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# **The Current Situation in the Japanese Economy and its Financial Markets—What is the Effect of the Negative Interest Rate?**

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COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

# **The Current Situation in the Japanese Economy and its Financial Markets – What is the Effect of the Negative Interest Rate?**

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## **Abstract**

In order to understand the effect of negative interest rates on the Japanese economy and its financial system, it is essential to analyze Abenomics – the economic policies of Prime Minister Shinzo Abe’s administration – within the context of the global economy. The author gives an overview of the introduction of the negative interest rate, the current state of the Japanese economy and financial markets, challenges confronting Japan, actions the DBJ has taken, the necessity of reforms, and prospects for growth.

## **Introduction**

It is hard to understand the effect of negative interest rates on the Japanese economy and its financial system without analyzing the future of the global economy and Abenomics. This is a fundamental question.

Since Prime Minister Abe's administration was formed in the end of 2012, the author has served as Vice Minister of Finance and has been dedicated to achieving the goals of Abenomics, the economic policies of the administration. By its nature Abenomics has both benefits and challenges. From this perspective, the author gives a background of the introduction of the negative interest rate, and the current state of the Japanese economy and financial markets.

## **Turmoil in the Beginning of the Year**

### **Stock price decline**

The stock market has fluctuated from the beginning of 2016. The Nikkei Stock Average marked JPY at 19,033 on December 30, but then fell until it reached 14,865 on February 12. CEOs of investment banks observed, "It could be ideal that the stock prices are declining in the beginning," or "We expect that stock prices will be between JPY 22,000 to JPY 23,000 by the end of 2016" – but these comments sound foolish now.

The fall of stock prices was mainly caused by concern about the Chinese economy due to the fall of the Chinese stock market and the fall of oil prices, which led to many unexpected issues. China exercised a circuit breaker (suspending market transactions when the stock prices rise or fall more than 7% compared to the previous day) on January 4<sup>th</sup> and 7<sup>th</sup>. However, they suspended this procedure on January 8<sup>th</sup> because it led to confusion. The RMB continued to depreciate after August 2015 when China devalued its currency by 2%. Then the government intervened in the market by selling USD and buying RMB, which led to the sudden fall of China's foreign reserves (USD 3.9 trillion at peak → USD 3.23 trillion at the end of January). The course of this reaction by the Chinese government gave an impression to the whole world that both Chinese currency and policies in the stock market are not well-organized. We should take into consideration that the leader of the Chinese authority of securities and markets had recently changed. The National Peoples' Congress, which opened on March 5<sup>th</sup>, decided they would introduce fiscal policies to support the Chinese economy (it would allow a financial deficit of up to 3%). This decision allowed the economy to stabilize, but it will take time for the Japanese and Chinese stock markets

to recover.

### The path to appreciation of JPY

In the currency market, JPY has been appreciating since 2015. Moreover, many risk factors – such as the launching of a North Korean missile, political risk including fear of terrorism not only in France but also in the US and Turkey, the European refugee crisis, and concerns about a Brexit – have led investors to take risk-averse behaviors, which boosted the appreciation of the JPY. Even after the Great East Japan Earthquake in 2011, there was a fear that the JPY would appreciate abruptly, being seen as a safe currency and as a safe haven. Therefore the G7 intervened jointly to prevent an abrupt JPY appreciation.

### Fall of crude oil prices

Until July 2014, crude oil prices were over 100 U.S. dollars (USD) per barrel. However, many global incidents – an increase in the production of shale gas/oil, a slowdown of demand for crude oil, a restart of US oil exports on December 18, a break-up of diplomatic relations between Saudi Arabia and Iran on January 3, and a lift of sanctions on Iraq – led to a crude oil price decline to USD 26. This price is the lowest range since 2003, and stock prices fell simultaneously.

### Falling crude oil prices are supposed to have a positive impact on Japan

The fall of crude oil prices is basically positive news to Japan and China, who are oil importers. When crude oil prices fall by 50%, Japan stands to save JPY 7 trillion in import costs. For example, the performance of electric power companies or airline companies also improve since they use a large amount of oil. On the other hand, in the short run, this price reduction causes the slowdown of the economies of resource-rich countries such as Russia, Brazil and those in the Middle East. These economic slowdowns, as well as that of China, can lead to the slowdown of Southeast Asian economies.

