Revision of TANKAN[1] in the March 2004 Survey— Comparison between the pre- and post-revision in the December 2003 Survey

1. Introduction

TANKAN will be revised from the March 2004 Survey (to be released on April 1, 2004). In addition to the regular revision of sample enterprises which is conducted every 5 years, the revision includes some changes in the framework of the survey. The fundamental revision aims at improving the statistical accuracy by reflecting the industrial structure of the economy and incorporating the recent accounting system.

This paper introduces the main points of the revision and primary changes in the sample design of TANKAN. It also reveals the difference between the pre- and post-revision surveys in terms of aggregation results.

2. Revision of TANKAN in the March 2004 Survey

The five major changes will be introduced in this section.

(1) Revising the Surveyed Industries

The surveyed industries will be revised to reflect the recent structural changes in industries. We select the surveyed industry if it is related to the trend in business conditions and is profit-making. The classification of industries is decided in accordance with the *Japan Standard Industrial Classification (Rev.11)* released by the Ministry of Public Management, Home Affairs, Posts and Telecommunications in March 2002. Details of the revision in TANKAN are as follows (See Figure 1).

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[1] "TANKAN" is an abbreviation of "TANKI KEIZAI KANSOKU CHOUSA" (the Short-term Economic Survey of Enterprises in Japan). Unless otherwise noted, TANKAN indicates "All Enterprises TANKAN," in which sample enterprises are selected from the population.

i) Reclassifying Industries:

"Information communication" and "Restaurants & Accommodations" will be separated from "Services," following the *Japan Standard Industrial Classification*. The remaining industries in "Services" will be divided into two categories, "Services for businesses" and "Services for personals" to respond to users' needs.

"Shipbuilding & Heavy machinery" and "Other transportation machinery" will be unified since the number of population enterprises may be too small to recognize the condition of these industries individually.

ii) Expanding the Industrial Coverage:

"Industrial waste disposal business," "Instruction services for arts, culture and technical skills," "Welfare services for the aged and care services" and so on will be added in "Services" as they may be profit-making and may be related to the trend in business conditions.

(2) Revising Criteria of Enterprise Size

While the pre-revision TANKAN adopts the number of employees as the criteria for enterprise size, the revised TANKAN will adopt enterprises' capital as its criteria.[2] This revision is to reflect the rapid diversification of employment styles in enterprises. For instance, there appear to be some enterprises with a small number of employees but large capital, such as holding companies and Internet-related companies.

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[2] For reference, for some time, we will continue to release four figures (Business Conditions Diffusion Index, Sales, Current Profits, and Fixed Investment) based on the number of employees on the following day of the release day.
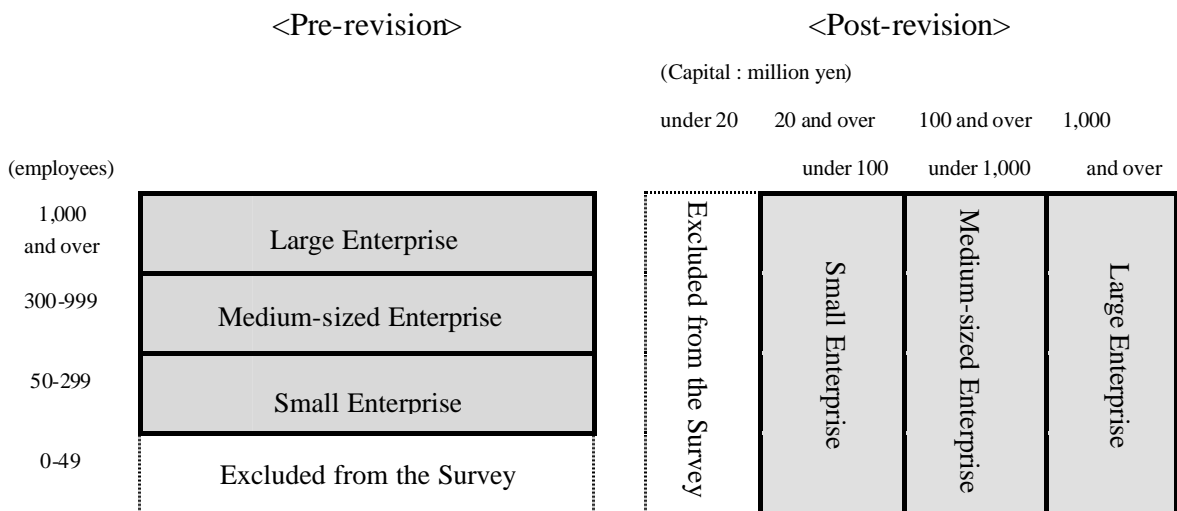
(3) Revising Survey Items

Survey items are designed to reflect changes of economic conditions. On the other hand, we have to avoid duplication against other statistics and to decrease the burden on respondents. To accomplish these objectives, we will revise several items. Some examples are shown below(See Figures 2 and 3 for all revised points).

i) "Domestic sales" will be abolished as it can be calculated by deducting "Exports" from "Sales."
ii) "Land purchasing expenses" will be added in response to strong users' needs.
iii) "Net income" will be added to grasp the condition of business activities that cannot be recognized only by current profits.

