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### **Planned Revisions of the *Tankan***

Research and Statistics Department, Bank of Japan

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Research and Statistics Department, Bank of Japan

E-mail: [post.rsd5@boj.or.jp](mailto:post.rsd5@boj.or.jp)

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## Planned Revisions of the *Tankan*

### I. Overview

The *Tankan* (Short-Term Economic Survey of Enterprises in Japan) is a nationwide business survey conducted by the Bank of Japan, with the aim of providing an accurate picture of business trends of enterprises in Japan, thereby contributing to the appropriate implementation of monetary policy. The *Tankan* asks various questions, such as those regarding business conditions, financial statements, and inflation.<sup>1</sup> It is carried out on a quarterly basis and provides survey results in a timely manner.<sup>2</sup> Moreover, the *Tankan* has a long history since its predecessor, the *Principal Enterprises Tankan*, started in 1957, and maintains its extremely high response rate.<sup>3</sup> On the back of these strengths, the *Tankan* is one of the important information sources for the Bank's assessment on economic conditions; it also provides benefits for a wide range of users.

Our basic policy for conducting the *Tankan* survey is to improve the convenience of users as well as to reduce the burden on survey respondents to the greatest extent possible. On this basis, while the Bank has added survey items necessary to grasp actual economic conditions accurately in response to structural economic and financial changes, it has abolished items that draw relatively little attention from users and overlap with those of other statistics.<sup>4</sup>

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<sup>1</sup> The current survey items of the *Tankan* consist of the following four categories: (1) judgment survey items; (2) annual projections; (3) inflation outlook of enterprises; and (4) number of new graduates hired. Annual projections cover actual results and forecasts such as of sales and fixed investment.

<sup>2</sup> For every survey, the *Tankan* collects responses from enterprises during about one month survey period, and releases results on the day after the end of the survey period.

<sup>3</sup> The response rates for the recent surveys have remained more than 99 percent (99.5 percent for the September 2016 survey and 99.6 percent for the December 2016 survey).

<sup>4</sup> Most recently, the *Tankan* revised its survey items in 2014. In this revision, while the inflation

Based on our survey policy stated above, this time we intend to implement the following five revisions: (1) an addition of research and development (hereafter R&D) investment to survey items; (2) an enhancement of the survey on exchange rates; (3) an introduction of a new survey category regarding overseas business activities; (4) an abolition of some survey items -- operating profits and half-year figures of investment-related items; and (5) a more efficient sample design and a decrease in the number of sample enterprises.<sup>5</sup>

In June 2016, the Bank proposed its revision draft of the *Tankan* and launched a public consultation to gather public views. We are deeply grateful for the 35 invaluable contributions received from a wide range of business groups, economists, and academics. Reflecting these contributions, the Bank will proceed with the implementation of the revisions presented in this paper. R&D investment will be added from the March 2017 survey<sup>6</sup>, and the other revisions are to be implemented until around 2020. Once decided, we will announce a more detailed schedule and a new release format.

Going forward, the Bank will continue its efforts to further improve the *Tankan*, considering a balance between an improvement in the convenience of users and a reduction in the burden on respondents.

## **II. Five Specific Changes in Detail**

### **A. Addition of R&D Investment to Survey Items**

In recent years, with Japanese enterprises facing intensifying global competition, their domestic offices take on an increasingly significant role in R&D. Japanese enterprises, particularly of manufacturing, have started increasing R&D investment toward the development of new technology that enhances their competitiveness in the medium to long term. Royalty revenue, which is earned by providing created new technology to overseas subsidiaries, is of growing importance for Japanese enterprises.

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outlook of enterprises was included, many items regarding income statements and balance sheets were abolished.

<sup>5</sup> See Chart 1 for the list of survey items before and after the revision presented in this paper.

<sup>6</sup> For more details, see "Inclusion of 'R&D Investment' in the *Tankan* and New Release Format" (Research and Statistics Department of the Bank of Japan, December 2016).

Taking these developments into account, the Bank will include a new item called "R&D Investment" in survey items of annual projections of the *Tankan*. Specifically, we will take a survey on actual results and forecasts of R&D expenses listed on financial statements for all sample enterprises, including financial institutions. R&D investment will be added from the March 2017 survey.

