



May 22, 2019
Bank of Japan

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

Speech at a Meeting with Business Leaders in Nagasaki

Yutaka Harada

Member of the Policy Board

(English translation based on the Japanese original)

Introduction

Thank you for giving me this opportunity to exchange views with you and for having taken the time to be here despite your busy schedules. It is indeed a great honor to be here today. Please allow me to express my gratitude for your great cooperation with the business operations of the Bank of Japan, particularly of the Nagasaki Branch.

As you all know, Japan's growth rate, which until the 1980s was the highest among major developed countries, has declined since the 1990s. Low growth started in the 1990s, so it has lasted for three decades. Those who know nothing but low growth are already in their forties. And those who have happy memories of entering the job market during the bubble period and remember suffering through the collapse of asset prices are already in their fifties.

Many people say that they do not really mind if economic growth is low -- there are more important things than the economy. But if you tell them that low growth will lead to lower pensions, everyone will reply: "Well, that's a problem." The Scandinavian countries, with their comprehensive welfare systems, are all economically wealthier than Japan.

Moreover, people lose their generosity and ability to make rational judgments when the economy is in trouble. You will probably agree if, for example, you think back to Japan's path from the Showa Depression of 1930-31 to the war. It is important for the economy to be in a good state.

Based on these considerations, there are a number of issues I will talk about today. First, I would like to consider Japan's low growth by dividing GDP growth into the three factors determining growth -- growth in capital input, labor input, and total factor productivity (TFP), which can be regarded as representing technological progress -- and look at Japan's performance in comparison with other countries. Second, linked to this low growth, I will talk about why the 2 percent price stability target is needed. Third, I will talk about the link between the "high-pressure economy" and growth. Fourth, I will explain the relationship between low interest rates and banks' profitability. And fifth, I will elaborate on recent economic developments and monetary policy.

I. Japan's Low Growth and Growth Accounting from an International Perspective

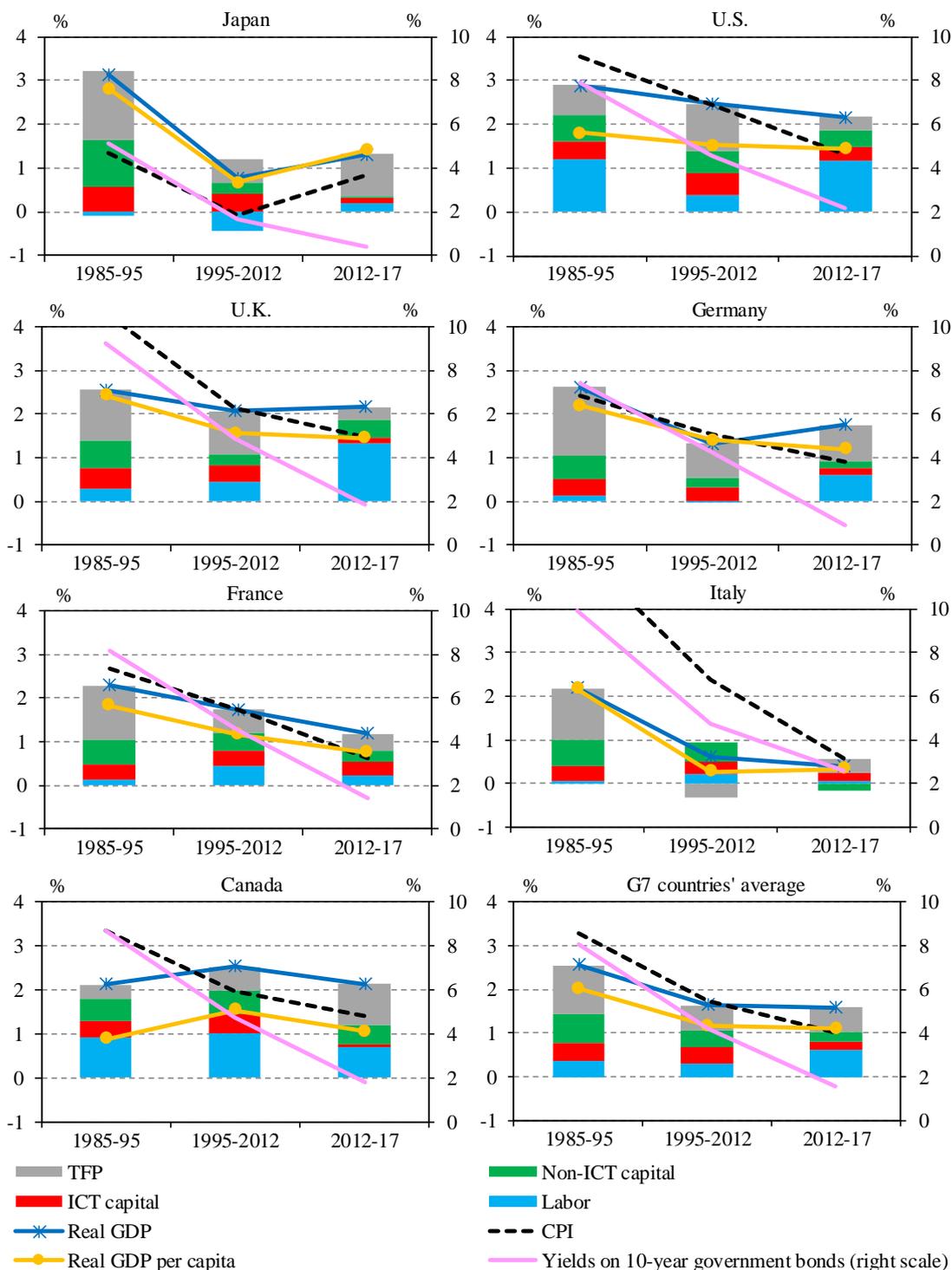
Let us look at Japan's low growth from an international perspective. In what follows, I will divide growth into growth in capital input (information and communication technology [ICT] capital as well as other capital), labor input, and TFP. The reason for dividing growth into these three factors is that considering each factor individually provides some understanding of how the growth rate could be raised. Let us take a moment to have a look at the estimates for member countries provided by the Organisation for Economic Co-operation and Development (OECD). Specifically, Chart 1 presents the average growth rates for three subperiods for each of the seven major OECD economies and the averages for these economies as a group.¹

