

# Policy Choices in a Society with Declining Birth Rate in Japan—Based on the Discussion of the Effects after the "1.57 Shock"

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**Abstract:** After the "1.57 shock", the Japanese government took a series of positive measures to tackle the sharp decline in birthrate. This article reviews relevant Japanese policies and discusses their effects: Is it too late or is it never too late to mend? Reap what you have sown or sow one thing and expect to reap another? Hold the key or sidestep the heart of the matter? This paper analyzes the key reasons for the false propositionalization of the "M-curve theory" in Japan, and provide relevant inspirations, which combine with the population problems facing China.

**Keywords:** Japan, Society with Declining Birth Rate, Policy Choices, Effect Discussion

## 1. Introduction

According to Japanese demographic data, the total special birth rate (The total special birth rate, known as the "total fertility rate," represents the average number of children born to each woman in her lifetime. According to the definition of the Ministry of health, health and labor of Japan, the total special birth rate is "the sum of the birth rates of women aged 15 to 49 by age".) in Japan in 1966, It dropped to 1.58, while the total special birth rate in Japan in 1989 was 1.57, once again surpassing the lowest level in 1966, which caused a great impact in Japanese society at that time.

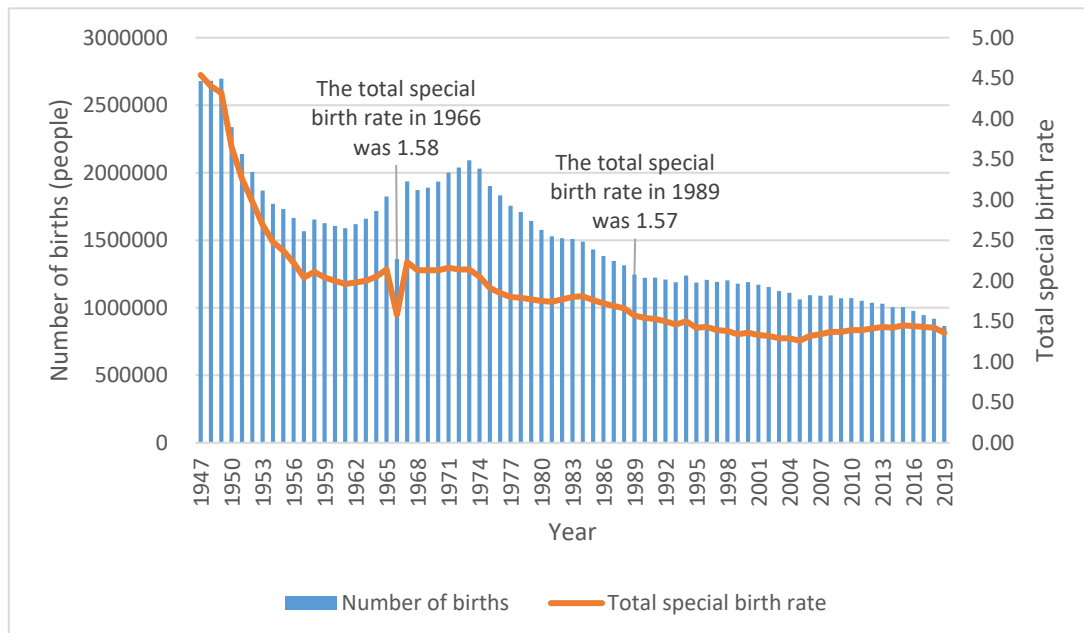


Figure 1 Annual Change of Birth Number and Total Special Birth Rate in Japan (1947-2019).

Data source: The author is compiled according to the 2019 population dynamics overview data of Japan's thick labor province

As shown in Figure 1, 1947 -1949 was the peak of the first baby boom in Japan, with the total special

birth rate of 4.54, 4.40 and 4.32 in three years, and the birth population of 2.679 million, 2.682 million and 2.697 million respectively. After that, the birth rate began to decline. By 1966, the total special birth rate had dropped from 2.14 in the previous year to 1.58, forming a huge gap. Japan's birth rate reached its peak in the second baby boom in 1973 and then entered a downward channel again. In 1988, the total special birth rate was 1.66, making it the country with the lowest birth rate in the world at that time. At that time, the Japanese government specially prepared a report full of sense of crisis. However, in 1990, the Japanese government announced that the total special birth rate in 1989 had reached a record low of 1.57. Because of the sharp decline of the child population, it will lead to the shortage of young labor force, the decline of social support and social vitality, which has caused great concern and impact in Japanese society, especially in politics, business and the elderly. This announcement is also called "1.57 Impact". For this reason, the Japanese government has made it an extremely urgent problem to deal with the sharp decline in the birth rate, and concentrated on adopting a series of active policies and measures to create a social environment conducive to fertility and upbringing.

The stabilization and recovery of the total labor force is naturally based on curbing the sharp decline in the birth rate. So, what policies has the Japanese government adopted? How's the effect? What is the key reason for the virtual proposition of "M-type theory"? China's total labor force has decreased since 2017. Although the scale of labor force is still huge, the trend of aging and fewer children is accelerating. How to avoid the cliff-like decline of labor force is a major issue related to China's future sustainable development. Studying Japan's policy choices after the "1.57 shock" has reference significance for promoting the long-term balanced development of China's population.