### The Chinese Economy

The question of what happens to the Chinese economy is repeatedly discussed among Japanese business people. Generally, the more they know about China, the more optimistic are their projections. The main reasons for this are: 1. The fall of stock prices would not discourage Chinese companies to raise capital nor slow down their consumption (the companies will raise about 3%

of capital via issuing stocks and the rich would own the stocks; however, they have a low propensity toward consumption). 2. Fundamentally, the fall of crude oil prices is a benefit. 3. The decline of growth is part of a transition to a “new normal”; due to the one-child policy, the working-age population in China became a declining trend in 2012, and by 2029 the entire population of China is projected to decline.

Despite this optimism, there is still worry about capital flight. The Asian crisis was caused by countries being short on capital, not by their declining growth rate. The G7 needs to watch and provide advice to China in order to avoid a default under surplus. Although the target of 6.5% growth was proposed, there was still only 2% growth according to the so-called “Keqiang index” (combining three preferred indicators: railway cargo volume, electricity consumption, and loans disbursed by banks) compared to the previous year. The reliability of Chinese statistics is always questioned. The news came out on January 26, 2016 that the director of the National Bureau of Statistics of China was arrested due to “serious breach of discipline.” This detail was not disclosed to the public. The Financial Times reported in February that the balance sheets of Chinese banks are affected by fraudulent loans. They report that private commercial banks receive bribes to provide large loan agreements to state-owned companies. These concerns in China – a lack of information and an inability to find the truth – is still prevalent. However, fortunately, inbound tourists and inbound consumption from China to Japan have not yet declined. These facts imply an underlying strength in the Chinese economy.

### **Negative Interest Rate**

Under these circumstances, the BoJ’s introduction of a negative interest rate on January 29, 2016 surprised many people. Initially, Japanese stock prices surged and the JPY depreciated. However, once it was reported that Janet Yellen, the Chair of the U.S. Federal Reserve (Fed), had announced a loosening in the pace of raising U.S. interest rates, JPY started to appreciate and, simultaneously, stock prices went down. The Fed had decided to shift from a zero-interest rate policy and implied on four occasions that they would raise the interest rate. The market expected that the Fed would slow down the pace of the interest rate increase, which led to JPY appreciation. Since then, the global trend has been to take risk-averse positions; Japanese stock prices and JPY currency have not yet returned to last year’s average levels. In this sense, the Bank of Japan was unlucky. The merits and demerits of negative interest rates are still under debate in Japan.

**What is the purpose of the negative interest rate? How about the lending interest rate? The deposit interest rate?**

The Bank of Japan (BOJ) explains that the negative interest rate “lowers the short end of the yield curve and will exert further downward pressure on interest rates across the entire yield curve.” Besides the effect of downward pressure on real interest rates, we assume the following background. The first arrow of Abenomics, until precisely a year ago, was the monetary policy targeting of a 2% increase in the Consumer Price Index (CPI). However the BOJ inevitably extended the target year to 2017, partially due to the fall in crude oil prices. The major focus of this policy is to create the expectation of inflation in the market. The underlying assumption is a strong belief in the BOJ’s ability to bring this policy into action. Some people started to argue that it is difficult for the BOJ to continue buying Japanese Government Bonds (JGBs) because it is reaching the quantitative limit. With a negative interest rate policy, the BOJ could further decrease interest rates if necessary, so there is no limit like Quantitative Easing. In Europe, Sweden has a negative 1.1% rate, Denmark a negative 0.65% rate, and Switzerland a negative 0.75% rate. The BOJ Governor, Haruhiko Kuroda, also declared that “we will not hesitate to ease again if needed.”

Following the introduction of the negative interest rate, the financial markets struggled to adjust their systems. All the interest rates in Japan – the lending interest rate for enterprises, mortgage loan interest rates, and bank deposit interest rates – went down. Governor Kuroda commented at the national Diet that the deposit interest rate would not go negative. This would shrink the margin of banks. On the other hand, the BOJ estimated that JPY 23 trillion out of JPY 253 trillion in BOJ current account deposits would be affected by the negative 0.1% interest rate. Eventually, financial institutions would have to withdraw the deposited money from BOJ and decide how to utilize the money, for example by providing riskier loans with higher interest rates, investing in riskier assets such as stocks or real estates, through investment trusts, or by purchasing foreign bonds. It is the same for individuals. The success of the negative interest rate is dependent on whether it will generate a portfolio rebalance effect and boost a trend of “from savings to investments.” If the money starts to circulate in the market and the economy turns upward, the negative interest rate policy will be a success.

