



February 27, 2019

Bank of Japan

**Economic Activity, Prices,
and Monetary Policy in Japan**

Speech at a Meeting with Business Leaders in Kagawa

Goushi Kataoka

Member of the Policy Board

(English translation based on the Japanese original)

I. Economic Activity and Prices

A. Overseas Economies

I would like to start my speech by looking at developments in overseas economies.

After the global economy had grown synchronously since the second half of 2016, differences in growth rates among countries have recently become evident. I consider that overseas economies have now leveled off and are in a state where due attention should be paid to the effects of various risks. According to the January 2019 *World Economic Outlook (WEO) Update* released by the International Monetary Fund (IMF), as presented in Chart 1, the global economic growth rate is projected to remain around 3.5 percent through 2020. However, when compared with the April 2018 WEO forecast, downward revisions are evident, as seen on the right-hand side in Chart 1. In addition, the global Purchasing Managers' Index (PMI), as shown in Chart 2, has declined to a level seen during the global economic destabilization in 2016 for both manufacturing and services, although they are still above the 50-point level. Thus, the pace of overseas economic growth as a whole for 2019 seems to have weakened compared with that for 2018.

Let me elaborate on current developments by major countries and regions. With regard to the U.S. economy, interest rate-sensitive housing investment has been weak and some soft data have been showing signs of peaking out against the background of a rise in U.S. interest rates, while growth in exports has been decelerating. Nevertheless, private consumption has been supported by tax cuts and a favorable employment situation. As for the European economy, its pace of growth has been decelerating, partly due to the effects of a tightening of European Union (EU) emission standards and the political situations in Italy and France, although domestic demand has been more or less firm. As with the European economy, the Chinese economy has been decelerating, and the impact of this deceleration on emerging economies is a matter of concern.

The following factors continue to pose a risk to the outlook: U.S. macroeconomic policies and the consequences of protectionist moves, the impact these have on the global economy and financial markets, and negotiations on the United Kingdom's exit from the EU. Future

developments require close attention as the effects of these risks have already been seen in some economies.

B. Japan's Economy

Next, I would like to turn to Japan's economy. Starting with recent developments, the real GDP growth rate for the October-December quarter of 2018 recovered to positive territory after a decline in the previous quarter. This was partly due to the rebound from the decrease in domestic demand caused mainly by natural disasters in the July-September quarter. However, the recovery from negative growth is losing momentum amid heightening uncertainties regarding overseas economies. Chart 3 shows the real GDP growth rate and the breakdown by component. While private consumption and private business fixed investment picked up, the contribution of external demand further decreased within negative territory compared with that for the July-September quarter, partly due to an increase in imports. Although exports increased after a decline in the previous quarter, the overall rate of increase remained relatively low given a drop due to the effects of supply-side constraints caused by natural disasters.¹ The low rate of increase in exports is attributable mainly to a decrease in orders from China against the background of U.S.-China trade friction and a gradual deceleration in overseas economies.

Turning to the outlook for Japan's economy, as shown in Chart 4, the medians of forecasts made by the Bank of Japan's Policy Board members for real GDP growth rates presented in the January 2019 *Outlook for Economic Activity and Prices* (Outlook Report) are 0.9 percent for both fiscal 2018 and 2019, and 1.0 percent for fiscal 2020. My view, however, is that the pace of growth will be more modest than these forecasts. Specifically, I would project the growth rate for fiscal 2018 to be around 0.5 percent, as the pace of economic recovery will likely remain moderate amid the heightening uncertainties regarding overseas economies. For both fiscal 2019 and 2020, the growth rate will likely be in the range of 0.5-1.0 percent. The impact on households of the consumption tax hike scheduled to take place in October 2019 will likely be smaller than that of the previous hike in 2014, as the government will take

¹ Attention should also be paid to the fact that real GDP growth rates on an annualized quarter-on-quarter basis have been on a declining trend since the January-March quarter of 2018, and that the rate for the October-December quarter fell for the first time since the October-December quarter of 2014, which followed the consumption tax hike in April that year.

measures to smooth out possible fluctuations in demand. Nevertheless, it is a matter of concern that the pace of expansion in consumption since fiscal 2014 has been quite slow and households' sentiment indicators such as the Consumer Confidence Index have continued to decline since 2018 (Chart 5).² Moreover, I consider that the pace of pick-up in Japan's economy will likely be slow from the scheduled consumption tax hike in October onward, mainly because the heightening of uncertainties in the global economy, which I mentioned earlier, might limit business activity to a certain degree through expectations of a slowdown in external demand.

C. Recent Developments and Outlook for Prices

Next, I will move on to price developments. The year-on-year rate of increase in the consumer price index (CPI) for all items less fresh food for January 2019 was 0.8 percent, as shown in the left-hand graph of Chart 6. Looking at the CPI in detail, it should be noted that the contribution of a rise in energy prices to the CPI was significant at 0.4 percentage point, and the rate of increase for all items less fresh food and energy, which directly reflects supply-demand conditions, stood at only 0.4 percent year on year. The right-hand graph of Chart 6 shows some indicators that represent the underlying developments in consumer prices. These indicators have continued to show relatively weak developments.

The important indicators that affect underlying price developments are the output gap and medium- to long-term inflation expectations. The output gap, as shown in the left-hand graph of Chart 7, has remained positive, reflecting improvements in the capital stock and labor markets. Nevertheless, the positive output gap shrank slightly for the July-September quarter of 2018, mainly due to the effects of natural disasters. Inflation expectations have been somewhat weak, as indicated in the right-hand graph of Chart 7. I am convinced that this is attributable to the adverse effects of prolonged deflation in the past and recent weak price developments. In addition, in my view, the credibility of achieving the Bank's 2 percent price stability target has not been sufficiently enhanced among the public, and this is also affecting inflation expectations.

² Looking at the Consumer Confidence Index, the decrease in the consumer perception index since 2018 was mainly attributable to a decline in perceptions of "employment" (job stability or ease of finding a job) and "overall livelihood."