(4) Abolishing "Principal Enterprises TANKAN"

"Principal Enterprise TANKAN" will be abolished from the revised TANKAN. Since the surveyed enterprises [3] are basically fixed and simple aggregates are used in "Principal Enterprises TANKAN," the results may diverge from the actual economic conditions due to the changes in the industrial structure. Because of this reason, "Principal Enterprises TANKAN" has been treated as a reference survey since the March 1999 Survey. As a result, a majority of TANKAN users have come to focus

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[3] They are selected from "stock exchange listed companies with capital of one billion yen and over, excluding the financial and insurance industries" under the condition that they are "principal enterprises deemed to generally reflect the trends in their industries" (about 700).

mainly on "All Enterprises TANKAN." Under this situation, we have decided to abolish "Principal Enterprises TANKAN" (sample enterprises of "Principal Enterprises TANKAN" will continue to be surveyed in "All Enterprises TANKAN").

(5) Introducing Missing-value Supplement

Unanswered responses (missing value) have been treated simply: the responses were excluded from the aggregation. For the quantitative items, in which the population estimation method is taken for aggregation, this treatment corresponds to substituting the average figures of the stratum,[4] to which the unanswered respondent belongs, for the unanswered items. This is because the population estimation method calculates the aggregated figure by multiplying the average figure by the number of the population.

In order to decrease non-sampling errors, we are making efforts to keep a high response rate by asking for the understanding and cooperation of responding enterprises. With these efforts, the current response rates for all quantitative question items are basically at a high level, so we have not had any problems with the current measure. However, we have been searching for a better measure for unanswered responses, in the event of lower response rates.

After the revision, we will introduce a new measure for unanswered responses for all annual projection items such as Sales, Current Profits, and Fixed Investment. This substitutes the most recent response of the corresponding enterprise to the unanswered items. According to our analysis, the new measure enhances the accuracy more than the current one as a whole.

3. New Sample Enterprises

To revise the survey, we have chosen new sample enterprises from the updated population based on *the 2001 Establishment and Enterprise Census of Japan.*[5] We have adopted the sampling method described below. The method aims at achieving statistical accuracy with less burden on respondents and less staff members when compiling data.

i) Maintaining the current surveyed enterprises as sample enterprises. (Note that the current surveyed enterprises with less than 20 million capital are to be excluded

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[4] There are 377 strata by industry and scale (capital and employee) for population estimation.

[5] The survey was conducted as of October 1, 2001.

from the population of the new survey.)

  ii) Adding the minimum number of enterprises at random to achieve the statistical accuracy such as the error ratio of sales and the consistency of the sample distribution with the population distribution.

In consequence of sampling, 3,831 sample enterprises are added and 1,187 are eliminated. As a result, there are 10,848 sample enterprises in the new TANKAN (Figures 4 and 5).

4. December 2003 Survey on a New Basis

(1) Discontinuity between the Pre- and Post-Revision Surveys

Changes in the survey framework and sample enterprises create a discontinuity between the time series data up to the December 2003 Survey and data of the March 2004 Survey. To recognize this discontinuity, we have conducted a preliminary survey for all sample enterprises of the new survey. With the survey, we reaggregated the December 2003 Survey on the new basis. There seemed to be no large differences between the pre- and post-revision surveys in both judgement items and year-to-year changes of the annual projection items such as Sales and Fixed Investment. Note that there are some gaps in several items such as Business Conditions DI for large nonmanufacturing. See "Data comparison between pre- and post- revision of TANKAN in the December 2003 Survey" (released on March 8, 2004) for details.

(2) Factors of Discontinuity

The discontinuity between the pre- and post-revision of TANKAN is caused by the following three factors (Figure 6):

  i) Eliminating sample enterprises:
    Sample enterprises with less than 20 million yen in capital are to be excluded from the survey.

  ii) Changing criteria:
    The criteria of enterprise size are to be changed from the number of employees to capital amount.

iii) Adding sample enterprises:

New enterprises are to be added to meet the criteria for the statistical accuracy.

(3) Discontinuity in the Business Conditions DI

As for the Business Conditions DI, there is an upward discontinuity in all mainly due to adding new sample enterprises which exerted upward pressure on the DI.[6] On the other hand, a discontinuity differs in each category, because changing criteria contributes both positively and negatively to the DI.

▼Data: Comparison between the pre- and post-revision - Business Conditions DI -

(Diffusion index of "favorable" minus "unfavorable", %points)

| | | DI (Actual) | | Difference (post-revision minus pre-revision) | | | |
| | | | | | Factor* | | |
		pre-revision	post-revision		Eliminating sample enterprises	Changing criteria	Adding sample enterprises
All enterprises	All industries	-15	-11	4	1	-	3
Large enterprises	manufacturing	11	7	-4	0	-4	0
	nonmanufacturing	-9	0	9	0	5	4
Medium-sized enterprises	manufacturing	-1	-3	-2	0	-4	2
	nonmanufacturing	-21	-12	9	1	-2	10
Small enterprises	manufacturing	-13	-10	3	1	-1	3
	nonmanufacturing	-28	-25	3	2	-3	4

(*) See Figure 6 for details of the factor decomposition procedure.

