

# Monetary System and Economic Situation of Japan from 2013 to 2019

Jinbo Hu<sup>(⊠)</sup>

University of California, Irvine, USA jinboh1@uci.edu

**Abstract.** The monetary system is related to the economic situation. It is a system formed by the state's regulations on the relevant elements of currency, the organization and management of currency circulation. As a developed country in Asia. Japan has a close relationship between the formulation of monetary system and economic situation. From 2013 to 2019, Japan experienced the change of leaders and the adjustment of the monetary system, and brought the economic situation of Japan to a new height. This article focuses on Japan's monetary system and economic situation from 2013 to 2019. It is divided into three parts. The first part is a general introduction, which briefly describes the Japanese monetary system and economic situation from a macro perspective and the dialectical relationship between the two. The second part is divided into two parts. By analyzing the different situations and changes from 2013 to 2019 year by year, we can see the policy adjustment of Japan in different years. The third part is a summary, which is based on the previous text and summarizes the direction of Japanese economic development that can be realized behind the monetary system and economic situation in Japan's economic development.

**Keywords:** Monetary system · Economic situation · Japan

# 1 Introduction

The monetary system came into being and developed with the development of commodity economy. After a long period of development, it gradually became a relatively standard system in modern times. In modern countries, the significance of monetary system is that it can be used to maintain the stability of domestic currency circulation, so that a country can normally play various functions and provide favorable objective conditions for the development of commodity economy. With the development of economic globalization, the economies of various countries are becoming more closely linked. As an important part of Asia's economic development that cannot be ignored, Japan also adjusted its monetary system according to the domestic economic development situation in 2013–2019. This paper will analyze the monetary system and economic situation of Japan from 2013 to 2019.

# 2 Overall Monetary Policy from 2013 to 2019

A Monetary System is defined as a set of policies, frameworks, and institutions by which the government creates money in an economy. Such institutions include the mint, the central bank, treasury, and other financial institutions [1]. As an economic policy regulated by the national government, monetary policy is closely related to economic activities. Every country will conduct serious research when it conducts normal national governance, and then formulate correct economic policies related to a country's development. Whether the economic policy is correct or not will bring completely different results to economic activities and economic development. Japan's monetary policy and economic policy from 2013 to 2019 are adapted to achieve a balance between international economic trade and domestic economic development, achieve rapid economic growth, achieve an increase in domestic employment rate, and safeguard the daily life of its people. Over the past three decades, Japan's monetary policy has been relatively loose on the whole. In the face of the global economic shocks in recent years, various countries have formulated different macroeconomic policies aimed at their own economic situation in order to stabilize the economy. On this basis, the implementation effect of Japan's adjusted monetary policy did not meet expectations. In terms of the time of economic development, since the beginning of 1990, Japan has experienced several economic crises, involving the impact of the whole Asian region, its own economic crisis and the international financial crisis in 2008. Each financial crisis has provided a realistic necessity for the adjustment of Japan's domestic economic and monetary policies. At present, Japan is suffering from the severe economic downturn caused by the new pneumonia epidemic. For the year 2013–2019 analyzed in this paper, although Japan's monetary policy has always remained loose, it has not obviously overcome the situation of economic stagnation and deflation. One of the reasons is that the loose monetary policy can not effectively stimulate demand, and the growth of money supply relative to the base money is insufficient, resulting in the decline of the money multiplier. In addition, the role of credit intermediation was not fully played during the domestic financial crisis in Japan in the late 1990s. In addition, as deflation continues and the interest rate is close to the lower limit of zero, the economic growth expectation declines, the money demand function becomes unstable, and the implementation effect of the loose monetary policy decreases accordingly.

