

# Reflections on Chinese Economic Development in the Post-epidemic Era via Analysis of Argentina's Debt Crisis and Japanese Bubble Economic Crisis

Jingyang Zuo

WLSA Shanghai Academy, Shanghai, 200000, China

\*Corresponding author. Email: 15235289536@163.com

## ABSTRACT

During 20th century, the whole world has undergone great changes, especially in politics and economics. By now, we are dramatically hit by the Covid-19, which have profound impacts on human health, economic development, etc. This thesis, by a method of literature review, mainly focuses on analyzing Argentina's debt crisis and Japanese bubble economic crisis, comparing their similarities and differences, and giving rise to reflections on Chinese economic development in the post-epidemic era. To be more specific, this paper argues causes, situations, solutions and consequences of Argentina debt crisis and Japanese bubble economic crisis. By illustrating following above, this thesis concludes that Chinese government should enhance the competitiveness of domestic enterprises, make rational use of monetary and fiscal policies, and take timely measures to adjust the exchange rate when it exceeds the maximum floating range.

**Keywords:** *Argentina debt crisis, Japanese bubble economic crisis, government debt, foreign capital, real estate*

## 1. INTRODUCTION

During 2020, China and the rest of the world were dramatically hit by the Covid-19, which brought great harm to human health and economic development. China was thinking ways to recover its economy back to the right track by designing proper policies based on the reflections from historical events, which had significant referential value to help China build its economic development. In the late 2020, some economists in China began to analyze again some famous historical economic crisis to help China figure out effective policies which can promote Chinese economic recovery [1]. Most of them referred to the Great Depression, American Subprime Crisis, Argentine debt crisis, Japanese real estate bubble crisis, etc. Based on my field of research, the author not only analyzes economic crisis but also compare commons and differences of them, which allows the author to carefully view the results in a more meaningful and reliable scale. In this paper, the author gives analysis to the Argentina's debt crisis and Japanese real estate bubble crisis in details and uses comparison method to summarize their commons and differences of causes, process, policies, and

consequences. Finally, the paper lists some suggestions to Chinese government based on the research and summary from Argentine and Japanese economic crisis, which the author believes their significant contributions on the Chinese economic recovery. Reflections giving to Chinese government mostly focus on the development trend of Chinese industries, combination use of proper policies and adjustment of foreign exchange system in China. If those above are implemented properly, they could certainly make China attain the renewed economic boom.

## 2. ANALYSIS OF ARGENTINA'S DEBT CRISIS AND JAPANESE BUBBLE ECONOMIC CRISIS

In 20th century, the whole world experienced a long-lasting and influential turmoil, including world wars, economic and financial crisis, oil crisis, political instability, etc[2]. On one hand, Argentina transformed from a developed country to a developing country on account of severe economic crisis lasting throughout most of the century, which brought Argentina with no ability to pay its debt to foreign investors and had to

endure high rate of inflation[3]. On the other hand, Japan's economy was devastated more seriously than any other countries in the end of the 20th century, because of its ten-years bubble economy and bursting of bubbles[4]. From the author's perspective, Argentina and Japan have economic problems caused by international incidents but apply different government-policies to address them. With ineffective and improper policies, Argentina and Japan both exacerbate economic problems and lead to the severe economic crisis in the end. Japanese government timely punctures the economic bubble, while Argentine government continues to execute wrong and ineffective policies, entirely aggravating its economic crisis. In the end, Argentina and Japan both give rise to the reflections on Chinese economic development in the post-epidemic era[5].

First and foremost, Argentina's economic crisis and Japanese bubble economic crisis were both derived from the international incidents, which have profound impacts on Argentina and Japan's economic performance. In 19th and early 20th century, Argentina was a major country exporting agriculture products, such as cereals, grains, and meats, bringing plenty of wealth to Argentina itself. By the early 20th century, Argentina had become one of the most prosperous countries in the world, fueled by massive immigration and foreign capital inflow. According to the data from world bank, in 1908, Argentina had the seventh highest GDP per capita income in the world, ahead of Germany, Canada and the Netherlands. In 1913, Argentina's per capita income reached a staggering \$3,797, higher than France's \$3,485 and Germany's \$3,648, demonstrating Argentina's outstanding economic performance before the world wars[6].

However, Argentina respectively missed the first and second industrial revolution, and excessively depended on agricultural exports. Two world wars and the great depression occurred between 1929-1931 greatly influenced Argentina's economic performance[7]. In the world market, lack of demand for agricultural products and increasing demand for industrial products, such as guns, weapons, cannons, and steels, make Argentina decrease its exports with large amounts, which were the pillar of the national economy. As a result, Argentina's economy moved into recession, facing with political instability, unemployment, capital flight and social turmoil. In 1930, Argentina's army seized power in a coup, ushering in a period of political upheaval that saw eight presidents in 20 years, and import conservative policies that closed the country's economy[8]. From a different angle, Japan's economy was directly impacted by the "Square Conference", referring to a meeting the United States, Japan, Britain, France, Germany and other five countries finance ministers and central bank officials held in The Plaza Hotel in New York, September 1985.

