

Policy Measures, Reform Effects, and Development Dilemmas of Abenomics

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Abstract

Abenomics has been widely expected to revive Japan's economy since its inception, but the actual results of its policies are controversial. This study incorporates other literature and my comprehension to get a complete picture of Abenomics from past to future. I analyze the theoretical basis of the three arrows: the monetary policy attempted to change inflation expectations to increase aggregate demand; the fiscal policy is wavering between consolidation and economic growth; structural reforms wished to clear the obstacles to long-term growth such as population aging and inflexible working practices. Concerning assessment, I further find that the aggressive monetary policy failed in stimulating export growth and encouraging lower interest rates. The flexible fiscal policy is restrained by the unreasonable revenue and expenditure structure. The structural reforms have vague objectives, and the effects are hard to quantify. I finally discuss coronavirus shocks that wrecked future challenges, and the short-term and long-term growth is made elusive by

the population aging and geographical conflicts between China and America. Hence it is a monumental task to salvage the moribund Japanese economy.

Keywords

Abenomics; Quantitative and qualitative easing; Flexible fiscal policies; Structural reforms; Coronavirus

Introduction

In 2012, Shinzo Abe became prime minister again. Before his inauguration, the Japanese economy has been sluggish for a long time. Since Japan's economic collapse in 1989, Japan's average annual Gross Domestic Product growth rate has been less than 1%, and inflation has been at a negative value. Therefore, the global media has unanimously criticized the Japanese economy and called the past "the lost 20 years". Faced with this dilemma, Shinzo Abe carried out drastic reforms. He tried to overcome deflation through ultra-loose monetary policy and fiscal stimulus policies to revitalize the economy and

Citation: Xuezhou Wang. (2022) Policy Measures, Reform Effects, and Development Dilemmas of Abenomics. The Journal of Young Researchers 4(1): e20220429

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Received on March 23, 2022; Accepted on April 7, 2022; Published on April 29, 2022

through structural reforms to solve the problems of Japan's aging population and shrinking population. This series of policies and measures are also called Abenomics (three arrows) by the media. Before the coronavirus, the Japanese economy continued to recover. Economic growth was close to the longest record in 73 months after World War II. The unemployment rate in Japan continued to drop to nearly 2%, and the Nikkei index also rose sharply.

However, the outlook for the Japanese economy is very bleak at present. First, the coronavirus has severely hit the Japanese economy, and this wound is difficult to heal in a short time. According to the results of the Cabinet's statistics, Japan's real Gross Domestic Product fell 3.0% annually in the third quarter of 2021, which was another decline after a significant contraction in the first quarter. Several economists said that the goal of Japan's economic recovery to the level before the coronavirus within this year might be challenging to achieve. Secondly, political turmoil brings uncertainty. After Abe's departure, Yoshihide Suga, who has only served for one year, left the scene sadly. In the dilemma of the spread of the coronavirus, a short-lived cabinet came to an end in just one year. Uneasiness about political stability is spreading in the future, and the new Prime Minister Fumio Kishida's attitude towards Abenomics is still unclear. In the face of this chaos, reviewing Abenomics can bring a deeper understanding of the Japanese economy.

So, I cannot help but ask what the theoretical basis of the three arrows of Abenomics is? How is it explicitly implemented? In this eight-year ruling, Abenomics has played an important role. How should I judge these policies? In addition, the author believes that due to the sequelae of the coronavirus and the end of the post-Abe era, Japan's economic recovery is facing significant challenges, so it is necessary to contact

Abenomics for analysis and comparison.

Literature review and theoretical analysis

The first of the three arrows of Abenomics

To increase the money supply in the Japanese market, the Bank of Japan implements a qualitative and quantitative monetary policy (QQME), which is called the first arrow of Abenomics (Fujiwara et al., 2015). The monetary policy adopts Keynesianism, and it is regarded as a necessary means to resist deflation (Krugman, 2013). This kind of monetary policy is quite radical, through the Bank of Japan's quantitative easing, forward-looking guidance on interest rates, and future asset purchases to increase the supply of base money (Ueda, 2013). Abe also instructed the Bank of Japan to raise the inflation target to 2% and achieve the target through unlimited easing in the future (Hausman and Wieland, 2014).