Turning to the outlook for prices, the medians of the Policy Board members' forecasts for the year-on-year rate of change in the CPI (all items less fresh food) presented in the January 2019 Outlook Report are 0.8 percent for fiscal 2018, 0.9 percent for fiscal 2019, and 1.4 percent for fiscal 2020, excluding the direct effects of the scheduled consumption tax hike and policies concerning the provision of free education (Chart 4).³ Price projections have continued to be revised downward, reflecting the weak price developments, but the Bank's view is that the momentum of prices toward the 2 percent price stability target will be maintained. However, I dissented from the relevant description in the January Outlook Report as I think the possibility of the inflation rate rising toward 2 percent is low at the moment and that the momentum of inflation has not been strengthened. There are four main reasons behind my position.

First, under the present circumstances, the effects of a widening of the output gap on inflation might have become less pronounced.⁴ Second, there is a possibility that the expanding trend of the output gap will not continue. If the expanding trend of the output gap becomes even more robust, firms will likely increase prices and wages to better reflect a rise in costs and a tightening of labor market conditions. These firms' moves will likely progress more than an increase in households' tolerance of price rises. However, taking account of the outlook for Japan's economy, I consider that there is a strong possibility that the expanding trend of the output gap will rather abate going forward.⁵ Third, based on the first two points, there is little prospect for the time being of an increase in inflation expectations through the adaptive formation mechanism pushing up the observed inflation rate. Fourth, it is unlikely for inflation to be spurred by an increase in inflation expectations on the back of an enhancement

³ If a reduction in charges for mobile phone services takes place, it is expected to put downward pressure on prices in the short term.

⁴ From the second half of 2016 through 2018, the output gap estimated by the Bank's staff widened from a level of excess supply to excess demand of around 1.5 percent. Meanwhile, the year-on-year rate of change in the CPI for all items less fresh food and energy remained more or less unchanged at around 0.3 percent.

⁵ As I mentioned in section I. B., the pace of pick-up in Japan's economy will likely be slow from the scheduled consumption tax hike in October 2019 onward, mainly considering the following factors: in a situation where the pace of expansion in consumption since fiscal 2014 has been quite slow, households' sentiment indicators have continued to decline since 2018, and the heightening of uncertainties in the global economy might limit business activity to a certain degree through expectations of a slowdown in external demand.

of the credibility of achieving the price stability target. This is because such enhancement is unlikely in a situation where the monetary policy remains unchanged amid downward revisions to the Policy Board members' price projections.

II. Conduct of Monetary Policy

Let me first outline the Bank's current monetary policy, based on the outlook for economic activity and prices that I have described. I would then like to touch on my opinion about the Bank's monetary policy conduct.

The Bank conducts monetary policy under the framework of Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control, aiming to achieve the 2 percent price stability target. This current framework consists of three major components (Chart 8).

The first is yield curve control, in which the Bank sets the short-term policy interest rate at minus 0.1 percent and the operating target for long-term interest rates at around 0 percent. As for long-term interest rates, the Bank purchases Japanese government bonds (JGBs) while allowing some degree of fluctuation in long-term yields, depending mainly on developments in economic activity and prices.

The second component is the purchase of risk assets, including exchange-traded funds (ETFs). The Bank purchases ETFs so that their amount outstanding will increase at an annual pace of about 6 trillion yen. With a view to lowering risk premia of asset prices in an appropriate manner, the Bank may increase or decrease the amount of purchases depending on market conditions.

The third component is the Bank's public commitment regarding the future conduct of monetary policy. In July 2018, the Bank introduced forward guidance for short- and long-term interest rates, stating that "[t]he Bank intends to maintain the current extremely low levels of short- and long-term interest rates for an extended period of time, taking into account uncertainties regarding economic activity and prices including the effects of the consumption tax hike scheduled to take place in October 2019." The Bank aims to strengthen market confidence and expectations regarding the sustainability of monetary easing by making a

commitment to the levels of future policy interest rates, in addition to the inflation-overshooting commitment regarding the monetary base that has been in place since September 2016.

Of these three components, I dissented from two: the yield curve control, and the Bank's commitment regarding the future conduct of monetary policy. As presented in the joint statement by the Bank and the government, the Bank's mission is to achieve the price stability target at the earliest possible time. With this in mind, as for the yield curve control, in the current situation where the observed inflation rate is still evidently far from the 2 percent price stability target, I consider it appropriate to strengthen monetary easing in order to encourage further widening of the output gap within positive territory.⁶ At the same time, I judge that it is necessary to strengthen the Bank's commitment in order to promote a rise in inflation expectations.⁷ Moreover, to overcome deflation completely amid heightening uncertainties regarding economic and price developments, I consider it important to influence the expectations and forecasts of market participants and economic entities by implementing the appropriate means to further coordinate fiscal and monetary policy.⁸

Furthermore, I have a difference of opinion regarding the Bank's monetary policy conduct of continuing to persist with current monetary easing until the price stability target is achieved. It is necessary to pay due attention to the fact that sustaining the situation where the output gap is in positive territory over a prolonged period under bold monetary easing entails the risk of accelerating business and financial cycles thereafter.⁹ Due attention is also required

⁶ Specifically, I consider it necessary to strengthen monetary easing so that yields on JGBs with maturities of 10 years and longer would broadly be lowered further.

⁷ Specifically, I consider it would be necessary for the Bank to make a commitment to taking additional easing measures if it revised downward its assessment of medium- to long-term inflation expectations.

⁸ I would argue that the mindset of firms and households in Japan was formed under the prolonged deflationary environment after the mid-1990s, such that it has become rational to assume that economic activity is sustainable without inflation. In a situation where the anchor of inflation expectations has been lost, I believe that to achieve the 2 percent price stability target and maintain the target price level in a stable manner, it is important not only to enhance monetary easing, but also to further strengthen the coordination of fiscal and monetary policy -- that is, a "policy mix."