Let us look at how three factors mentioned above affect business conditions DI concretely.

At first, the eliminating sample enterprises factor contributes positively to the new DI. As a whole, the eliminated enterprises, which employ 50 and over but have less than 20 million yen capital, are the ones with lower DIs than other sample enterprises (See Figure 7). Secondly, the changing criteria factor does not have any general implications

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[6] The business conditions DI was also revised upward in the past two revisions of sample enterprises (by all industries and all enterprises basis; December 1998 survey: old basis -49, new basis -47; August 1993 survey: old basis -34, new basis -29).

on the Business Conditions DI. It contributes both positively and negatively to the new DI (See Figure 8). Finally, the <u>adding sample enterprises</u> factor contributes positively to the new DI, except for large manufacturing, in which a few are added to sample enterprises. As a whole, new sample enterprises, especially those newly established, have higher DIs than older ones. New enterprises have become samples of TANKAN, since the population of the survey was updated. To put it another way, the updated population may include some newly established enterprises with outstanding performance among all enterprises and thus have positive effects on the new DI (See Figures 9 and 10). TANKAN on the new basis accurately reflects business conditions in this way. In other words, the old population may cause bias to the survey with the course of time[7].

Now, let us look at categories such as large or small, and manufacturing or nonmanufacturing in detail.

i) Large manufacturing enterprises
  - <u>Eliminating sample enterprises</u> does not have any significant effects on the DI, because only a few enterprises are eliminated.
  - <u>Changing criteria</u> has negative effects on the DI, because some previous medium-sized enterprises with lower DIs shift to large enterprises mainly in "Chemicals," "Industrial machinery," and "Electrical machinery".
  - <u>Adding sample enteprises</u> does not have any significant effects on the DI, because only a few enterprises are added.

ii) Large nonmanufacturing enterprises
  - <u>Eliminating sample enterprises</u> does not have any significant effects on the DI, because only a few enterprises are eliminated.
  - <u>Changing criteria</u> has positive effects on the DI, because some previous medium-sized enterprises with higher DIs shift to large enterprises mainly in "Wholesaling" and "Transportation".
  - <u>Adding sample enterprises</u> has positive effects on the DI, because some newly established enterprises with higher DIs are added mainly in "Services for Businesses" and "Services for Personals."

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[7] Among all 3,831 new sample enterprises, 2,193 could not be included in the population unless the criteria of enterprise size changed. These 2,193 enterprises include some Internet-related enterprises, which do not have many employees but large capital and which we have intended to incorporate.

iii) Small manufacturing enterprises
- Eliminating sample enterprises has positive effects on the DI, because some enterprises with lower DIs are eliminated.
- Changing criteria does not have any significant effects on the DI, because there are few enterprises which are reclassified from other categories.
- Adding sample enterprises has positive effects on the DI, because some newly established enterprises with higher DIs are added mainly in "Iron & Steel" and "Industrial machinery".

iv) Small nonmanufacturing enterprises
- Eliminating sample enterprises has positive effects on the DI, because some enterprises with lower DIs are eliminated.
- Changing criteria has negative effects on the DI, because some previous medium-sized enterprises with lower DIs shift to small enterprises mainly in "Retailing" and "Restaurants & Accommodations".
- Adding sample enterprises has positive effects on the DI, because some newly established enterprises with higher DIs are added mainly in "Wholesaling" and "Transportation."

(4) Discontinuity in Annual Projection Items

We analyzed the discontinuity in fixed investment among annual projection items in the same way as we did in the Business Conditions DI. Eliminating sample enterprises and changing criteria do not have any significant effects on fixed investment. On the other hand, adding sample enterprises has some positive effects on the year-to-year change of fixed investment of small enterprises in both manufacturing and nonmanufacturing (Figure 11).

5. Conclusion - Towards Further Improvement of TANKAN

To sum up the analysis described above, significant discontinuities are not observed between the pre- and post-revision surveys. Note, however, that there are some discontinuities which may be caused by the bias in the pre-revision survey, because five years have passed since the last revision. The discontinuities may reflect the various structural changes of the Japanese economy which occurred in the last five years.

Recently, the structure of the Japanese economy and industry has been changing rapidly. In order for TANKAN to capture the actual business conditions, a more frequent revision may be required. As such, we will shorten the interval between the revisions of sample enterprises from every 5 years to every 2 or 3 years.