The *Tankan* currently calculates and publishes figures of software and fixed investment excluding land purchasing expenses, which corresponds to private non-residential investment of the national accounts of Japan. When the survey on R&D investment is launched, we will add the amount of R&D investment to the current release figures in line with the revision of the national accounts<sup>7</sup>, and therefore will publish figures of software, R&D, and fixed investment excluding land purchasing expenses. We will also release R&D investment independently as well as continue to release software and fixed investment excluding land purchasing expenses.

## **B. Enhancement of Survey on Exchange Rates**

The *Tankan* currently holds a survey on the U.S. dollar-yen exchange rates for exports for exporting enterprises. However, imports, outward direct investment, and direct investment income -- in addition to exports -- have become increasingly important for the business activities of Japanese enterprises. In addition, currencies other than the U.S. dollar, particularly the euro, play a greater role. In light of these developments, the Bank will enhance the survey on exchange rates. Specifically, we will take a survey on the euro-yen rates as well as the U.S. dollar-yen rates of all sample enterprises excluding financial institutions.

As for the new release format, we will publish figures of exchanges rates for all sample enterprises and for exporting enterprises.<sup>8</sup> For aggregation, we will compute simple averages of answered figures of exchange rates rather than their weighted averages by

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<sup>7</sup> The national accounts statistics of Japan were revised in December 2016, conforming to the new international statistical standard (2008SNA). As a result of this revision, R&D investment is newly regarded as part of capital formation.

<sup>8</sup> In addition, we consider publishing figures of exchange rates only for enterprises included in a survey on overseas business activities, which is described next.

answered figures of the amount of exports, which are currently released.<sup>9</sup> This reflects the fact that exchange rates for overall businesses (not only exports but also imports, outward direct investment, and direct investment income) will be answered by an expanded number of enterprises, including non-exporting enterprises. Moreover, simple averages of exchange rates -- estimated by using answered figures in the past *Tankan* surveys -- show little difference from weighted averages by exports.

### **C. Introduction of New Category regarding Overseas Business Activities**

With Japanese enterprises developing business operations worldwide, their overseas business activities have a larger impact on corporate behavior and economic conditions in Japan. In recent years, in addition to exports and the shift of production sites to overseas, overseas business activities have greater influence on domestic R&D activities and administrative functions of head offices than before. Overseas activities also increasingly affect not only manufacturing enterprises but also nonmanufacturing.

Against the background of this situation, to grasp changes in economic conditions in Japan more accurately, the Bank will introduce a new survey category called "Overseas Business Activities." Specifically, we will conduct a survey on actual results and forecasts of the following five items -- sales, overseas sales, current profits, fixed investment, and overseas fixed investment -- on a consolidated basis (Chart 2 [1]).

As for the current survey items of the *Tankan*, all of which are surveyed on a non-consolidated basis, the Bank collects answers from both parent companies and consolidated subsidiaries. However, since the new category surveys consolidated figures, we will limit the survey to parent companies located at the top of consolidated business groups to avoid doubling up figures (Chart 2 [2]).<sup>10</sup> We will also limit it to large enterprises

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<sup>9</sup> For the convenience of users, we consider publishing retrospective figures of the simple average U.S. dollar-yen rates for exporting enterprises.

<sup>10</sup> Since pure holding companies, which are currently excluded from our survey coverage, usually locate at the top of business groups, we will ask for cooperation of major pure holding companies to the survey on overseas business activities. At the same time, we will begin a survey on fixed investment, land purchasing expenses, software investment, and R&D investment for enterprises assigned to the industry of "Business Consultants and Pure Holding Companies" contained in the *Japan Standard Industrial Classification*. Moreover, as mentioned in footnote 8, exchange rates will

with a capital of 1 billion yen or more, with a view to easing the total burden on sample enterprises.

Taking into account our survey objectives and ease of response for sample enterprises, overseas sales and overseas fixed investment will be described as sales to overseas external customers and the amount of newly listed tangible fixed assets located overseas, respectively.<sup>11</sup> In cases in which respondents have practical difficulty in answering figures in line with these descriptions, we plan to flexibly allow them to answer alternative figures that they can prepare. Therefore, when using survey results, it should be noted that answered figures from enterprises are not necessarily based on a single unified definition.<sup>12</sup> From the same viewpoint, in the case where enterprises do not prepare consolidated current profits due to the adoption of the International Financial Reporting Standards (IFRS) or the Generally Accepted Accounting Principles in the United States (US-GAAP), they will be allowed to answer consolidated income before income taxes instead.