On the other hand, specialists have raised the following concerns: 1. An increase in the monetary base would not bring about inflation. 2. People wouldn't take loans under very low interest rates at this point; even lower interest rates won't change the situation much. Banks are unwilling to make loans with negative interest rates while deposit interest rates do not go negative. 3. If deposit interest rates cannot be negative, they may end up in competition for currency devaluation. 4. JPY/USD exchange rates may have become insensitive to the change in interest rates.

One solution is to abolish the 2% target. However, most developed countries share the 2% inflation target, and if Japan lowers it to 1%, JPY would definitely appreciate. The success of this policy is dependent on how the financial institutions and individuals can survive a low spread under negative interest rates until the economy turns around and prices start an upward trend. The Japanese economy is facing a critical moment.

### **Crucial Factors: Growth and a Feeling of Safety**

#### Abenomics all over the world

During the G20 meeting on February 26th, some argued that monetary policy alone is not enough to stimulate growth. Their argument was that countries should conduct swift fiscal policies and structural reforms. This argument is correct in a sense. The G20 emphasizes the importance of fiscal, monetary, and structural policies. It claims that monetary policy, fiscal policy, and structural reform are important, which are the same ideas as Abenomics. Thus, Japanese economic policy should be going in the right direction.

Capital is floating throughout the world having nowhere to go; economists don't expect much growth in countries like China or Russia, or those in Southeast Asia, South America, or the Middle East. So, some investors foresee capital going to Japan, considering its high-quality technology, stable politics, and potential for the improvement of companies' management.

It is true that Japanese stock prices are not doing well ever since they were impacted by the global economy. However, when we look at the Japanese economy closely, it has been stable for a while, and there are several pieces of good news. The most important lesson going forward is to put the existing "growth strategy" into action.

#### Good news and not-so-good news

Recently, there has been good news about the Japanese economy. In 2015, company revenues were the highest in history. Unemployment was 3.2%, which is close to full employment. In the labor market, demand exceeds supply. Inbound tourists had increased by 50% from the previous year, amounting to 20 million people. International M&A deals by Japanese companies in 2015 recorded their largest amount in history. On the other hand, consumption had not increased. The CPI in 2015 remained about the same as the previous year due to the stagnant effects of JPY depreciation and the fall of energy prices.

### What is the Area for Growth?

When people say “growth strategy,” what is the area for Japan to target? One area we can look at is a study by the DBJ (Development Bank of Japan) on capital investment. In June 2015, the following areas included an increase of at least 20% over the previous year in their capital investment plans: production equipment for semi-conductors or displays for smartphones and cars; data centers for cloud services; improvements of or new parts for smart cars; improvements of new aircraft; environmentally-friendly electricity generation systems such as solar, wind, high-efficiency coal, and LPG fire power; cargo facilities; high-speed railways such as linear motor cars; and real estate development in the metropolitan Tokyo area.

### What has the Japanese Government Done to Implement its Growth Strategy?

The Japanese government has put forth efforts on corporate governance, innovation, expanding into the emerging Asian market, utilization of the elderly, improvement of productivity in service industries, and rigorous support of the agricultural, medical, and tourism sectors.

The Financial Times, a very well-known and severe critic of Japan, evaluated Japan’s growth strategies in September 2015. This is before its acquisition by the Nikkei. They gave an A for structural reform in the agricultural sector and corporate governance, and a B for structural reform in energy and womenomics. As often cited in the past, foreign investors assert that Japan lacks liquidity in its labor market and needs to increase its supply of foreign labor.

The most effective and important aspect of Japan’s strategy is stronger corporate governance; in other words, a revision of old business customs and traditions. What does this mean? The cabinet office released an insightful report in 2013. According to the report, there are 3 major points:

#### The causes of deflation

First, cost reductions and an increase in retained earnings are rational for each company under deflation. However, for the economy as a whole, these actions by companies extend the deflationary period. This causes the so-called “fallacy of composition.” The total of retained earnings of Japanese companies are more than 70% of GDP. These retained earnings have not been used efficiently. Compared to Western companies, the ROEs of Japanese companies are still low.



Second, Japan lost its animal spirit as the deflation mindset grew. As a result, Japan lacked product innovations.

Third, the average wage was reduced due to the transition from permanent employment to temporary employment.

Abenomics is a cure for these causes. The BOJ's effort to combat deflation is to combat this shrinking mindset. Stronger corporate governance is necessary to ignite the animal spirit within companies. An increase of M&A deals are the result of stronger corporate governance.