⁹ Given that the output gap in Japan was in negative territory for a long period, some would argue that it is necessary to maintain the output gap within positive territory for a long period in order to change

to the fact that, if monetary easing is continued for a protracted period, achieving the price stability target would become less clear as uncertainties regarding the outlook for the economy would be prolonged. In addition, the longer monetary easing is continued, the higher the burden on an exit strategy becomes, and the more the side effects of monetary easing accumulate. Therefore, I believe that in considering the possible side effects, the discussion should be centered on finding ways to achieve the price stability target at the earliest possible time in order to prevent monetary easing from continuing for a protracted period.

III. Germany's Industrial Policy and Its Implications for Japan¹⁰

Let me now take a slightly different approach and talk about Germany's industrial policy. I am assuming many of you have heard the term "Industrie 4.0" in relation to Germany's industrial policy. In my understanding, "Industrie 4.0" is a strategic initiative that aims for the self-optimization of production, not only by improving the efficiency of production processes and the quality of products and making small-batch production of a large variety of products using digital technology, but also by predicting changes in business environment and enhancing the ability of production to adapt to such changes. In other words, "Industrie 4.0" goes beyond the idea of digitizing production processes; it embodies the concept of optimizing production activities using digital technology so that they are able to adapt to environmental changes.

"Industrie 4.0" is a national strategic initiative which was set forth by the German federal government in 2011. The federal government continues to play a leading role in implementing the policy. The framework of "Industrie 4.0" in Chart 9 shows the involvement of the government, with ministers of the federal government serving as chairs, and an organizational structure which encourages extensive cooperation across the public, private, and academic sectors, including industrialists, labor unions, and research institutions, as well as within each

the structure in which the inflation rate has remained at a low level. In view of the risks I mention, however, I believe that it is best to achieve the price stability target at the earliest possible time, not only by widening the output gap within positive territory, but also by raising inflation expectations through strengthening the Bank's commitment.

¹⁰ I would like to express my sincere gratitude here to Mr. Georg K. Löer, President of North Rhine-Westphalia (NRW) Japan K.K. and Mr. Kurando Ogi, Representative in Japan of the Saxony Economic Development Corporation for their assistance in compiling this section.

sector, from the management level to the field level. In other words, the government not only drafts the basis of the strategy and promotes the policy, but a structure has been established in which the government also gathers opinions and concerns from small and medium-sized enterprises in order to spread the effects of the policy to the very end of the value chain. Moreover, a virtuous cycle in which cooperation among the public, private, and academic sectors is strengthened has become possible, partly because ministers of economic affairs in German state government are often highly specialized and researchers at institutions such as universities are very keen to have their findings used in business.

In addition to the federal government's "Industrie 4.0," local governments in Germany are active in supporting start-ups as a means to promote industrial development. Knowledge, skills, and funds are all essential throughout the process of starting up a new business: from the early stages of generating business ideas and developing business plans, through raising funds and merchandizing products, until the business can finally stand on its own. In each of these stages, the local government provides considerable support and invests in the new business on its own behalf to actively fulfill its role as a catalyst to encourage investment in newly established enterprises.

As indicated in Chart 10, Japan and Germany have common features in that the share of manufacturing in all industries is large, and that the birthrate is declining and the population aging. Although the pace of aging for managers of small and medium-sized enterprises has been more moderate in Germany compared with Japan, smooth business succession and the development of newly established enterprises are important tasks for Germany as well. Another common challenge is that both Japan and Germany need to enhance added value for their domestic manufacturing in order to tackle the intensification of global competition in manufacturing industry caused by the rise of emerging economies.

On the other hand, there are also differences between Japan and Germany. One particularly significant difference is that small and medium-sized enterprises in Germany are more active in expanding their businesses overseas and exporting their products than those in Japan. As a result, there are many "hidden champions" in Germany -- that is, enterprises that have global market shares and are leaders in a particular niche business area.

Given the declining birthrate and aging population, I believe that there are many lessons Japan can learn from Germany's industrial policy and from its small and medium-sized enterprises. Germany's industrial policy aims to enhance the added value in domestic industries through extensive cooperation across and within the public, private, and academic sectors, and it places importance on supporting innovative enterprises. Small and medium-sized enterprises in Germany seek to expand their businesses overseas on their own in search of new markets unlike those in Japan whose overseas business expansion typically depends on the corporate groups they belong to. Since Japan and Germany share many common features, I believe that they can expand each other's business opportunities by strengthening their cooperation.

Thank you for your attention.