Even after the revision, there are still several issues we have to deal with. For example, although the procedure for responding mergers and spin-offs is partly changed from the revision, we think it incomplete even after the revision. We will continue to examine this issue from a wide perspective including the framework of the survey. Another example would be that we should consider collecting survey forms on-line, as they are still collected by mail. Considering the recent IT innovation, an online survey may bring certain benefits to the respondents.
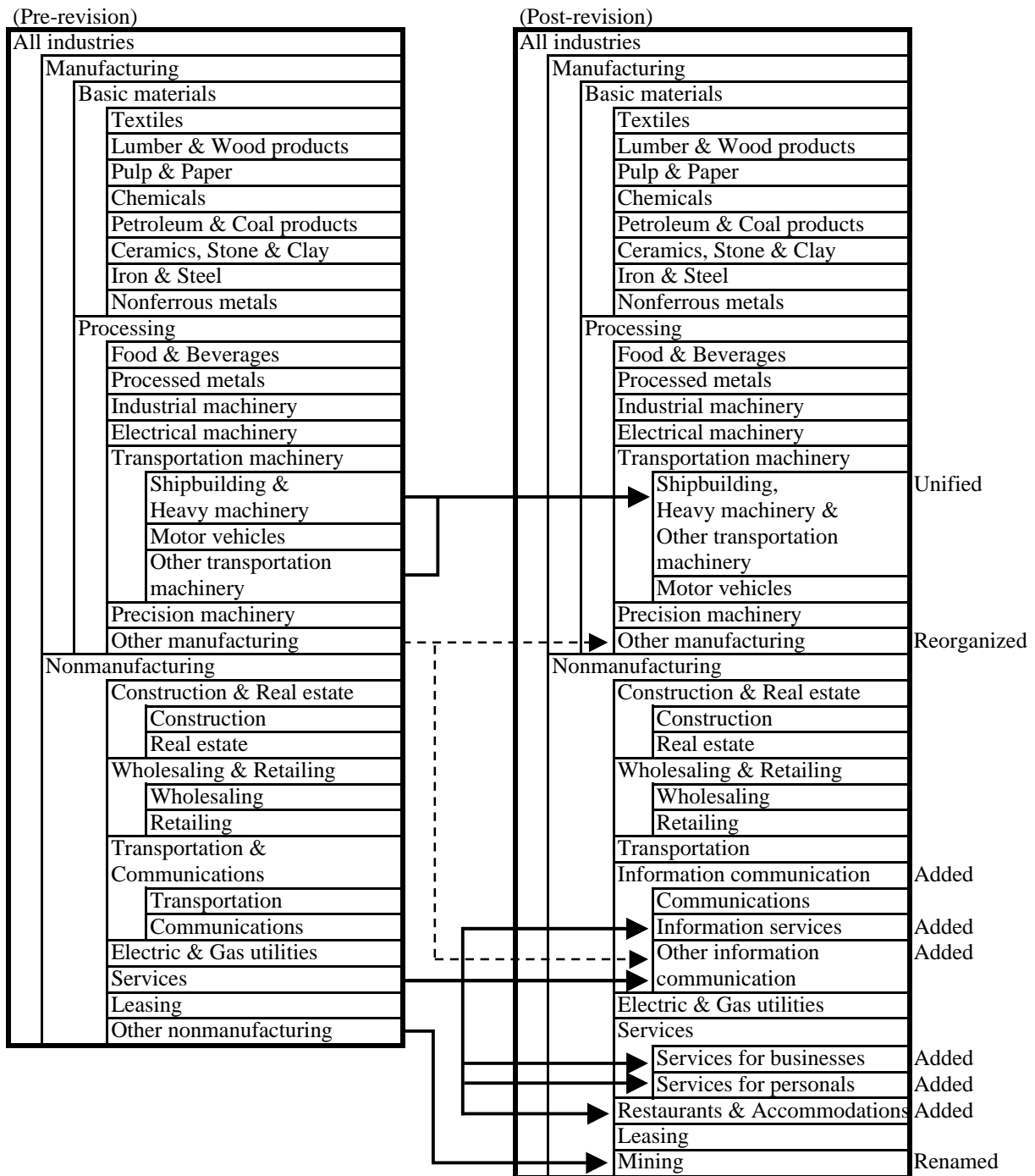
The Bank of Japan will continue to enhance the accuracy of its statistics by incorporating the changes in economic structures and conditions. Moreover, we will also make efforts to overcome the various problems to meet users' needs and to alleviate the burden on respondents.

(Figure 1)

Industry Classification of the Pre- and Post- Revision TANKAN

(Pre-revision)

All industries
- Manufacturing
  - Basic materials
    - Textiles
    - Lumber & Wood products
    - Pulp & Paper
    - Chemicals
    - Petroleum & Coal products
    - Ceramics, Stone & Clay
    - Iron & Steel
    - Nonferrous metals
  - Processing
    - Food & Beverages
    - Processed metals
    - Industrial machinery
    - Electrical machinery
    - Transportation machinery
      - Shipbuilding & Heavy machinery
      - Motor vehicles
      - Other transportation machinery
    - Precision machinery
    - Other manufacturing
- Nonmanufacturing
  - Construction & Real estate
    - Construction
    - Real estate
  - Wholesaling & Retailing
    - Wholesaling
    - Retailing
  - Transportation & Communications
    - Transportation
    - Communications
  - Electric & Gas utilities
  - Services
  - Leasing
  - Other nonmanufacturing