In 1978, the Islamic Revolution broke out in Iran, and then the Iran-Iraq war broke out between Iran and Iraq. Daily oil production fell sharply, and international oil prices soared from \$14 to \$35 per barrel[10]. Consequently, aggregate supply largely decreased in America with lack of oil supply, an important industrial element, which led to the cost-push inflation in America. The Federal Reserve then implemented contractionary monetary policy to restrain the inflation. Higher interest rate brought by left shift of money supply curve attracted foreign investors to deposit money in America, creating more demand for dollar in American foreign exchange market, and thus lead to the large appreciation of dollar. America then launched the "Square Conference" to call for an orderly depreciation of yen, to solve the huge trade deficit of the United States after the second oil crisis, which led to a sharp appreciation of yen. Based on the data conducted from Japan statistics agency, in early 1988, the yen reached 120 to the dollar, double its pre-Plaza accord appreciation. In the 1990s, the yen peaked at around 80 to the dollar, three times its level before the Plaza Accord. Consequently, it had a considerable impact on Japan's export-led industries.

In this case, Japan's exports and commodities became continuously more expensive in foreign market, restraining Japan's export-sales to a large extent. In summary, Argentina and Japan's economy were both impacted by international incidents in 20th century and moved into recession from then on. Next, Argentine government and Japanese government adopted different policies to address problems but showed great ineffectiveness, which exacerbated economic problems and contributed to economic crisis ultimately.

## ***2.1 Argentina's reaction to economic recession***

Argentina tried to fix the economic recession in three stages, but it used wrong and improper policies in each stage, making situation become worse and generating huge amounts of national debt that need to be paid to foreign investors. 1950-1990 was a first stage in which Argentina's economy suffered serious budget deficit and hyperinflation. During 1950-1990, Argentine government adopted expansionary fiscal policies to borrow money from central bank to pay the government spending and transfer payment, supporting poor people and inland industries, and closed country's door for open economy, protecting inland industries from foreign competition.

### ***2.1.1 First stage***

On one hand, after the great depression and World War II, people lived in poor life and industrial plants, which developed mining, powering, and engineering, had no funds to innovate techniques and produce

industrial products, because of few incomes generated from agricultural exports. In this circumstance, Argentine government adopted fiscal policy: it paid transfer payment to poor people to sustain them living in a better life, it purchased goods and services produced by industrial plants to give them more revenue streams, it reduced levied tax industrial plants had to pay, giving them more confidence to invest money into production and innovation, and Argentine government also increased average wages worker received from day-life working. In this case, Argentine government stimulated the economic development in the short run. However, it further led to the severe government budget deficit and put Argentina's economy into hyperinflation. Public saving is derived from taxes revenue minus transfer payment minus government spending, and Argentina had a mass of budget deficit owing to vast spending of transfer payment and government spending. In loanable fund market, supply of loanable fund decreased enormously, because Argentine government borrowed substantial amounts of money from central bank, elevating real interest rates and attracting foreign investors to deposit money into Argentina. Nonetheless, Argentine government banned capital inflow from foreign investors and keep commanding central bank to print money to compensate the imbalance of loanable

fund. Therefore, central printed abundant amounts of money since 1950s and prominently decreased the value of money, leading to severe inflation.

In 1980s, when Military strongman Alberto Gualtieri was president of Argentina, the country's economy seriously deteriorated. GDP plunged 11%, and inflation rate was high. K-line graph in figure 1., based on the data from trading networks, depicts increasingly high inflation rate from 1970 to 1990. From the other hand, Argentina overwhelmingly protected inland plants from foreign competition by closing country's door for international trade. Argentina's state-owned enterprises faced a series of problems after then, among which the most prominent was low economic efficiency, and many enterprises suffered serious losses for a long time. The root of this problem lies in several aspects: enterprise managers lack the operation and management experience and skills required by modern enterprises; Government protections and incentives stifle enterprise; Without government subsidies, companies struggle to finance their technological innovations, and their products and services are priced artificially low. In consequence, it weakened the competitiveness and production capacity of domestic enterprises in international markets and reduced their enthusiasm for production to a great extent.

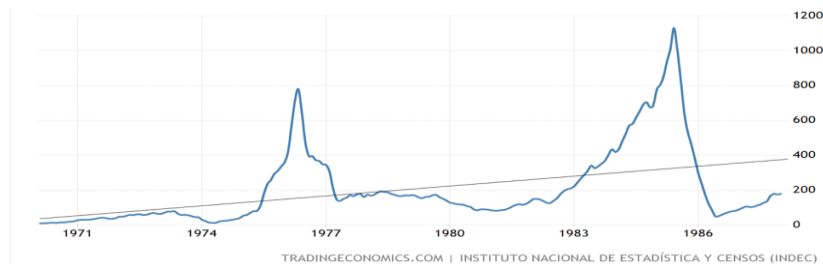


Figure 1 Argentina's inflation rate, 1970-1990

### 2.1.2 Second stage

The second stage is referred to the period between 1990 and 2000, in which Argentina had economic problems of government budget deficit and inflation. At the beginning of 1990s, Argentine government opened its country's economic door to attract foreign traders and investors. Since in the loanable funds market, Argentine government continuously borrowed money, shifting supply of loanable funds curve to the left, and resulted in high real interest rate. In this case, foreign investors sought investment motives at Argentina's financial market, because of higher investment returns than any other countries. Based on the data from GDPBOX, in 1990, Argentina had 18.4 hundred million foreign capital inflow, whereas in 1999, it had 239.9 hundred million foreign capital inflow, 13 times larger than 1990[11].