The blue line in the charts shows that, while Japan still enjoyed comparatively high growth during 1985-95, growth subsequently stalled, and from the mid-1990s it registered slower growth than the other countries except Italy. However, following the introduction of bold monetary easing -- quantitative and qualitative monetary easing (QQE) -- in 2013, Japan's growth rate recovered somewhat, and with growth in the other countries slowing, Japan's low growth is no longer that conspicuous.²

¹ Data provided by the OECD are also employed in Chapter 1, Section 3 of the *2018 White Paper on Information and Communications in Japan* released by the Ministry of International Affairs and Communications. Figure 1-3-2-2 of the *White Paper* arrives at similar conclusions to my speech today. Using the dataset employed by the Bank of Japan's Research and Statistics Department and the Cabinet Office to estimate the output gap and potential GDP, somewhat different results from those using the OECD data are obtained regarding the contribution of growth in TFP and capital input.

² To simplify the chart, the period 1985-95 is shown. Since the high growth registered in Japan during the second half of the 1980s was due to the bubble, combining this period with the first half of the 1990s, when the bubble burst, provides a better representation of the underlying growth trend. See Harada Yutaka, "Jissho keizaigaku wa ikanaru shinjitsu o terashi dashi taka," in *Ushinawareta 10 nen no shinin wa nanika*, ed. Iwata Kikuo and Miyagawa Tsutomu (Tokyo: Toyo Keizai, 2003).

Chart 1 Decomposition of Structures of Economic Growth in Major Countries Based on Growth Accounting



Note: Real GDP per capita is GDP per capita expressed in terms of real purchasing power parity in U.S. dollars as of 2010. ICT capital denotes information and communications technology capital. The starts to time series of yields on 10-year government bonds differ according to their availability. Japan's growth accounting data for 2017 are estimated using the Cabinet Office's System of National Accounts.

Sources: Cabinet Office, "System of National Accounts"; OECD, "Level of GDP per capita and productivity," "Growth in GDP per capita, productivity and ULC"; IMF, "World Economic Outlook Database"; Bloomberg.

Next, the bars in the charts provide a breakdown of GDP growth into changes in the contribution of capital input, labor input, and TFP. As can be seen, in Japan, capital input, labor input, and TFP growth all decelerated in 1995-2012, and thus all three contributed to the decline in growth overall. In 2012-17, growth recovered somewhat as a result of a recovery in the contribution of labor input and TFP.³ However, while the average annual growth rate of the seven countries since 2012 has been 1.6 percent, Japan's growth rate, at 1.3 percent, remains low.

That said, the reason that the growth rate of many of the other countries is higher than Japan's is the higher growth rate of labor input. While labor input on average in the other countries has contributed 0.6 percentage point to GDP growth, it has contributed only 0.2 percentage point in Japan. However, because labor input growth in Japan in 1995-2012 actually made a negative contribution of 0.4 percentage point, the recovery to small but positive labor input growth has made a substantial contribution to the recovery in Japan's overall economic growth since 2012. The reason for the relatively large contribution of labor input in most of the other countries is that these countries recently have seen an increase in their population, mainly due to immigration. The fact that labor input in Japan has made only a small contribution to growth overall means that, on a per capita basis, Japan's growth rate has been on par with that of the other countries. In fact, in terms of real purchasing power parity GDP per capita, Japan's growth rate of 1.4 percent is higher than the 1.1 percent average of the seven countries.

³ While it frequently had been argued that the decline in Japan's growth rate during the 1990s was due to a decline in TFP growth, it has been concluded that other factors also have substantially contributed to the slowdown, such as a deceleration in labor quality improvements, a decline in labor input, a deceleration in capital accumulation, and a decline in capacity utilization. For details, see the following references. Motohashi Kazuyuki, "IT investment and productivity growth of Japan's economy and comparison to the United States (available only in Japanese)," *RIETI Discussion Papers*, no. 02-J-018, November 2002, <https://www.rieti.go.jp/jp/publications/summary/02110001.html>. Kawamoto Takuji, "What Do the Purified Solow Residuals Tell Us about Japan's Lost Decade?," *Monetary and Economic Studies*, vol.23, no.1, February 2005. Kwon Hyeog Ug and Fukao Kyoji, "Ushinawareta 10-nen ni TFP jyōshō wa naze teitai shitaka -- Seizōgyō kigyō dēta ni yoru jisshō bunseki," chap. 3 in *Keizai seido no jisshō bunseki to sekkei*, vol.1 *Keizai teitai no genin to seido*, ed. Hayashi Fumio (Tokyo: Keiso Shobo, 2007).

Moreover, in the case of Japan, another factor that has contributed to the recovery in economic growth is the recovery in TFP growth. The contribution of TFP growth -- at 1.0 percent -- has been higher than the average of the seven countries, which is 0.6 percent. I think that the recovery in TFP growth is partly due to the contribution of the "high-pressure economy," which I will talk about later. On the other hand, the contribution of capital input has further declined from 1995-2012, dropping to 0.2 percent. This is lower than the average of the seven countries, which is 0.4 percent. Moreover, dividing capital input growth into growth in ICT capital and other capital shows that input growth in both is lower than the average of the seven countries. It could be said that, in Japan, the contribution of capital to economic recovery is insufficient, and so is capital investment. I will return to this issue later.