The key to the quantitative easing policy is whether it can change market expectations and whether people's perception of monetary policy can be changed (Fujiwara et al., 2015). However, the initial significant positive impact of monetary policy (the rise in stock prices) was driven by the enthusiastic buying of shares and selling of Japanese yen by foreign investors (Ito, 2014; Katz, 2014; Fukuda, 2015). The ensuing stimulus also did not reach expectations. In addition, domestic investors still have doubts about the effects of Abenomics, so they lack the enthusiasm to respond. (Shibata, 2017).

The monetary policy expects to increase the supply of base currency and make people believe that there will be lower actual interest rates in the future. This stimulated the demand for credit and gave full play to the bank's creation of money (Hausman and Wieland, 2014). For this reason, the monetary policy of Abenomics is not the

same as the previous monetary policy experimented with from 2001 to 2006 (Hausman and Wie-land, 2014).

However, inflation expectations are still set at a low level of 1% (less than 2% expected) (Fujiwara et al., 2015). The impact of monetary policy on inflation is not significant (Shibata, 2017). According to a reliable survey, commercial banks' loans to companies have increased by only 2% on average, and most of the funds invested by the central bank are idle in commercial bank accounts (Jiang, 2017). This is particularly critical because Kuroda hopes inflation can stimulate consumption and encourage companies to increase investment and hire more employees (Ito, 2014; Katz, 2014). Due to the failure of expected high inflation and the newly implemented tax increase in April 2014, the effectiveness of monetary policy is not significant (Shibata, 2017).

Besides, there is a gap between expectations and reality, and the positive market trends quickly disappear. Although data shows that people expect higher prices, Japan's total consumption has not risen but has fallen since mid-2013, contrary to Kuroda's expectations (Katz, 2014). The possible reason is that the labor share in Japan's national income has continued to decrease (Aoyagi and Ganeli, 2015). The wages of formal jobs have not increased much, while the wages of informal jobs have decreased significantly (Shibata, 2017). We have not observed an increase in long-term, stable jobs. Even more, workers are doing temporary and low-paying jobs, and the number of informal jobs continues to expand. Those problems have been aggravated during Abe's tenure (Ito, 2014).

On May 23, 2013, the Japanese market collapsed, and the attitude of the Japanese people towards Abenomics policies turned. People became more

skeptical and pessimistic about the future (Fukuda, 2015). Long-term inflation expectations have not increased significantly (Shibata, 2017). The Japanese economy has been in a long-term liquidity trap, so there is little room for monetary policy to operate (Fujiwara et al., 2015). Although the Bank of Japan's monetary policy is quite aggressive (large-scale purchases of government bonds to increase high-power currencies), it still fails to see results in stimulating investment.

Another subordinate target for quantitative and qualitative easing was to depreciate Japan's currency to improve the current account and spur the aggregate demand. However, the yen's depreciation has failed to drive a significant expansion of the export market. Firstly, a considerable part of Japan's manufacturing industry's "production bases" have been transferred overseas. Secondly, the average exchange rate of the yen against the US dollar has continued to fall (Jiang, 2017). Nevertheless, it is worth noting that currency depreciation can theoretically break through the rigid benefits pattern and clear the obstacles to reform set by solid interest groups (Yi, 2013). Nevertheless, indeed the effects are hard to quantify.

In general, Shinzo Abe wants to stimulate Japan's inflation expectations and consumption through coordinated monetary policy to grow. However, people's expectations are difficult to improve (Shibata, 2017). There lacks a clear and stable relationship between policies and inflation expectations (Fujiwara et al., 2015). This problem was aggravated by the increase in tax, limited rising wages, and export growth, which suppressed reasonable inflation expectations. Under the influence of these various factors, consumption continues to be sluggish.

The second of the three arrows of Abenomics

The second arrow of Abenomics is called flexible fiscal policy, which includes two large-scale fiscal packages (Arslanap and Lam, 2013). The second arrow hopes to drive total social demand through fiscal expenditure, ending deflation and realizing a long-term virtuous economic cycle (Kataoka, 2014). This policy can theoretically increase the demand for labor, reduce the number of unemployed in Japan, and force Japanese companies to increase employee wages. (Kataoka, 2014).

Due to the large-scale purchase of government bonds by the Bank of Japan in the past two to three decades, the interest rate of government bonds has been meager, which has eased the pressure on government debt to a considerable extent. However, such low-interest rates may not be sustainable in the future because higher inflation means higher nominal interest rates, and the increase in interest rates will put the government in an embarrassing position (OECD, 2015). The snowballing effect will eventually result in the default and hence lose the confidence of Japan's economy (Dourille-Feer, 2015). Therefore, the second arrow of Abenomics is not very tenable. In a sense, all fiscal stimulus is constrained by long-term fiscal deficits and public debt (Shibata, 2017).