## 2. The policy review

### 2.1. Angel Plan and New Angel Plan

In 1994, Japan formulated the first comprehensive countermeasure against the decline of birth rate, that is, "the basic direction of future measures to support parenting", also called "Angel Plan". In this plan, the reasons for the decline of birth rate are the increase of late marriage and the decline of fertility of husband and wife, and the factors that lead to this situation include the difficulty of balancing parenting and work, the difficulty of bearing the psychological and physical burden of raising children, the influence of housing conditions and the increase of parenting costs. The plan defines five basic directions: "promoting the balance between parenting and work", "supporting family parenting", "improving the housing and living environment of parenting", "reducing the burden of parenting education" and "reducing the cost of parenting". Then, specific countermeasures are listed from seven aspects, such as improving employment environment, strengthening child care services, strengthening mother and child health care, improving living environment, promoting school education, reducing child care economic burden, and developing child care infrastructure, etc. The Five-Year Plan for Emergency Child Care Measures (1994-1999) was formulated as part of the Angel Plan, with specific quantitative targets set as shown in Table 1.

Table 1: Main Quantitative Objectives of the Five-Year Plan for Emergency Child Care Measures (1994-1999).

category	project	target
Strengthen child care services	(1) Care for young children (0 to 2 years old)	600 thousand people
	(2) Extension of conservation	7000 institutes
	(3) Temporary conservation	3,000 institutes
	(4) Infant health support services	500 institutes
	(5) After-school Children's Club	9000 institutes
Building a multi-functional nursery	(1) the construction of multi-functional nursery	1,500 institutes
	(2) Enrich the staff of the nursery in order to provide various childcare services	
Building childcare support infrastructure	Regional Child Care Support Centre	3,000 institutes
other	In addition, it will also support local governments to voluntarily implement parenting measures according to regional characteristics	

Source: According to the data of the Japanese Ministry of Health, Labor and Welfare, <https://www.mhlw.go.jp/bunya/kodomo/hoiku-taisaku.html>.

After the implementation of "Angel Project", the problem of declining birth rate has further aroused the common concern of Japanese society, but the decline of birth rate has not stopped. Therefore, in 1999, the Japanese government formulated the "Basic Policy for Promoting the Strategy of Decreasing Children", and on this basis formulated the "Specific Implementation Plan for the Strategy of Decreasing Children (2000-2004)", also known as the "New Angel Plan". The key content of "New Angel Plan" is not only to revise the original seven specific countermeasures of "Angel Plan", but also to increase the content of changing the corporate atmosphere of fixed gender division of labor and giving priority to the workplace. At the same time, as shown in Table 2, "New Angel Plan" has also set a more comprehensive quantitative goal on the basis of "Angel Plan".

Table 2: Main quantitative objectives of the specific implementation plan (New Angel Plan) of the key measures to promote the decline of children.

Category		Project	Target	
			In 1999	In 2004
Strengthen parenting support services	Expand the acceptance of young children	Young children (0-2 years old) in nurseries receive quotas	580,000 people	680,000 people
	Parenting services to meet diverse needs	Promote extended conservation	7000 institutes	10,000 institutions
		Promote holiday conservation	100 institutes	300 institutes
		Promote temporary care for infants	450 institutes	500 cities and towns
		Construction of multifunctional nursery	1600 institutes	2000 institutes
	Promote parenting support including family support	Construction of Regional Parenting Support Center	1,500 institutes	3,000 institutes
		Promote temporary conservation	1,500 institutes	3,000 institutes
		Construction of Family Support Center	62 institutes	180 institutes
		Construction of Children's Club after School	9,000 institutes	11,500 institutes
	Promote the balance between parenting and work	Create an environment that is easy to take maternity leave and return to the workplace	Reassessment of parental leave allowance to improve the level of parental leave allowance	25%
Establish an environment where you can continue to work while raising children		Provision of free telephone service for childcare	35 prefectures and counties	47 prefectures and counties
Support the re-employment of people who stop working because of childbirth or childcare		Provide support services for those who want to re-enter the workforce	22 prefectures and counties	47 prefectures and counties
Development of maternal and infant health care system	Construction of national growth medical center, etc.		Opened in 2001	
	Construction of medical network with comprehensive perinatal mother-child medical center as the core		10 prefectures and counties	47 prefectures and counties (2001)
	Promote emergency medical treatment for children		Area 118	360 qu
	Establish a fertility counseling center		24 institutes	47 institutions
Improve the parenting education environment	Increase the opportunities and places to provide experience information	Promote children's centers nationwide	365 institutes	About 1,000 institutions
		Promotion of children's radio stations	1,300 institutions	About 5,000 institutions
		24-hour telephone consultation for children (research project)	16 prefectures and counties	47 prefectures and counties
	Establish a parenting support network to support family education in the region	24-hour telephone consultation to promote family education (research project)	16 prefectures and counties	47 prefectures and counties

Source: According to the data of Japanese Ministry of Health, Labor and Welfare, [https://www.mhlw.go.jp/www1/topics/syousika/tp0816-3\\_18.html](https://www.mhlw.go.jp/www1/topics/syousika/tp0816-3_18.html).

Compared with the Angel Plan, the New Angel Plan is not only richer and more specific in measuring goals, but also puts forward the importance of "forming a society in which both men and women participate". However, both plans insist that "marriage and having children should be freely chosen by the parties", and the relevant measures put forward by the government are aimed at creating an environment for those who want to have children to be born and grow up with peace of mind.

## ***2.2. Parenting Support Scheme***

After the Angel Project and the New Angel Project, the Japanese government has successively launched a series of promotion policies that give attention to both work and parenting. For example, in 2001, it issued the Policy on Promoting the Balance between Work and Parenting, and put forward specific support measures from five aspects: workplace reform, zero-waiting children strategy, childcare services, after-school children's measures and community parenting support. In 2002, Japan's Ministry of Health, Labor and Welfare once again published the policy of reducing children. Apart from the conventional measures centered on "supporting the balance between parenting and work", it also comprehensively and systematically put forward four measures including re-examining working methods including men, regional parenting support, social security support for the next generation, and improving children's sociality and self-reliance. In 2003, based on the existing policies, the Cabinet Meeting of Japan launched "Action Measures on Supporting the Cultivation of a New Generation" specifically for child-rearing workers, child-rearing families and parents who want to raise children. These measures are aimed at the declining fertility and the trend of rapid decline in children, and put forward relevant goals and strategies from the perspective of emphasizing the reform of work style. The Japanese government decided to push forward the relevant legislative measures because the decline of birth rate has not been significantly improved during the period.