As a result, in foreign exchange market, demand for peso steadily increased, raising nominal exchange rate

to a new peak, and thus appreciated the peso in foreign exchange market, giving foreign investors more confidence to deposit money in Argentina's financial market. At the same time, in loanable funds market, supply of loanable funds increased, covering the government budget deficit. Moreover, to solve serious inflation derived from unlimited printing of money, Carvalho created his famous exchange plan, including fixing the exchange rate at the level of 1 peso =1 US dollar, allowing US dollar to be used as a legal means of payment, and in the plan, the central bank must not finance government deficits. In consequence, it prominently decreased the inflation rate and gave foreign investor more confidence to purchase Argentina's financial products and services. In 1994, the price of consumer goods increased by only 3.9 per cent, the lowest value in 40 years, and a total of US \$80 billion of foreign direct investment was attracted during the period 1991-2000[11]. However, was seriously overvalued because of its nominally equivalent values to dollar. In 2000, Argentina's total foreign debt amounted

to US \$146.2 billion, equivalent to 4.7 times of foreign exchange earnings in that year, and debt service accounted for 38% of export earnings.

Due to the impact of the Southeast Asian financial crisis and the Brazilian financial crisis in November 2001, Argentine government declared that it was unable to pay its foreign debt. Widespread riots and bitter political unrest plummeted investors' confidence in Argentina, both at home and abroad: Argentina is not only facing a debt crisis, but also a political and social crisis. In this case, foreign investors withdrew money

from Argentina's financial market, transferring funds and capital out of country. In foreign exchange market, supply of peso considerably increased, which depreciated the peso to a large degree. Peso depreciated sharply, reaching 75% at the highest point, and inflation rose rapidly. After the devaluation of peso, cumulative inflation rate reached 80%, large numbers of enterprises closed, and the unemployment rate soared to 25%. In 2002, Argentina's economy declined by 10.9%. Figure 2. depicts a sharp decline of GDP in 2001-2002, and Figure 3. presents high debt to GDP ratios since 2002[12].

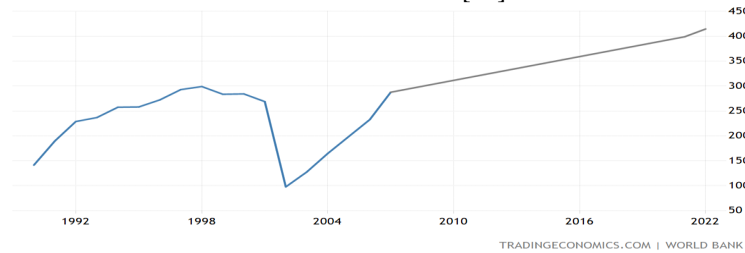


Figure 2 Argentina's Gross Domestic Product, 1992-2022

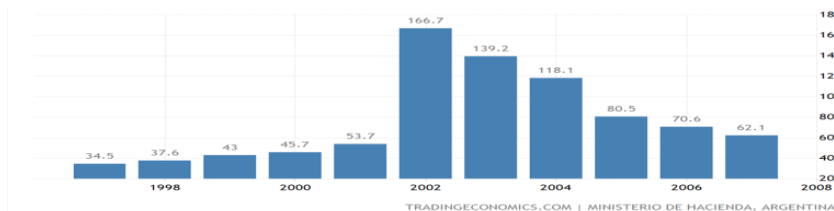


Figure 3 Argentina's debt to GDP ratio, 1997-2007

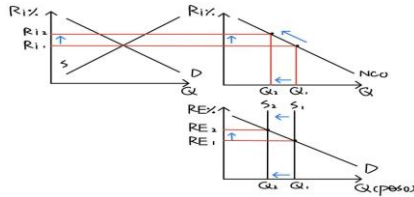
2.1.3 third stage

Argentina generated vast amounts of debt in its third stage of economic development, referring to the period since 2000s, and bereaved of investors' confidence with no repaying ability. Before all others, after the Argentina debt crisis occurred in 2001, Argentine governments have made the repayment of foreign debts a core task, strengthening the government intervention, the implementation of import substitution, the restrictions of imports and boost of exports to ensure the foreign trade surplus, and at the same time Argentine government implemented strict foreign exchange controls. Argentine government's efforts to promote the economic growth and reduce the financial instability once received a relatively good result. From 2003 to 2011, Argentina's economy achieved rapid growth. After then, since 2012, under the influence of international economic and financial situation, Argentina's economic growth slowed down significantly, inflation was high, local currency depreciated and foreign exchange reserves decreased. Since the beginning of 2014, the Argentine government took measures such as easing foreign exchange control, raising interest rates, and reducing fiscal subsidies, which has improved the macroeconomic situation. However, Argentina was greatly impacted by the

Federal Reserve in 2018. At 2am on March 22, 2018, the Federal Open Market Committee (FOMC), the monetary policy decision-making body of the Federal Reserve, released its monetary policy statement and decided to raise the benchmark interest rate to the target range of 1.50% to 1.75%, which was widely expected by the market to reduce inflation and maintain a stable economic growth. It was the Fed's first rate-hike since Mr. Powell became fed chairman.