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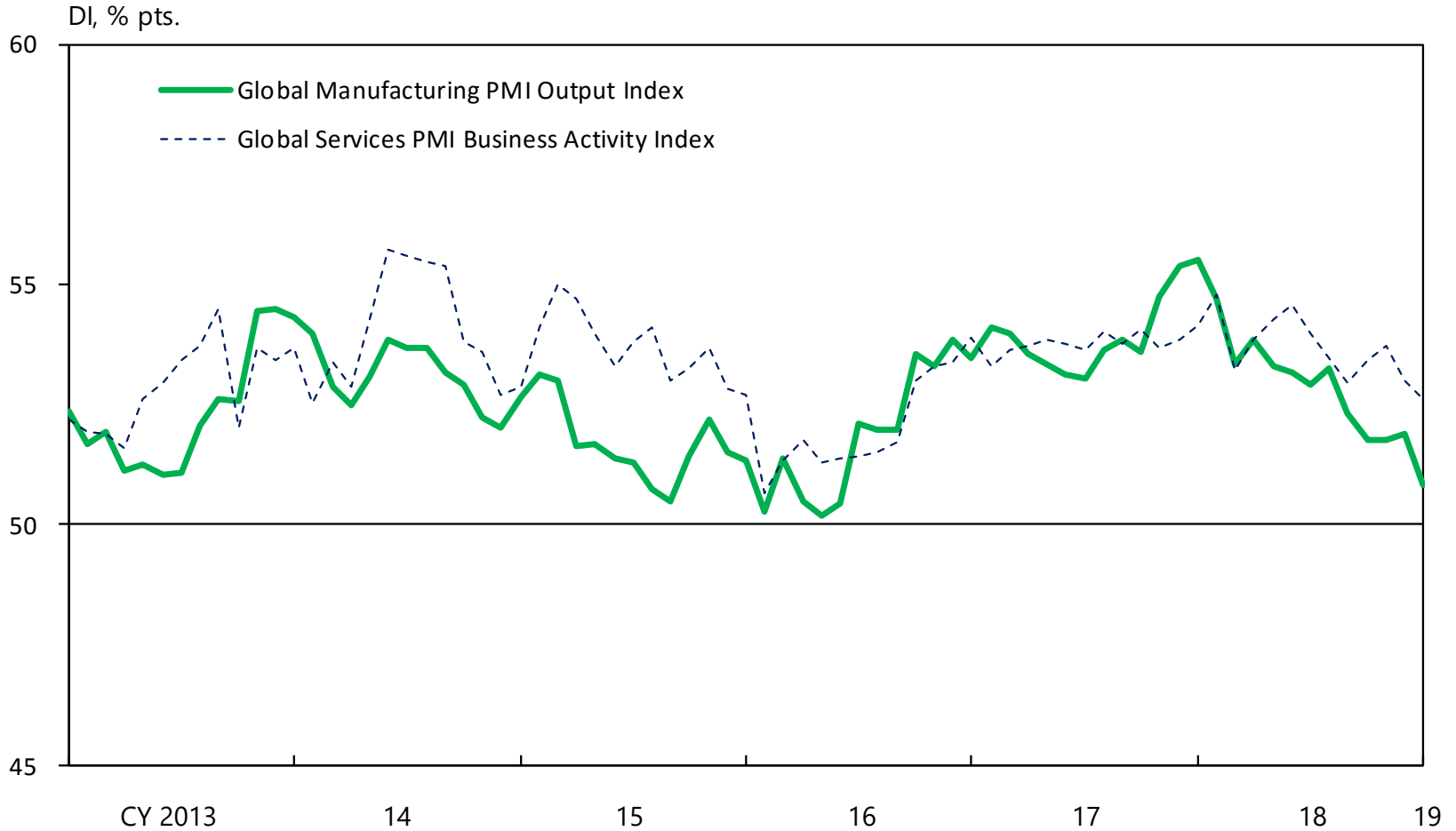
World Economic Outlook by the IMF

		January 2019 forecasts (y/y % chg.)			Difference from April 2018 forecasts (% pts.)		
		2018	2019	2020	2018	2019	2020
World		3.7	3.5	3.6	-0.2	-0.4	-0.2
Advanced Economies	Japan	0.9	1.1	0.5	-0.3	+0.2	+0.2
	United States	2.9	2.5	1.8	0.0	-0.2	-0.1
	Euro Area	1.8	1.6	1.7	-0.6	-0.4	0.0
	Germany	1.5	1.3	1.6	-1.0	-0.7	+0.1
	France	1.5	1.5	1.6	-0.6	-0.5	-0.2
	United Kingdom	1.4	1.5	1.6	-0.2	0.0	+0.1
Emerging Economies	China	6.6	6.2	6.2	0.0	-0.2	-0.1
	Brazil	1.3	2.5	2.2	-1.0	0.0	0.0
	India	7.3	7.5	7.7	-0.1	-0.3	-0.2
	Russia	1.7	1.6	1.7	0.0	+0.1	+0.2

Note: As for the January 2019 forecasts, figures for 2018 are estimates and those for 2019 onward are projections. All of the figures for the April 2018 forecasts are projections. For India, figures are presented on a fiscal year basis.

Source: IMF, "World Economic Outlook (January 2019, April 2018)."

