
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Notes:
1. Figures for 1999 are calculated based on the definitions under the amended Small and Medium Enterprise Basic Law (amended December 1999).
2. Small and medium business establishments are defined as business establishments with 300 or fewer employees (100 or fewer employees in the wholesale and service sectors, and 50 or fewer employees in the retail and service sectors).
3. Small-scale business establishments are defined as business establishments with 1–19 employees (1–4 employees in the wholesale, retail, food service and service sectors).
4. Percentage figures for share of small-scale business establishments indicate the proportion of all business establishments.
## Enterpises

### Supplementary statistical data

### (2) Enterprises

<table>
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<th>Year</th>
<th>No. 1</th>
<th>Total 1</th>
<th>No. 2</th>
<th>Total 2</th>
<th>No. 3</th>
<th>Total 3</th>
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### Notes
2. Number of enterprises = number of companies + number of sole proprietorships
3. SMEs are sole proprietorships and companies with 300 or fewer regular employees (100 or fewer employees in the wholesale sector, and 50 or fewer employees in the retail, food service and service sectors) or with paid-in capital not in excess of ¥100 million (or ¥30 million in the wholesale sector, and ¥10 million in the retail, food service and service sectors).
4. Following the amendment of the Small and Medium Enterprise Basic Law, SMEs are defined as sole proprietorships and companies with 300 or fewer regular employees (100 or fewer in the wholesale and service sectors, and 50 or fewer in the retail and food service sectors) or with paid-in capital not in excess of ¥300 million (¥100 million in the wholesale sector and ¥50 million in the retail, food service and service sectors).
5. Small-scale enterprises are sole proprietorships and companies with 20 or fewer regular employees (5 or fewer in the wholesale, retail, food service and service sectors).
6. Percentage figures for share of small-scale enterprises indicate the proportion of all business enterprises.

Source: Compiled from Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Statistics Bureau, Establishment and Enterprise Census of Japan.
## Supplementary statistical data

### (3) Companies only

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<th>Large enterprises</th>
<th>Total</th>
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<td>No.</td>
<td>% of total</td>
</tr>
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Source: Compiled from Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Statistics Bureau, Establishment and Enterprise Census of Japan.

Notes:
2. SMEs are defined as companies with 300 or fewer regular employees (100 or fewer employees in the wholesale sector, and 50 or fewer employees in the retail, food service, and service sectors) or with paid-in capital not in excess of ¥100 million (or ¥30 million in the wholesale sector, and ¥10 million in the retail, food service and service sectors). Sole proprietorships are not included.
3. Following the amendment of the Small and Medium Enterprise Basic Law, SMEs are defined as companies with 300 or fewer regular employees (100 or fewer in the wholesale and service sectors, and 50 or fewer in the retail and food service sectors) or with paid-in capital not in excess of ¥300 million (¥100 million in the wholesale sector and ¥50 million in the retail, food service and service sectors). Sole proprietorships are not included.
4. Small-scale enterprises are companies with 20 or fewer regular employees (5 or fewer in the wholesale, retail, food service and service sectors). Sole proprietorships are not included.
5. Percentage figures for share of small-scale enterprises indicate the proportion of all enterprises (companies).
### Table 2 Number of enterprises by prefecture (private, non-primary industry)

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<th>Large enterprises</th>
<th>Total</th>
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<td>No. % of total</td>
<td>No. % of total</td>
<td>No. % of total</td>
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<td>92,606 88.7</td>
<td>171 0.2</td>
<td>104,448 100.0</td>
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<tr>
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<td>81,751 99.8</td>
<td>73,103 89.3</td>
<td>132 0.2</td>
<td>81,884 100.0</td>
</tr>
<tr>
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<td>179,945 88.5</td>
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<td>203,367 100.0</td>
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<td>171 0.2</td>
<td>104,448 100.0</td>
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<td>73,103 89.3</td>
<td>132 0.2</td>
<td>81,884 100.0</td>
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<td>73,103 89.3</td>
<td>132 0.2</td>
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<td>73,103 89.3</td>
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<td>179,945 88.5</td>
<td>314 0.2</td>
<td>203,367 100.0</td>
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Notes: 1. Figures calculated based on definitions under the amended Small and Medium Enterprise Basic Law (amended December 1999).
2. Number of enterprises = number of companies + number of sole proprietorships
3. SMEs are sole proprietorships and companies with 300 or fewer regular employees (100 or fewer employees in the wholesale and service sectors, and 50 or fewer employees in the retail sector) or with paid-in capital not in excess of ¥300 million (or ¥100 million in the wholesale sector, and ¥50 million in the retail and service sectors).
4. Small-scale enterprises are sole proprietorships and companies with 20 or fewer regular employees (5 or fewer in the wholesale, retail and service sectors).
5. Percentage figures for share of small-scale enterprises indicate the proportion of all business enterprises.
Table 3  Number of employees by industry and size (private)

(1) Business establishments

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<th>Of which small-scale business establishments</th>
<th>Large business establishments</th>
<th>Total</th>
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<td>% of total</td>
<td>No. of employees</td>
<td>% of total</td>
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</table>

<table>
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<th>% of total</th>
<th>No. of employees</th>
<th>% of total</th>
<th>No. of employees</th>
<th>% of total</th>
<th>No. of employees</th>
<th>% of total</th>
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<td>12.6</td>
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<td>Electricity, gas and water utilities</td>
<td>1,648,542</td>
<td>84.1</td>
<td>655,236</td>
<td>19.9</td>
<td>413,377</td>
<td>12.6</td>
<td>3,288,261</td>
<td>100.0</td>
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<tr>
<td>Services</td>
<td>1,648,542</td>
<td>84.1</td>
<td>655,236</td>
<td>19.9</td>
<td>413,377</td>
<td>12.6</td>
<td>3,288,261</td>
<td>100.0</td>
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<tr>
<td>Non-primary industry total</td>
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<td>13,266</td>
<td>6.6</td>
<td>53,020</td>
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<td>199,925</td>
<td>100.0</td>
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<td></td>
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<td>2,196,262</td>
<td>18.3</td>
<td>4,340,365</td>
<td>36.2</td>
<td>11,995,478</td>
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<tr>
<td></td>
<td>4,728,340</td>
<td>62.9</td>
<td>2,210,460</td>
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<td>4,563,799</td>
<td>37.1</td>
<td>12,292,139</td>
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<tr>
<td></td>
<td>8,449,050</td>
<td>61.2</td>
<td>2,222,758</td>
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<td>11,890,062</td>
<td>22.0</td>
<td>17,451,317</td>
<td>100.0</td>
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<tr>
<td></td>
<td>13,839,245</td>
<td>72.4</td>
<td>2,151,356</td>
<td>15.7</td>
<td>3,779,723</td>
<td>27.6</td>
<td>17,451,317</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Notes:
1. Figures for 1999 are calculated based on the definitions under the amended Small and Medium Enterprise Basic Law (amended December 1999).
2. "Employees" means all employees.
3. Small and medium business establishments are defined as business establishments with 300 or fewer employees (100 or fewer in the wholesale and service sectors (in 1999 following the amendment of the Small and Medium Enterprise Basic Law), and 50 or fewer in the retail and service sectors).
4. Small-scale business establishments are defined as business establishments with 1~19 employees (1~4 employees in the wholesale, retail, food service and service sectors).
5. Percentage figures for share of small-scale business establishments indicate the proportion of all business establishments.
## (2) Enterprises