Survey results of overseas business activities will be released in the following style. First, the Bank will publish year-on-year rates of change in aggregated amounts of each item as well as shares of overseas amounts in total amounts for sales and fixed investment, but will not publish aggregated amounts themselves. Second, these figures will be calculated by simply aggregating answers obtained from enterprises that can provide all figures necessary for calculation -- for example, year-on-year rates of changes are calculated based on only enterprises that answer figures of both a certain fiscal year and the following fiscal year -- for each item.<sup>13</sup> Third, the Bank will release figures by industry based on the broad classification of all industries, manufacturing (basic materials and processing, separately), and nonmanufacturing.

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also be surveyed for pure holdings companies answering overseas business activities.

<sup>11</sup> In September 2015 the Bank carried out the pilot survey of overseas business activities, with the cooperation of 150 enterprises, to assess the feasibility and the burden on respondents.

<sup>12</sup> It is also worth noting that (1) figures on a consolidated basis are subject to changes in international accounting standards and enterprises' choices about their accounting standards, and (2) the number of consolidated subsidiaries of sample enterprises likely change. These factors could cause discontinuity in the time series of aggregated results.

<sup>13</sup> As for the category of overseas business activities, we are unable to conduct population estimation due to the absence of population information on a consolidated basis.

#### **D. Abolition of Some Survey Items**

Considering the degree of attention paid by users, the burden of survey respondents, and the overlap with other surveys, among survey items of annual projections, the Bank will stop the survey on operating profits and change the survey on half-year figures of investment-related items to that on fiscal-year figures.<sup>14</sup> For the other items of annual projections -- i.e., sales, exports, exchange rates, current profits, and net income -- half-year figures will continue to be surveyed.

#### **E. More Efficient Sample Design Using the *Economic Census of Japan***

The *Tankan* develops a sample survey framework, under which the Bank extracts sample non-financial enterprises from a population of private enterprises with a capital of 20 million yen or more, to satisfy established criteria such as of the statistical accuracy. Based on this framework, approximately 11,000 sample enterprises are extracted from a population consisting of approximately 210,000 enterprises. To compile more accurate statistics with fewer sample enterprises, samples of the *Tankan* are selected using the method of stratified sampling, under which we subdivide population enterprises into groups (strata) based on the specific classifications such as industry and scale, and extract samples from each stratum.

To achieve a more efficient sample design of the *Tankan*, we will use the *Economic Census* -- jointly conducted by the Ministry of Internal Affairs and Communications and by the Ministry of Economy, Trade and Industry -- newly available as population information. Specifically, we will make a change from the number of employees to sales among the current three bases used for stratifying population enterprises -- industry, capital size, and the number of employees -- and extract samples more efficiently. This enables us to attain our statistical accuracy targets with fewer samples. On this basis, we will make use of this improvement in the sampling methodology to decrease the number of sample enterprises, thereby reducing the total burden on survey respondents.

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<sup>14</sup> The current investment-related items are fixed investment, land purchasing expenses, and software investment. For R&D investment -- which will be added from the March 2017 survey -- half-year figures will be surveyed at first, and the change to fiscal-year figures will be applied along with the above three items in due course.

The Bank will implement the new sampling methodology in the upcoming revision of sample enterprises around 2018.<sup>15</sup>

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<sup>15</sup> For more details of this new sampling methodology using the *Economic Census*, see "Revision of the Sample Design of the *Tankan* Using the *Economic Census* of Japan" (Research and Statistics Department of the Bank of Japan, September 2016).