In this case, America monetary market had higher nominal interest rate, a signal which foreign investors can perceived higher investment returns in America, and thus most of foreign investors withdrew money and capital from Argentina and deposited them at America. As a result, the economic and financial situation in Argentina fluctuated sharply and peso depreciated sharply with increasing amounts of peso flowing into foreign exchange market. In reactions to maintain the confidence of foreign investors and reduce the economic and financial instability, central bank of Argentina largely increased nominal interest rate. Based on the data from Argentina's central bank, to curb the depreciation of peso, it raised benchmark interest rate from 27.25% to 40% in a row for three times in more than a week from April 27, 2018, which was called by the market as a "desperate rate hike". Consequently, net capital outflow decreased from Q1 to Q2 resulting from

increased real interest rate from  $R_{i1}$  to  $R_{i2}$  at loanable fund market (same inflation rate in 2018, based on Fisher's hypothesis). With the help from IMF (International Monetary Fund), in foreign exchange market, the supply of peso decreased from  $Q_1$  to  $Q_2$ , same quantity as net change in capital outflow, because foreign investors sought increasingly higher investment returns from Argentina's monetary market, and real exchange rate thus rose from  $RE_1$  to  $RE_2$  in response to more demand of peso. Following changes are shown at Figure 4[13].



**Figure 4** Argentina's real equilibrium in open economy in 2018

With following change represented above, according to the data of Argentina's National Bureau of Statistics and Census, Argentina's foreign debt accumulated to 277.648 billion US dollars by the end of 2019, of which about 62% of Argentina's foreign debt belongs to the government, about 26% to non-financial institutions or enterprises, and about 9% to the central bank[14]. As of 2019, Argentina's foreign exchange reserves were only 44.848 billion US dollar. In other words, the ratio of foreign debt to foreign exchange reserves reached 6.18 times, which is much higher than 4.2 times in 2018 and far exceeds the international warning standard. Argentina in this case has generated plenty of debt needed to be paid in the future. During the Covid-19, Argentine government adopted expansionary monetary and fiscal policy to stimulate the economic recovery from coronavirus. Aggregate demand largely increased since then, pushing up price level, and caused the peso to depreciate in foreign exchange market on account of less demand for peso with expensive goods and services sold in foreign market (demand push inflation). Argentine government also endured large amounts of budget deficit, owing to heavy expense of government spending to sustain small-and-median sized enterprises and transfer payment to support poor and unemployed people. As a result, Argentine government again needed to borrow a mass of money from central bank. To fix the large gap of shortage of funds, central bank of Argentina once increased nominal interest rate to absorb foreign saving and capital to a new peak. Figure 5 shows

Argentina's economic indicators in the post-epidemic era, particularly prominent for inflation rate of 50.7%, debt to GDP ratio of 102%, unemployment rate of 8.2% and interest rate of 40%, according to the data from Trading Economics. As a result, Argentina fell into deeper debt crisis with no ability to repay them, which made Argentina default loans to larger amounts, and deteriorate the economic situation in the whole country. Cristina Fernandez de Kirchner, Argentina's influential vice president, said on Wednesday that the country could not repay its \$45 billion debt to the International Monetary Fund under the current terms of negotiations; That reduces the country's chances of reaching a deal with its biggest creditor. "We are not paying because we have no money to pay," she said at an event in Buenos Aires, calling the terms and conditions "unacceptable."

### 2.1.4 Summary

In short, Argentine government introduced wrong and ineffective policies in its three stages of economic development. After the great depression and World War II, Argentine government adopted expansionary fiscal policy to stimulate the economic recovery and support poor people to live in a better life. The result was that Argentine government generated great amounts of debt and led to the severe inflation because of unlimited printing of money. After 1990s, Argentine government opened the country's economic door to attract the foreign investment with abundant amounts but failed to repay them. Besides, Argentine government enacted infeasible exchange rate regime, making peso overvalued to a large extent and then depreciated substantially when government had no repaying ability. As a result, Argentina underwent serious debt crisis in 2001-2002, and resulted in huge financial volatility, severe inflation, and economic downturn. In the third stage of economic development, Argentine government temporarily carried effective policies to recover from debt crisis, damp down inflation and reduce government budget deficit, and once made great economic performance. However, interest rate hike by Fed and Covid-19 again inflicted heavy losses on Argentina. Argentina's central bank blindly raised interest rate, and Argentine government used expansionary demand-side policy to stimulate the economic growth in the post-epidemic era. These actions produced huge amounts of national debt and malignant demand-push inflation, entirely worsening Argentina's economic situation.



	Recent Data	Previous Data	Unit	Date
Currency	107	107		2022-02
Stock Market	89424	89978	integral	2022-02
GDP Growth rate	4.08	-0.9	%	2021-09
Annual GDP Growth rate	11.9	17.9	%	2021-09
Unemployment rate	8.2	9.6	%	2021-09
Inflation rate	50.7	50.9	%	2022-01
Inflation rate/month	3.9	3.8	%	2022-01
Interest rate	40	38	%	2022-01
Balance of Trade	371	424	US \$- Million	2021-12
Current Account	3287	2763	US \$- Million	2021-09
Current Account to GDP ratio	1	-0.9	Percentage of GDP	2020-12
Government Debt to GDP ratio	102	90.2	Percentage of GDP	2020-12
Government Budget	-8.5	-3.8	Percentage of GDP	2020-12
Consumer Confidence index	40.14	37.77	Integral	2022-01
Corporate Income Tax rate	25	30	%	2021-12
Individual Income Tax	35	35	%	2021-12

**Figure 5** Argentina's economic indicators in the post-epidemic era

## 2.2 Japan's reaction to the economic recession

Japanese bubble economic crisis was primarily induced by government's wrong and ineffective policies. However, since 1989, Japanese government sensed the severity of bubble economy, timely implementing adjustive policies to redirect the orientation of economic development, which gave Japan renewable powers to promote the further economic growth. After the "Plaza Agreement" was signed, five countries began to sell dollar in the foreign exchange market, making the supply of dollar in excess. Dollar depreciated and the currencies of the other four countries appreciated accordingly. Among them, the exchange rate of yen against dollar doubled in three years, soaring from 240 to 120. Japan's exporters have been hit by a sharp appreciation of yen with much higher prices sold in foreign market than before, and thus Japanese government adopted expansionary monetary policy to support high exports and reduce the corporate debt.