<table>
<thead>
<tr>
<th>Industry</th>
<th>Size</th>
<th>SMEs</th>
<th>Of which small-scale enterprises</th>
<th>Large enterprises</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Item</td>
<td>No. of employees</td>
<td>% of total</td>
<td>No. of employees</td>
<td>% of total</td>
</tr>
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<td>Construction</td>
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<td>3,313,839</td>
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<td>1,828,362</td>
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<td>Manufacturing</td>
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<td>6,873,009</td>
<td>63.5</td>
<td>1,904,318</td>
<td>12.4</td>
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<td>Wholesale</td>
<td></td>
<td>2,613,429</td>
<td>70.0</td>
<td>362,210</td>
<td>9.7</td>
</tr>
<tr>
<td>Retail</td>
<td></td>
<td>3,886,631</td>
<td>63.5</td>
<td>934,781</td>
<td>15.3</td>
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<tr>
<td>Food services</td>
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<td>2,100,391</td>
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<td>27.7</td>
</tr>
<tr>
<td>Services</td>
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<td>5,536,199</td>
<td>73.5</td>
<td>1,097,087</td>
<td>14.6</td>
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<td>Non-primary industry total</td>
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<td>66.4</td>
<td>7,515,958</td>
<td>18.4</td>
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</tbody>
</table>

**Source:** Compiled from Ministry of Public Management, Public Affairs, Posts and Telecommunications' Statistics Bureau, **Establishment and Enterprise Census of Japan** (1999).

**Notes:**
1. Figures for 1999 are calculated based on the definitions under the amended Small and Medium Enterprise Basic Law (amended December 1999).
2. "Employees" means regular employees.
3. No. of employees of enterprises = no. of regular employees of companies + no. of regular employees of sole proprietorships (head offices + branches)
4. SMEs are sole proprietorships and companies with 300 or fewer regular employees (100 or fewer in the wholesale and service sectors, and 50 or fewer in the retail and food service sectors) or with paid-in capital not in excess of ¥300 million (or ¥100 million in the wholesale sector and ¥50 million in the retail, food service and service sectors).

## (3) Companies only

<table>
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<tr>
<th>Industry</th>
<th>Size</th>
<th>SMEs</th>
<th>Of which small-scale enterprises</th>
<th>Large enterprises</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Item</td>
<td>No. of employees</td>
<td>% of total</td>
<td>No. of employees</td>
<td>% of total</td>
</tr>
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<td>1,525,650</td>
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<td>1,496,979</td>
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<td>1,094,427</td>
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<td>109,223</td>
<td>5.9</td>
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<td>62.6</td>
<td>4,677,733</td>
<td>12.9</td>
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</tbody>
</table>

**Source:** Compiled from Ministry of Public Management, Home Affairs, Posts and Telecommunications' Statistics Bureau, **Establishment and Enterprise Census of Japan** (1999).

**Notes:**
1. Figures for 1999 are calculated based on the definitions under the amended Small and Medium Enterprise Basic Law (amended December 1999).
2. "Employees" means regular employees.
3. Regular employees of sole proprietors (sole proprietorships) are not included.
4. SMEs are defined as companies with 300 or fewer regular employees (100 or fewer in the wholesale and service sectors, and 50 or fewer in the retail and food service sectors) or with paid-in capital of not in excess of ¥300 million (or ¥100 million in the wholesale sector and ¥50 million in the retail, food service and service sectors).
Supplementary statistical data

Table 4 Number of employees by prefecture (private, non-primary industry)
SMEs

Hokkaido
Aomori
Iwate
Miyagi
Akita
Yamagata
Fukushima
Ibaraki
Tochigi
Gunma
Saitama
Chiba
Tokyo
Kanagawa
Niigata
Toyama
Ishikawa
Fukui
Yamanashi
Nagano
Gifu
Shizuoka
Aichi
Mie
Shiga
Kyoto
Osaka
Hyogo
Nara
Wakayama
Tottori
Shimane
Okayama
Hiroshima
Yamaguchi
Tokushima
Kagawa
Ehime
Kochi
Fukuoka
Saga
Nagasaki
Kumamoto
Oita
Miyazaki
Kagoshima
Okinawa
Total
Source:
Notes:

No. of
employees
1,279,685
330,856
328,586
513,161
286,920
309,642
483,694
600,038
441,257
476,641
1,194,111
889,551
4,732,373
1,571,434
653,390
317,905
332,882
237,798
211,317
547,362
556,072
978,381
1,972,904
419,220
267,579
665,514
2,791,377
1,228,440
226,442
230,720
141,877
180,643
462,618
728,488
347,222
181,422
260,996
359,640
185,787
1,186,473
200,616
321,533
379,033
273,004
255,129
362,453
295,233
31,197,419

% of
total
84.9
88.2
87.5
79.9
91.9
87.1
88.0
85.0
83.6
85.2
84.1
76.5
42.7
74.0
87.6
80.4
85.4
89.3
88.6
84.2
87.8
81.2
72.2
85.3
86.4
75.4
57.1
79.6
87.4
89.0
87.5
91.5
87.1
77.3
82.5
91.4
78.0
87.5
89.0
75.9
89.8
89.2
85.2
89.5
90.9
89.0
89.9
69.5

Of which small-scale
Large
enterprises
enterprises
No. of
% of
No. of
% of
employees
total
employees
total
422,173
28.0
227,492
15.1
123,796
33.0
44,165
11.8
117,760
31.3
47,080
12.5
179,876
28.0
129,221
20.1
113,612
36.4
25,123
8.1
122,484
34.5
45,710
12.9
192,253
35.0
65,948
12.0
253,163
35.9
105,733
15.0
184,993
35.0
86,741
16.4
200,318
35.8
82,487
14.8
464,773
32.7
226,349
15.9
332,783
28.6
272,789
23.5
1,180,047
10.6
6,348,899
57.3
500,741
23.6
551,493
26.0
254,190
34.1
92,077
12.4
119,222
30.1
77,672
19.6
131,092
33.6
56,809
14.6
100,198
37.6
28,506
10.7
98,407
41.3
27,171
11.4
218,169
33.6
102,478
15.8
237,965
37.6
77,347
12.2
380,843
31.6
226,087
18.8
661,846
24.2
761,523
27.8
169,320
34.5
72,039
14.7
103,545
33.4
41,994
13.6
259,167
29.3
217,529
24.6
914,276
18.7
2,093,638
42.9
446,155
28.9
314,506
20.4
98,978
38.2
32,621
12.6
109,882
42.4
28,573
11.0
52,145
32.2
20,276
12.5
75,045
38.0
16.872
8.5
161,277
30.4
68,345
12.9
242,717
25.7
214,442
22.7
126,786
30.1
73,801
17.5
80,893
40.8
17,088
8.6
95,208
28.5
73,607
22.0
142,544
34.7
51,231
12.5
80,223
38.4
23,039
11.0
398,705
25.5
376,147
24.1
76,153
34.1
22,664
10,2
131,578
36.5
39,023
10.8
145,215
32.6
65,845
14.8
104,973
34.4
31,902
10.5
104,385
37.2
25,440
9.1
147,650
36.3
44,789
11.0
125,201
38.1
33,021
10.1
10,982,725
24.5 13,707,332
30.5