Looking at the seven countries, most of them have been experiencing declining growth, as indicated by the blue line in the charts. Countries growing faster than Japan have been able to do so due to population growth including immigration. While low growth has been a problem in Japan since the late 1990s, it has now become a global problem. At the same time, inflation also has been falling. Until the 1980s, developed countries -- especially Italy and the United Kingdom -- were suffering from high inflation, so hardly anyone in the world was concerned about the possibility of falling prices, which now is a major issue. In Japan, from the mid-1990s onward, it has been pointed out that deflation has led to sluggish output growth, exacerbating the nonperforming-loan problem and the fiscal deficit problem.⁴

While the United States and the United Kingdom struggled to maintain positive inflation, they somehow succeeded. However, the situation seems different in the case of continental Europe. For example, as seen in the charts, inflation in Germany, France, and Italy has not reached 1 percent in 2012-17, so it can be said that they are under deflationary pressure. Meanwhile, Japan has recovered from the deflation observed in 1995-2012, but the rate of increase in the consumer price index (CPI) has not yet reached 1 percent.

⁴ Iwata Kikuo, "Naze keiki no teimei ga tsuzuku no ka?," chap. 2 in *Nihon gata byōdō shakai wa horobu no ka* (Tokyo: Toyo Keizai, 1995).

Furthermore, interest rates also have been declining. While this reflects the decline in real growth rates and in inflation, it seems there are additional factors that play a role.⁵

II. Why Is the 2 Percent Inflation Target Important?

As mentioned earlier, not only Japan but other major countries also are suffering from low growth and low inflation. In addition, countries in continental Europe have been unable to achieve their inflation targets, which aim at 2 percent. So, why is inflation of 2 percent important? Some argue that if other countries cannot achieve 2 percent inflation, Japan will not need to accomplish this target.

The Bank has cited three reasons why achieving 2 percent inflation is important.⁶ My interpretation of the Bank's view can be summarized as follows. First, aiming at achieving 0 percent inflation entails the risk of actually aiming for deflation, given the upward bias of the CPI. Second, the equilibrium interest rates -- which are achieved in the long run -- tend to be lower on a nominal basis when the aim is 0 percent inflation. That being the case, there will be virtually no room for lowering interest rates should the economy fall into recession. In order to avoid this, it is necessary to provide a so-called buffer for nominal interest rates by raising the inflation rate. Third is the global standard. Given that other major countries aim at achieving 2 percent inflation, if Japan were the only country with a lower target, this would result in an appreciation of the yen, which would create turmoil in firms' investment plans. If Japan maintains the same inflation rate as other countries, I feel that this will serve to stabilize foreign exchange over the long term.

⁵ On this point, I explained interest rate declines in relation to declines in the real GDP growth rate and the inflation rate as well as structural changes in the supply of and demand for funds in Harada Yutaka, "Naze nihon no kinri wa hikui no ka," *Keiki to saikuru*, no. 62, Japan Association of Business Cycle Studies, November 2016. In addition, the relationship between monetary policy and interest rates is explained in Ben S. Bernanke, "Why are interest rates so low?" Brookings Institution, March 30, 2015, <https://www.brookings.edu/blog/ben-bernanke/2015/03/30/why-are-interest-rates-so-low/>. The Cabinet Office raises the decline in capital goods prices and heightening demand for safe assets as factors behind interest rate declines in Cabinet Office, *Sekai keizai no chōryū 2016 nen* II, chap. 1, section 1, January 2017.

⁶ Haruhiko Kuroda, "Overcoming Deflation and After: Speech at the Meeting of Councillors of Nippon Keidanren (Japan Business Federation) in Tokyo," Bank of Japan, December 2013.

Of these theories, I consider the buffer theory of interest rates within the second point to be the most important and would like to provide my view on it. This theory is completely different from the one advocated by the Bank in the past. The previous theory aimed at raising interest rates preemptively even when the economic recovery was insufficient, because if interest rates were too low, it would be difficult to implement stimulus measures during recessions. Such monetary policy resulted in a complete failure.

The buffer theory should be interpreted as raising interest rates after confirming that price increases have gained enough momentum. This theory posits that interest rates will rise due to inflation. I would like to emphasize that the Bank's current thinking on the buffer theory is totally different from the previous incorrect one.

Private banks' business consists of borrowing short-term debt and financing long-term lending. The higher long-term interest rates are relative to short-term rates, the larger banks' loan margins will be. Since short-term interest rates generally do not rise as much as long-term rates, banks naturally will gain profits if interest rates go up due to an increase in the inflation rate. So, why did banks want a hike in interest rates as early as possible? Maybe they have not been sufficiently aware of the mechanism that lowering interest rates to stimulate the economy will lead to a rise in inflation and hence in nominal interest rates, or maybe they have been aware of this mechanism but were so desperate for a rise in interest rates that they could not wait.

Moreover, there are many who say that the Bank's large-scale asset purchases and negative interest rate policy are unusual, and thus the policy must be "normalized" as early as possible.⁷ However, they never explain on what basis policy should be regarded as usual or unusual. Termination of the zero interest rate policy in 2000 and of quantitative easing in 2006 can be regarded as attempts to "normalize" monetary policy, but these proved to be major failures. The premature tightening of monetary policy gave rise to concerns about a deterioration in the economy, and the spread between short- and long-term interest rates

⁷ See, for example, Yamakawa Tetsufumi, "Deguchi no meiro, kin'yū seisaku o tou 22, Seifu no 'datsu defure sengen' uke seijyōka e," *Shūkan Ekonomisuto*, March 13, 2018, <https://www.weekly-economist.com/20180313bojexit/>.

actually declined rather than increased.⁸ Similarly, in the United States and Europe, the spread between such rates has been declining. This is said to be because of the cooling of the economy brought about by the monetary tightening implemented so far. If interest rates were raised immediately in Japan now, the spread between short- and long-term interest rates likely would be reversed.