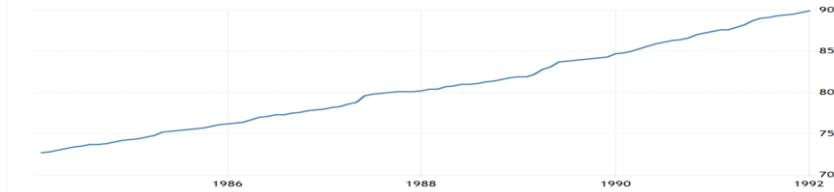
### 2.2.1 lower interest rate

In response to the open market operation Japanese government led, and lower reserve ratio and discount rate central bank regulated, nominal interest rate was cut five times in a row, from 5% in 1985 to 2.5% in 1987, and money supply grew by more than double digits for four years in a row, resulting in massively excess liquidity in the domestic monetary market. Lower interest rates have kept Japanese companies producing and exporting goods and services because lower loaning costs from banks offered them more incentives, and foreign exchange earned by companies has flowed into Japanese banks. In an effort to expand operating profits, Japanese commercial banks are frantically lending at ultra-low interest rates. Japanese commercial banks poured money into real estate mortgages, which are less

risky than normal corporate loans. A flood of loans from banks into the property market began to push up prices.

In 1987, house prices in Tokyo rose 53%. Office workers are busy borrowing money to buy houses in fear of rising housing prices, and real estate developers organized a group of unemployed people dressed as home buyers to queue up late at night, thus fanning the momentum of the vast national housing-purchasing trend. Figure 6. shows increasing trend of Japanese "CPI of Housing Utilities" from 1984 to 1992, illustrating Japanese sharply increased housing price and quantity of sales. At the same time, an influx of international hot money helped inflate Japan's property bubble. Since the Plaza Accord, yen has appreciated by 5 per cent a year, and international capital has poured into Japan to dominate its stock and property markets. The influx of hot money led to the rapid rise of stock prices and housing prices, thus attracting more international capital to enter Japan for speculation. Yen continued to appreciate, the stock market and housing prices continued to rise, and the bubble became greater. Bank loans and hot money poured into the real estate industry at the same time, and land prices in Japan began to soar.

In 1989, Japan's land price climbed to 2,137 trillion yen, while the lowest point at the end of 1998 was 1,388 trillion yen. The bubble value of 749 trillion yen was equivalent to two times of Japan's GDP in 1989. The joke here was that the 23rd arrondissement of Tokyo alone could buy the Entire United States. In 1989, in front of the Ginza Hall in Tokyo, the land and Transport Department announced the official land price of 110 million yen (\$970,000) per square meter, which also won the Guinness World Record for the highest land price in the world. Today, the land price is 40 million yen, down almost two-thirds. In this time, no one can realize the severity of Japanese economic bubble in real estate and stock market.



**Figure 6** Japanese "CPI of Housing Utilities", 1984-1992

In reality, Japanese bubble economy cannot last forever, because it had potential to violate the whole economy as well as the development of country in a large scale. What was overlooked, however, was that Japan was already 77.4 per cent urbanized and its ageing rate was climbing. The urbanization dividend disappeared, the demographic dividend ceased, the economy lost its growth momentum, and the housing price lost its support. The caveat was that the bigger the city, the bigger the fall when the bubble burst and crashed. Everyone from the real estate companies and financial institutions to ordinary people was buying real estates and stocks in hope of making a fortune in the continuing boom. The whole society was talking about real estates and stocks. In that period, a year's profit of an enterprise was not as good as a day's increase of a piece of land. The real economy has pumped out funds to enter the real estate market in a big way. One step behind is equal to one century behind. In the words of Kiyohiko Tamura, a professor at the University of Tokyo: "The price of a studio in Shinjuku, Tokyo, could double in a single day. Today you buy, tomorrow he buys, the price goes up, and there is a chain effect." However, the rampant rise in real estate prices would cause a series of adverse effects on Japan's economy.

First of all, it has seriously affected the development of real industry. High land prices have made it difficult for many factories to expand, while other bellwether of Japan's real economy, such as Toyota Motor, Fuji Heavy Industries and Hitachi Electric, have also moved aggressively into real estate. Nominal GDP growth over the same period was only about 5% a year. Moreover, high price of land seriously hindered the government's public investment in the construction of the Second Dongming Expressway, which was under construction at that time. Due to the high land price, it was difficult to carry out the plan, and the management situation of the Japan Highway Corporation was extremely deteriorated. Lastly, agricultural land was occupied in large numbers, and the domestic agricultural output was also threatened. High housing prices have made ordinary Japanese people unable to afford their own homes. In 1990, it cost more than 50 million yen to buy a small house of 60 square meters in Tokyo. Basically, according to the salary standard of 4 million yen at that time, it would take 15 years to eat and drink. This made many Japanese young people who dreamed of Tokyo forget and balk at it. In 1990, the proportion of loans to productive industries in Japan fell to 25%, while that to

non-productive industries rose to 37%. Japan's seemingly prosperous economy has become a veritable castle in the air. Since 1989, Japanese government began to be aware of the economic bubble. Therefore, Japanese government abruptly tightened the monetary policy to prevent from further economic deterioration.