However, tax increases were not welcomed by Japanese consumers. It can be observed that consumption has stagnated since then, and economic growth has become negative (Harding, 2015a). The negative impact of this tax increase on the Japanese economy has been criticized by many scholars, who are more concerned about inflation or a more robust Japanese economic recovery, rather than stabilizing the Japanese government's fiscal position (Kataoka, 2014). Although these criticisms do exist, many economists (Hausman and Wieland, 2014) also

affirm the importance of Abenomics and regard it as the right policy. In the Abe cabinet, the two forces have diverged. The Cabinet office prioritizes the goal of economic growth, while the Ministry of Finance hopes to stabilize its finances first (Harding, 2015b). Therefore, the goal of fiscal balance is hindered by the internal conflicts of the Abe government and the contradictory consequences of restraining fiscal policy and consumption due to the increased consumption tax (Shibata, 2017).

Due to tax increases and fiscal packages, flexible fiscal policies have recently been transformed into tight fiscal policies (Harding and Inagaki, 2015). It can be said that the tax increase was implemented too early, which caused the Japanese economy to fall into recession again in the spring of 2014. Enterprises transfer the cost of tax increases to prices, making many families reluctant to increase expenditures. All in all, the second arrow of Abenomics is in contradiction. It is necessary to increase public expenditure to stimulate the stagnant economy and limit public expenditure to stabilize the stretched financial situation. This contradiction is particularly evident in the debate surrounding the increase in consumption tax (Shibata, 2017).

In general, the Abe government's fiscal package of economic reform policies aims to promote Japan's economic recovery, but it has not fundamentally changed Japan's economic downturn by its impact. There was teeny or no fiscal stimulus in the implementation of Abenomics in the whole picture. In reality, the effect of short-term economic recovery was offset by the surges in taxation, and it was more like a fiscal retrenchment rather than a fiscal stimulus (Edward, 2020).

The third of the three arrows of Abenomics

The third arrow is the growth strategy, which

includes some structural reforms. The government promised to work hard to improve the competitiveness of domestic enterprises, overcome energy constraints, and strengthen the construction of innovation platforms (Hausman, 2014; Yoshino and Taghizadeh-Hesary, 2015). The government has great expectations for this policy. They believe that the third arrow of structural reform will play a decisive role in the success of Abenomics and Japan's long-term economic growth (Schiff, 2015; Szekeres, 2015). When formulating the plan, the Abe government pointed out ten key reforms, including lowering corporate taxes, improving company management, encouraging venture capital, and promoting technology to promote innovation (Cabinet Office, 2015). These reforms will significantly promote the development of enterprises. These reforms are dedicated to different directions: on the one hand, it endeavors to revitalize the Japanese labor market, promote women's participation, flexible working methods, and attract highly skilled foreign workers (Danninger and Steinberg, 2015). On the other hand, it emphasizes the importance of participation in the Trans-Pacific Partnership (TPP), thereby strengthening the liberalization of the agricultural industry (Shibata, 2016).

The third arrow also attempts to create a favorable environment for new growth sectors, including energy, environment, medical services, and integration with Asia (Danninger and Steinberg, 2015). Through these ten key reforms, the growth strategy aims to produce a "chain reaction" across the country and achieve two critical goals: local revitalization and SME innovation and regional economic structural reform (Cabinet Office, 2014).

However, there are still concerns about the effectiveness of corporate taxes and labor market flexibility (Shibata, 2017). The first essential

reform to strengthen corporate governance aims to shift the existing governance model to the Anglo-Saxon model by encouraging companies to take on more outsiders. The aim is to weaken links between Japanese companies, such as keiretsu (Shibata, 2017). The Abe administration also plans to cut corporate taxes. Nevertheless, the exceptionally high tax rates (40 percent) on the most profitable American companies at the time suggested that there was no direct link between lower corporate taxes and higher corporate productivity (Dourille-Feer, 2015).

Moreover, the trickiest part of the "third arrow" should be the goal of "flexible work practices." The incidence of relative poverty in Japan has always remained high, and there is still a trend of further expansion because of flexible working practices. However, as a conservative, Shinzo Abe has to deal with the delicate and urgent problems of substantial public debt and rising social spending associated with population aging. He is a significant player in economic growth. The aim for redistribution of wealth and the woes of poverty were ignored deliberately (Dourille-Feer, 2015). This increase in the poor class means reduced taxation and lower consumption, which will inevitably affect the economic recovery (Jiang, 2017). Nonetheless, concerning and coping with poverty will take away government spending and worsen the government's budget.