(Post-revision)

All industries
- Manufacturing
  - Basic materials
    - Textiles
    - Lumber & Wood products
    - Pulp & Paper
    - Chemicals
    - Petroleum & Coal products
    - Ceramics, Stone & Clay
    - Iron & Steel
    - Nonferrous metals
  - Processing
    - Food & Beverages
    - Processed metals
    - Industrial machinery
    - Electrical machinery
    - Transportation machinery
      - Shipbuilding, Heavy machinery & Other transportation machinery — Unified
      - Motor vehicles
    - Precision machinery
    - Other manufacturing — Reorganized
- Nonmanufacturing
  - Construction & Real estate
    - Construction
    - Real estate
  - Wholesaling & Retailing
    - Wholesaling
    - Retailing
  - Transportation
  - Information communication — Added
    - Communications
    - Information services — Added
    - Other information communication — Added
  - Electric & Gas utilities
  - Services
    - Services for businesses — Added
    - Services for personals — Added
  - Restaurants & Accommodations — Added
  - Leasing
  - Mining — Renamed

(Figure 2)

Survey Items of TANKAN I

<Judgement items>

Survey item	Revision
Business conditions (a)	-
Domestic supply and demand conditions for products and services (b)	-
Overseas supply and demand conditions for products (b)	-
Inventory level of finished goods and merchandise (c)	"Forecast" will be abolished
Wholesalers' inventory level (c)	"Forecast" will be abolished
Production capacity (d)	-
Employment conditions (e)	-
Financial position (f)	"Forecast" will be abolished
Lending attitude of financial institutions (g)	"Forecast" will be abolished
Change in interest rate on loans* (h)	-
Conditions for CP issuance (g)	Added (only "actual results")
Change in output prices* (h)	-
Change in input prices* (h)	-

Notes: Respondents are asked to choose one alternative among three choices as the best descriptor of prevailing conditions at the time of the survey and three month hence. (As for three items marked with *, the best descriptor of prevailing changes from three months earlier and three month hence.)

(a) Choices are: 1) Favorable; 2) Not so favorable; and 3) Unfavorable.

(b) Choices are: 1) Excess demand; 2) Almost balanced; and 3) Excess supply.

(c) Choices are: 1) Excessive or somewhat excessive; 2) Adequate; and 3) Insufficient or somewhat insufficient.

(d) Choices are: 1) Excessive capacity; 2) Adequate; and 3) Insufficient capacity.

(e) Choices are: 1) Excessive employment; 2) Adequate; and 3) Insufficient employment.

(f) Choices are: 1) Easy; 2) Not so tight; and 3) Tight.

(g) Choices are: 1) Accommodative; 2) Not so severe; and 3) Severe.

(h) Choices are: 1) Rise; 2) Unchanged; and 3) Fall.

(Figure 3)

Survey Items of TANKAN II

<Quantitative items>

Category	Survey item	Revision
Quarterly data	Total liabilities	Added
	Loans from financial institutions	-
	Commercial paper	-
	Corporate bonds	-
	Capital and additional paid-in capital	Abolished
	Total assets	Added
	Cash and deposits	-
	Securities listed as liquid assets	-
	Securities listed as fixed assets	-
	Number of employees	-
	Part-time workers	-
	Interest-bearing debt outstanding (i, j)	-
	Level of liquidity (i, j)	-
	Number of employees (i, j)	-
Annual projections	Sales	-
	Domestic sales (reported only by Wholesaling)	Abolished
	Exports	-
	Predicted exchange rates (Yen per dollar)	-
	Material costs	-
	Personnel expenses	-
	Depreciation expenses	-
	Operating profits	-
	Financial income	-
	Financial expenses	-
	Current profits	-
	Net income	Added
	Fixed investment	-
	Land purchasing expenses	Added
	Software investment	-
Other	Overseas production	Abolished
	Overseas investment	Abolished
	Number of new graduates hired	-

Notes:

(i) Respondents are asked to choose one alternative among three choices as the best descriptor of
    prevailing changes from the time of the survey to three months hence.

(j) Choices are: 1) Increase; 2) Unchanged; and 3) Decrease.