## 3 Policies for Different Years

## 3.1 Monetary System and Economic Situation in 2013

In 2013, Japan's GDP was US \$5155.72 billion [2], Japan's economy grew at an annual rate of 2.6% in the second quarter of 2013, the Cabinet Office said Monday [3]. At the same time, Japan's economic situation is characterized by the rapid recovery of the stock market, and the increase of the asset effect caused by the recovery of the stock market, which finally led to the expansion of consumption. In addition, the yen depreciated in 2013, which means that the benefits of enterprises, especially large enterprises, have increased. The international competitiveness of large export enterprises is improving. After all, using Japanese yen to settle accounts means increasing profits. The end of

2012 is the bottom of Japan's 15th economic cycle. In this case, the 16th economic cycle will begin to enter such a high period in 2013, and the role of economic cycle is also great. In addition, the Japanese policy in 2013 also raised the consumption tax. The implementation is determined to start on April 1, 2014, and the consumption tax in Japan will be increased from 5% in the past to 8%. Because of the need to raise the consumption tax rate, people began to consume in advance.

# 3.2 Monetary System and Economic Situation in 2014

The increase in the consumption tax rate has led to sharp ups and downs in the Japanese economy. The GDP growth rate in the second quarter of 2014, that is, the first quarter of fiscal year 2014, decreased by 6.7% if converted into an annual rate. And it continued to decline by 1.9% in the third quarter. The total GDP in 2014 was: US \$4850.41 billion [2]. Japan continued to maintain a loose monetary policy in 2014, for reasons of boosting the economy and stimulating demand, as well as concerns that high government debt could not bear the rise of interest rates. However, against the background of the widening interest rate gap between Japan and the United States, the Japanese yen is continuously depreciating, and Japan is also facing the consequences of rising prices, deteriorating terms of trade, and increasing volatility in the stock market and treasury bond market.

# 3.3 Monetary System and Economic Situation in 2015

In 2015, Japan's economy did not show great improvement. The GDP was US \$4389.48 billion [2]. The general characteristics were high opening and low going, fluctuating. The growth rate of real GDP was 4.2% in the first quarter, dropped to negative 1.7% in the second quarter, rebounded to 1.6% in the third quarter, but dropped to 1.7% in the fourth quarter. The first quarter of 2016 was positive 1.7%. The real GDP growth of the whole year of 2015 was positive 0.8%, but it was later revised to 0.5%. It turns out that the economic expectation of the Abe government for 2015 is 1.2%, which shows that whether it is 0.8 or 0.5, it is far from the original expectation. In 2015, under the promotion of Prime Minister Shinzo Abe, Japan set several goals. The first is to achieve a strong economy. The specific goal is to achieve a total GDP of 600 trillion by 2020. Before that, the Democratic Party's economic policy has clearly proposed to reach 650 trillion yen by 2020. Therefore, this policy is compatible with the objectives of the Democratic Party. In addition, a very important link in the economic situation is stable employment. In 2015, Japan improved the treatment of young people, stabilized employment and enriched childcare measures. The specific goal of this policy is to achieve the ideal birth rate of 1.8. Fertility rate is the average number of babies born to females during their reproductive years [4]. The high birth cost, the delay of birth age, the improvement of education, the lost opportunity cost of birth, and the awakening of self-consciousness are all the reasons. The improvement of education level is an important factor affecting the change of fertility rate in recent years. The higher the education level of women, the proportion of having more children will be greatly reduced. There are many factors hindering women's childbirth, of which childbirth cost is the primary factor. Childbirth cost includes direct and indirect costs of childbirth. Direct costs include education costs. At present, families are investing more and more in education; There are housing costs.

Having more children reduces living space, and high house prices lead to rising costs; There are care costs, such as the cost of sister-in-law, hiring a nanny, childcare and so on. Indirect costs include time costs and career losses. Both family education and care require a lot of time. According to international experience, having more than two children will greatly affect the female labor participation rate, and it can not be recovered. Behind this, the economic situation also produces some demands for women's employment.