### **DBJ's actions**

The DBJ, where I serve as Deputy President, is making several contributions toward Japan's growth strategy. (Currently DBJ is a 100% government-owned entity. DBJ plans to be fully privatized in the future.)

### **Revitalizing the local economy**

The DBJ was founded in 1951. Its strength lies in infrastructure in rural areas such as railways, electricity, and hotels. The Bank has put forth efforts to energize the economy in rural areas since its foundation. In particular, it offers:

- Advisory services to local government projects. (Many employees are seconded to the governments.)
- Providing risk money in cooperation with local banks. For example, we collaborate with local banks' M&A networks and local banks to create a fund to provide risk money.

### **Tourism**

According to research by the DBJ, Japan ranks as the top tourist destination among the eight Asian countries. This popularity is not a mere temporary trend. The research discovered that visitors tend to go to Mt. Fuji, Tokyo, Hokkaido, and Kyoto, particularly first-time visitors. For second-time visits, other destinations become popular as well. So, in order to attract repeat tourists, it is not enough to attract them to just a few tourist destinations. Attractive places and experiences, marketing, and finance are also necessary.

### Destination Management Organization

One way to “improve the value of its brand” is the adoption of Destination Management Organizations (DMOs) to coordinate tourism marketing and finance. In April 2016, the DBJ established the Setouchi version of the DMO in cooperation with 7 prefectures and regional banks that represent each prefecture. To support financing, the DBJ established a tourism fund with these 7 regional banks. The 7 prefectures, which tend to have different decision-making processes, will cooperate together to come up with content that attracts tourists. A separate entity, which was created to support business development, will play a role here as well.

### Supporting female entrepreneurs

One famous female professor at Columbia University was keen on supporting active workforce female participation, and provided data showing that companies with more female directors have higher ROEs. When asked why this was the case, she answered with wonder, “It is obvious – because half of the world’s population is female.” The reason why female participation is emphasized in a growth strategy for the Japanese economy is not because Japan doesn't have enough a labor supply; it is because females can attract the business demand of female consumers. The female business plan competition, which has been held by DJB since 2012, is now a well-known gateway into the business world for Japanese female entrepreneurs.

### **What are the causes of concern among the Japanese people?**

Wages in Japan are gradually increasing. The employment environment is good. However, consumption is not increasing and people are still saving money. The reasons are unclear. Is it bad weather? Inflation on groceries? Lower pension payments? An increase in temporary workers? One of the major reasons is that the current Japanese generation, especially people who have children, or young people, have unknown concerns about their future. They are worried about the social welfare system – that they might not receive their pensions when they get old; and with a shrinking population and rise of the Asian emerging market, there is no clear consensus as to how Japanese people will survive in an integrated global economy. In the past, Japanese people had a consensus that Western cultures were their model for future cities or industries, but this sentiment no longer exists. If Japanese do not share an image of where Japan should be in the future, how can policy makers set their goals? What industry should be built in which area of Japan? Where should roads and ports be built, and what are the goals of these projects? Into what kind of education and research areas should the government be investing? There are many areas where a

consensus as yet to be built in order to create and adopt effective policies. To boost the Japanese economy, it is not just the “growth strategy” that is important, but also the feeling of “safety.” So it is necessary to allay the concerns that many Japanese people have.

### **Concerns about Social Welfare**

In Japan, concerns about social welfare overlap with concerns about the sustainability of fiscal health. For example, it seems easy to match the increase in the cost of social welfare to the growth of nominal GDP, but in reality it is very difficult. The reason is that the population is aging. In Japan, by 2025, 30% of the population will be over 65 years old, and by 2050, the percentage will reach 40%. Once people reach 65 years old, the cost of medical care per person triples. For people over 75 years old, it quintuples. The expenditures paid by the tax for the medical care of people over 75 years old costs 12 times more than for people who are younger than 65. As a result, the tax spending on social welfare increases by JPY 1 trillion every year. On the other hand, tax revenues have hardly increased by JPY 1 trillion due to deflation and tax cuts. The debt-to-GDP ratio of Japan is over 230%, which is the highest in the world. The ratio keeps increasing and has not stopped. In short, it is not successfully under control.

This high government debt-to-GDP ratio came about because the government never secured financing to cover the increase costs of social welfare. It is clear when we compare the government budget in 1990 to that of 2016 that the total of increases in the social welfare budget and debt servicing costs coincide with an increase in the special deficit-financing bond (it is zero in 1990). This leads to a decrease in the budget for other expenditures, and now this expenditure-to-GDP ratio is the smallest among the OECD countries. There are no more expenditures to cut.