### 2.2.2 Contractionary monetary policy

In attempt to burst the bubble economy and redirect the redirect the orientation of economic development, Japanese government carried out the contractionary monetary policy. Firstly, Japan's central bank raised interest rates in the short term. The central bank raised its ultra-low interest rate from 2.5 percent to 3.25 percent in May 1989 and raised it four times in a row to reach 6 percent in August 1990. Secondly, the government suddenly forced to tighten credit, controlling the total amount of credit in the real estate market. In 1991, commercial banks stopped lending to real estate holders, and the M2 growth rate dropped sharply from the average level of 11.68% in 1990 to the low level of 3.66% in 1991, which was far below the nominal GDP growth rate of 6% that year. Macro-control policies were too aggressive and the bubble burst quickly. The first to burst was the stock market bubble. January 12, 1990 was the darkest day ever for the Japanese stock market. That day, the Nikkei index tumbled, sending Japanese stocks tumbling 70 percent and sending them into a 20-year bear market. Stock prices fell sharply, and credit declined, leaving almost all banks, corporations, and securities firms with huge losses. The bankruptcy of the company led to the influx of a large amounts of real estates owned by companies into the market, immediately making the real estate market oversupplied, and the housing price began to fall. Meanwhile, with the arbitrage space of yen shrank, international capital fled out of the country.

In 1991, the Japanese real estate market began to collapse, a huge real estate bubble burst from Tokyo, quickly spreading throughout Japan. In 1992, the Japanese government introduced an even worse "land value tax" policy, requiring those who hold land to pay a certain percentage of the tax each year. The Japanese property market immediately entered an era of "oversupply" as owners who had accumulated large amounts of land during the property boom began to sell. Average house prices across Japan have fallen for 16 consecutive years since the bubble burst in 1990. From

1990 to 2006, average home prices nationwide fell 49.56%, roughly back to 1986 levels before the housing bubble. House prices in Tokyo continued to fall until 2005, falling 67.12% from their peak in 1988 and returning to the 1985 level. Japan called it the "lost 20 years". Figure 7. shows the sharp fall of Japanese housing prices since 1990, a year in which economic bubble burst. To put in a nutshell, "Plaza Accord" led to the dramatic appreciation of yen, hitting Japanese production and exports sales. Government adopted expansionary monetary policy to lower the nominal interest rate, encouraging the sales of exports and

manufactures. However, excessive supply of money and loans with ultra-low interest rate massively flowed into Japanese real estate and stock market, a relatively safe haven than any other kinds of market, and thus creating the economic bubble with sharp rise of land and housing price. In 1989, government detected the hazard of bubble economy in stock and real estate market, which could largely hinder the economic development in the future. Then government tightened the monetary policy, bursting the economic bubble, and redirect the Japan's economy back on a right track.



Figure 7 Japanese Housing Price, 1980-2010

### 3. REFLECTIONS ON CHINESE ECONOMIC DEVELOPMENT IN THE POST-EPIDEMIC ERA

From analysis of Argentina's debt crisis and Japanese bubble economic crisis, they both give rise to the profound reflections on Chinese economic development during the post-epidemic era. In the first place, Chinese government should enhance the competitiveness of domestic enterprises, actively developing competitive industries that conform to global development trends[10]. Argentina's economy was destroyed substantially during the first half of 20th century because of less demand for agriculture products. In fact, Argentina depended on the export-sales of agriculture products since the "May Revolution" in Argentina. After then, Argentina's economy experienced a huge expansion when Argentina exported agriculture products in large quantity. However, during the successive international events, referring to World War I, the Great Depression and the World War II, international countries were busy to deal with wars and innovation of weapons, generating vast demand for industrial products[11].

Thus, in international market, demand for Argentina's agricultural products shrank in large scales. Argentina respectively missed the first and second industrial revolution, no longer supporting its industrial development. In consequence, Argentina's economy contracted to a large extent, which gave reflections to China that in time of post-epidemic era, it should focus

on developing advantageous industries in line with the global development trend. Based on China's current development trend and international situation, China should primarily focus on developing information technology industry, intelligent building industry, new material industry, biotechnology industry, etc.

#### 3.1 Development of relevant industries

Firstly, the information technology industry can help China accelerate the transmission speed of science and technology and shorten the distance from creation to application in production. It can also promote the development of technology-intensive industries and is conducive to the adjustment of national economic structure. Secondly, intelligent building industry will play a more important role in China's urban construction in the future. As an organic part of modern architecture and even future architecture, intelligent building industry is constantly absorbing and adopting new reliability technology, achieving design and technical breakthroughs, and giving new content to the traditional architectural concept. Thirdly, the new material industry occupies an important position in the industrial system. Vigorously developing new material industry is of great significance to improving China's high-tech level, transforming and upgrading traditional industries, realizing the sustainable development of national economy, promoting national defense modernization and enhancing comprehensive national strength. Lastly, the biotechnology industry is the main direction of China's strategic emerging industries. It is of great



significance for China to seize the commanding heights of the new round of scientific and industrial revolution, accelerate the growth of new industries, develop the new economy, cultivate new drivers of growth, and build a "healthy China". Only in this way can China in line with the global development trend, and thus stabilize the economic growth promoted by advantageous industries in the post-epidemic era. To sum up, the analysis of the cause of Argentina's economic problems gave reflections to China that it should enhance the competitiveness of domestic enterprises, actively developing competitive industries that conform to global development trends, such as information technology industry, intelligent building industry, new material industry and biotechnology industry[13].