Abenomics" mainly stays at the demand-side reforms of Western macroeconomic regulation to stimulate demand, but lacks drastic economic structural reforms. Only drastic economic structural reforms or supply-side reforms that revitalize one's financial stock can provide surging new impetus for the long-term growth of one's economy (Ding, 2020). It was reported that Japan's labor income has only increased by a small part, but productivity has hardly increased

(Gros, 2020). The supply-side policy above lacked effects and some even led to a deterioration of Japan's economy. The long-run results are inconspicuous.

Policy evolution of Abenomics

As its name suggests, "Abenomics" has a distinctive personal color, and it was Abe's dominant policy when he was in office. Starting with the "three arrows" of "bold monetary policy," "flexible fiscal policy," and "growth strategy," the Abe government has successively introduced a series of economic policies.

In January 2013, the Cabinet Office of Japan, the Ministry of Finance, and the Bank of Japan issued a joint statement to clarify the inflation target of a 2% increase in consumer prices. In April of the same year, the Bank of Japan's "quantitative and qualitative financial easing policy" followed closely. The main content included expanding the monetary base, doubling the supply within two years, increasing the purchase of treasury bonds and risky assets, and extending the holdings of treasury bonds. During this period, the interest on medium and long-term loans is reduced, and investment is promoted.

In June, the Japanese government issued the "Japan Rejuvenation Strategy," emphasizing industrial revitalization, market development, and international market expansion. The Japan Government decided to revise the strategy every year after that. In December 2013 and December 2014, the Japanese government introduced economic stimulus policies totaling 18.6 trillion yen and 3.5 trillion yen, respectively, supported by central and local fiscal expenditures. At this point, the first-stage policy combination of "Abenomics" has been launched.

"Abenomics" achieved remarkable results in the early stage, and Japan's GDP, prices, and

employment have all improved. However, after the consumption tax rate was raised from 5% to 8% in April 2014, the momentum for the improvement of the Japanese economy has significantly weakened. In September 2015, Abe put forward the goal of "100 million total active society" and showed the "three new arrows," then "Abenomics" entered the second stage. The "new three arrows" are "hope," "dreams," and "peace of mind," corresponding to the "post-war highest nominal GDP of 600 trillion yen" and "total fertility rate 1.8" and the policy goal of "work and caring for the elderly can be balanced."

In January 2016, the Bank of Japan introduced a hostile interest rate policy, also known as the "quantification and qualitative financial easing policy of negative interest rates," so the financial policy was upgraded again. In August of the same year, the Japanese government implemented an economic stimulus policy of 28.1 trillion yen with a total capital scale of 28.1 trillion yen, and the fiscal policy is also continuing to follow up. In September, the Bank of Japan once again launched the "quantitative and qualitative financial easing policy with long- and short-term interest rate operations," including maintaining negative interest rates, expanding the supply of funds, and purchasing treasury bonds to maintain long-term interest rates at around 0%.

After 2017, as the financial policy has been pulled to the maximum, the policy focus has changed. In June 2017, the Japanese government changed its practice of revising the "Japan Rejuvenation Strategy" every year and instead proposed a new "Future Investment Strategy," revised in 2018. The two-year theme was "For Society 5.0 "Reforms" and "Reforms towards Society5.0 and a data-driven society". This plan focused on applying cutting-edge technologies

such as the Internet of Things, big data, artificial intelligence, and robotics to industrial development and social life in the fourth industrial revolution. It also claimed to use the latest technology to solve economic development and social problems. In June 2019, the Japanese government launched the "2019 Growth Strategy" and the "Declaration of Creating the World's Most Advanced Digital Country." "Digital economy," "technical innovation," and "general social security system" have become key areas.

However, after the consumption tax rate was raised from 8% to 10% in October 2019, the Japanese economy took a sharp turn, and the coronavirus in 2020 caused a significant blow to the economy. Although the Japanese government has issued a super-large-scale emergency economic response of 117.1 trillion yen, since the fourth quarter of 2019, real GDP has fallen into negative growth for three consecutive quarters, and the annual rate conversion value in the second quarter of 2020 has reached -27.8%. That set the most significant drop in Japan after the war.