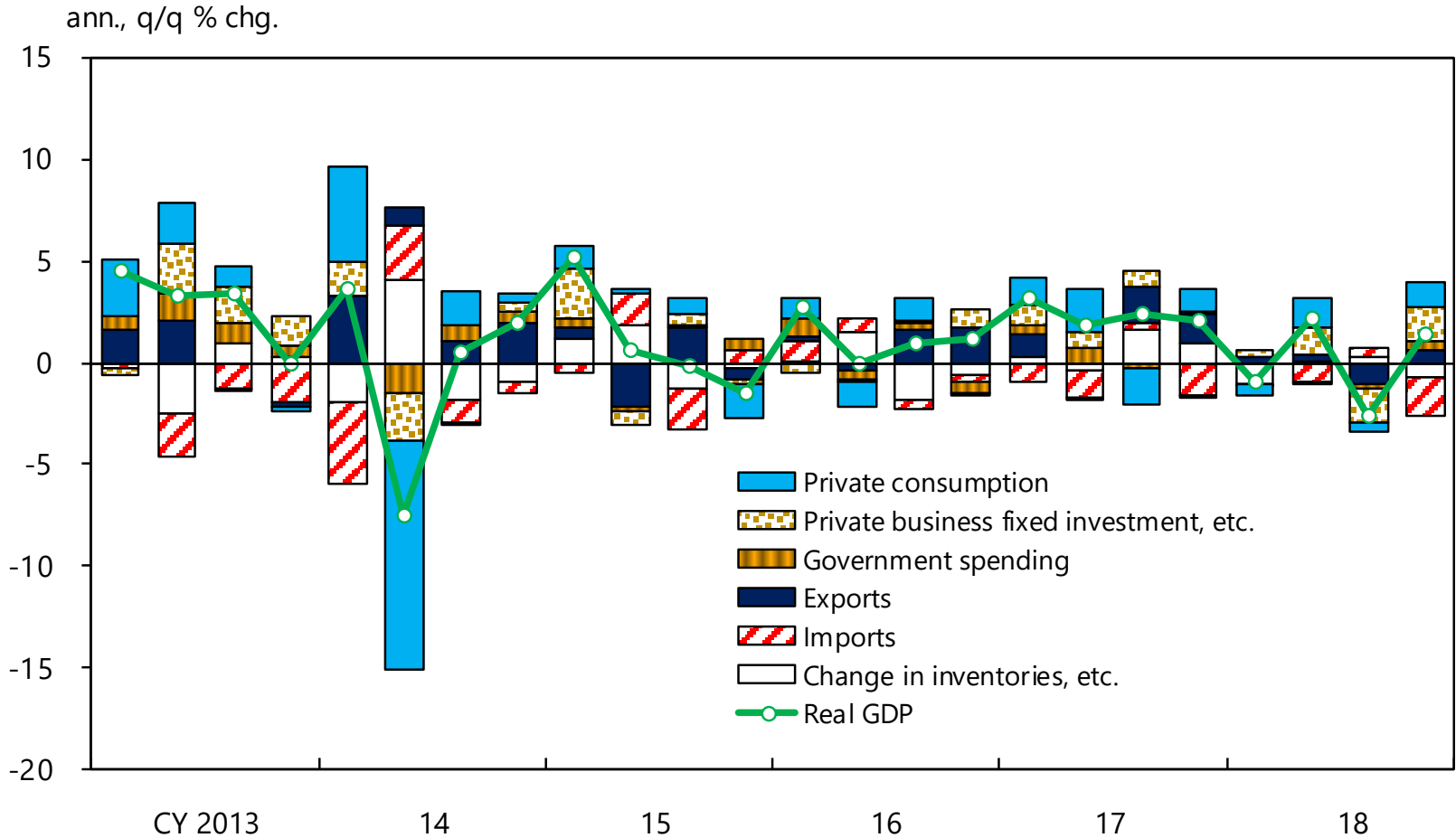
Global PMI



Note: Figures are from the J.P. Morgan Global PMI. Figures above 50 indicate improvement and below 50 show deterioration on a month-on-month basis.

Source: IHS Markit (© and database right IHS Markit Ltd 2019. All rights reserved.)

Real GDP Growth and Breakdown by Component



Source: Cabinet Office, "Quarterly Estimates of GDP for October-December 2018 (First Preliminary Estimates)."

Outlook for Economic Activity and Prices

(January 2019 Outlook Report)

medians of Policy Board members' forecasts, y/y % chg.

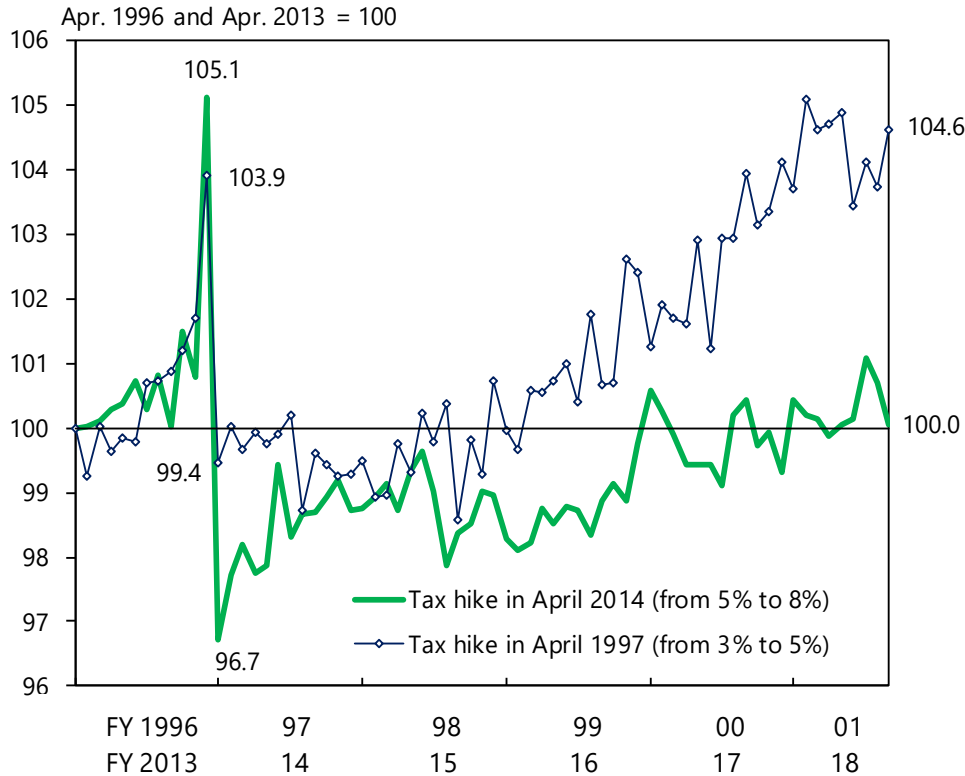
	Real GDP	CPI (all items less fresh food)	(Reference) Excluding the effects of the consumption tax hike and policies concerning the provision of free education
Fiscal 2018	+0.9	+0.8	
Forecasts made in October 2018	+1.4	+0.9	
Fiscal 2019	+0.9	+1.1	+0.9
Forecasts made in October 2018	+0.8	+1.6	+1.4
Fiscal 2020	+1.0	+1.5	+1.4
Forecasts made in October 2018	+0.8	+1.6	+1.5

Note: The direct effect of the consumption tax hike on the CPI for fiscal 2019 and fiscal 2020 is estimated to be 0.5 percentage points for each year. The direct effects of policies concerning the provision of free education on the CPI for fiscal 2019 and fiscal 2020 are estimated to be minus 0.3 percentage points and minus 0.4 percentage points, respectively.

Source: Bank of Japan, "Outlook for Economic Activity and Prices (January 2019)."

Household Consumption

Consumption Before and After Tax Hikes



Note: The latest figures are as of December 2001 and December 2018.

Source: Cabinet Office, "Synthetic Consumption Index."