Moreover, there is another reason for the Bank's committing to the 2 percent inflation target; namely, that we cannot fully grasp the actual strength of the economy at present. Specifically, we do not actually know the exact structural unemployment rate, which represents the limit below which any further decline in the rate gives rise to inflation. If the Bank had terminated monetary easing based on estimates that the structural unemployment rate was around 3.5 percent or lower, the current unemployment rate of 2.0-2.5 percent would not have been achieved.⁹ In fact, I think that we probably will be able to achieve an even lower unemployment rate. The reason why lower unemployment was achieved and a bubble has not occurred is because the inflation rate is set as the direct target for monetary policy. Moreover, given the rise in wages, nonmanufacturing firms are making progress in streamlining business processes and making labor-saving investment. In other words,

⁸ For more on this point, see Yutaka Harada, "Economic Activity, Prices, and Monetary Policy in Japan: Speech at a Meeting with Business Leaders in Ishikawa," Bank of Japan, July 2018.

⁹ The following publications showed that the structural unemployment rate was around 3.5 percent or lower using unemployment-vacancy analysis: Ministry of Health, Labour and Welfare, *Analysis of the Labour Economy 2015*, September 2015; Cabinet Office, *Annual Report on the Japanese Economy and Public Finance 2015*, August 2015; and Bank of Japan, "The Bank's View" in the *Outlook for Economic Activity and Prices* (hereafter the report), October 2014.

The Bank, from the April 2015 report, deleted the description regarding the structural unemployment rate from the main text of "The Bank's View" and added the following in a footnote to it: "This rate [the structural unemployment rate] is calculated to be around 3.5 percent or lower recently under a specific methodology." Then, from the April 2016 report, this description was deleted from that footnote and instead moved to a footnote to "The Background." From the July 2016 report, the actual level of the structural unemployment rate referred to in that footnote was replaced by the following expression: "the structural unemployment rate defined here differs from the concept of Non-Accelerating Inflation Rate of Unemployment (NAIRU), and does not show a direct relationship with prices or wages." The chart presenting the structural unemployment rate had long been published in the "The Background," and it indicated that the rate gradually had been declining from the range of 3.0-3.5 percent. The rate exhibited a sharp drop to around 2.5 percent in the April 2018 report, before the chart was removed from "The Background" in the July 2018 report.

having a clear inflation target made it possible to implement bold monetary policy and bring about a recovery of the economy.

At the international conference entitled "Central Banking in a Changing World," hosted by the Bank's Institute for Monetary and Economic Studies (IMES) in May 2018, Professor Athanasios Orphanides of the Massachusetts Institute of Technology, the Honorary Advisor to IMES -- who served as the Governor of the Central Bank of Cyprus and was then a member of the Governing Council of the European Central Bank (ECB) -- commented that lack of clarity on the precise definition of price stability made the Bank reluctant to engage in decisive quantitative easing and instead willing to accommodate too-low inflation. However, he also said that, following the clarification of the definition as 2 percent in terms of the year-on-year rate of increase in the CPI in 2013, a dramatic reorientation of monetary policy took place, and the decisive QQE introduced in the same year has been gradually reflating the economy while simultaneously improving Japan's government debt dynamics.¹⁰

III. The "High-Pressure Economy" and Real Economic Growth

Monetary easing measures stimulate the economy, bring about labor shortages, and exert pressure on the economy to grow. While there are a variety of channels through which such a "high-pressure economy" results in higher real growth rate, I would like to consider this in terms of the results of growth accounting mentioned earlier.¹¹ Following the introduction of QQE, Japan's real growth rate recovered due to increases in growth in labor input as well as TFP. However, capital input both in terms of ICT capital as well as other capital has been decelerating.

The reason why labor input increased is because QQE succeeded in stimulating the economy. While the number of unemployed will increase during a recession, those that have been unemployed will start to work during an economic upturn, and with the

¹⁰ Athanasios Orphanides, "The Boundaries of Central Bank Independence: Lessons from Unconventional Times," *Monetary and Economic Studies*, vol.36, no.4, November 2018.

¹¹ I have explained these channels in Harada Yutaka, "Nihon keizai to seisansai: Special Lecture at a Conference Commemorating Daiwa Institute of Research's 200th Release of Japan's Economic Outlook," Bank of Japan, March 2019.

improvement in the employment situation, those who had given up looking for work will also actively look for work again and then start working. As a result, labor input increases.

Moreover, because a recession means that there is less work, those who fortunately have had a job will try hard not to lose it. Amid a lack of jobs, the so-called black firms will take advantage of their employees that do not want to lose the job they managed to get, subjecting them to harsh working conditions.¹² Meanwhile, large firms, because they cannot easily lay off employees, will be saddled with a lot of dissatisfied employees with an uncertain career and future. Under these circumstances, profits and productivity are unlikely to grow.

When the economy expands, low-productivity work tends to be reduced. In times of recession, sales fall and retailers, restaurants, and so forth will try to increase demand, even if only a little, by extending their business hours. The opposite occurs during an economic upturn. If there are labor shortages, restaurants that used to stay open until midnight will start to close early. If they open only during the busiest times of the day and in the evening, labor productivity will increase.

If there are labor shortages, this makes it possible for people to switch jobs. Those working at black firms will flee while those with an uncertain career and future will also try to relocate in order to obtain new jobs. Since they will move to firms that value them more highly, the economy's overall productivity will increase. This is not only a matter of productivity. Engaging in a job in which they are valued more highly also raises their degree of happiness. In other words, levels of both productivity and happiness rise at the same time, and so will that of TFP.