In 2003, Japan enacted the Basic Law on Countermeasures for a Society with Fewer Children, which further clarified the basic principles of measures taken by a society with fewer children. According to the requirements of the Law, in 2004, the Japanese Cabinet passed the Outline of Social Countermeasures for Declining Children, and put forward "three viewpoints", "four priorities" and "28 specific actions". The implementation period of these specific measures is from 2005 to 2009, which is considered as an alternative version of the "New Angel Project". In the same year, Japan promulgated the "Promotion Law of New Generation Cultivation Support Countermeasures", which stipulated the purpose, basic concepts, and the responsibilities and action plans of the state, local public organizations and business owners, trying to promote these measures quickly and centrally, so as to create a healthy social environment for bearing and raising the next generation. The law came into effect from the date of promulgation, but the formulation of action plans for local public organizations and business owners came into effect in 2005. Also in 2003, Japan partially revised the Child Welfare Law, mainly from the perspective of supporting child care in all childcare families, and added measures to strengthen regional childcare support, such as implementing childcare support in cities, towns and villages, and formulating relevant childcare plans.

As one of the measures to reduce the number of children, the Japanese Cabinet approved the Vision of Children and Parenting in 2010. This is a countermeasure to reduce the number of children in the five years from 2010 to 2014, including financial support such as child allowance, after the Angel Plan, the New Angel Plan and the Child and Parenting Support Plan. In April of the same year, Japan promulgated the Law on Supporting and Promoting the Development of Children and Youth, which put forward a series of comprehensive support measures in education, welfare and employment, and strengthened support for the independence of young people, especially those children and young people who have difficulties in social independence.

In the context of the sharp decline in the birth rate, in 2012, Japan promulgated three laws related to children and child care, including the law on children and child care support, the law on the recognition of children's Kindergartens (Partial Amendments), and the law on the implementation of the law on children and child care support and the law on the recognition of children's Kindergartens (Partial Amendments). Under this new legal system, financial support will be provided to certified children's schools, kindergartens and nurseries, approval and certification, guidance and supervision, and construction support for cooperative kindergartens and children's institutions, so as to further enrich the support for local children and foster children. Through these efforts, we hope to establish a new support system for meeting the desire to have children and creating a society that is easy to raise children.

In 2014, Japan partially revised the new generation cultivation support countermeasures promotion law, extending the validity period for 10 years until 2025, expanding support for mother-child families and father-child families, and taking measures such as adjusting child support allowance and annuity

payment to create a more conducive environment for child care.

During this period, in accordance with the law on the promotion of the next generation cultivation and support countermeasures, Japan formulated the guidelines for the formulation of action plans in 2003, 2009, 2014 and 2019, and released the relevant contents of the action plans of Machi village, Dudaο Prefecture and enterprise owners.

### 2.3. New economic policy options

In September 2012, Abe became Japanese Prime Minister for the second time. In order to get rid of deflation, Abe launched "abonomics" with "monetary easing", "fiscal stimulus" and "growth strategy" as "three arrows". In September 2015, Abe was re-elected president of Japan's ruling Liberal Democratic Party. Abe's economics entered the second stage. Focusing on the goal of "building a society with 100 million people, Abe put forward" three new arrows ": one is to nurture a strong economy of hope; the second is to build a dream of child care support; the third is to secure social security (as shown in Table 3).

*Table 3: New and old "three arrows" of Abenomics.*

Old "three arrows"		New "three arrows"
Monetary easing	→	Strong economy
Fiscal stimulus	→	Parenting support
Growth strategy	→	social security

*Source: the author sorted out the key points of Abe's speech.*

In the aspect of "strong economy", it proposes the goal of expanding GDP to 600 trillion yen; in terms of "child care support", it proposes "waiting for children ("Standby children" refers to children who are unable to be admitted to nurseries due to insufficient facilities such as nurseries.)" In terms of "social security", the goal of "zero nursing turnover" is proposed mainly around the nursing problems of the elderly.

In order to achieve the above policy objectives, sustainable financial resources are the key. Therefore, in 2017, Japan formulated the new economic policy program, as shown in Table 4. The plan proposed to take the productivity revolution and human resource development revolution as two important strategies for development in 2020, and obtain economic growth results through the implementation of these two strategies, so as to further enhance the level of social security, Build a safe and dynamic social foundation.

*Table 4: The main countermeasures for declining birthrates in the new economic policy plan.*

Human resource development revolution		Productivity revolution
Free early childhood education	↔	Productivity revolution of small and medium sized enterprises
Eliminate standby children		Productivity revolution by improving corporate profitability and promoting investment
Free higher education		Productivity revolution through the implementation of society 5.0 and disruptive innovation
Substantial free education in private middle schools		

*Source: according to the documents of Japanese cabinet office*

In the revolution of human resource development, it includes "free early childhood education", "elimination of waiting children", "free higher education", "substantial free education in private secondary schools". By promoting the revolution of human resources development, policy resources should be given priority to children and child care, so as to meet the needs of all generations, including young people, and eliminate worries about parenting and nursing, so as to achieve the expected 1.8 birth rate.