Assessing the effectiveness of Abenomics

The first arrow seemed to miss the bull 's-eye

The most striking policy of Abenomics was the first arrow-quantitative and qualitative easing (QE), which was not too novel but an upgrade version of quantitative easing. The new point is that QQE commits to changing the long-term interest rate by Operation Twist (selling short-term national debt and buying long-term national debt). This arrow has three main aims: first, this is expected to create a loose monetary environment through a significant base currency. Consequently, it should stimulate the sluggish Japanese economy; second, he wants to adopt a "higher money supply-low interest rate-high

borrowing-high consumption-high inflation" transmission mechanism. It is worth noting that the low-interest rate is fulfilled by quantitative easing and operation twists; third, it aims to propel exports by lowering the currency's value due to an increase in the amount of money. However, there seems to be some deviation between the expected target of Abe's "first arrow" and the actual effect.

First, the violent release of the monetary base did not bring about a significant increase in the money supply. Since Shinzo Abe came to power at the end of 2012, the monetary base balance has risen from about 10% at the end of 2012 to about 52% at the end of 2014. However, the year-on-year growth rate of the money supply has only risen from 2.6% at the end of 2012 to 2017 4.1% of the total. This stark contrast may be related to the fact that the balance sheet of Japanese companies has not yet been fundamentally repaired and residents' willingness to consume is still cautious. The creditors usually had lower consumer propensity. Those behaviors may also bring about a high reserve ratio in commercial banks, which diminishes the money supplier, thus hindering the growth of the money supply.

Second, the logical transmission of "low-interest rates-high borrowing/high consumption-high inflation" does not seem to be as smooth as expected. From the perspective of residents, driven by many years of QE, Japan's loan interest rate has been lowered a lot, and the unemployment rate has dropped to a historic low. However, the new increase in personal consumer loans in Japan is still hovering at a low level.

From a consumers' perspective, the consumption habits formed by the Japanese people in the deflationary environment of the past 15 years are difficult to change. Also, the growth rate of residents' wages has not increased significantly.

These partly explained the failure of transmission from low interest to high consumption. Although the new housing loans of Japanese households have been at a high level in the past 15 years, it is challenging to purchase houses based on rigid demand to increase the price of animals significantly.

From a corporate perspective, Japanese companies have been busy repairing their balance sheets since the real estate bubble burst in 1990 and have no intention of continuing to raise debt. The sluggish demand for corporate borrowing is not sensitive to changes in interest rates, leading to the failure of monetary policy transmission. This situation has continued until now, and even if the Bank of Japan implements the monetary policy of a "negative interest rate," corporate lending is still weak. In addition, though the interest rate is lowered and firms' profits increase, firms are still unwilling to set higher wages and give higher dividends.

Third, the transmission path of "currency depreciation-export increase-economic growth-get rid of deflation" did not meet expectations. From the end of 2013 to the first half of 2015, the yen depreciated sharply, but it did not bring about a significant rebound in exports. So, the impact on to aggregate demand curve was limited. From the end of 2016 to the present, Japan's inflation has improved slightly, mainly due to imported inflation, the increase in CPI caused by the high prices of imported raw materials and commodities. Looking back, from April 2013 to April 2014, Japan's CPI climbed abnormally, which had a lot to do with the increase in the consumption tax and the rise in energy prices. From 2015 to 2016, the price of bulk commodities fell precipitously, which once again brought Japan's CPI to the bottom. These are not directly related to currency depreciation or export growth. Hence this transmission channel

failed to get smooth as expected.

An intriguing phenomenon was that monetary stimulus was transferred mainly to cash surplus as firms reveled in higher profits but refused to give higher wages or fringe benefits. This led to the inequality between company management and poor citizens. The differences in marginal propensity to consume resulted in lower consumption than expected.

Generally, we refine the look into various detailed factors which suppress the stimulating effect. It is virtually not so much that the first arrow of Abenomics fails to hit in the right direction, but for some reason, it seems to underestimate the resistance and take it too optimistic. The inflation expectation was hard to alter; Habit-forming and prudence were prevalent; The post-mortem revealed that policymakers felt it hard to hit the bull's eyes. There should be an effective and efficient measure.

The second arrow was the end of a powerful crossbow Shinzo Abe's second arrow refers to "flexible fiscal policy." There are two main fiscal measures in Japan: one is to increase the supplementary budget to make up for the lack of fiscal revenue; the other is to adjust the tax policy to deal with fiscal expenditure. Shinzo Abe intends to stimulate the Japanese economy by arranging flexible fiscal policies, but the unreasonable revenue and expenditure structure has dramatically reduced the expected effect.