Lastly, let me explain capital input. Why is capital input not increasing? This is similar to asking why investment is not increasing in line with profits. Reasons for this include low growth expectations, the self-fulfilling nature of growth expectations, and sluggish growth in domestic business fixed investment caused by the strong appetite for overseas

¹² For examples of black firms, see Konno Haruki, *Burakku kigyō, Nihon o kuitsubusu yōkai* (Tokyo: Bunshun Shinsho, 2012).

investment.¹³ The latter reflects concerns over a shrinking of the domestic market due to the declining population and the experience of intermittent surges in the value of the yen amid its appreciating trend up until the introduction of QQE. Of these reasons, what I think is particularly noteworthy is the self-fulfilling nature of growth expectations. Low growth in the past and intermittent surges in the yen will reduce growth expectations and the expected rate of return on investment. Therefore, in order for investment to recover, continued high growth and stable exchange rates are vital. From 2012 until today, average annual growth has remained just above 1 percent, the exchange rate has been stable, and investment has been recovering, but most recently we appear to have entered a more difficult phase. This is something I will discuss when talking about recent economic developments later.

IV. Low Interest Rates and the Profitability of Private Banks

As I have explained, while low interest rates have led to labor shortages and are likely to have contributed to increased productivity and happiness, it frequently is argued that they undermine the profitability of private banks.¹⁴ However, I think that deterioration in banks' profitability actually is caused by the structural problem that they are accumulating deposits despite there being no borrowers. Let me examine what would have happened to banks' profitability if the Bank did not conduct bold monetary easing, namely QQE.

From the time of the introduction of QQE up until February 2019, loans by domestically licensed banks increased by 71 trillion yen while deposits increased by as much as 144 trillion yen.¹⁵ I think that banks typically would react positively to monetary policy that allows them to increase loans by as much as 71 trillion yen; on the contrary, they express considerable criticism and dissatisfaction. This is because deposits are growing faster than loans, which makes it difficult for some banks to invest these funds. Of course, deposits will rise as lending increases as a result of the money multiplier mechanism, but this mechanism

¹³ See Naoya Kato and Takuji Kawamoto, "Corporate Profits and Business Fixed Investment: Why are Firms So Cautious about Investment?" *Bank of Japan Review*, no. 16-E-2, April 2016, https://www.boj.or.jp/en/research/wps_rev/rev_2016/data/rev16e02.pdf; and Aoki Daiju and Shikano Tatsushi, "Shotoku ga nobitemo shishutsu ga nobinai no wa naze ka," chap. 4 in *Abenomikusu no shinka*, ed. Harada Yutaka and Masujima Minoru (Tokyo: Chuokeizai-sha, 2018).

¹⁴ See, for example, "Mienu 'deguchi,' fukusayō zōdai: ginkōkai ni takamaru fuman -- mainasu kinri 3 nen," Jiji Press, February 15, 2019, <https://www.jiji.com/jc/article?k=2019021500887&g=eco>.

¹⁵ Bank of Japan, *Financial Institutions Accounts*.

alone does not lead to an increase in deposits twice as large as the increase in loans. In my opinion, if banks are struggling to invest funds, it might be better if they tried not to accumulate deposits.

In this context, news reports suggest that regional financial institutions are struggling to attract personnel and that staff members are retiring early.¹⁶ While this is reported as though it is troublesome, it consequently could lead to a reduction in the number of personnel assigned to collecting more deposits than needed and in that of branches. I think that this would increase the productivity of the banking sector, and thus of Japan's economy as a whole.

I am aware, of course, of the criticism that the decline in the number of bank branches would reduce convenience for users, and thus banks should not close branches.¹⁷ However, banks would decide to close such branches because they only have few customers in the first place. I agree with the argument that having a deposit account should be regarded as a basic human right, but there are many other places to make a deposit account, such as post offices, agricultural and fishery cooperatives, credit cooperatives, convenience stores, and supermarkets that provide banking services. Deposit accounts can be held in a range of places nowadays.

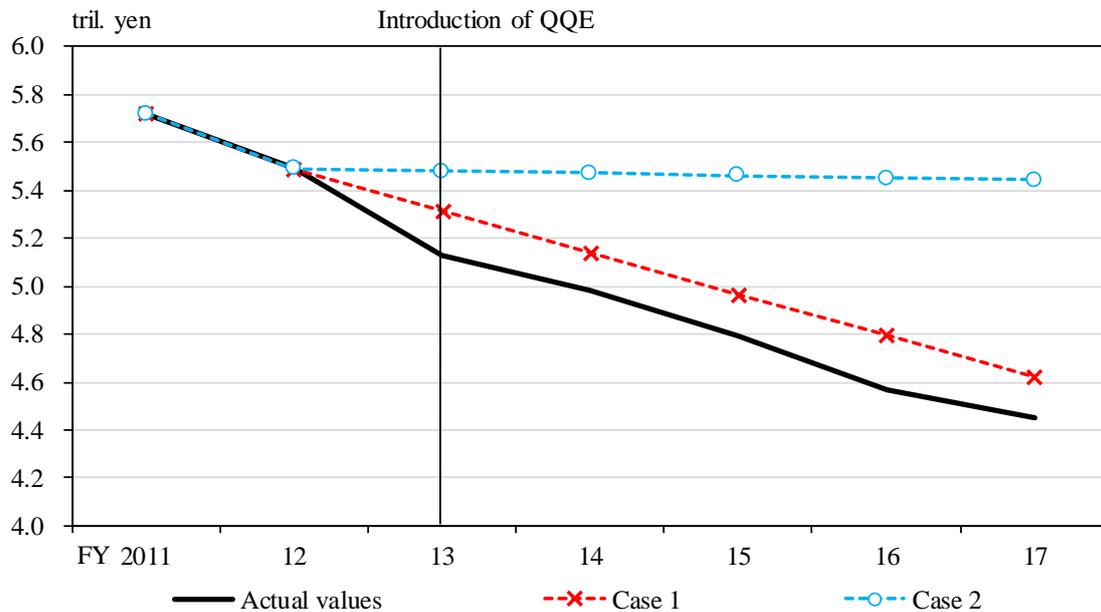
To examine the impact of the Bank's easing policy on banks' profits, Chart 2 compares the actual deposit-taking and lending-related profit as a result of the increase in lending and decline in interest rates since the introduction of QQE (where profit is calculated by subtracting interest on deposits from interest on loans) as well as hypothetical deposit-taking and lending-related profit had QQE not been introduced. In particular, two counterfactual scenarios are considered. In the first, Case 1, it is assumed that without QQE