In the productivity revolution, it includes "productivity revolution of small and medium-sized enterprises", "productivity revolution through improving corporate profitability and promoting investment", "productivity revolution through the implementation of society 5.0 and disruptive

innovation". Through the implementation of productivity revolution and technological innovation such as artificial intelligence, robot and Internet of things, the productivity is greatly improved. At the same time, small and medium-sized enterprises are vigorously promoted to invest in equipment and human resources to effectively solve the problem of labor shortage.

### 3. Effect discussion

#### 3.1. Is it too late or is it never too late to mend

Looking back on the course of Japan's policy of reducing the number of children, it is not difficult to see that after the "1.57 shock", the Japanese government has been actively taking measures, but in fact, these policies have little effect on improving the fertility rate, and the trend of fewer children is still continuing. For the 30 years since 1990, the total special birth rate, It has been lower than the level of 1.57 in 1989, and reached the lowest value of 1.26 in 2005. The total special birth rate in 2019 is only 1.36, which has dropped for four consecutive years to the lowest level in recent 12 years. The number of births in 2019 is 860000, which is also the lowest in history. There is even a saying of "860000 shocks".

For this reason, some people think that for a long time before that, Japan was not a society that gave full care to marriage, pregnancy and child rearing. At this time, it was too late for the Japanese government to take measures. Some people also pointed out that due to the collapse of the bubble economy after the "1.57 shock", the Japanese government was committed to coping with the problems of economy and aging, and failed to boldly promote the strategy of fewer children, So as to delay the opportunity again.

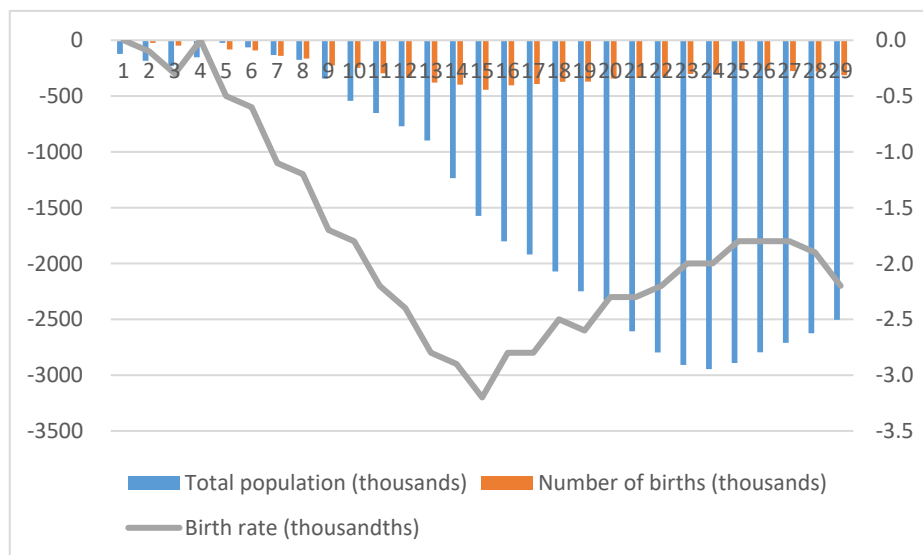


Figure 2 The difference between the birth data and projections of Japan's main population after "1.57 shock".

Data sources: the actual number of the total population is from the world bank; the actual number of births and birth rate is from the population dynamic overview of Japan's honoluo province; and the calculated figures are from the population projection report (median) published by the Institute of population problems of houlaio Province in 1991.

According to the first official report after the "1.57 shock" issued by Japan's Institute of population problems in 1991, as shown in Figure 2, as of 2019, the actual values of Japan's birth rate, birth number and total population were lower than expected at that time, which is also one of the important reasons why the Japanese government's policy of reducing the number of children has been put forward severely. In fact, Japan's total fertility rate fell below the replacement level as early as 1974. Therefore, some people say that it is too late for Japan to adopt relevant policies after the "1.57 shock". However, from another perspective, the lack of children is a common worry of developed countries. From the perspective of direct Fertility Indicators, although the performance of these policies in Japan is not "top-notch", the improvement of several indicators is worthy of attention, Even from this, we can see the effect of Japan's strategy of reducing the number of children.

**3.1.1. The speed of total population reduction is under control**

As shown in Figure 3, since 1990, Japan's total population has been in the trend of slight growth, until the total population reached its peak in 2008, and showed negative growth in 2009. After a slight rebound in 2010, the total population size continued to decline. Nevertheless, the total population of Japan in 2019 was 126.2649.31 million, an increase of 2727931 million compared with 1990, an increase of 2.2%; at the peak of 2008, the total population of Japan reached 128.063 million, an increase of 4.526 million compared with 1990, an increase of 3.7%.

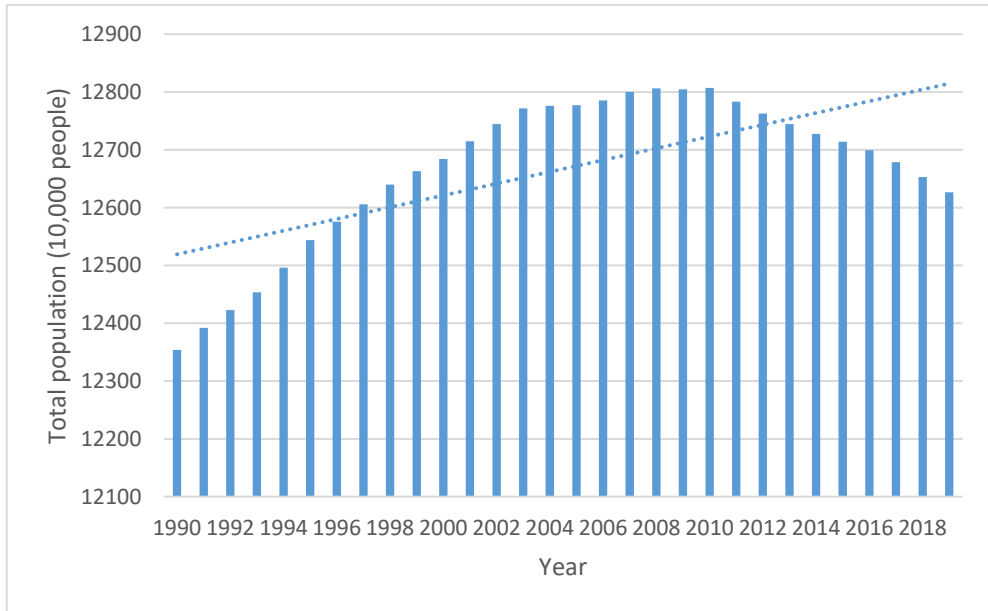


Figure 3 Changes in Japan's total population size.