Consumer Confidence Index

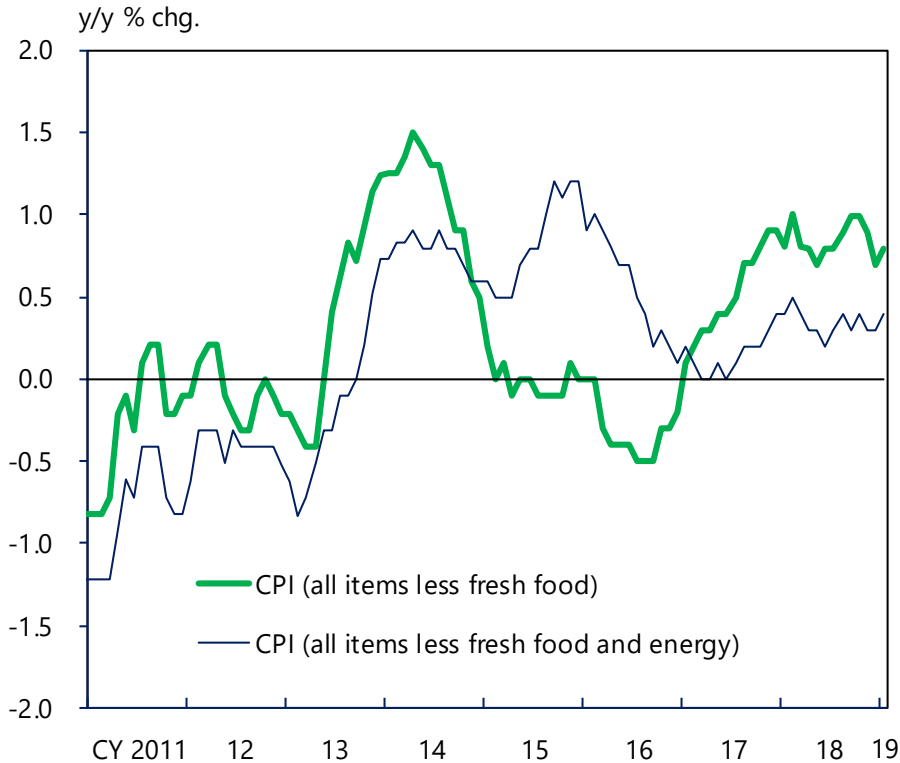


Note: Households of two or more persons. Consumer Confidence Index is composed of four categories: "overall livelihood," "income growth," "employment," and "willingness to buy durable goods." There are discontinuities between March and April 2013, and between September and October 2018, due to changes in the survey method.

Source: Cabinet Office, "Consumer Confidence Survey."

Consumer Prices

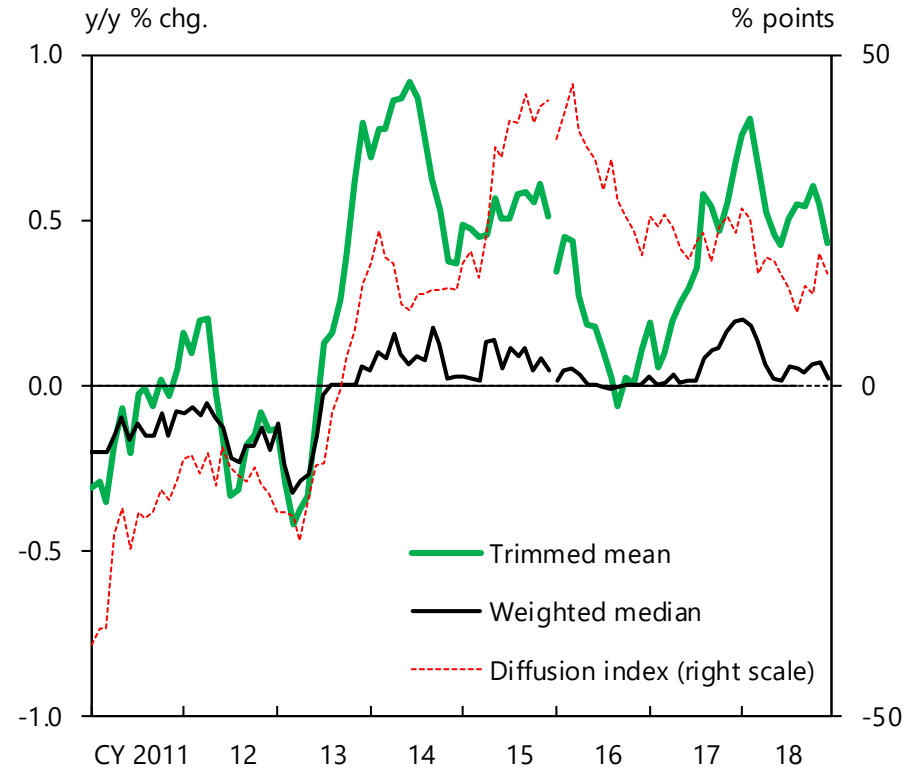
Consumer Price Index



Note: Figures are adjusted for changes in the consumption tax rate.

Source: Ministry of Internal Affairs and Communications, "Consumer Price Index."

Measures of Underlying Inflation



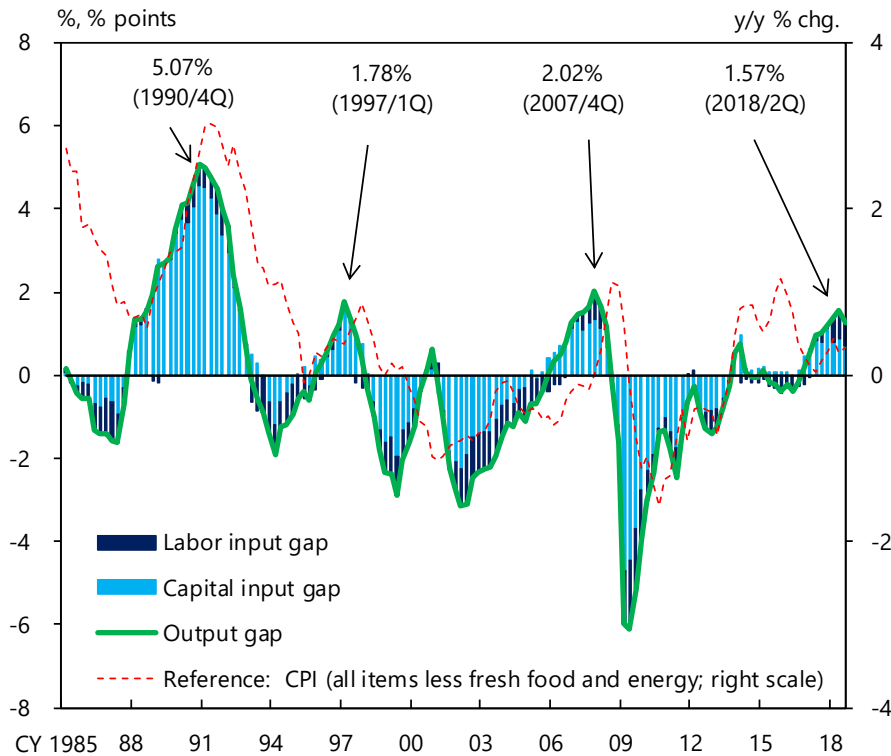
Notes: 1. The latest figures are as of December 2018.