First, the fiscal revenue structure is unreasonable. Japan's fiscal revenue mainly comes from taxes and supplementary budgets (the supplementary budget is mainly through construction bonds and exceptional deficit financial bonds). In 2017, 35% of Japan's fiscal revenue was achieved through bond issuance, compared with the previous rate

as high as about 50%. To alleviate the government's debt repayment pressure, Shinzo Abe even sacrificed the independence of the central bank and used highly loose monetary policies to complement fiscal expansion. The side effect was that the government debt ratio continued to rise. Japan's government may fail to realize the implications of this high debt ratio fully.

On the one hand, the high debt requires some trade-off between investment and consumption. To solve the problem of investment downturn, Shinzo Abe chose to reduce corporate income tax. This means he must raise the consumption tax to fill in the loss in corporation tax revenue due to the high debt. The reality corroborated the logic. He seems to selectively ignore the same sluggish consumption and raise the consumption tax (in April 2014, the consumption tax was raised from 5 % to 8%) to make up for public expenditures. This approach not only runs counter to the proactive fiscal policy but has also been repeatedly resisted by the domestic people. Shinzo Abe announced that the consumption tax would rise again to 10% in 2017, but the plan has been repeatedly delayed. The already weak Japanese consumption will once again be overshadowed. Though consumers may be pushed to purchase goods and services now by the higher expectation of future prices, they might worry more about the higher interest rate and lower wages in the future, which tends to limit the growth of consumption.

On the other hand, the effect of fiscal stimulus is limited. The Japanese government has accumulated excessive debts over the years, and the demand for debt servicing will significantly compromise the effectiveness of its fiscal policy. In 2016, Japanese government debt service expenditures accounted for 23.6% of total fiscal expenditures, and hard expenditures such as

social security and people's livelihood accounted for 32%. The total of the two has exceeded 55%, and expenditures on public projects that directly affect the economy accounted for only 6%.

The third arrow had little effect

Shinzo Abe's third arrow refers to structural reforms. However, Abenomics aims to bring about inflation and the recovery of Japan's economy. So, the public focus is mainly on "QQE + flexible finance," the "third arrow" has received much less attention than the first two arrows. He announced the structural reform plan on June 5, 2013, including creating special economic zones, attracting technology, resources, and talents, and increasing public infrastructure. However, the policy objectives are relatively vague, the process is difficult to quantify, and the effect is not apparent.

A simple comparison can be made between Japan and China. Although the development of the two economies is quite different, both countries face problems such as population aging, unbalanced profit distribution, excessive macro-leverage, and low corporate investment confidence. China's current supply-side structural reforms are also quite like Abe's third arrow.

Challenges facing Japan's economic recovery

To achieve a successful economic recovery, Japan needs to perform three things well. The first is to effectively control the sprawl of coronavirus, avoiding further downside risks to the domestic economy and prices; the second is to propel the normalization of economic activities as soon as possible. Japan needs to maintain employment and social stability; the third is to push the TPP forwards with America.

The Japanese economy faces the following issues in the medium and long term. First, the

aging problem is deteriorating. As shown in Fig. 1, in 2020, Japan's elderly population over 65 accounted for 28.9% of the total, which continued to rise year on year. By 2025, this proportion will reach 30%, and in 2040 it will exceed 35%. Although the third arrow stimulated population growth, improvement of labor productivity is still challenging to offset the adverse effects of aging. The aging of the population has intensified. On the one hand, it has led to the expansion of medical and social insurance costs, which aggravated the financial burden on the government; on the other hand, it has reduced residents' income and overall innovation capabilities. e. This meant the social security system have to be redesigned and more funds will be needed.