# 3.4 Monetary System and Economic Situation in 2016

In 2016, Japan's GDP was US \$5003.68 billion [2]. From the perspective of monetary policy, in 2016, Japan introduced some remarkable policies. For example, at the end of February 2016, Japan lowered the interest rate between the central bank and commercial banks to negative 0.1%, mainly because the 2% inflation rate or the 2% price increase rate in Japan was not realized. After the implementation of negative interest rates, the market did not respond well. The stock market fell sharply, and Japan's economic policy is guided by the appreciation of the yen. This is not a bad thing for the daily life of the Japanese, and it can reduce the interest burden of family life. Moreover, the most direct effect of the appreciation of the yen is to stimulate consumption and investment, thereby expanding people's purchasing power. In addition, the low long-term interest rate may lead to difficulties in investment operation, and the present value of the debt paid by the severance payment will increase. In addition, it may lead to overheating of the real estate market. This is his drawback, and it is very obvious. In addition, in October 2016, Japan launched a short-term and long-term interest rate control policy. From the perspective of fiscal policy, this effort is even greater. At the beginning of 2016, the Abe government decided to launch an expanded proactive fiscal policy, with a total scale of 28 trillion yen. Of course, the government has contributed 3.6 trillion yuan. As the supplementary budget expenditure of 2016. The reason for such large-scale fiscal investment is that the monetary policy of quantitative easing, quality easing and negative interest rate, or the trinity of monetary policy, has failed to achieve its original economic objectives. Specifically, the target of 2% inflation and 2% price increase have not been achieved. Japan's economic situation is generally not good, and its monetary policy is out of order, so it has to shift from the previous emphasis on monetary policy to the active fiscal policy. The third policy is the labor and employment policy. The labor and employment policy is the policy of labor mode reform proposed by Shinzo Abe. The specific content is to advocate equal pay for regular and temporary workers, and equal pay for men and women. In fact, this goal is also very difficult to achieve. This is mainly due to the increase of informal employees, whose wages are very low, only about 60% of those of formal workers. Moreover, women's wages are basically 60% to 70% of men's wages. Therefore, in order to reverse this situation, we have proposed measures to reform the labor mode.

# 3.5 Monetary System and Economic Situation in 2017

In 2017, Japan's GDP was US \$4930.84 billion [2]. In 2017, Japan's GDP (excluding GNP) was 1.037, representing that Japanese enterprises earned abroad, which was about 3.7% more than foreign investment income in Japan. GNI (formerly GNP) is the sum

of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad [5]. In the United States, China, Britain and other countries, the number did not reach 1. It can be seen that Japan has indeed produced a lot of "economic growth" overseas. In addition, in October 2017, the assets held overseas by Japanese enterprises and individuals seemed to exceed 1000 trillion yen for the first time, and increased by 50% in the past five years. This figure is very alarming. It means that Japanese enterprises hold a large number of overseas assets, which is not only driven by market development, but also can avoid the downturn of Japanese local economy. Therefore, in analyzing Japanese economy, in addition to tracking traditional data such as GDP, price and unemployment rate, the "invisible" overseas enterprises are also very important.

# 3.6 Monetary System and Economic Situation in 2018

In 2018, Japan's GDP was US \$5037.83billion [2], In 2018, Japan's economy grew at an annual rate of 0.7%, achieving sustained growth for seven consecutive years since 2012, but the growth momentum slowed down compared with the previous year. How to overcome the aging of young children, the decline of the total population, and the low labor productivity are testing the Japanese government's ability to cope. Of course, the decline in the fertility rate can also be interpreted from another perspective. When the number of children is reduced, the burden of family support is reduced, which reduces family expenditure and improves the ability to save. In the process of rapid population transformation, the population policy has gradually broken the role of traditional families that rely on the number of children to provide for the elderly, thus encouraging individuals to accumulate, which has brought about an increase in the national savings rate. Therefore, to maintain the high-speed economic growth in the future, we need to continue to give full play to the positive role of the family planning policy in promoting the accumulation of material capital and human capital investment. According to the Bank of Japan's December Tankan (Short-Term Economic Survey of Enterprises), large manufacturers' overall assessment of business conditions improved for the fifth straight quarter, hitting an 11-year high of +25 [6].