2. The diffusion index is defined as the share of increasing items minus that of decreasing items. The share of increasing/decreasing items is the share of items in the CPI (less fresh food, consumption tax adjusted) whose price increased/decreased from a year earlier.

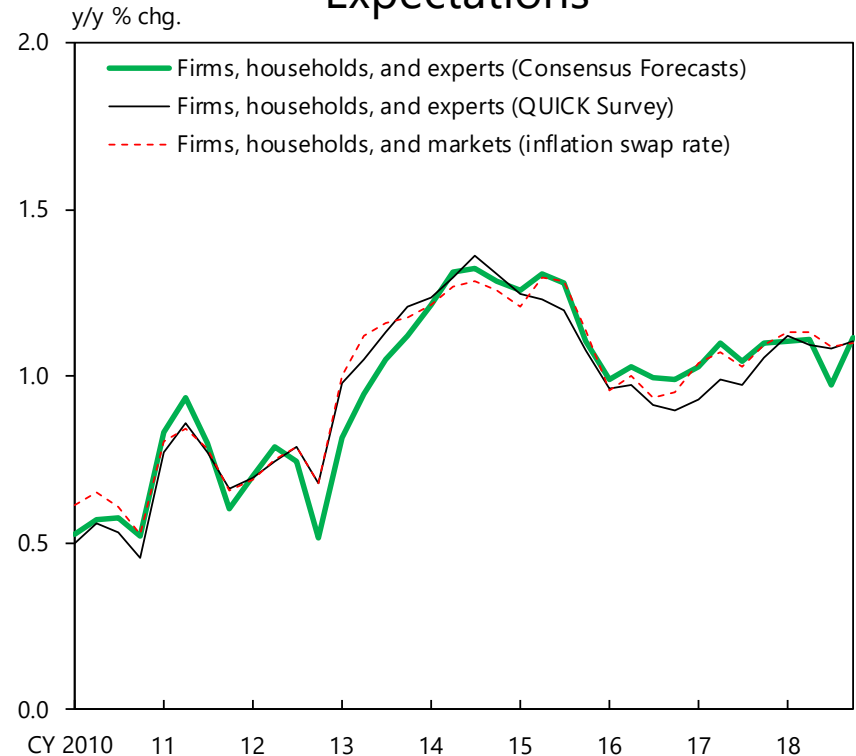
Sources: Bank of Japan, "Measures of Underlying Inflation"; Ministry of Internal Affairs and Communications.

Output Gap and Inflation Expectations

Output Gap



Synthetic Indicators of Inflation Expectations



- Notes: 1. The data of the output gap in the left-hand graph are the estimates by the Bank's staff as of January 30, 2019. The CPI figures are adjusted for changes in the consumption tax rate.
2. In the right-hand graph, semiannual data from the Consensus Forecasts up through 2014/Q2 are linearly interpolated. Figures for the Bank's *Opinion Survey on General Public's Views and Behavior* exclude inflation expectations by respondents whose annual inflation expectations were $\pm 5\%$ or greater. The output prices DI in the *Tankan* (Short-Term Economic Survey of Enterprises in Japan) represents the difference between the share of firms that raised prices in the preceding three months and the share of firms that lowered prices.
3. In the right-hand graph, inflation expectations of firms are taken from the *Tankan* and those of households are taken from the Bank's *Opinion Survey*. For experts' and markets' inflation expectations, data from the Consensus Forecasts, the QUICK Survey, and the inflation swap rate are used as indicated by their respective lines.

Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index (Japan; 2015-base)"; Consensus Economics Inc., "Consensus Forecasts"; QUICK, "QUICK Monthly Market Survey (Bonds)"; Bloomberg; Bank of Japan.

Outline of the Bank's Monetary Policy

(1) Yield Curve Control

Short-term rate: The Bank will apply minus 0.1 percent to the Policy-Rate Balances.

Long-term rate: The Bank will purchase JGBs so that 10-year JGB yields will remain at around zero percent. While doing so, the yields may move upward or downward to some extent mainly depending on developments in economic activity and prices.

(2) Asset Purchases

The Bank will purchase ETFs and J-REITs so that their amounts outstanding will increase at annual paces of about 6 trillion yen and about 90 billion yen, respectively. With a view to lowering risk premia of asset prices in an appropriate manner, the Bank may increase or decrease the amount of purchases depending on market conditions.

(3) Commitment

Overshooting commitment: The Bank will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds 2 percent and stays above the target in a stable manner.

Forward guidance for policy rates: The Bank intends to maintain the current extremely low levels of short- and long-term interest rates for an extended period of time, taking into account uncertainties regarding economic activity and prices including the effects of the consumption tax hike scheduled to take place in October 2019.