¹⁶ See, for example, the 2-day series, Minami Takero and Nakatani Shogo, "Chigin haran jinzai kokatsu no kiki," *Nikkei*, February 20 and 21, 2019.

¹⁷ Yamaneko, "Keizai kishōdai ginkō no kyogaku sonshitsu, dare no tame," the *Asahi Shimbun*, March 26, 2019. The article describes how deterioration in banks' profits has started to undermine users' convenience -- for example, branches that people nearby have frequented have closed and/or some other branches have stopped providing services for corporate clients, allowing use only by individual clients.

lending would not have increased and interest rates would have continued declining, following the past trend. Next, although I think that it is correct to assume that interest rates would have continued to drop as a trend due to the decline in prices and in real GDP growth rate, as pointed out earlier, the second counterfactual scenario, Case 2, assumes that interest rates would not have declined.

Chart 2 Simulation of Deposit-Taking and Lending-Related Profit



Note: All banks (domestic business sector). Deposit-taking and lending-related profit is calculated by subtracting interest on deposits (including negotiable certificates of deposits) from interest on loans (including bills discounted). In Case 1, data from fiscal 2013 onward -- those for yields on loans, yields on deposits, amount outstanding of loans, and amount outstanding of deposits and negotiable certificates of deposits -- were estimated using the trends calculated from the time-series data from fiscal 2002 through 2012. In Case 2, the only difference from Case 1 is that figures for yields on loans from fiscal 2013 onward were set at the same level as that of fiscal 2012.

Sources: Japanese Bankers Association, "Zenkoku ginkō kessan happyō," "Financial Statements of All Banks"; Bank of Japan, "Financial Institutions Accounts."

Comparing the actual deposit-taking and lending-related profit with the hypothetical cases, the profit in Case 1 in fiscal 2017 would have been 0.2 trillion yen higher than the actual profit. In Case 2, it would have been 1 trillion yen higher. Adding up the differences from fiscal 2013, the cumulative total would be 0.9 trillion yen in Case 1 and 3.4 trillion yen in Case 2. However, the economy improved, stocks rose, and interest rates declined due to QQE, so credit costs have decreased and realized gains/losses on stockholdings and bondholdings have increased as a result of QQE. If we cumulate these gains/losses from

fiscal 2013, they reach 4.0 trillion yen by fiscal 2017, which is greater than the cumulative total in Case 1 or 2 during the same period.¹⁸ It could be said that, until fiscal 2017, banks' profits were actually higher as a result of QQE than they would have been otherwise. The argument that banks' profits have decreased as a result of QQE is based on the implausible assumption that profits would have increased by more if only interest rates had not declined, completely ignoring the fact that the decline in interest rates brought about the improvement in the economy.

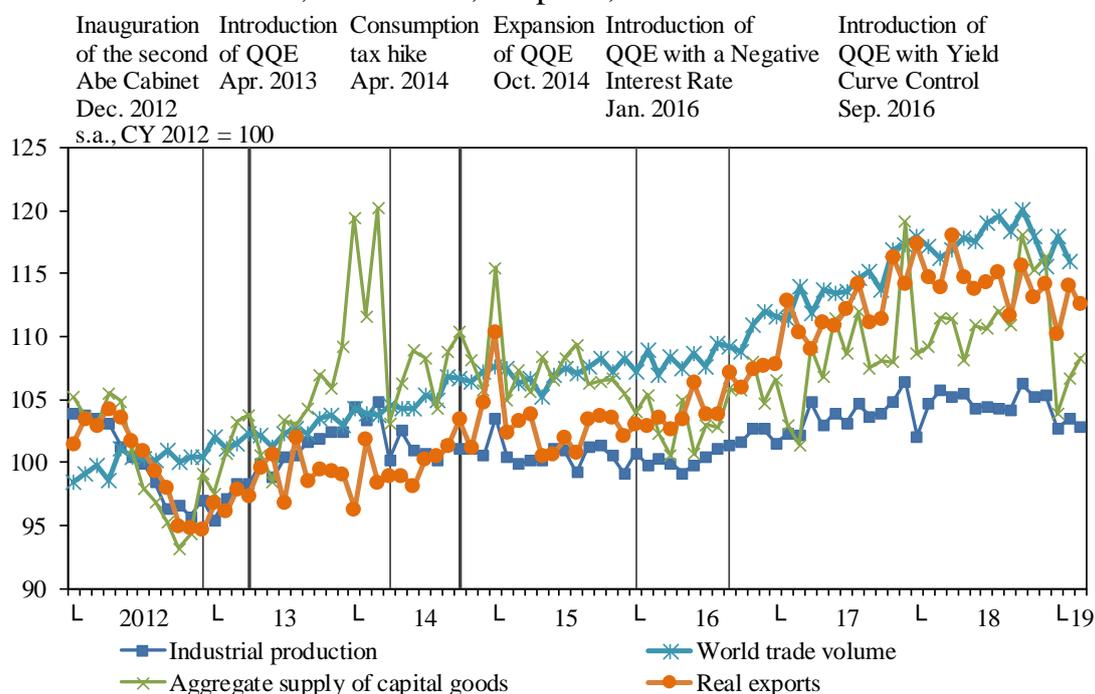
¹⁸ Calculated by adding realized gains/losses on bondholdings, realized gains/losses on stockholdings, and credit costs of major banks (non-consolidated) as well as regional banks (non-consolidated). Data are taken from the Bank's Financial System and Bank Examination Department's annual *Financial Results of Japan's Banks* for each fiscal year from fiscal 2013 through 2017 (those for fiscal 2014 are available only in Japanese).