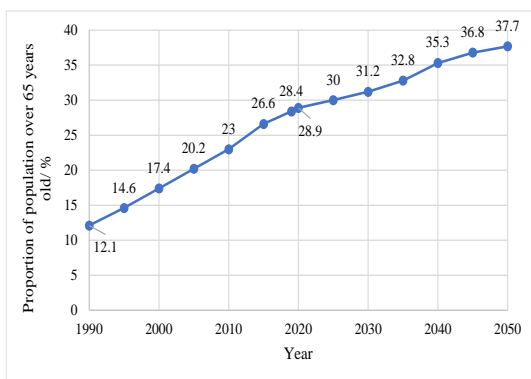


Figure 1 Development trend of the aging population in Japan

Secondly, the epidemic has led to further deterioration of the financial position. Over the years, coronavirus has increased the financial burden of Japan's childcare, disaster response, and defense costs. The coronavirus outbreak has brought the Japanese economy into recession, and the fiscal revenue in 2020 has been reduced, the most significant decline since 2009. To stimulate the economy, the Japanese government had to issue more government bonds. The new issuance of government bonds in the 2021 budget reached 43.6 trillion yen, and the

dependence on government bonds rose to 40.9% from 31.7% in the previous year, exceeding 40% for the first time since 2015. The imbalance of fiscal revenue and expenditure and the increase in debt have plunged Japan into a dilemma between economic growth and fiscal reconstruction, indicating that the fiscal reconstruction goal that has been delayed to 2025 may be delayed again.

It is worth noting that Japan's difficult fiscal situation did not trigger a debt crisis. The main reason is that domestic investors have long dominated its national debt holding structure, but this situation is changing. Since 2016, the overseas holding ratio of Japanese government bonds has begun to exceed 10%, and at the end of 2020, it was 13.3%. If it continues to develop, the Japanese government debt risk will increase. Rebuilding finances and promoting the collaborative and healthy development of finance and the economy are significant issues the Japanese government must encounter.

Third, the room for macroeconomic control continues to shrink. After Abe became prime minister for the second time, he began implementing "Abenomics," an essential part of the quantitative easing monetary policy. Due to the Sino-US trade friction, the coronavirus, and the recession of the world economy, the risks faced by the Japanese economy have increased. While stepping up its proactive fiscal policy, the Bank of Japan has repeatedly hinted that once the situation deteriorates, it will not rule out the possibility of further implementing a loose monetary policy. As we can see, the government's available policy tools and space will gradually narrow. It had already taken a hostile interest rate policy before.

Fourth, the Sino-US game is showing a long-term trend. Under significant changes unseen in

a century, the international political and economic order has undergone shock adjustments. During the coronavirus, the U.S. government's pressure on China continued to escalate, and the Sino-U.S. game became manifest and protracted. After Joe Biden took office in early 2020, he worked hard to repair the "normal" that was destroyed during Trump's period in some respects, but his hardline attitude towards relations with China has not changed. The Biden administration believes that China is "the leading strategic competitor of the United States," and the competition between the United States and China is the "biggest geopolitical test" of the 21st Century. One current conflict is on Taiwan- the American government used it as weight in negotiations. The prolonged Sino-US game and the US policy inclination toward China will bring uncertainty to the world economy and affect Japan, which maintains close economic and trade relations with China and the United States.

Fifth, reverse globalization is speeding in worldwide. The frequent supply-side shocks have made the shipping cost soaring, which leads to surges in the prices of final goods. This has induced countries to manufacture and purchase domestic products.

To sum up, to promote sustained and stable economic growth, Japan needs to effectively deal with domestic disasters and the aging situation of fewer children and further promote reform, improve the business environment, increase people's income, and promote consumption and investment. At the same time, Japan also needs to flexibly and adequately respond to the complex external situation, adjust macroeconomic policies appropriately at the right time, and avoid or at least reduce risks. Based on the current economic situation in Japan, changes in the domestic and international

environment, and analysis of various factors affecting Japan's economic growth, the Japanese economy will show a development trend of low growth, low inflation, and low unemployment in the medium and long term. According to the latest forecast by the Cabinet Office in the context of the coronavirus, the average annual growth rate of Japan's real GDP from 2021 to 2030 is about 2.3%, and the average annual consumer price index rises by about 1.6%. Under the epidemic, the unemployment rate is high. However, as the economy recovers after the epidemic, the unemployment rate will hover at a relatively low level, around 2.5%. From this, it can be judged that the economic gap between China and Japan will further widen in the future, and the adjustment of China-Japan relations in the political, military, security, economic, and trade fields will continue.

Conclusion

In this investigation, the aim was to assess Abenomics' policy measures, reform effects, and development dilemmas. After long-term deflation and low economic growth, the outlook of Japan's economy seemed gloomy. Prime minister Shinzo Abe decided to introduce the policies of Abenomics, goading more expenditure and production. It incorporated aggressive monetary policy, flexible fiscal policies, and structural reforms. Nevertheless, the achievements failed in keeping up with expectations, and insidious threats hide behind them.