On the revenue side, government taxes consist of a JPY 17 trillion consumption tax, a JPY 18 trillion income tax, and a JPY 12 trillion corporate tax. Other tax revenues are too small, and even if we raise the rate of such taxes, they will not result in trillions of additional revenue. There is a trend of lowering corporate tax rates across the world. Raising the income tax rate would lead to concerns about inequality. If the government tries to secure trillions of additional tax revenue by raising the income tax, it will mainly affect low- and middle-income individuals. Thus, the most realistic option is to raise the consumption tax.

### **Comprehensive reform of social security and the tax system**

The conundrum above demonstrates why it is necessary to conduct comprehensive reforms of the

social security and tax systems. In 2012, the Liberal Democratic Party of Japan, the Democratic Party of Japan, and Komeito made a historical agreement on this topic. Now the discussion is about when to increase the consumption tax rate to 10%. Such a decision is always made according to politics. In the long term, a serious obstacle exists because there is no consensus among the general public regarding the levels of consumption tax rate and social security.

The lack of a consensus creates concerns amongst the general public. How high should the consumption tax be? As a result of the hike, how much can Japanese people expect to receive in social welfare from the government? How much money should individuals save by themselves? No one has the answers to these questions. This situation causes anxiety. Many people agree on the necessity of further “efficiency on social welfare,” but in reality, no one wants to downgrade the quality of social welfare. Consensus can be formed on “eliminating waste,” but it is difficult to agree on what is the waste. Ultimately it depends on the individual. If you are willing to pay money for it, it is not a waste; if you are not willing to pay for it, it is a waste. Costs and benefits need to coincide in order to create a consensus. Many options should be provided by various entities, such as the government, think tanks, academia and others. Many ideas should be proposed and discussed, with scenarios considering different consumption tax rates. This process would provide a clear picture about how much preparation each should make, which would reduce peoples’ concerns.

### **Concern About a Shrinking Population**

#### **Even the U.S. faces a population problem**

One of the main reasons for the steady growth of the U.S. economy is its increasing population. Out of a 2 million population annual increase, 40% of these are immigrants – a significant amount. Projections are that white people will account for less than 50% of the total population in the U.S. by the 2040s. The impoverishment of former middle-income classes and a change in American society will result. Moreover, currently Asians are less than 40% of the total world population. By the 2030s, it is assumed that this percentage will be around 60%.

#### **How long will Japan try to compete on cost?**

Currently, the Japanese government aims to stop the decrease of population at 100 million. By the 22<sup>nd</sup> century, emerging economies in Asia, South America and Africa may have grown rapidly like present-day China by utilizing their abundant populations. Facing this situation, should Japan

compete with these emerging markets by focusing on larger quantities and lower cost? Should Japan be seeking the same value as them?

### Focus on per capita

Japan, whose GDP per capita is still 24<sup>th</sup> in the world, could relieve concerns about its shrinking population by moving forcefully to improve in this category. The biggest problem of its shrinking population is a large reduction in its labor force. However, some argue that the problem of excess labor supply could emerge in the future due to productivity improvements, along with the development of robots and AI. For instance, driverless cars will solve the problem of a shortage of truck drivers, and AI could perhaps write most of the academic economic papers in the future. The second problem is a severe effect on consumption. However, this problem can be resolved if the GDP per capita increases and people increase their purchases.

### Conclusion

Japan is the first country to face a myriad of problems endemic to advanced countries. Many of these problems will also become severe in the U.S. and China. Japan should lead and confidently solve these problems by creating high-quality, high added-value, and innovative products and services which other countries cannot imitate. This would create more wealth. In addition, Japan should focus not on quantity but on quality, and enrich its peoples' minds.

In order to achieve these goals, Japan needs talented people. Such talented people have to compete with each other in order to improve. Diversity cannot be left out of this competition, yet this is what is lacking in Japanese society. In Western countries, they hire diverse people and make them compete with each other. For example, I have heard many people from a diverse set of countries work at the HM Treasury, whereas in Japan, we rarely see non-Japanese people working for the Japanese government. The Governor of the Bank of England is Canadian; the CEO of Rolls-Royce is German; and the CEO of Morgan Stanley is Australian. Japan should make the most of the 2020 Tokyo Olympics and its attendant inflow of foreign tourists.