Total
No. of
employees
1,507,177
375,021
375,666
642,382
312,043
355,352
549,642
705,771
527,998
559,128
1,420,460
1,162,340
11,081,272
2,122,927
745,467
395,577
389,691
266,304
238,488
649,840
633,419
1,204,468
2,734,427
491,259
309,573
883,043
4,885,015
1,542,946
259,063
259,293
162,153
197,515
530,963
942,930
421,023
198,510
334,603
410,871
208,826
1,562,620
223,280
360,556
444,878
304,906
280,569
407,242
328,254
44,904,751

% of
total
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
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100.0
100.0
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100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0

Compiled from Ministry of Public Management, Home Affairs, Posts and Telecommunications’ Statistics Bureau,
1. Figures calculated based on definitions under the amended Small and Medium Enterprise Basic Law (amended
December 1999).
2. Number of employees indicates the number of regular employees of companies and total number of employees of
sole proprietorships (including proprietors but not including branch employees).
3. SMEs are companies with 300 or fewer regular employees (100 or fewer in the wholesale and service sectors, and
50 or fewer in the retail sector) or with paid-in capital not in excess of ¥300 million (¥100 million in the wholesale
sector, and ¥50 million in the retail and service sectors), and sole proprietorships with a total workforce (including
proprietors) of 300 or fewer (100 or fewer in the wholesale and service sectors, and 50 or fewer in the retail sector).
4. Small-scale enterprises are companies with 20 or fewer regular employees (5 or fewer in the wholesale, retail and
service sectors) and sole proprietorships with a total workforce (including proprietors) of 20 or fewer (5 or fewer in
the wholesale, retail and service sectors).
5. Percentage figures for share of small-scale enterprises indicate the proportion of all business enterprises.

9


Table 5 Number of manufacturing establishments

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<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>4~9</td>
<td>244,004</td>
<td>234,814</td>
<td>224,197</td>
<td>229,281</td>
<td>206,621</td>
<td>213,308</td>
<td>198,411</td>
<td>190,640</td>
<td>206,808</td>
<td>186,111</td>
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<td>86,533</td>
<td>88,134</td>
<td>85,158</td>
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<td>74,823</td>
<td>72,639</td>
<td>73,743</td>
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<td>78,181</td>
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<td>717</td>
<td>708</td>
<td>696</td>
<td>674</td>
<td>645</td>
<td>620</td>
<td>605</td>
<td>587</td>
<td>562</td>
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<td>4~299</td>
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<td>409,815</td>
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<td>354,627</td>
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<td>3,934</td>
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<td>3,666</td>
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<td>3,559</td>
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<td>387,726</td>
<td>369,612</td>
<td>358,246</td>
<td>373,713</td>
<td>345,399</td>
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</table>

Source: Ministry of Economy, Trade and Industry, Census of Manufactures.

Notes:  
1. The number of establishments (factories) indicates the number of establishments by size of workforce.  
### Table 6 Number of employees in manufacturing

#### (1) Actual number

<table>
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<td>1,419</td>
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<td>1,366</td>
<td>1,247</td>
<td>1,272</td>
<td>1,199</td>
<td>1,155</td>
<td>1,231</td>
<td>1,119</td>
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<tr>
<td>10–19</td>
<td>1,193</td>
<td>1,218</td>
<td>1,176</td>
<td>1,131</td>
<td>1,074</td>
<td>1,061</td>
<td>1,036</td>
<td>1,007</td>
<td>1,021</td>
<td>971</td>
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<td>100–299</td>
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<td>2,008</td>
<td>1,958</td>
<td>1,903</td>
<td>1,897</td>
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<td>1,881</td>
<td>1,834</td>
<td>1,772</td>
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<td>1,549</td>
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<td>1,511</td>
<td>1,484</td>
<td>1,423</td>
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<td>1,485</td>
<td>1,424</td>
<td>1,359</td>
<td>1,309</td>
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<td>1,224</td>
<td>1,165</td>
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<td>3,157</td>
<td>3,077</td>
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<td>2,898</td>
<td>2,837</td>
<td>2,787</td>
<td>2,708</td>
<td>2,588</td>
</tr>
<tr>
<td>Total</td>
<td>11,173</td>
<td>11,351</td>
<td>11,157</td>
<td>10,885</td>
<td>10,416</td>
<td>10,321</td>
<td>10,103</td>
<td>9,937</td>
<td>9,838</td>
<td>9,370</td>
</tr>
</tbody>
</table>

#### (2) Percentage breakdown

<table>
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<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4–9</td>
<td>13.0</td>
<td>12.5</td>
<td>12.1</td>
<td>12.5</td>
<td>12.0</td>
<td>12.3</td>
<td>11.9</td>
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<td>12.5</td>
<td>11.9</td>
</tr>
<tr>
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Source: Ministry of Economy, Trade and Industry, *Census of Manufactures*.

Notes:
1. Based on statistics for business establishments.
### Table 7  Values of shipments in manufacturing

(1) Actual shipments

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Source: Ministry of Economy, Trade and Industry, *Census of Manufactures*.

Notes:
1. Based on statistics for business establishments.
Table 8  Value added in manufacturing

(1) Actual value

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(2) Percentage breakdown

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Source: Ministry of Economy, Trade and Industry, *Census of Manufactures*.
Notes: 1. Based on statistics for business establishments.
2. Gross value added in the case of firms with 9 or fewer employees.
### Supplementary statistical data

#### Table 9 Value-added productivity in manufacturing

(1) Actual value added (annual value added per employee)

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(2) Percentage value added (where large enterprises=100)

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<td>(10~299)</td>
<td>(49.8)</td>
<td>(48.9)</td>
<td>(50.6)</td>
<td>(52.5)</td>
<td>(54.8)</td>
<td>(54.9)</td>
<td>(53.9)</td>
<td>(52.3)</td>
<td>(51.4)</td>
<td>(52.2)</td>
<td>(53.4)</td>
<td>(54.5)</td>
</tr>
</tbody>
</table>

Source: Ministry of Economy, Trade and Industry, Census of Manufactures.

Notes:
1. Based on statistics for business establishments.
2. Gross value added in the case of firms with 9 or fewer employees.
### Table 10 Number, employees and sales of wholesale outlets

#### (1) Number of outlets and employees

<table>
<thead>
<tr>
<th>No. of employees</th>
<th>Year</th>
<th>No. of outlets (1,000)</th>
<th>No. of employees (1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1~2</td>
<td>95.3</td>
<td>101.8</td>
<td>90.4</td>
</tr>
<tr>
<td>3~4</td>
<td>110.0</td>
<td>123.3</td>
<td>103.0</td>
</tr>
<tr>
<td>5~9</td>
<td>121.6</td>
<td>132.1</td>
<td>120.1</td>
</tr>
<tr>
<td>10~19</td>
<td>64.7</td>
<td>70.5</td>
<td>67.8</td>
</tr>
<tr>
<td>20~49</td>
<td>34.0</td>
<td>36.4</td>
<td>36.0</td>
</tr>
<tr>
<td>50~99</td>
<td>7.8</td>
<td>8.4</td>
<td>8.4</td>
</tr>
<tr>
<td>1~99</td>
<td>433.5</td>
<td>472.5</td>
<td>425.7</td>
</tr>
<tr>
<td>100 or over</td>
<td>3.0</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>436.4</td>
<td>476.0</td>
<td>429.3</td>
</tr>
</tbody>
</table>