Data source: the author collates the data from the World Bank ([HTTPS:// data. Worldbank. Org. CN](https://data.worldbank.org/CN)).

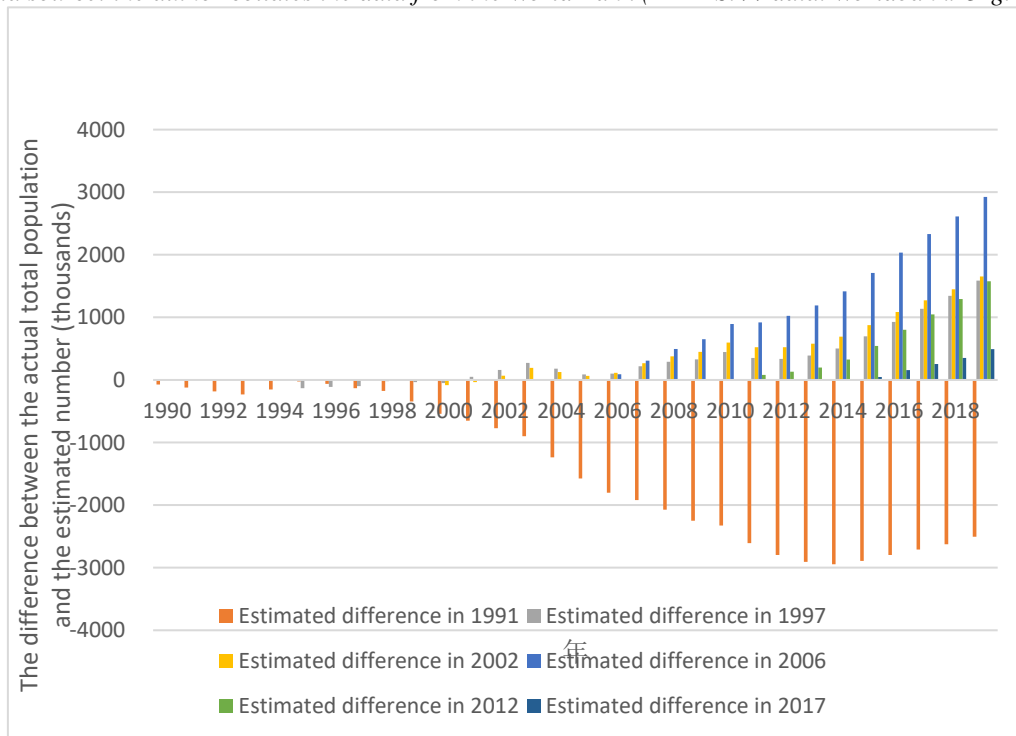


Figure 4 Comparison of Japan's actual total population with the five-year projection.

Data source: Based on the actual population of Japan published by the world bank and the population projection report (median calculation) of Japan's Population Research Institute of houlaop province once every five years.

Moreover, as shown in *Figure 4*, compared with the predicted data of the future population made by the Population Research Institute of houlao province every five years according to the characteristics and trends of demographic data observed at that time, the actual population number is all lower than that of 1991, but the actual population after 2001 is higher than that of 1997. The actual population in 2019 is higher than the estimated value in 1997, 2002, 2006, 2012 and 2017 by 1.586 million, 1.654 million, 2.923 million, 1.576 million and 492 million respectively. Of course, if the factor of foreign residents is taken into account, the actual population in the past years since 1991 will still be lower than all the calculated data every five years. However, it can not be denied that Japan's policy of reducing the number of children has played a certain role. If these measures are not taken, the total population size of Japan will surely decrease faster.

### 3.1.2. The decreasing trend of labor force has been reversed

From now on, although these policies did not change the declining trend of Japan's birth rate rapidly, the total special birth rate reached 1.26 by 2005. But Japan's total labor force, which began to decline in 2008 because of a declining birth rate, began to rebound miraculously in 2013. As shown in *Figure 5*, during the eight years from 2012 to 2019, the total population decreased by 4.967 million and 2.5 million people were added. Therefore, the proportion of labor force in the total population also increased from 51.4% in 2012 to 54% in 2019. 2.5 million labor force may be nothing for a country with a large population and labor force like China, but for a country with a population of 120 million, this figure accounts for 3.8% of its total population. What's more, the new size of the labor force is in Japan's population growth since 1976 (According to the definition of the world bank, the annual population growth rate in year t is the exponential growth rate of population from T-1 to year t, expressed as a percentage. Population is based on the actual definition of population, that is, all residents are counted regardless of their legal status or nationality), It has been hovering at the low level below 1%, even in the case of negative growth since 2009, it is more precious!