## Revised Survey Items

	Before Revision		After Revision		
Judgment Survey	Business Conditions		Business Conditions		
	Domestic Supply and Demand Conditions for Products and Services		Domestic Supply and Demand Conditions for Products and Services		
	Overseas Supply and Demand Conditions for Products		Overseas Supply and Demand Conditions for Products		
	Inventory Level of Finished Goods and Merchandise		Inventory Level of Finished Goods and Merchandise		
	Wholesalers' Inventory Level		Wholesalers' Inventory Level		
	Production Capacity		Production Capacity		
	Employment Conditions		Employment Conditions		
	Financial Position		Financial Position		
	Lending Attitude of Financial Institutions		Lending Attitude of Financial Institutions		
	Change in Interest Rate on Loans		Change in Interest Rate on Loans		
	Conditions for CP Issuance		Conditions for CP Issuance		
	Change in Output Prices		Change in Output Prices		
	Change in Input Prices		Change in Input Prices		
	Annual Projections	Sales	(half year)	Sales	(half year)
Exports		(half year)	Exports	(half year)	
Exchange Rates for Exports (Yen/U.S. dollar)		(half year)	Exchange Rates (Yen/U.S. dollar)	(half year)	Enhanced
			Exchange Rates (Yen/Euro)	(half year)	
Operating Profits		(half year)	N/A		Abolished
Current Profits		(half year)	Current Profits	(half year)	
Net Income		(half year)	Net Income	(half year)	
Fixed Investment		(half year)	Fixed Investment	(fiscal year)	Changed to fiscal-year figures
Land Purchasing Expenses		(half year)	Land Purchasing Expenses	(fiscal year)	
Software Investment		(half year)	Software Investment	(fiscal year)	
N/A		R&D Investment	(fiscal year)	Added	
Inflation Outlook	Outlook for Output Prices		Outlook for Output Prices		
	Outlook for General Prices		Outlook for General Prices		
New Graduates Hired	Number of New Graduates Hired		Number of New Graduates Hired		
Overseas Business Activities (consolidated figures)	N/A	Sales		(fiscal year)	Added for specific enterprises
		Overseas Sales		(fiscal year)	
		Current Profits		(fiscal year)	
		Fixed Investment		(fiscal year)	
		Overseas Fixed Investment		(fiscal year)	

Notes: 1. Shaded areas indicate revised items.

2. For R&D investment -- which will be added from the March 2017 survey -- half-year figures will be surveyed at first, as with current investment-related items, and the change to fiscal-year figures will be applied along with these items in due course.

## Survey on Overseas Business Activities

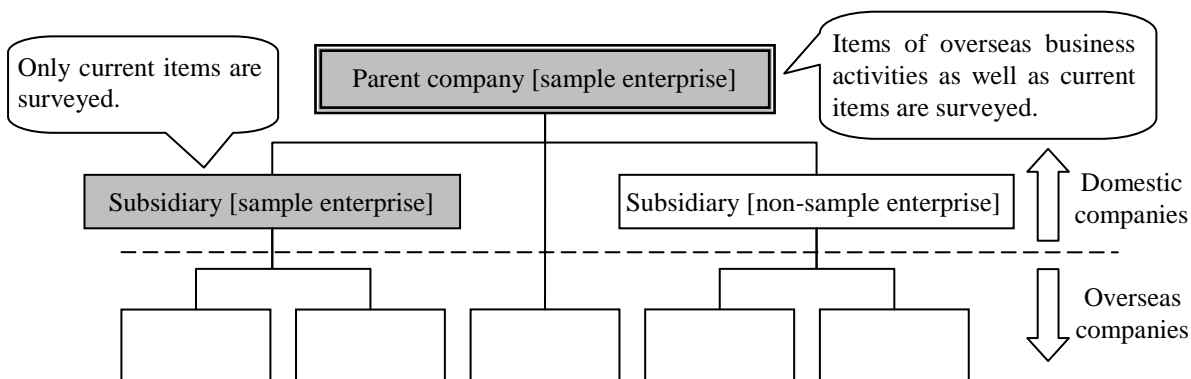
### (1) Survey and Release Items

Survey Items (on a consolidated basis)	Release Items (on a consolidated basis)
A. Sales B. Overseas Sales C. Current Profits D. Fixed Investment E. Overseas Fixed Investment	(a) Total Sales (y/y % chg.) (b) Domestic Sales (y/y % chg.) (c) Overseas Sales (y/y % chg.) (d) Share of Overseas Sales in Total Sales (e) Current Profits (y/y % chg.) (f) Total Fixed Investment (y/y % chg.) (g) Domestic Fixed Investment (y/y % chg.) (h) Overseas Fixed Investment (y/y % chg.) (i) Share of Overseas Fixed Investment in Total Fixed Investment

### (2) Survey Coverage

The survey of overseas business activities covers enterprises that satisfy both of the following conditions: (i) parent companies located at the top of consolidated business groups, and (ii) large enterprises with a capital of 1 billion yen or more.

	Large enterprises			Medium-Sized Enterprises	Small Enterprises
	Pure Holding Company	Parent Company	Subsidiary		
Current Survey Items (on a non-consolidated basis)	Surveyed for a part of items	Surveyed	Surveyed	Surveyed	Surveyed
Overseas Business Activities (on a consolidated basis)	Surveyed	Surveyed	N/A	N/A	N/A



Note: Domestic figures of sales and fixed investment are calculated by subtracting each overseas figure from each total figure.