#### (2) Percentage breakdown of number of outlets and employees

<table>
<thead>
<tr>
<th>No. of employees</th>
<th>Year</th>
<th>No. of outlets</th>
<th>No. of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1~2</td>
<td>21.8</td>
<td>21.4</td>
<td>21.1</td>
</tr>
<tr>
<td>3~4</td>
<td>25.2</td>
<td>25.9</td>
<td>24.0</td>
</tr>
<tr>
<td>5~9</td>
<td>27.9</td>
<td>27.8</td>
<td>28.0</td>
</tr>
<tr>
<td>10~19</td>
<td>14.8</td>
<td>14.8</td>
<td>15.8</td>
</tr>
<tr>
<td>20~49</td>
<td>7.8</td>
<td>7.6</td>
<td>8.4</td>
</tr>
<tr>
<td>50~99</td>
<td>1.8</td>
<td>1.8</td>
<td>2.0</td>
</tr>
<tr>
<td>1~99</td>
<td>99.3</td>
<td>99.3</td>
<td>99.2</td>
</tr>
<tr>
<td>100 or over</td>
<td>0.7</td>
<td>0.7</td>
<td>0.8</td>
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</table>
### Supplementary statistical data

#### (3) Annual sales and annual sales per employee

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1~2</td>
<td>5,830</td>
<td>8,162</td>
<td>6,595</td>
<td>6,524</td>
<td>7,122</td>
<td>3,464</td>
<td>4,626</td>
<td>4,180</td>
<td>5,435</td>
<td>5,774</td>
<td>5,380</td>
<td></td>
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<tr>
<td>3~4</td>
<td>18,251</td>
<td>23,788</td>
<td>19,413</td>
<td>18,761</td>
<td>18,269</td>
<td>4,802</td>
<td>5,610</td>
<td>5,380</td>
<td>5,774</td>
<td>5,380</td>
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<td></td>
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<td>5~9</td>
<td>49,592</td>
<td>64,403</td>
<td>54,115</td>
<td>53,712</td>
<td>51,949</td>
<td>6,261</td>
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<td>6,890</td>
<td>7,526</td>
<td>6,714</td>
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<tr>
<td>10~19</td>
<td>62,784</td>
<td>82,024</td>
<td>72,162</td>
<td>71,782</td>
<td>71,069</td>
<td>7,321</td>
<td>8,753</td>
<td>8,008</td>
<td>8,727</td>
<td>7,940</td>
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<tr>
<td>20~49</td>
<td>86,233</td>
<td>108,734</td>
<td>98,992</td>
<td>96,020</td>
<td>97,431</td>
<td>8,674</td>
<td>10,212</td>
<td>9,380</td>
<td>10,006</td>
<td>9,387</td>
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<tr>
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<td>54,584</td>
<td>68,696</td>
<td>64,689</td>
<td>61,076</td>
<td>62,778</td>
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<td>12,122</td>
<td>11,452</td>
<td>11,878</td>
<td>11,499</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1~99</td>
<td>277,274</td>
<td>355,807</td>
<td>315,966</td>
<td>307,875</td>
<td>308,618</td>
<td>7,469</td>
<td>8,831</td>
<td>8,265</td>
<td>8,851</td>
<td>8,235</td>
<td></td>
<td></td>
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<tr>
<td>100 or over</td>
<td>169,210</td>
<td>217,358</td>
<td>198,351</td>
<td>171,939</td>
<td>186,835</td>
<td>27,488</td>
<td>29,468</td>
<td>26,158</td>
<td>25,212</td>
<td>25,022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>446,484</td>
<td>573,165</td>
<td>514,317</td>
<td>479,813</td>
<td>495,453</td>
<td>10,317</td>
<td>12,024</td>
<td>11,236</td>
<td>11,533</td>
<td>11,024</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### (4) Percentage breakdown of annual sales and proportionate annual sales per employee

<table>
<thead>
<tr>
<th>No. of employees</th>
<th>Annual sales</th>
<th>Proportionate annual sales per employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1~2</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>3~4</td>
<td>4.1</td>
<td>4.2</td>
</tr>
<tr>
<td>5~9</td>
<td>11.1</td>
<td>11.2</td>
</tr>
<tr>
<td>10~19</td>
<td>14.1</td>
<td>14.3</td>
</tr>
<tr>
<td>20~49</td>
<td>19.3</td>
<td>19.0</td>
</tr>
<tr>
<td>50~99</td>
<td>12.2</td>
<td>12.0</td>
</tr>
<tr>
<td>1~99</td>
<td>62.1</td>
<td>62.1</td>
</tr>
<tr>
<td>100 or over</td>
<td>37.9</td>
<td>37.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Ministry of Economy, Trade and Industry, Census of Commerce.

Notes:
1. Figures for 1994 onward are compiled based on the new industrial classification system (revised October 1993), and differ slightly in content from those for 1991 and earlier, which were compiled based on the former industrial classification system.
2. The 1999 census was conducted at the same time as the Ministry of Public Management, Home Affairs, Posts and Telecommunications Establishment and Enterprise Census of Japan (the same simplified questionnaire format was used for both censuses). Data from this census are not continuous with the data for previous years due to the determination of existing establishments censused.
3. Proportionate annual sales per employee indicates the proportion in each size category indexed against large enterprises (=100).
4. Employees of agency and brokering businesses are not included in the calculation of annual sales per employee.
Table 11  Number, employees and sales of retail outlets

(1) Number of outlets and employees

<table>
<thead>
<tr>
<th>Item</th>
<th>No. of outlets (1,000)</th>
<th>No. of employees (1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1~2</td>
<td>874.4</td>
<td>847.2</td>
</tr>
<tr>
<td>3~4</td>
<td>422.1</td>
<td>416.9</td>
</tr>
<tr>
<td>5~9</td>
<td>214.0</td>
<td>214.0</td>
</tr>
<tr>
<td>10~19</td>
<td>70.4</td>
<td>71.9</td>
</tr>
<tr>
<td>20~49</td>
<td>31.4</td>
<td>33.1</td>
</tr>
<tr>
<td>1~49</td>
<td>1,612.3</td>
<td>1,583.1</td>
</tr>
<tr>
<td>50 or over</td>
<td>7.4</td>
<td>8.1</td>
</tr>
<tr>
<td>Total</td>
<td>1,619.8</td>
<td>1,591.2</td>
</tr>
</tbody>
</table>

(2) Percentage breakdown of number of outlets and number of employees

<table>
<thead>
<tr>
<th>Item</th>
<th>No. of outlets</th>
<th>No. of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1~2</td>
<td>54.0</td>
<td>53.2</td>
</tr>
<tr>
<td>3~4</td>
<td>26.1</td>
<td>26.2</td>
</tr>
<tr>
<td>5~9</td>
<td>13.2</td>
<td>13.4</td>
</tr>
<tr>
<td>10~19</td>
<td>4.3</td>
<td>4.5</td>
</tr>
<tr>
<td>20~49</td>
<td>1.9</td>
<td>2.1</td>
</tr>
<tr>
<td>1~49</td>
<td>99.5</td>
<td>99.5</td>
</tr>
<tr>
<td>50 or over</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

(Unit: %)
### (3) Annual sales and annual sales per employee

<table>
<thead>
<tr>
<th>No. of employees</th>
<th>Annual sales (¥ billion)</th>
<th>Annual sales per employee (¥10,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1~2</td>
<td>12,832</td>
<td>15,224</td>
</tr>
<tr>
<td>3~4</td>
<td>19,246</td>
<td>23,006</td>
</tr>
<tr>
<td>5~9</td>
<td>24,095</td>
<td>28,878</td>
</tr>
<tr>
<td>10~19</td>
<td>16,948</td>
<td>21,409</td>
</tr>
<tr>
<td>20~49</td>
<td>16,998</td>
<td>21,151</td>
</tr>
<tr>
<td>1~49</td>
<td>90,121</td>
<td>109,668</td>
</tr>
<tr>
<td>50 or over</td>
<td>24,719</td>
<td>30,971</td>
</tr>
<tr>
<td>Total</td>
<td>114,840</td>
<td>140,638</td>
</tr>
</tbody>
</table>