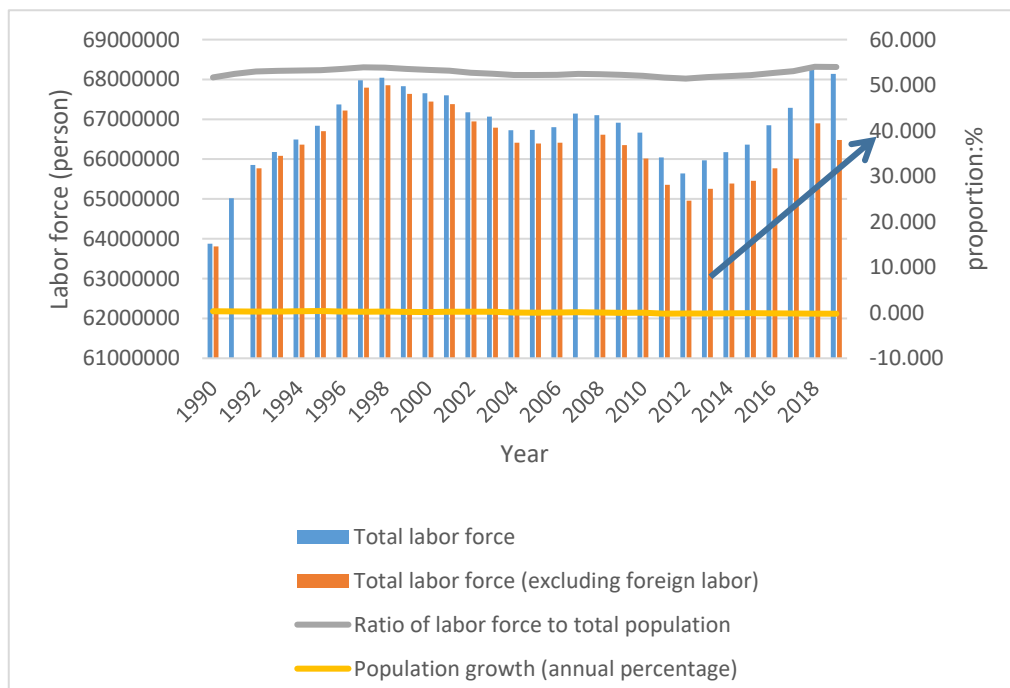


Figure 5 Trend of labor force change in Japan.

Data sources: (1) according to the relevant data published by the World Bank ([HTTPS:// data. Worldbank. Org. CN](https://data.worldbank.org)), the report on the employment status of foreigners ([HTTPS:// www.mhlw. Go. JP / Bunya / koyou / gaikokujin09 / index. HTML](https://www.mhlw.go.jp/bunya/koyou/gaikokujin09/index.html)) and the declaration of employment status of foreigners ([HTTPS:// www.mhlw. Go. JP / STF / seisakunintsuite / Bunya / koyou](https://www.mhlw.go.jp/stf/seisakunintsuite/bunya/koyou)) published by the Ministry of labor of Japan\_(2) there is no official data on the number of foreign workers in 1991 and 2007;(3) The total workforce includes all groups over the age of 15 who meet the ILO definition of economically active population.

Of course, the international migration of foreign workers should also be considered. Relevant reports published by Japan's Ministry of labor (It includes the report on the employment status of foreigners published by the Ministry of labor, labor and welfare of Japan, and the employment management report



of the occupational stability bureau of the Ministry of health, health and labor on the employment of foreign workers.), The results show that: in 1990, there were 68000 foreign workers in Japan, 100000 in 1994, 1 million in 2016 and 1.559000 in 2019. The influx of foreign workers has played an important role in alleviating Japan's labor shortage. However, in terms of quantity, the proportion of foreign workers is very small after all, which only exceeded 1% in 2011, reaching 1.04% and only 2.43% in 2019. As shown in Figure 5, excluding the factor of foreign workers, the labor force still increased by 1.523 million from 2012 to 2019, and the trend of steady growth of Japan's total labor force has not changed since 2013.

Therefore, we may say that the relevant policies adopted by Japan after the "1.57 shock" are indeed too late, but judging from the changes in the total population size and the total labor force, they still have the effect of "mending the loopholes after the sheep have been lost".

### 3.2. Reap what you have sown or sow one thing and expect to reap another

Although these policies adopted by Japan do not perform well in terms of direct population indicators, under the influence of these measures, some other important social indicators show a trend of continuous improvement. However, can this be regarded as "planting melons and beans"? If we look at the importance of these indicators for economic and social development, it may also be called "reaping what you sow".

#### 3.2.1. Standby rate of children entering the kindergarten

As we know, the standby rate of the nursery is the product of "the number of children waiting in the nursery" and "the number of children used in the nursery". there was a significant decrease. As shown in Figure 6, on the one hand, the number of child care centers and the number of children used in nurseries in Japan is on the rise. In 2020, the number of child care centers in Japan will be 2.967 million and 2.737 million, respectively, which will increase by 1.044 million and 1.143 million over 1995. As a result, the number of standby children in Japan is also changing. In 1995, the number of standby children will be 28500, and by 2020 it will be 12400, a total of 161000. As a result, the standby rate of children entering kindergartens has dropped from 1.8% in 1995 to 0.5% in 2020. Although there is still a gap from the realization of the goal of "zero standby children" proposed by the Japanese government, it is not difficult to see that the number of children queuing up at home waiting for the vacant places in the nursery has been decreasing due to the continuous improvement of child care facilities and care service capacity in Japan.