# 3.7 Monetary System and Economic Situation in 2019

In 2019, Japan's GDP was US \$5123.32billion [2]. The economy contracted 6.3% in Q4 compared to the previous quarter in seasonally-adjusted annualized terms [7]. As the economic and trade friction brings uncertainty to the global economy, Japan's exports continue to be weak. Affected by the global economic slowdown, Japan's exports fell year-on-year in November, the 12th consecutive month of year-on-year decline. At the same time, industrial output value declined in November, which was the first two consecutive months of decline since September 2018, increasing the possibility that manufacturing industry dragged down economic growth in the fourth quarter. The weak export has a negative impact on production. In addition, natural disasters and the rise of consumption tax have caused the economy to shrink. Analysts pointed out that the continuous disasters have affected people's consumption, private investment, public investment and

exports, which will pull down Japan's annual economic growth rate. According to our textbooks, bank regulation regulates monetary policy because banks with excess reserves constitute the supply of federal funds. If a bank does not have enough reserves to meet its reserve requirements, it constitutes a demand federal fund. The federal funds rate is the clearing equilibrium rate of the federal funds market [8]. In general, in 2019, economic and trade friction brought uncertainty to the global economy. On the one hand, it lowered Japan's economic development expectations; on the other hand, Japan's foreign economic cooperation was also negatively affected.

## 4 Conclusion

For a long time, the Central Bank of Japan has accumulated good experience in implementing the loose monetary policy, especially the practical experience of the monetary policy framework in three different stages has become an important guide to deal with various external adverse shocks. From 2008 to 2012, the experience of the first stage of monetary policy framework shows that monetary policy should respond to external shocks flexibly and boldly. From 2013 to 2019, the experience of the second and third stages of the monetary policy framework shows that the Central Bank of Japan can flexibly adjust the monetary policy by learning from the experience and lessons of international macroeconomics, while taking into account the spillover effects of other countries' monetary policies on domestic monetary policies. Like other major economies, Japan's monetary policy and economic situation also need to be adjusted in accordance with the international situation. Based on the current experience in coping with the international financial crisis, Japan has made a monetary policy suitable for its own development and continuously adjusted the direction according to the actual situation. However, due to the impact of the epidemic, Japan's future development still needs to implement flexible and bold regulatory policies in a timely and appropriate manner.

# References

- 1. Agarwal, P. (2022, February 2). Monetary system. Intelligent Economist. Retrieved August 31, 2022, from https://www.intelligenteconomist.com/monetary-system/
- 2. O'Neill, A. (2022, May 18). Japan GDP 1987–2027. Statista. Retrieved August 31, 2022, from https://www.statista.com/statistics/263578/gross-domestic-product-gdp-of-japan/
- Riley, C. (2013, August 11). Tax hike in question as Japan GDP Tax hike in question as Japan GDP disappoints. CNNMoney. Retrieved August 31, 2022, from https://money.cnn.com/2013/ 08/11/news/economy/japan-gdp/index.html
- Market business news. (2021, May 19). What is fertility rate? definition and examples. Market Business News. Retrieved August 31, 2022, from https://marketbusinessnews.com/financial-glossary/fertility-rate/
- macrotrends. (n.d.). Japan GNP 1962–2022. MacroTrends. Retrieved August 31, 2022, from https://www.macrotrends.net/countries/JPN/japan/gnp-gross-national-product
- Akiyoshi, T. (2018, Jan 10). The Japanese economy in 2018: On track for a record-setting growth streak. nippon.com. Retrieved August 31, 2022, from https://www.nippon.com/en/cur rents/d00375/

- Gardner, E. (2020, February 18). Japan GDP Q4 2019. FocusEconomics | Economic Forecasts from the World's Leading Economists. Retrieved August 31, 2022, from https://www.focuseconomics.com/countries/japan/news/gdp/economy-contracts-sharply-at-the-end-of-2019
- 8. Olney, M. L. (2011). Macroeconomics as a second language. Wiley.

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