### (4) Percentage breakdown of annual sales and proportionate annual sales per employee

<table>
<thead>
<tr>
<th>No. of employees</th>
<th>Annual sales</th>
<th>Proportionate annual sales per employee (Unit: %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1~2</td>
<td>11.2</td>
<td>10.8</td>
</tr>
<tr>
<td>3~4</td>
<td>16.8</td>
<td>16.4</td>
</tr>
<tr>
<td>5~9</td>
<td>21.0</td>
<td>20.5</td>
</tr>
<tr>
<td>10~19</td>
<td>14.8</td>
<td>15.2</td>
</tr>
<tr>
<td>20~49</td>
<td>14.8</td>
<td>15.0</td>
</tr>
<tr>
<td>1~49</td>
<td>78.5</td>
<td>78.0</td>
</tr>
<tr>
<td>50 or over</td>
<td>21.5</td>
<td>22.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Ministry of Economy, Trade and Industry, Census of Commerce.

Notes:
1. Figures for 1994 onward are compiled based on the new industrial classification system (revised October 1993), and differ slightly in content from those for 1991 and earlier, which were compiled under the former industrial classification system.
2. The 1999 census was conducted at the same time as the Ministry of Public Management, Home Affairs, Posts and Telecommunications' Establishment and Enterprise Census of Japan (the same simplified questionnaire format was used for both surveys). Data from this census are not continuous with the data for previous years due to the determination of existing establishments censused.
3. The proportionate annual sales per employee indicates the proportion in each size category indexed against large enterprises (=100).
# Table 12 Value added of business corporations and breakdown (all industries)

(1) SMEs (capital of under ¥100 million)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value added</td>
<td>154,570 (100.0)</td>
<td>154,319 (100.0)</td>
<td>157,222 (100.0)</td>
<td>158,715 (100.0)</td>
<td>147,384 (100.0)</td>
<td>152,907 (100.0)</td>
<td>153,151 (100.0)</td>
<td>148,034 (100.0)</td>
</tr>
<tr>
<td>Personnel costs</td>
<td>116,766 (75.5)</td>
<td>121,511 (78.7)</td>
<td>124,695 (79.3)</td>
<td>124,632 (78.5)</td>
<td>117,263 (79.6)</td>
<td>122,494 (80.1)</td>
<td>123,197 (80.4)</td>
<td>122,792 (82.9)</td>
</tr>
<tr>
<td>Interest and discount expenses</td>
<td>17,993 (11.6)</td>
<td>15,055 (9.8)</td>
<td>14,424 (9.2)</td>
<td>12,064 (7.6)</td>
<td>9,615 (5.4)</td>
<td>8,190 (5.4)</td>
<td>10,081 (6.6)</td>
<td>7,122 (5.8)</td>
</tr>
<tr>
<td>Movable property and real estate rent</td>
<td>12,669 (8.2)</td>
<td>13,341 (8.6)</td>
<td>13,532 (8.8)</td>
<td>13,932 (8.7)</td>
<td>12,858 (8.6)</td>
<td>13,109 (8.6)</td>
<td>14,764 (9.6)</td>
<td>12,449 (8.4)</td>
</tr>
<tr>
<td>Taxes</td>
<td>6,949 (4.5)</td>
<td>6,810 (4.4)</td>
<td>7,118 (4.5)</td>
<td>7,238 (4.6)</td>
<td>6,876 (4.7)</td>
<td>7,029 (4.6)</td>
<td>9,132 (6.0)</td>
<td>6,199 (4.2)</td>
</tr>
<tr>
<td>Net operating profit</td>
<td>194 (0.1)</td>
<td>-2,398 (-1.6)</td>
<td>-2,547 (-1.6)</td>
<td>849 (0.5)</td>
<td>772 (0.5)</td>
<td>2,085 (1.4)</td>
<td>-4,023 (-2.6)</td>
<td>-528 (-1.3)</td>
</tr>
</tbody>
</table>

(2) Large enterprises (capital of ¥100 million or over)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value added</td>
<td>113,463 (100.0)</td>
<td>112,286 (100.0)</td>
<td>115,255 (100.0)</td>
<td>118,558 (100.0)</td>
<td>122,336 (100.0)</td>
<td>122,754 (100.0)</td>
<td>117,262 (100.0)</td>
<td>119,697 (100.0)</td>
</tr>
<tr>
<td>Personnel costs</td>
<td>73,600 (64.9)</td>
<td>75,130 (66.9)</td>
<td>76,051 (66.0)</td>
<td>77,618 (65.5)</td>
<td>79,317 (64.8)</td>
<td>80,627 (65.7)</td>
<td>80,158 (68.4)</td>
<td>79,354 (66.3)</td>
</tr>
<tr>
<td>Interest and discount expenses</td>
<td>16,944 (14.9)</td>
<td>14,518 (12.9)</td>
<td>13,352 (11.6)</td>
<td>11,225 (9.5)</td>
<td>9,593 (7.8)</td>
<td>8,825 (7.2)</td>
<td>8,129 (6.9)</td>
<td>7,320 (6.1)</td>
</tr>
<tr>
<td>Movable property and real estate rent</td>
<td>10,902 (9.6)</td>
<td>11,681 (10.4)</td>
<td>11,789 (10.3)</td>
<td>12,035 (10.1)</td>
<td>12,550 (10.3)</td>
<td>12,411 (10.1)</td>
<td>12,634 (10.8)</td>
<td>12,507 (10.4)</td>
</tr>
<tr>
<td>Taxes</td>
<td>6,141 (5.4)</td>
<td>6,103 (5.4)</td>
<td>6,417 (5.6)</td>
<td>6,337 (5.3)</td>
<td>6,446 (5.3)</td>
<td>6,917 (5.6)</td>
<td>5,204 (4.4)</td>
<td>5,160 (4.3)</td>
</tr>
<tr>
<td>Net operating profit</td>
<td>5,876 (5.2)</td>
<td>4,854 (4.3)</td>
<td>7,646 (6.6)</td>
<td>11,343 (9.6)</td>
<td>14,431 (11.8)</td>
<td>13,974 (11.4)</td>
<td>11,137 (9.5)</td>
<td>15,355 (12.9)</td>
</tr>
</tbody>
</table>


Note: Figures in parentheses indicate percentage share.
Table 13 Value-added productivity, personnel costs per employee and labor share of business corporations (all industries)