### ***3.2 Rational use of monetary and fiscal policies***

In the second place, Chinese government should make rational use of monetary and fiscal policies since Argentine government and Japanese government both failed to use them properly, bringing the whole country into severe economic crisis. After 1950s, Argentine government singly adopted expansionary fiscal policy to stimulate the economic recovery and irrationally make overuse of the government budget to increase the government spending and distribute transfer payments to people living in the poor life. The results were huge amounts of national debt once causing inflation and depreciation of peso, leaving a mass of national debt, and hence induced 2001-2002 Argentina's debt crisis. From a different angle, when yen sharply appreciated after the "Plaza Agreement" was signed in Square Conference, Japanese government failed to realize the real situation and adopted expansionary monetary policy to massively increase the money supply. Excessive money flowed into real estate and stock market, once were seen as less risky places by investors. As a result, the price of real estates and stocks extensively increased, creating serious economic bubbles, and triggered the Japanese real estate bubble economic crisis.

Unreasonable use of policies by Argentine and Japanese government gave introspections to Chinese government during the post-epidemic era. In 2020-2021, Chinese economy is in the point of "Stagflation" represented by the left shift of aggregate supply curve in aggregate demand-supply analysis. Price of goods and services sold in Chinese domestic market increased while quantity sold decreased, which is defined as "cost-push inflation". Chinese industries endured daily fixed costs of rents, maintenance, transportation, production and raw materials, and wages as variable costs, but revenue stream shrank enormously, which naturally made enterprises decrease quantity of sales with higher price sold on each item. The aim for

Chinese government is to stimulate the economic recovery and stabilize the economic growth by giving consumers confidence to purchase goods and services and offering suppliers incentives to produce, while it also needs to evade inflation, government budget deficit, monetary risks, and economic bubbles, based on the reflections from Argentina and Japan.

As a result, Chinese government should make combinative use of expansionary fiscal policy to enhance the consumer confidence, expansionary supply-side policy to encourage the production, while using contractionary monetary policy to damp down the inflation and offset the fiscal deficit. In this case, aggregate demand can largely increase when government increase its purchase on goods and items. Through distributing transfer payment to people in low-income level and reducing payroll taxes and indirect taxes on commodities, consumers will increase consumptions on goods and services, which can also help increase the aggregate demand. Then, Chinese government should adopt supply-side policies to help small and median-sized enterprises overcome the financial difficulties. Chinese government can confer tax credit to those companies and offer them low-interest loans. Therefore, businesses can become more willing to produce goods and services in public market, and aggregate supply will increase in large amounts.

In this situation, Chinese government can successfully stimulate the economic growth in circumstance of stagflation. However, Chinese government will run into budget deficit and demand-push inflation can also be intensified. Consequently, Chinese government should timely implement contractionary money policy to restrain the inflation by selling the government security in open market, increasing nominal interest rate with decreased money supply. Consumers can detect higher returns from savings now and choose to deposit part of their income into commercial banks. By implementing contractionary monetary policy, it can curb the potential inflation and lessen the size of government debt by shrinking money supply, bringing Chinese economy back to the right track from Covid-19 as soon as possible. To summarize, Chinese government should strategically adopt expansionary fiscal policy, supply-side policy, and contractionary monetary policy to help Chinese economy quickly recover from Covid-19 in the post-epidemic era, based on the policy-analysis that Argentine and Japanese government implemented to address existing economic problems but finally lead to the severe economic crisis[14].

### ***3.3 Optimizing floating exchange rate system***

In the last place, Chinese government should formulate the maximum floating range in its floating

exchange rate system to prevent from financial instability at any moment and should pay attention to controlling the size of foreign debt, based on lessons learned from Argentine and Japanese economic crisis. Pesos during the Argentina's economic crisis largely depreciated in different time-interval, causing great financial instability, and led Argentina to the serious debt crisis. In 1990-2002, the second stage of Argentina's economic development, Argentine government revalued the peso at parity with the dollar, which can increase capital inflow by giving confidence to investors but make peso seriously overvalued. When Argentine government accumulated a mass of debt but announced that it could fail to pay them back, it generated huge financial panics to foreign investors, thus causing outflow of capitals and bank-run. As a result, in foreign exchange market, supply of pesos increased since investors having capability to master their investment funds are no longer in favor of Argentina, withdrawing their funds in large quantities. Pesos then substantially devalued; rampant inflation occurred because higher price of goods and services were sold in domestic market, and Argentina had to face a serious debt crisis.

In contrast, yen sharply appreciated after the "Square Conference" since Japan and other countries in agreement with "Plaza Accord" frantically sold dollars in their foreign exchange market. In consequence, yen appreciated against dollar, making Japanese goods sold in international market more expensive. It brought trade deficit to Japan, which severely restricted the potential boom of Japanese economy. Through depreciation of peso and appreciation of yen, they clearly exemplified that how appreciation & depreciation beyond a certain range can bring devastations to the national economy. Hence, it's worth noting that RMB is gradually appreciating against international currencies during the post-epidemic era.