(Figure 4)

Number of Population and Sample Enterprises by Industry and Scale

Industry	All Enterprises		Large Enterprises		Medium-sized Enterprises		Small Enterprises	
	Population	Sample	Population	Sample	Population	Sample	Population	Sample
All Industries	**215,250**	**10,848**	**5,471**	**2,441**	**22,351**	**2,890**	**187,428**	**5,517**
Manufacturing	45,581	4,393	2,076	1,188	5,804	1,183	37,701	2,022
Textiles	3,464	263	72	49	254	63	3,138	151
Lumber & Wood products	2,128	144	30	13	149	37	1,949	94
Pulp & Paper	1,339	162	46	32	178	43	1,115	87
Chemicals	2,018	288	295	143	482	68	1,241	77
Petroleum & Coal products	217	77	29	22	36	23	152	32
Ceramics, Stone & Clay	3,235	232	92	49	324	58	2,819	125
Iron & Steel	1,227	212	82	54	240	52	905	106
Nonferrous metals	744	165	65	39	151	56	528	70
Food & Beverages	5,971	449	206	119	727	119	5,038	211
Processed metals	4,153	281	94	56	368	72	3,691	153
Industrial machinery	5,912	493	270	149	701	117	4,941	227
Electrical machinery	5,093	665	382	200	918	198	3,793	267
Shipbuilding, Heavy machinery & Other transportation machinery	612	160	37	31	98	50	477	79
Motor vehicles	1,717	288	157	117	315	83	1,245	88
Precision machinery	1,134	182	62	39	154	45	918	98
Other manufacturing	6,617	332	157	76	709	99	5,751	157
Nonmanufacturing	169,669	6,455	3,395	1,253	16,547	1,707	149,727	3,495
Construction	55,444	1,278	304	142	1,619	206	53,521	930
Real estate	12,896	427	425	92	1,911	168	10,560	167
Wholesaling	34,895	1,245	717	194	4,225	388	29,953	663
Retailing	18,728	801	389	159	1,865	219	16,474	423
Transportation	11,572	662	309	143	1,260	165	10,003	354
Communications	478	134	96	40	122	54	260	40
Information services	5,234	265	220	92	1,348	79	3,666	94
Other information communication	2,382	210	246	56	641	76	1,495	78
Electric & Gas utilities	324	140	82	46	133	57	109	37
Services for businesses	9,803	327	132	76	1,030	80	8,641	171
Services for personals	9,613	366	176	83	1,203	60	8,234	223
Restaurants & Accommodations	6,723	309	214	75	970	76	5,539	158
Leasing	1,219	206	60	36	198	66	961	104
Mining	358	85	25	19	22	13	311	53

Notes: 1. Size of enterprises is defined by capital amount. Large enterprises: 1,000 million yen and over, Medium-sized enterprises: 100 and over - under 1,000 million, Small enterprises: 20 and over - under 100 million yen

2. The number of sample enterprises is as of December 2003 and may change due to mergers and spin-offs etc.

(Figure 5)

Changes in the Number of Sample Enterprises

	Number of sample enterprises
Start of All Enterprises TANKAN (May 1974)	5,596
The 1st revision (May 1980)	5,373
The 2nd revision (May 1983)	7,035
The 3rd revision (February 1985)	7,116
The 4th revision (May 1988)	7,635
The 5th revision (November 1993)	10,011
The 6th revision (March 1999)	9,433
The 7th revision (March 2004)	10,848 (*)

(*) The number of sample enterprises is as of December 2003 and may change due to mergers and spin-offs etc.

(Figure 6)

Procedure to Decompose the Discontinuity

(1) Old basis

	Capital Size			
	Large	Medium-sized	Small	Excluded from the survey
Employee size — Large				
Medium-sized				
Small				
Excluded from the survey				

(1)→(2): Eliminating sample enterprises
- Sample enterprises with less than 20 million yen capital are excluded.

(2) Old basis excluding samples to be eliminated

	Capital Size			
	Large	Medium-sized	Small	Excluded from the survey
Employee size — Large				
Medium-sized				
Small				
Excluded from the survey				

(2)→(3): Changing criteria
- The criteria of enterprise-sizes has changed from the number of employees to the capital amount.
- Each enterprise's industry is updated.

(3) New basis excluding samples to be added

	Capital Size			
	Large	Medium-sized	Small	Excluded from the survey
Employee size — Large				
Medium-sized				
Small				
Excluded from the survey				

(3)→(4): Adding sample enterprises
- New sample enterprises are added.

(4) New basis

	Capital Size			
	Large	Medium-sized	Small	Excluded from the survey
Employee size — Large				
Medium-sized				
Small				
Excluded from the survey				

(Figure 7)

Business Conditions DI of Enterprises to be eliminated from the New Survey

(Diffusion index of "favorable" minus "unfavorable", %points)

		Number of sample enterprises*		DI *	
		Total	To be eliminated	Total	To be eliminated
All enterprises	All industries	8,204	1,187	-15	-28
	Manufacturing	3,561	247	-5	-21
	Nonmanufacturing	4,643	940	-23	-30
Large enterprises	All industries	1,365	20	1	-25
	Manufacturing	738	18	11	-22
	Nonmanufacturing	627	2	-9	-50
Medium-sized enterprises	All industries	2,612	249	-14	-22
	Manufacturing	1,036	16	-1	6
	Nonmanufacturing	1,576	233	-21	-25
Small enterprises	All industries	4,227	918	-22	-29
	Manufacturing	1,787	213	-13	-23
	Nonmanufacturing	2,440	705	-28	-31

(*) Figures are on the old basis.