(1) Value-added productivity

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Under ¥5,000,000</td>
<td></td>
<td>4,153</td>
<td>4,001</td>
<td>3,861</td>
<td>3,791</td>
<td>3,708</td>
<td>3,683</td>
<td>3,653</td>
<td>3,447</td>
</tr>
<tr>
<td>¥5,000,000~under ¥10,000,000</td>
<td></td>
<td>4,474</td>
<td>4,204</td>
<td>4,269</td>
<td>4,375</td>
<td>4,234</td>
<td>4,254</td>
<td>4,124</td>
<td>3,776</td>
</tr>
<tr>
<td>¥10,000,000~under ¥50,000,000</td>
<td></td>
<td>5,506</td>
<td>5,337</td>
<td>5,348</td>
<td>5,433</td>
<td>5,139</td>
<td>5,090</td>
<td>4,926</td>
<td>4,793</td>
</tr>
<tr>
<td>¥50,000,000~under ¥100,000,000</td>
<td></td>
<td>6,149</td>
<td>6,202</td>
<td>6,089</td>
<td>6,310</td>
<td>6,316</td>
<td>6,335</td>
<td>6,767</td>
<td>6,040</td>
</tr>
<tr>
<td>¥100,000,000~under ¥1,000,000,000</td>
<td></td>
<td>7,459</td>
<td>7,353</td>
<td>7,461</td>
<td>7,609</td>
<td>7,772</td>
<td>7,583</td>
<td>7,287</td>
<td>7,330</td>
</tr>
<tr>
<td>¥1,000,000,000 or over</td>
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<td>10,928</td>
<td>10,583</td>
<td>11,004</td>
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(2) Personnel costs per employee

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<td>5,578</td>
<td>5,491</td>
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<td>6,872</td>
<td>6,989</td>
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<td>3,872</td>
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<td>3,851</td>
<td>3,851</td>
<td>3,891</td>
<td>3,817</td>
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<tr>
<td>¥100,000,000 or over</td>
<td></td>
<td>6,223</td>
<td>6,247</td>
<td>6,365</td>
<td>6,568</td>
<td>6,670</td>
<td>6,742</td>
<td>6,628</td>
<td>6,518</td>
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<td>4,512</td>
<td>4,547</td>
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<td>4,648</td>
<td>4,559</td>
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(3) Labor share

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<td>84.3</td>
<td>86.3</td>
<td>85.5</td>
<td>84.1</td>
<td>87.0</td>
<td>86.9</td>
<td>90.1</td>
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<tr>
<td>Under ¥5,000,000</td>
<td>79.9</td>
<td>84.2</td>
<td>83.3</td>
<td>81.4</td>
<td>81.0</td>
<td>82.3</td>
<td>87.0</td>
<td>88.9</td>
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<tr>
<td>¥5,000,000~under ¥10,000,000</td>
<td>73.4</td>
<td>76.3</td>
<td>77.2</td>
<td>77.1</td>
<td>79.8</td>
<td>79.6</td>
<td>80.9</td>
<td>82.5</td>
</tr>
<tr>
<td>¥10,000,000~under ¥50,000,000</td>
<td>69.7</td>
<td>73.2</td>
<td>72.9</td>
<td>72.5</td>
<td>72.1</td>
<td>74.7</td>
<td>70.2</td>
<td>75.6</td>
</tr>
<tr>
<td>¥50,000,000~under ¥100,000,000</td>
<td>69.5</td>
<td>71.4</td>
<td>71.8</td>
<td>72.5</td>
<td>71.4</td>
<td>73.6</td>
<td>75.3</td>
<td>73.9</td>
</tr>
<tr>
<td>¥100,000,000~under ¥1,000,000,000</td>
<td>62.9</td>
<td>64.9</td>
<td>63.5</td>
<td>62.6</td>
<td>62.2</td>
<td>62.5</td>
<td>65.4</td>
<td>63.0</td>
</tr>
<tr>
<td>¥1,000,000,000 or over</td>
<td>75.5</td>
<td>78.7</td>
<td>79.3</td>
<td>78.5</td>
<td>79.6</td>
<td>80.1</td>
<td>80.4</td>
<td>82.9</td>
</tr>
<tr>
<td>Under ¥100,000,000</td>
<td>64.9</td>
<td>66.9</td>
<td>66.0</td>
<td>65.5</td>
<td>64.8</td>
<td>65.7</td>
<td>68.4</td>
<td>66.3</td>
</tr>
<tr>
<td>¥100,000,000 or over</td>
<td>71.0</td>
<td>73.8</td>
<td>73.7</td>
<td>72.9</td>
<td>72.9</td>
<td>73.7</td>
<td>75.2</td>
<td>75.5</td>
</tr>
</tbody>
</table>

Note: See note 1 to Table 14 regarding method of calculation.

Table 14 Trends in productivity indices (all industries)

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</tr>
</thead>
<tbody>
<tr>
<td>Value-added productivity (¥1,000)</td>
<td>5,025</td>
<td>4,890</td>
<td>4,882</td>
<td>4,993</td>
<td>4,840</td>
<td>4,894</td>
<td>4,837</td>
<td>4,602</td>
</tr>
<tr>
<td>SMEs</td>
<td>9,594</td>
<td>9,337</td>
<td>9,646</td>
<td>10,032</td>
<td>10,287</td>
<td>10,265</td>
<td>9,696</td>
<td>9,831</td>
</tr>
<tr>
<td>Large enterprises</td>
<td>6,223</td>
<td>6,247</td>
<td>6,365</td>
<td>6,568</td>
<td>6,742</td>
<td>6,742</td>
<td>6,742</td>
<td>6,742</td>
</tr>
<tr>
<td>Personnel costs per employee (¥1,000)</td>
<td>3,796</td>
<td>3,851</td>
<td>3,872</td>
<td>3,921</td>
<td>3,851</td>
<td>3,817</td>
<td>3,817</td>
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<tr>
<td>SMEs</td>
<td>6,223</td>
<td>6,247</td>
<td>6,365</td>
<td>6,568</td>
<td>6,742</td>
<td>6,742</td>
<td>6,742</td>
<td>6,742</td>
</tr>
<tr>
<td>Large enterprises</td>
<td>20,613</td>
<td>21,225</td>
<td>21,889</td>
<td>22,719</td>
<td>23,641</td>
<td>24,082</td>
<td>24,073</td>
<td>24,030</td>
</tr>
<tr>
<td>Capital-labor ratio (¥1,000)</td>
<td>6,579</td>
<td>6,688</td>
<td>7,147</td>
<td>7,290</td>
<td>7,228</td>
<td>7,070</td>
<td>7,354</td>
<td>7,083</td>
</tr>
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<td>SMEs</td>
<td>20,613</td>
<td>21,225</td>
<td>21,889</td>
<td>22,719</td>
<td>23,641</td>
<td>24,082</td>
<td>24,073</td>
<td>24,030</td>
</tr>
<tr>
<td>Large enterprises</td>
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<td>0,731</td>
<td>0,683</td>
<td>0,685</td>
<td>0,670</td>
<td>0,692</td>
<td>0,658</td>
<td>0,650</td>
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<tr>
<td>Capital productivity</td>
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<td>0,441</td>
<td>0,442</td>
<td>0,435</td>
<td>0,426</td>
<td>0,403</td>
<td>0,409</td>
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</table>

Notes: 1. Value-added productivity = value added / no. of employees + no. of directors
Personnel costs per employee = pay of employees and directors + welfare expenses / no. of employees + no. of directors
Labor share = personnel costs / value added x 100
Capital stock = balance of tangible fixed assets (including land and excluding construction suspense account) + depreciation expenses (including special depreciation)
Capital-labor ratio = capital stock / no. of employees + no. of directors
Capital productivity = value added / capital stock
2. SMEs defined as firms with paid-in capital of under ¥100 million.
Large enterprises defined as firms with paid-in capital of at least ¥100 million.
Table 15 Trends in profitability (all industries)