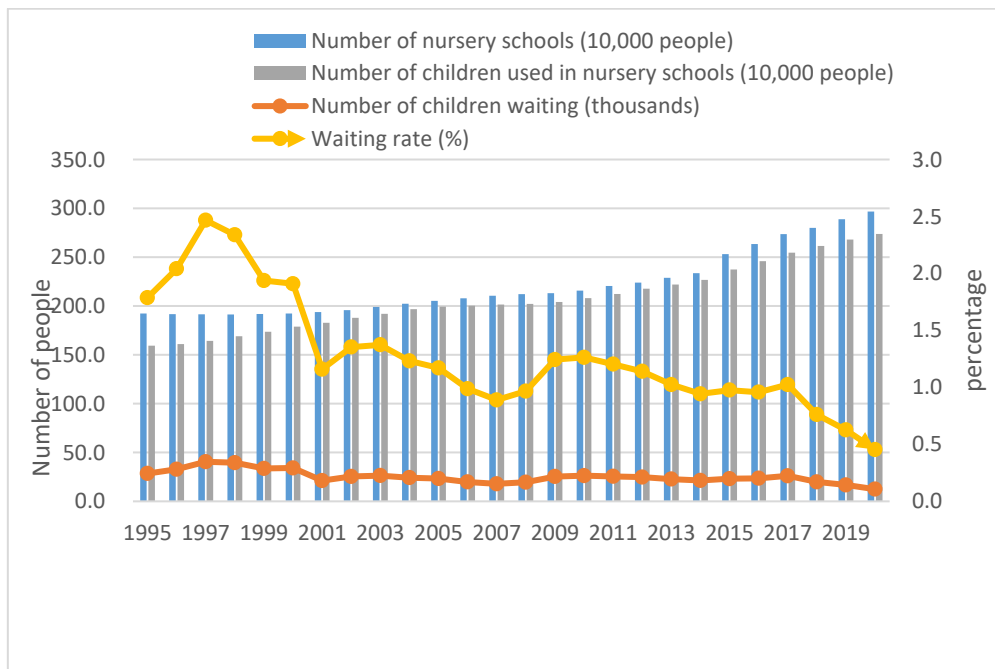


Figure 6 Annual change of waiting rate of children in Japan.

Data sources: the author collates the data from "summary of relevant conditions of nurseries", "status of nurseries", "supply and demand of care services and standby status" of Japan's Ministry of honao; the number of children on standby from 1995 to 2000 is the old definition data.

**3.2.2. The labor participation rate and employment rate have been rising steadily**

As shown in Figure 7, in 2019, the population and labor force of Japan over the age of 15 are 110.92 million and 68.86 million, respectively, which are 10.03 million and 5.02 million more than those in 1990. Under such circumstances, the employment rate of Japan's population over the age of 15 is still stable at about 60%. It dropped to 56.5% in 2011 and 2012, and then gradually fell back to 60.6% in 2019. As a result, the number of employed people increased from 62.49 million in 1990 to 68.86 million in 2019, adding 4.75 million. From the comparison of labor force and employment, as mentioned by Abe, the former Prime Minister of Japan, in his resignation speech in September 2020, "creating a social environment where people can work if they want to work" has been basically realized. It is particularly worth noting that under the influence of the population and fertility policy, Japan's female labor participation rate and employment rate have been rising. The female labor participation rate and employment rate have increased from 57% and 49% in 1990 to 71.7% and 52.3% in 2019, respectively, rising by 3.2% and 14.6%. The growth of female labor participation rate plays an important role in making up for the shortage of Japanese labor force. At the same time, the female employment rate in Japan reached 51.3% in 2018, which exceeded 50% again after 50 years. This also shows the positive results of Japan's relevant policies calling for building a "balance between work and child care" and "a more active society".

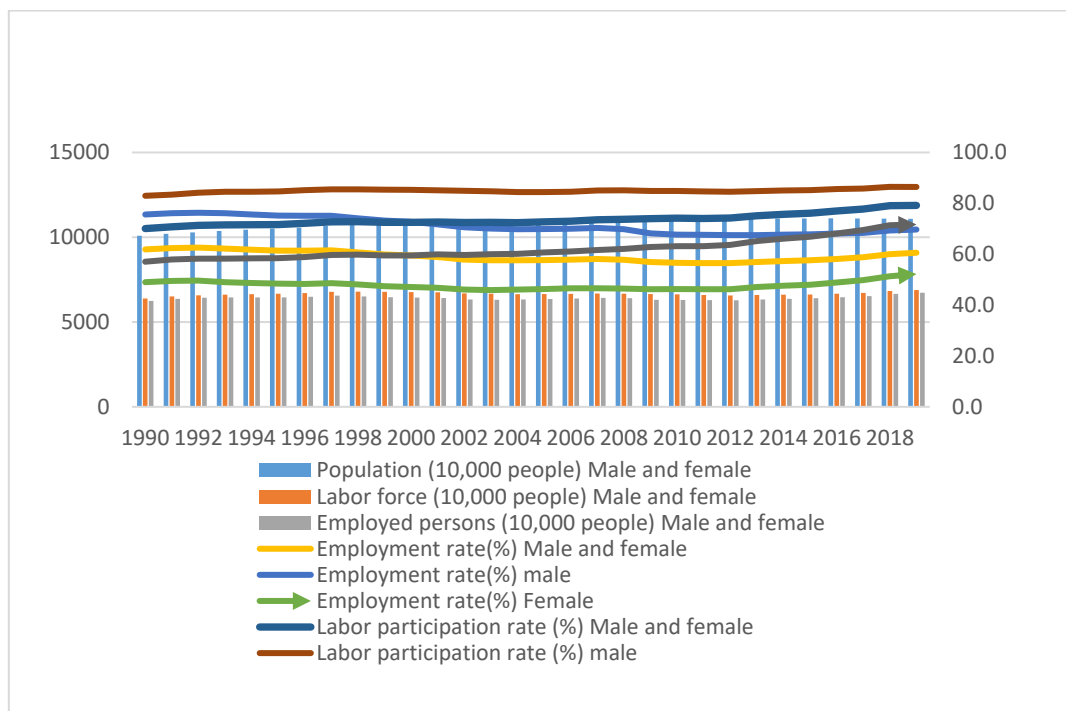


Figure 7 Annual changes of employment rate and labor participation rate in Japan.