(Figure 8)

Impact of Changes in Enterprise-Size Criteria on Business Conditions DI

(1) Overview of the change

| Manufacturing | Nonmanufacturing |
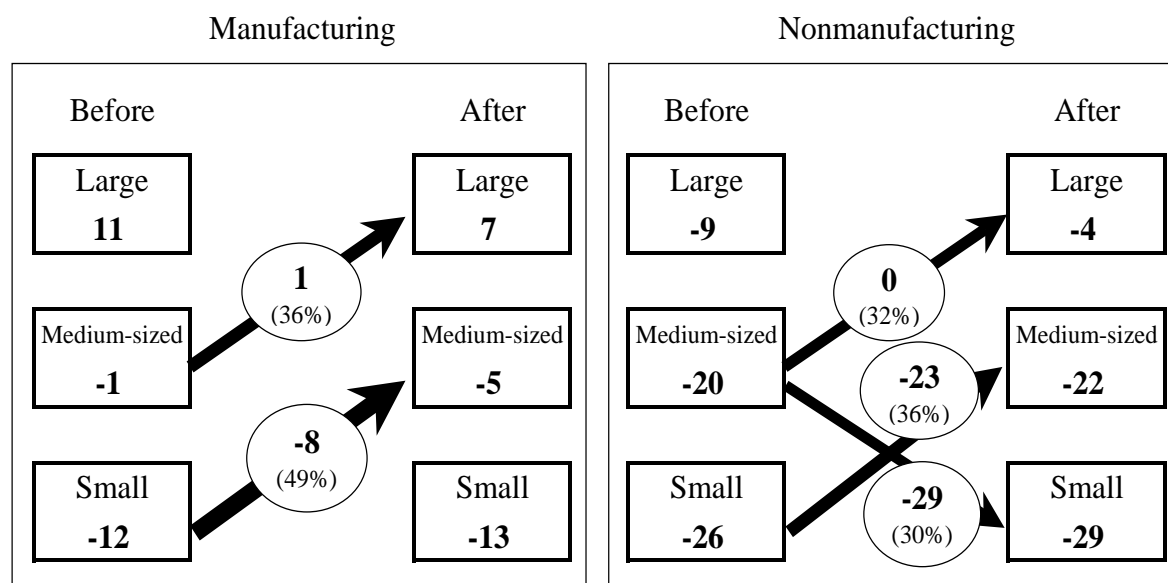
Notes: 1. The figure represents DI of each category. Figures in percentages represent the percentage share
of the changed enterprises to all enterprises in the category after the change.
   2. "Before" corresponds to (2) in Figure 6, and "After" corresponds to (3) in Figure 6.

(2) Numerical table of the change

i) Number of sample enterprises

Manufacturing

		After			Total
		Large	Medium-sized	Small	
Before	Large	647	50	4	720
	Medium-sized	401	433	168	1,020
	Small	76	480	966	1,574
Total		1,129	977	1,164	

Nonmanufacturing

		After			Total
		Large	Medium-sized	Small	
Before	Large	455	118	47	625
	Medium-sized	274	488	567	1,343
	Small	106	354	1,249	1,735
Total		859	990	1,898	

ii) Business Conditions DI

Manufacturing
(Diffusion index of "favorable" minus "unfavorable", %points)

		After			Total
		Large	Medium-sized	Small	
Before	Large	13	0	0	11
	Medium-sized	1	-2	-2	-1
	Small	-10	-8	-14	-12
Total		7	-5	-13	

Nonmanufacturing
(Diffusion index of "favorable" minus "unfavorable", %points)

		After			Total
		Large	Medium-sized	Small	
Before	Large	-5	-20	-24	-9
	Medium-sized	0	-23	-29	-20
	Small	-2	-23	-30	-26
Total		-4	-22	-29	

Notes: 1. Large: Large enterprises, Medium-sized: Medium-sized enterprises, Small: Small enterprises
    2: Total is not necessarily equal to the sum of Large, Medium-sized and Small, because some
      enterprises have switched their businesses from manufacturing (nonmanufacturing) to
      nonmanufacturing (manufacturing).

(Figure 9)

Impact of New Sample Enterprises on Business Conditions DI (1)