<table>
<thead>
<tr>
<th>FY</th>
<th>Item</th>
<th>SMEs</th>
<th>Large enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net return on total assets (%)</td>
<td>Turnover of total assets (times)</td>
<td>Net profit to net sales (%)</td>
</tr>
<tr>
<td>1989</td>
<td>3.6</td>
<td>1.4</td>
<td>2.5</td>
</tr>
<tr>
<td>1990</td>
<td>3.2</td>
<td>1.5</td>
<td>2.1</td>
</tr>
<tr>
<td>1991</td>
<td>2.7</td>
<td>1.5</td>
<td>1.8</td>
</tr>
<tr>
<td>1992</td>
<td>1.9</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>1993</td>
<td>1.2</td>
<td>1.3</td>
<td>0.9</td>
</tr>
<tr>
<td>1994</td>
<td>1.2</td>
<td>1.3</td>
<td>1.0</td>
</tr>
<tr>
<td>1995</td>
<td>1.5</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>1996</td>
<td>1.4</td>
<td>1.2</td>
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</tr>
<tr>
<td>1997</td>
<td>1.6</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>1998</td>
<td>0.8</td>
<td>1.2</td>
<td>0.7</td>
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<tr>
<td>1999</td>
<td>1.1</td>
<td>1.2</td>
<td>0.9</td>
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</tbody>
</table>


Notes: 1. Net return on total assets = \( \frac{\text{net profit (before tax)}}{\text{total assets (average at beginning and end of term)}} \times 100 \)

   Turnover of total assets = \( \frac{\text{sales}}{\text{total assets (average at beginning and end of term)}} \)

   Net profit to net sales = \( \frac{\text{net profit (before tax)}}{\text{net sales}} \times 100 \)

2. SMEs defined as firms with paid-in capital of under ¥100 million.
   Large enterprises defined as firms with paid-in capital of at least ¥100 million.
Table 16  Trends in main financial ratios (all industries)

<table>
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<tr>
<th>FY</th>
<th>Quick ratio</th>
<th>Current ratio</th>
<th>Ratio of fixed assets to net worth</th>
<th>Ratio of fixed assets to long-term capital</th>
<th>Equity ratio</th>
</tr>
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<tr>
<td></td>
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<td>Large enterprises</td>
<td>SMEs</td>
<td>Large enterprises</td>
<td>SMEs</td>
</tr>
<tr>
<td>1989</td>
<td>71</td>
<td>75</td>
<td>112</td>
<td>121</td>
<td>292</td>
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<tr>
<td>1990</td>
<td>71</td>
<td>73</td>
<td>112</td>
<td>122</td>
<td>268</td>
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<tr>
<td>1991</td>
<td>67</td>
<td>68</td>
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<td>1992</td>
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<td>112</td>
<td>117</td>
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<td>72</td>
<td>74</td>
<td>110</td>
<td>110</td>
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Notes:
1. Quick ratio = \( \frac{\text{quick assets}}{\text{current liabilities}} \times 100 \)
   - Quick assets = cash and deposits + accounts receivables

Current ratio = \( \frac{\text{current assets}}{\text{current liabilities}} \times 100 \)

Ratio of fixed assets to net worth = \( \frac{\text{fixed assets}}{\text{equity capital}} \times 100 \)

Ratio of fixed assets to long-term capital = \( \frac{\text{fixed assets}}{\text{equity capital} + \text{fixed liabilities}} \times 100 \)

Equity ratio = \( \frac{\text{equity capital}}{\text{total capital}} \times 100 \)

2. SMEs defined as firms with paid-in capital of under ¥100 million.
   - Large enterprises defined as firms with paid-in capital of at least ¥100 million.
### Table 17 Capital investment in manufacturing

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<td>4,052</td>
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<td>3,545</td>
<td>3,643</td>
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#### (2) Percentage breakdown

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<tr>
<td>30~99</td>
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<td>17.4</td>
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<td>15.4</td>
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<td>16.0</td>
<td>14.8</td>
<td>15.0</td>
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<tr>
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<td>23.6</td>
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<td>30.9</td>
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<td>31.4</td>
<td>29.7</td>
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<td>31.3</td>
<td>32.4</td>
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<td>38.3</td>
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#### (3) Investment per employee

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Source:  Ministry of Economy, Trade and Industry, *Census of Manufactures*.

Notes:  
1. Capital investment equals acquisitions of tangible fixed assets plus the annual change in the construction suspense account.  
2. Investments in head office establishments away from plants are not included.  
Table 18 Outstanding loans to small and medium enterprises by type of financial institution

(End of FY (end of Dec.))

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<td>National Life Finance Corporation</td>
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<td>328,758</td>
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Notes:
1. National bank banking and trust account loans to SMEs are business loans to individuals and business corporations with paid-in capital of ¥100 million or under or 300 or fewer regular employees (¥30 million or under or 100 or fewer regular employees in the wholesale sector, ¥10 million or under or 50 or fewer regular employees in the retail sector, the food sector and the service sector). Consumer loans not included.
3. Figures for national banks adjusted retroactively including member banks of the Second Association of Regional Banks (including mutual banks).
4. Figures not continuous due to exclusion of yen loans to non-residents from 1995.
5. People’s Finance Corporation and Environmental Hygiene Finance Corporation merged in October 1999 to form the National Life Finance Corporation.
## Table 19 Wages per employee and ratio by industry

### (1) Total cash pay

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### (2) Ratio (500 or over =100)

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Notes: 1. “All industries” excludes the service sector.
2. “Wholesale and retail” includes the food service sector.
### Table 20 Accession and separation rates

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<td>-0.04</td>
<td>1.64</td>
<td>1.68</td>
<td>-0.04</td>
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<td>1.36</td>
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<tr>
<td>1998</td>
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<td>1.81</td>
<td>1.87</td>
<td>-0.06</td>
<td>1.56</td>
<td>1.68</td>
<td>-0.12</td>
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<tr>
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<tr>
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<td>0.02</td>
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<td>1.81</td>
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<td>1.42</td>
<td>-0.13</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Size**


Note:

1. “Accession rate” is the number of regular employees that are hired, transferred or otherwise join an enterprise (including movements between establishments within the same enterprise) during the survey period divided by the total number of regular employees at the end of the of the previous survey period expressed as a percentage.

2. “Separation rate” is the number of regular employees that leave a business establishment due to retirement and transfer, etc. (including movement between establishments within the same enterprise) during the survey period divided by the total number of regular employees at the end of the previous survey period expressed as a percentage.
# Table 21 State of corporate bankruptcies

(1) Number of corporate bankruptcies and debts

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of bankruptcies</strong></td>
<td>15,108</td>
<td>14,834</td>
<td>16,464</td>
<td>18,988</td>
<td>15,352</td>
<td>18,769</td>
</tr>
<tr>
<td>Overall</td>
<td>14,970</td>
<td>14,731</td>
<td>16,293</td>
<td>18,749</td>
<td>15,135</td>
<td>18,497</td>
</tr>
<tr>
<td>Firms with paid-in capital of under ¥100 million</td>
<td>14,970</td>
<td>14,731</td>
<td>16,293</td>
<td>18,749</td>
<td>15,135</td>
<td>18,497</td>
</tr>
<tr>
<td><strong>Debts</strong></td>
<td>92,411</td>
<td>81,229</td>
<td>140,447</td>
<td>137,484</td>
<td>136,214</td>
<td>238,850</td>
</tr>
<tr>
<td>Overall</td>
<td>46,561</td>
<td>49,693</td>
<td>57,494</td>
<td>68,329</td>
<td>80,640</td>
<td>65,691</td>
</tr>
<tr>
<td>Firms with paid-in capital of under ¥100 million</td>
<td>46,561</td>
<td>49,693</td>
<td>57,494</td>
<td>68,329</td>
<td>80,640</td>
<td>65,691</td>
</tr>
</tbody>
</table>

Note: Only firms with debts of at least ¥10 million are included.