Structure of "Industrie 4.0"

**Federal Minister for Economic Affairs and Energy
and Federal Minister of Education and Research**

Technical/practical expertise decision-making

Steering Body

- Strategy development, technical coordination, and decision-making
- Members: Federal Ministers, business representatives, and chairs of working groups

Working Groups

1. Reference architecture, standardization and standards
2. Technology and application scenarios
3. Legal framework
4. Work, education, and training
5. Digital business models
6. Security of networked systems

Policy guidance, society, multipliers

Strategy Group

- Agenda setting, political steering, and multipliers
- Members:
 - State Secretaries
 - Representatives of steering body
 - Representatives of Federal Chancellery, Interior Ministry
 - State representatives
 - Representatives of associations
 - Representative of trade union
 - Representative of science

Research Council

Activities on the market

Industrial Consortia and Initiatives

- Implementation on the market
- Test beds
- Examples of applications

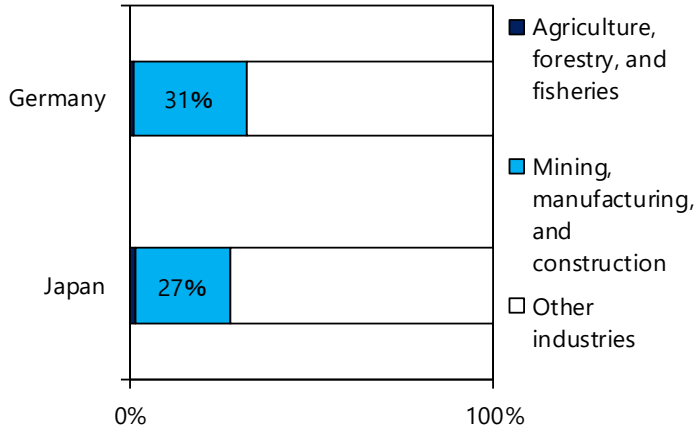
Standardization Council

Labs Network

Secretariat

Similarities and Differences between Germany and Japan

(1) Industrial distribution

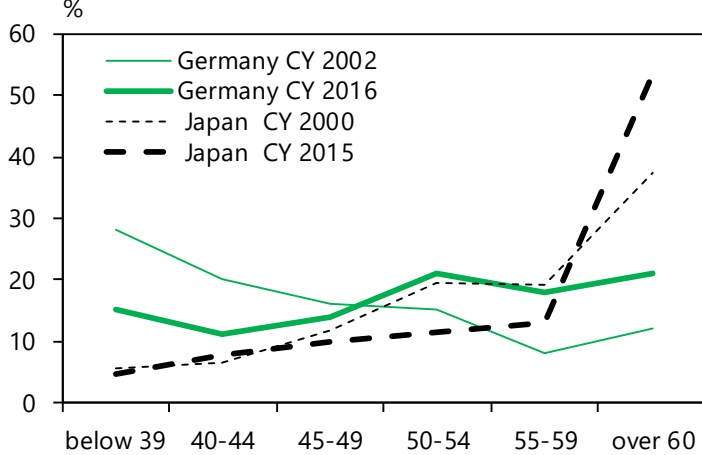


Note: Figures are as of CY 2018 for Germany and as of FY 2017 for Japan.

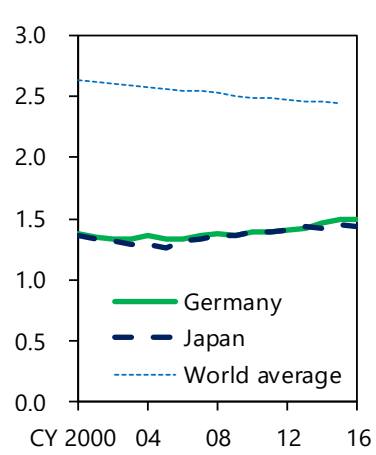
Sources: Statistisches Bundesamt, "National accounts"; Cabinet Office, "Annual Report on National Accounts for 2017."

(2) Declining birthrate and aging population

(a) Distribution of ages of SME managers

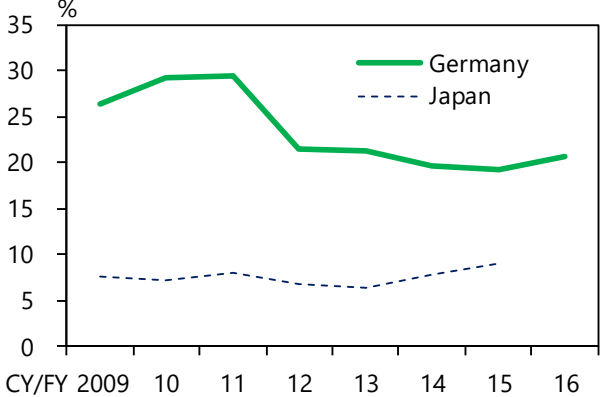


(b) Birth rates



Sources: KfW; The Small and Medium Enterprise Agency, "White Paper on Small and Medium Enterprises in Japan"; World Bank.

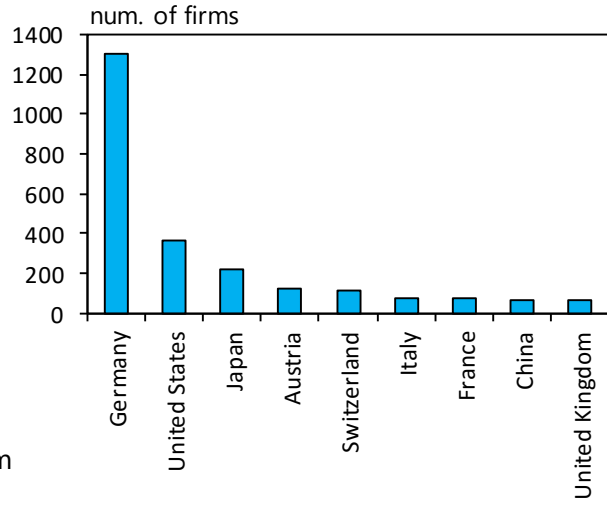
(3) Share of exports by SMEs



Note: Horizontal axes are CY for Germany and FY for Japan. The latest figure available for Japan is for fiscal 2015.

Sources: OECD, "Exports by Business Size"; The Small and Medium Enterprise Agency, "White Paper on Small and Medium Enterprises in Japan."

(4) International comparison of "hidden champion"



Note: The three criteria to be considered a "hidden champion" are the following: (a) the firm is among the top three in the global market or is number one for a particular niche business area on the continent where the firm is based, (b) the firm has less than 5 bil. euro in revenue, and (c) the firm is little known to the general public.

Source: Hermann Simon, *Hidden Champion of the 21st Century*.