According to the data from "Chinese State Administration of Foreign Exchange", in 2021, yuan appreciated by a hefty 10.38% against the euro, 14.59% against the yen and 3.68% against the pound, and the dollar continued to fall 0.6% against the yuan, which continued to appreciate. After the outburst of Covid-19, Fed adopted expansionary monetary policy (quantitative easing) to stimulate the economic recovery and to increase the investment and consumption[15]. It shows on figure 8. that money supply of dollar increased from MS1 to MS2, which decreased the nominal interest rate from  $Ni_1$  to  $Ni_2$ . In this case, investors received less investment returns from American financial market. In context of international situation during the post-epidemic era, against the backdrop of an oversupply of dollars, international demand for RMB has increased. In figure 9, it demonstrates increased demand for RMB by right shift of RMB demand curve in foreign exchange market. Demand for RMB

increased from  $D_1$  to  $D_2$ , elevating nominal exchange rate from  $NE_1$  to  $NE_2$ .

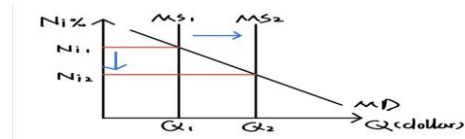


Figure 8 American monetary market after the quantitative easing

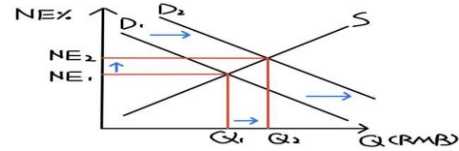


Figure 9 Chinese foreign exchange market during the post-epidemic era

However, Chinese government needs to pay close attention to the continuous appreciation of yuan during the post-epidemic era. Otherwise, it'll hinder the development of Chinese economy. First of all, in the foreign exchange market, excessive appreciation of RMB, especially the strong expectation of the public on the rapid appreciation of RMB, may trigger a large amount of speculative capital inflow into China, which will increase the foreign exchange reserves of the Central bank and the domestic money supply, thus affecting the domestic inflation rate and price stability. At the same time, the rapid appreciation of RMB exchange rate to attract more speculative capital inflows in China, will also bring adverse effect to the stability of domestic asset prices[15]. In particular, a large inflow of foreign capital may enter the capital market such as stock market or futures market, which may bring a liquidity boom in the short term. However, speculative capital will not form value investment. On the contrary, it will increase the volatility of the stock market and futures market, which is not conducive to the stable development of the capital market, and ultimately affect the stable operation of the macro economy. These are the reasons why Chinese government needs to keep a watchful eye on exchange rate fluctuations.

When the exchange rate exceeds the maximum floating range, the Chinese government should take measures to bring the exchange rate back to the normal range, so as to ensure long-term and stable economic development. When the exchange rate is too high, the Chinese government should lower it by selling yuan or buying dollars. Similarly, when the exchange rate is too low, The Chinese government should prop it up by selling dollars or buying yuan. Under such circumstances, China needs to have sufficient foreign exchange reserves to cope with possible economic problems caused by the exchange rate. Besides, attention should also be paid to controlling the size of foreign debt by Chinese government. In the course of

Argentina's economic development, the Argentine government introduced foreign debts on a large scale to repay government debts, and lost the ability to repay foreign debts, resulting in a serious debt crisis. As a result, the Chinese government should strictly control the amount of foreign debt issued. In a word, Chinese government should formulate the maximum floating range in its floating exchange rate system and should pay attention to controlling the size of foreign debt. When the exchange rate against other currencies is too high or too low, the Chinese government should take timely measures to adjust the exchange rate to a normal range.

#### 4. CONCLUSION

In conclusion, the paper finds that Argentina's debt crisis and Japanese bubble economic crisis are both derived from international incidents. World War I, World War II and the Great Depression dramatically hit Argentina's economic development by shrinking size of international demand for agriculture products Argentina exported, whereas Japanese economic performance was primarily impacted the "Square Conference", calling for orderly appreciation of yen. In response to the economic problems, Argentine government adopted expansionary fiscal policy through largely increasing government spending and transfer payment, and decreasing taxes levied on wages and commodities. In contrast, Japanese government implemented expansionary monetary policy, increasing money supply, decreasing discount rate, and required reserve ratio. However, both Argentina and Japan failed to realize the economic recovery but had to encounter with serious economic crisis. Argentine government generated large amounts of debt but failed to repay them, leading to the debt crisis and continuous economic instability. On the contrary, Japanese government created bubble economy in real estate and stock market with substantial funds flowing into it, pushing up price to the unprecedented high level. Consequently, Argentina was persistently influenced by the international situation and government's ineffective policies and has failed to repay debts many times, whereas Japanese government burst the bubble economy in time, saving whole country from future economic losses. In the end, Argentina's debt crisis and Japanese bubble economic crisis both give rise to the reflections on Chinese economic development in the post-epidemic era: Chinese government should enhance the competitiveness of domestic enterprises, make rational use of monetary and fiscal policies, and take timely measures to adjust the exchange rate when it exceeds the maximum floating range. In this paper, I don't fully demonstrate reasons why I compare Argentina's debt crisis to Japan's housing bubble crisis in detail. In my future research career, I will primarily focus on comparing the economic recession caused by

war with the measures taken by countries to restore economic development after the war.

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