(2) Number of bankruptcies and debts by industry

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction</strong></td>
<td>3,982</td>
<td>4,065</td>
<td>5,096</td>
<td>5,668</td>
<td>4,650</td>
<td>6,214</td>
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<td>No. of bankruptcies</td>
<td>8,006</td>
<td>8,939</td>
<td>24,000</td>
<td>22,236</td>
<td>12,860</td>
<td>14,510</td>
</tr>
<tr>
<td><strong>Debts</strong></td>
<td>2,150</td>
<td>2,989</td>
<td>3,022</td>
<td>3,710</td>
<td>2,891</td>
<td>3,529</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td>10,075</td>
<td>9,188</td>
<td>9,702</td>
<td>18,844</td>
<td>11,443</td>
<td>12,167</td>
</tr>
<tr>
<td>No. of bankruptcies</td>
<td>4,771</td>
<td>4,723</td>
<td>5,100</td>
<td>5,884</td>
<td>4,427</td>
<td>5,448</td>
</tr>
<tr>
<td><strong>Debts</strong></td>
<td>14,463</td>
<td>10,948</td>
<td>26,098</td>
<td>22,563</td>
<td>14,036</td>
<td>46,506</td>
</tr>
<tr>
<td><strong>Commerce</strong></td>
<td>707</td>
<td>594</td>
<td>591</td>
<td>694</td>
<td>682</td>
<td>629</td>
</tr>
<tr>
<td>No. of bankruptcies</td>
<td>11,737</td>
<td>20,526</td>
<td>17,703</td>
<td>20,013</td>
<td>47,664</td>
<td>48,604</td>
</tr>
<tr>
<td><strong>Debts</strong></td>
<td>91</td>
<td>66</td>
<td>82</td>
<td>87</td>
<td>136</td>
<td>77</td>
</tr>
<tr>
<td><strong>Real estate</strong></td>
<td>3,150</td>
<td>2,989</td>
<td>3,022</td>
<td>3,710</td>
<td>2,891</td>
<td>3,529</td>
</tr>
<tr>
<td>No. of bankruptcies</td>
<td>10,075</td>
<td>9,188</td>
<td>9,702</td>
<td>18,844</td>
<td>11,443</td>
<td>12,167</td>
</tr>
<tr>
<td><strong>Debts</strong></td>
<td>4,771</td>
<td>4,723</td>
<td>5,100</td>
<td>5,884</td>
<td>4,427</td>
<td>5,448</td>
</tr>
<tr>
<td><strong>Finance and insurance</strong></td>
<td>1,778</td>
<td>1,743</td>
<td>1,825</td>
<td>2,000</td>
<td>1,868</td>
<td>2,052</td>
</tr>
<tr>
<td>No. of bankruptcies</td>
<td>10,637</td>
<td>7,015</td>
<td>25,263</td>
<td>34,508</td>
<td>19,823</td>
<td>21,552</td>
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<tr>
<td><strong>Debts</strong></td>
<td>91</td>
<td>66</td>
<td>82</td>
<td>87</td>
<td>136</td>
<td>77</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td>35,260</td>
<td>23,172</td>
<td>35,842</td>
<td>16,283</td>
<td>27,921</td>
<td>92,008</td>
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<tr>
<td>No. of bankruptcies</td>
<td>1,778</td>
<td>1,743</td>
<td>1,825</td>
<td>2,000</td>
<td>1,868</td>
<td>2,052</td>
</tr>
<tr>
<td><strong>Debts</strong></td>
<td>10,637</td>
<td>7,015</td>
<td>25,263</td>
<td>34,508</td>
<td>19,823</td>
<td>21,552</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>629</td>
<td>654</td>
<td>748</td>
<td>945</td>
<td>698</td>
<td>820</td>
</tr>
<tr>
<td>No. of bankruptcies</td>
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<td>1,441</td>
<td>1,839</td>
<td>3,037</td>
<td>2,468</td>
<td>3,503</td>
</tr>
<tr>
<td><strong>Debts</strong></td>
<td>2,233</td>
<td>1,441</td>
<td>1,839</td>
<td>3,037</td>
<td>2,468</td>
<td>3,503</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15,108</td>
<td>14,834</td>
<td>16,464</td>
<td>18,988</td>
<td>15,352</td>
<td>18,769</td>
</tr>
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<td>92,411</td>
<td>81,229</td>
<td>140,447</td>
<td>137,484</td>
<td>136,214</td>
<td>238,850</td>
</tr>
<tr>
<td><strong>Debts</strong></td>
<td>91</td>
<td>66</td>
<td>82</td>
<td>87</td>
<td>136</td>
<td>77</td>
</tr>
</tbody>
</table>

Notes: 1. Only firms with debts of at least ¥10 million are included.
2. “Others” includes transport, telecommunications and primary industry.

(3) Breakdown of number of bankruptcies by cause

<table>
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<tr>
<td><strong>Slump in sales</strong></td>
<td>47.4</td>
<td>46.9</td>
<td>47.5</td>
<td>50.5</td>
<td>54.2</td>
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<tr>
<td><strong>Careless management</strong></td>
<td>17.4</td>
<td>17.3</td>
<td>15.6</td>
<td>13.8</td>
<td>13.0</td>
<td>11.2</td>
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<tr>
<td><strong>Chain reaction bankruptcy</strong></td>
<td>7.5</td>
<td>7.9</td>
<td>9.8</td>
<td>9.9</td>
<td>7.9</td>
<td>7.7</td>
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<tr>
<td><strong>Past difficulties</strong></td>
<td>8.1</td>
<td>10.6</td>
<td>11.1</td>
<td>12.0</td>
<td>11.4</td>
<td>12.9</td>
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<tr>
<td><strong>Other</strong></td>
<td>19.6</td>
<td>17.3</td>
<td>16.0</td>
<td>13.8</td>
<td>13.5</td>
<td>13.0</td>
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</table>

Note: Only firms with debts of at least ¥10 million are included.
Table 22 Summary of cases approved under the Law on Supporting Business Innovation of Small and Medium Enterprises

(as of March 31, 2001)

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<tr>
<th>Name of economic affairs bureau, etc.</th>
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<th>No. of approvals by prefecture</th>
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<td>Kanto</td>
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<td>Ibaraki</td>
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<td>376</td>
<td>Aichi</td>
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<td>Ishikawa</td>
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<td>Kanto</td>
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<td>Okinawa</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>3,942</td>
</tr>
</tbody>
</table>

Note: This law entered effect in July 1999, when the Law on Facilitation of Entry into New Fields by Small and Medium Enterprises was repealed.
## Table 23 Summary of budgets for small business measures

(Unit: ¥100 million)

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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>General account</td>
<td>1,331</td>
<td>(1,195)</td>
<td>1,335</td>
<td>+4</td>
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</tbody>
</table>

Source: Ministry of Economy, Trade and Industry.

Note: In addition to the above, the total budget for small business measures includes the budget for financing of government-affiliated financial institutions (¥621.6 billion under the first FY2000 supplementary budget, ¥56.6 billion under the FY2001 budget: Ministry of Finance) and the budget for subsidies to the Organization for Workers’ Retirement Allowance Mutual Aid (¥4.6 billion under the FY2001 budget: Ministry of Health, Labour and Welfare).