V. Recent Economic Developments and Monetary Policy

I have talked about the importance of creating a "high-pressure economy" with the monetary easing policy. I now would like to talk about recent economic developments.

Charts 3 and 4 provide an overview of key economic indicators. Almost all the indicators -- for production, investment (the aggregate supply of capital goods), exports, and world trade -- had been improving. However, there are many indicators that are falling currently.

Chart 3 Production, Investment, Exports, and World Trade



Sources: Ministry of Economy, Trade and Industry, "Indices of Industrial Production," "Indices of Industrial Domestic Shipments and Imports"; CPB Netherlands Bureau for Economic Policy Analysis, "CPB World Trade Monitor"; Bank of Japan, "Developments in Real Exports and Real Imports."

Chart 4 looks at wages, employment, employee income (wages multiplied by the number of employees), and consumption.¹⁹ Real wages per worker have not increased, but real

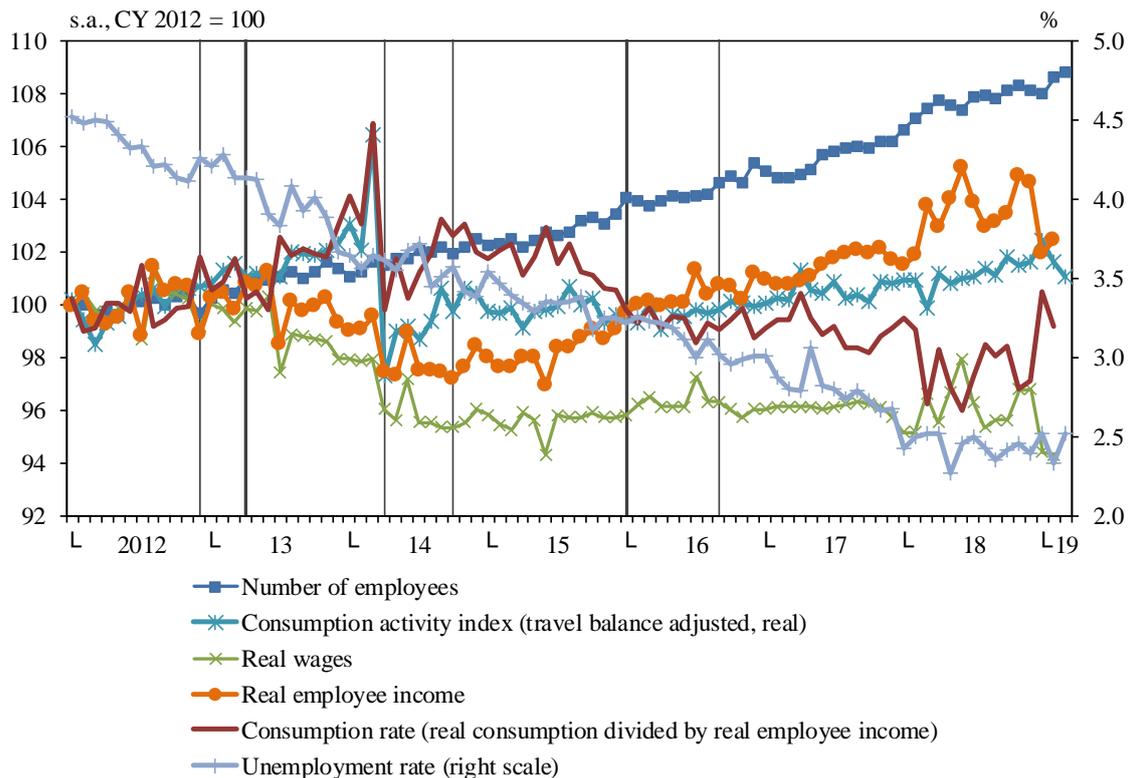
¹⁹ In my past speeches, I defined real employee income as the number of regular employees multiplied by real wages based on the *Monthly Labour Survey*. However, taking into account the decline in the level of the number of regular employees for January 2018, I have redefined real employee income as the product of the number of employed based on the *Labour Force Survey* and real wages based on the *Monthly Labour Survey*.

employee income (real wages multiplied by the number of employees) has grown more or less steadily except for fiscal 2014, the year of the consumption tax hike. The unemployment rate also has declined.

Among the different indicators, the one showing weak improvement is real consumption. Consumption as measured by the consumption activity index is still below the level in 2013; that is, before the spike in demand due to the frontloading of purchases prior to the consumption tax hike. However, it is true that consumption generally has been recovering.

Chart 4 Employment, Income, and Consumption

Inauguration of the second Abe Cabinet Dec. 2012	Introduction of QQE Apr. 2013	Consumption tax hike Apr. 2014	Expansion of QQE Oct. 2014	Introduction of QQE with a Negative Interest Rate Jan. 2016	Introduction of QQE with Yield Curve Control Sep. 2016
---	----------------------------------	-----------------------------------	-------------------------------	--	---



Note: Real employee income is calculated as the number of employees multiplied by real wages, which is total cash earnings deflated by the CPI (all items less imputed rent). The consumption rate is calculated as the consumption activity index (travel balance adjusted, real) divided by real employee income.