At the start, I developed the literature review and theoretical analysis of the three arrows. The most prominent finding to emerge from this section is that the aggressive monetary policy failed to change the inflation expectations and was hindered by the contradictory fiscal aims and repercussions induced by the labor reforms.; Based on the thought that the three arrows of

Abenomics are connected, I then discuss the policy evolution of Abenomics in these years. The investigation results found four critical time points – the first tax rise, policy direction transition, and second tax rise, covid-19. This complete review of the policy evolution could deepen the understanding of the three arrows' interrelations and drawbacks; The previous study did help when I evaluated whether the objectives or expectations of the three arrows were fulfilled (the assessment section). Finally, we found some problems Japan encountered including the Sino-US political conflict, fiercer objectives' conflicts between fiscal consolidation and economic growth, and aging problems. Then we gave some thoughts regarding future economic growth and inflation.

Before this study, little papers incorporate all the arrows and the evaluations. Although this article can barely serve as a comprehensive review of Abenomics' three arrows, this study was done at a critical time point, when Abenomics come to its natural end. Nevertheless, there exist some limitations in my dissertation. The study was limited by the absence of parallel data about the economic policies in other countries. We could have compared Abenomics with other measures, such as the Kennedy and Bush tax cuts, Obama stimulus, and Chinese structural reforms. Another limitation is that the study did not involve a micro-level analysis. So, the specific data were deficient for the growth rate of different industries. Notwithstanding these limitations, the dissertation focused on the main blood vessels of Abenomics and talked about their functions, directions, and so on rather than concerned with one or two small vessels. The little study followed this pattern before.

To sum up, Abenomics includes three arrows-quantitative and qualitative easing, flexible fiscal policy, and structural reforms. Though it was

outstanding in the early phase, the effects of Abenomics were obstructed later by the government and society, making it less impressive. The recent covid-19 even wiped out its accomplishments; the economy was struggling to go out. Further research could also be conducted to determine why those objectives conflict and stubborn inflation expectation is so hard to deal with.

Review

By the dissertation, I have achieved most aims mentioned in the project proposal form, a few of which was beyond my expectation. Skills relevant to reading, processing, and extracting information were improved though I had not read a lot of papers. In my literature review, it was essential to delete trivial messages and contain available information. The objectives of learning how to make citations and create a bibliography were achieved well to use this skill properly in later life. One unexpected accomplishment is that I make an organic reaction between my existing knowledge and the real-life case study (Abenomics).

Admittedly, there existed some limitations in my project. First of all, the time management of the whole study was a little out of control, which was probably caused by two factors-overrated knowledge processing speed and overestimated available time. Secondly, I was aware of the lack of depth in this study that should have incorporated more data, graphs and models. Also, my access to information was a little outdated and limited. More current studies needed to be reviewed, and more vertical and horizontal analysis should be carried forward in detail. It was a regret that I have no such corresponding ability to analyze. Eventually, though the project had vastly enhanced my English proficiency, it was a shame to acknowledge the Translator's use in assistance. Gradually, I hope to get rid of its

dependence on further study.

When I finished the literature review, some plans were already breeding in my mind. Shanghai Ulink international school has launched academic research projects in these years. It was just like the EPQ project. Currently, this study of Abenomics has made me more interested in macroeconomic topics, primarily monetary and fiscal policy. I had planned to develop a topic that could include more horizontal analysis, giving me a greater understanding of central bank and government roles in the crisis. Their conflicts can also be what I am interested in. I hope I can include more math skills next time. However, the specific topic has not been decided yet.

In conclusion, in the EPQ Project, I follow my specific project objectives. Despite some minor problems in the literature review (lose the meaning of this part), generally, it was good. I learn the importance of innovation. For example, the evaluation of three arrows improved my thinking skills based on existing knowledge. Also, I learn how to extract information and transform the contents I read into my own words. Though the achievements fail to achieve my expectations, I indeed made some progress in my writing and reading skills. However, I ignored one thing in my project objectives-Time management ability. I frequently change the specific schedule in the week. It was caused by a failure in judging myself. I hope I can do better next time. Except for the above-mentioned points, there is a surprise during my work on the dissertation. Through persistent comprehension, the knowledge I learned before (A-level economics and Mr. Mankiw's macroeconomics) and now (Abenomics) is integrated organically. This was a significant insight into how our relations with our lives and the collision between ideas can fortify knowledge.

Conflict of Interests: the author has claimed that no conflict of interests exists.

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