(1) Breakdown of new sample enterprises by foundation

Foundation period

☐ -1984
■ 1985-1995
■ 1996-

Manufacturing (1,123 enterprises)   Nonmanufacturing (2,708 enterprises)
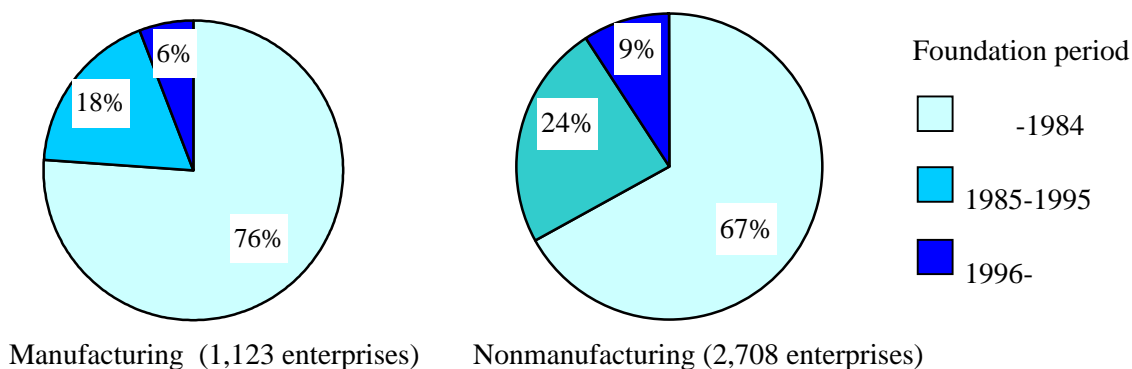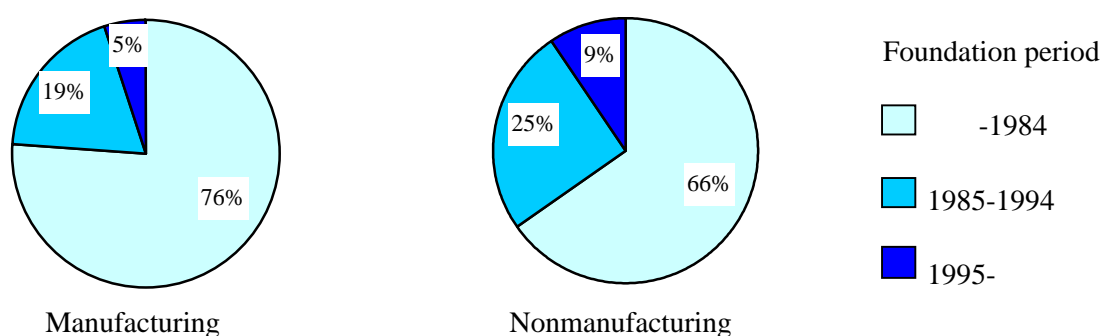
(2) Business Conditions DI of new sample enterprises by foundation

(Diffusion index of "favorable" minus "unfavorable", %points)

	DI (Subtotal of all new sample enterprises)				DI (Total) New basis
		-1984	1985-1995	1996-	
All industries	-6	-10	-3	9	-11
Manufacturing	-2	-4	0	12	-3
Nonmanufacturing	-9	-13	-4	8	-16
Services for Businesses	6	-5	4	52	-2
Services for Personals	-6	-9	-16	50	-14

Supplementary Figure: Breakdown of all enterprises in Japan by foundation

Foundation period

☐ -1984
■ 1985-1994
■ 1995-

Manufacturing   Nonmanufacturing

Notes: All enterprises with 10 and over million yen capital are surveyed.

(Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications "2001
 Establishment and Enterprise Census of Japan")

(Figure 10)

Impact of New Sample Enterprises on Business Conditions DI (2)

(3) Business Conditions DI of new sample enterprises
   by scale, industry, and foundation

(Diffusion index of "favorable" minus "unfavorable", %points)

	Industry (number of enterprises)		DI (Subtotal of all new sample enterprises)*	-1984	1985-95	1996-	DI (Total)*
All enterprises	All industries	(3,831)	-6	-10	-3	9	-11
	Manufacturing	(1,123)	-2	-4	0	12	-3
	Nonmanufacturing	(2,708)	-9	-13	-4	8	-16
Large enterprises	All industries	(453)	8	3	14	17	4
	Manufacturing	(59)	2	-2	17	0	7
	Nonmanufacturing	(394)	9	5	14	18	0
Medium-sized enterprises	All industries	(923)	6	1	16	6	-8
	Manufacturing	(206)	10	7	21	5	-3
	Nonmanufacturing	(717)	3	-1	15	6	-12
Small enterprises	All industries	(2,455)	-15	-15	-19	7	-19
	Manufacturing	(858)	-6	-6	-10	16	-10
	Nonmanufacturing	(1,597)	-20	-21	-22	2	-25

(*) Figures are on the new basis.

(Figure 11)

Factor Decompositon of the Difference between the Old and New Surveys in Fixed Investment

(%, %points)

		Year-to-year % change of FY2003		Difference (New minus Old)	Factor		
		Old basis	New basis		Eliminating sample enterprises	Changing Criteria	Adding sample enterprises
Large enterprises	Manufacturing	11.1	8.7	-2.4	0.1	-2.2	-0.2
	Nonmanufacturing	1.6	1.5	-0.2	0.0	-1.4	1.2
Medium-sized enterprises	Manufacturing	4.8	9.7	4.8	0.4	4.8	-0.4
	Nonmanufacturing	2.8	0.7	-2.1	0.0	-1.1	-0.9
Small enterprises	Manufacturing	-1.7	6.6	8.3	0.0	1.2	7.0
	Nonmanufacturing	1.2	4.5	3.3	-0.2	-0.1	3.5

Notes: See Figure 6 for the procedure to decompose the difference between the old and new surveys.