Sources: Ministry of Health, Labour and Welfare, "Monthly Labour Survey"; Ministry of Internal Affairs and Communications, "Consumer Price Index," "Labour Force Survey"; Bank of Japan, "Consumption Activity Index."

As mentioned earlier, the economy has been recovering due to QQE. However, exports and production have been declining since the second half of 2018, given, for example, the sluggish world trade volume. I consider that there is a risk of these declines spreading to employment and consumption. Also, there are a number of risks to economic activity going forward, such as the conduct of economic policy in the United States, trade friction between the United States and China, the United Kingdom's exit from the European Union (EU), developments in the European economy, and a slowdown of the Chinese economy. It also should be noted that, in Japan, a consumption tax hike is scheduled to take place in October 2019.

Challenges for Achieving the Price Stability Target of 2 Percent

The economy has been weak recently, and the same can be said about prices. According to the most recent data, the year-on-year rate of change in the CPI for all items less fresh food for March was only 0.8 percent, and that for all items less fresh food and energy was only 0.4 percent. Even so, if the economy continues to recover under the current monetary policy, the labor market will tighten and prices eventually will rise. There are some hurdles to overcome in achieving stable price rises, however.

First is the difficult situation the economy currently faces, as you already are familiar with.

Second is consumption tax hikes. Tax hikes could push the economy into recession, and a resultant decrease in demand could push down prices. Regarding the hike scheduled to take place in October 2019, its effects are likely to be smaller than those of the previous hike in April 2014 due to the following reasons: the rate increase -- from 8 percent to 10 percent -- is smaller than that of the previous hike; a reduced tax rate will be applied to some items; permanent measures such as those concerning the provision of free education will be implemented; and a variety of measures are to be taken so as to smooth out the effects of the front-loaded increase in demand and its fallback. However, the effects of the previous tax hike, which many economists had expected to be limited, have proved significant and lasting. There is a possibility that a decline in demand, such as the one seen after the previous hike, naturally would contain inflation.

The third hurdle is price declines associated with the scheduled consumption tax hike. Measures concerning the provision of free education will be implemented alongside the hike. The Bank estimates that the price rises brought about by the hike and the effect of prices being pushed down due to the provision of free education will together push up the year-on-year rate of change in the CPI for all items less fresh food for fiscal 2019 and 2020, by 0.2 and 0.1 percentage point, respectively.

In addition, I would like to mention another factor that is not directly related to the consumption tax hike. It is the planned reduction in charges for mobile phone services recently announced by some of the major mobile network operators in Japan. Although many of the details are uncertain and it depends on the prerequisites for such details, many analyses seem to suggest that it would push down the year-on-year rate of change in the CPI for all items less fresh food by 0.1 to 0.3 percentage point.²⁰ Assuming that these estimations are correct, achievement of the 2 percent price stability target inevitably would be delayed, in accordance with the degree of reduction.

Regardless of these setbacks, I am not too pessimistic. The provision of free education and a reduction in mobile phone-related prices are no different from tax cuts, and people's real income increases by an amount equivalent to the degree of price declines. Although it likely will take time for an increase in real income to induce an increase in actual demand, this will not hamper the achievement of the 2 percent price stability target itself. This also could be said about other price declines, including those in crude oil prices. Nevertheless, there is a risk that the current sluggishness in observed prices will spill over to inflation expectations, further delaying inflation.

To prepare for uncertainties accompanying the scheduled consumption tax hike and overseas economic outlook, the Bank clarified its forward guidance and decided to implement measures contributing to the continuation of monetary easing at the Monetary

²⁰ See, for example, Kato Azusa and Kono Ryutaro, "Economic Spotlight, keitai ryōkin 4 wari hikisage no inpakuto: CPI ni wa 0.3 pointo teido no inpakuto ka," BNP Paribas Securities (Japan) Limited, April 2019 and Tonouchi Shuji, "Fundamentaruzu nabigētā, keitai shinryōkin ni yoru CPI shitaoshi kōka wa yahari genteiteki to narisō," Mitsubishi UFJ Morgan Stanley Securities, April 2019.

Policy Meeting held on April 25, 2019.²¹ I considered it desirable to clarify the forward guidance but continued to oppose the policy proposal. This was because I considered that the Bank should indicate data-dependent guidance -- such as "the Bank intends to maintain the current levels of short- and long-term interest rates unless prices show stronger movements than currently anticipated" -- to further clarify its relationship with the price stability target.²²

Concluding Remarks

In my speech today, I examined Japan's economy since the 1980s using growth accounting and at the same time looked at the effects of monetary policy during this period. What this showed is that monetary policy has the ability to raise productivity not only from a short-term perspective but also from a long-term perspective. On the other hand, there is also a deep-rooted argument that bold monetary easing undermines the profitability of private banks. In this regard, I pointed out that this argument appears to ignore the positive impact of the overall economic recovery on banks' profitability. Lastly, I talked about the current state of Japan's economy and monetary policy. At present, domestic demand such as business fixed investment and consumption has withstood the decline in external demand and production. However, it also is true that downside risks to the economy are increasing. The impact of the consumption tax hike scheduled for October this year also is a concern. If the economy deteriorates to the extent that achieving the 2 percent price stability target in the long term becomes difficult, I view it as necessary to strengthen monetary easing without delay.

Thank you for your attention.

²¹ See, Bank of Japan, "Statement on Monetary Policy" and its Attachment, April 2019.

²² For my opinion regarding data-dependent forward guidance, see Yutaka Harada, "Economic Activity, Prices, and Monetary Policy in Japan: Speech at a Meeting with Business Leaders in Yamanashi," Bank of Japan, March 2019.