Data sources: labor participation rate data from the World Bank ([HTTPS:// data. Worldbank. Org. CN](https://data.worldbank.org/)); population and employment rate data from the Statistics Bureau of the Ministry of general affairs of Japan ([http:// www.stat.go.jp / data / roudou / 2. HTML](http://www.stat.go.jp/data/roudou/2.HTML)); the employment data are from the population aged 15 and above; the labor participation rate is the percentage of the population aged 15-64.

**3.2.3. The rising trend of unemployment rate and suicide rate has been reversed**

Although the policies adopted by Japan do not seem to have a direct effect on the birth rate, as the policies call for the reform of working methods and the elimination of the difficulties in balancing work and child rearing, under the condition of maintaining the growth of nominal GDP, as shown in Figure 8, the total unemployment rate of Japanese society rose from 2.1% in 1990 to 5.4% in 2002, and then began to drop to 2.4% in 2019. The once rising trend has been reversed. At the same time, the suicide rate, which reflects the social status to a certain extent, rose from 17.3% in 1990 to 27% in 2003, and then decreased to 16% in 2019. Although Japan's suicide rate is not the highest in developed countries, it does give the impression of a "suicide power" to the outside world, which is inseparable from the loneliness and pressure of Japanese society. From this perspective, it is hard to deny that these policies have played a positive role in saving thousands of lives every year.

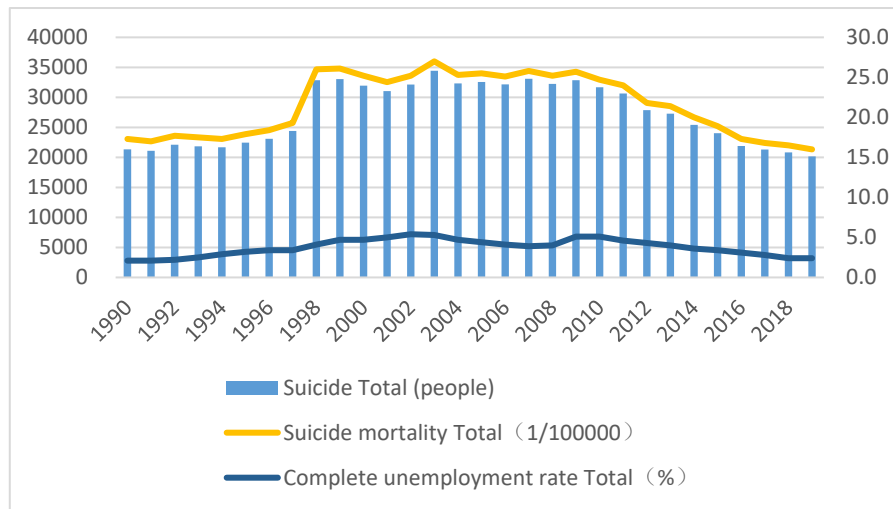


Figure 8 Annual changes of unemployment rate and suicide rate in Japan.

Data sources: unemployment rate data from the Statistics Bureau of the Ministry of general affairs of Japan (<http://www.stat.go.jp/data/roudou/2.html>); suicide rate data from Japan's Ministry of labor's suicide statistics: status of each year, [https://www.mhlw.go.jp/stf/seisakunintsuite/bunya/hukushi\\_kaigo/seikatsuhogo/jisatsu/jisatsu\\_year.html](https://www.mhlw.go.jp/stf/seisakunintsuite/bunya/hukushi_kaigo/seikatsuhogo/jisatsu/jisatsu_year.html)

### 3.3. Hold the key or sidestep the heart of the matter

Since the "1.57 shock", Japan has not reversed the trend of declining birth rate. Therefore, the voice of Japanese society demanding the government to reflect and review the relevant policies has been emerging. So, is Japan's policy accurate, or is it deliberately avoiding the heavy?

#### 3.3.1. Policy taboos before the war

In 1941, the Japanese Cabinet decided on a population policy, which mainly includes "reducing the age of marriage by 3 years", "encouraging an average of five children", "ensuring that the population reaches 100 million in 1960 (about 70 million)" and so on. This is the famous "outline for the establishment of population policy" in Japanese history. This policy clearly provides for the incentive system for families with many children, and public taxes are imposed on families without children and single people. This is a population policy aimed at ensuring the human resources needed for war, and it is also a decision that violates individual rights. Therefore, this policy became a taboo in Japan after the war. This can help us understand why the Japanese government has been cautious and embarrassed in dealing with the reduction of the birth rate after the "1.57" shock, and why the Japanese government has tried its best to simplify its population policy into a response to the decline in the birth rate, and even directly become a synonym for children and family policies.

#### 3.3.2. Elite feminism

When Japan implemented the "angel plan", the idea that childbearing is not an obligation but a right has been widely spread. In addition, since the 1990s, in order to promote the balance between child care and work and build a society in which men and women can share responsibilities, Japan has also formulated a series of policies on gender equality in employment. It has been proved that these policies have played a role in promoting women's labor participation rate. However, these women who improve labor participation under the policy mainly come from government agencies, companies and other elite objects, and their role in rural areas and ordinary families is relatively small. The main reason is that these women are often engaged in informal employment and have low income. When a family has to make money for two people at the same time, even if they can have children, it is difficult to achieve both work and child care.

#### 3.3.3. Lack of immigration policy

Although many of Japan's policies on coping with the decline of birth rate draw lessons from the practices of France, Sweden and other European countries, the immigration policy has always been considered not in line with Japan's national conditions. In fact, in 2019, the number of foreign workers in Japan has exceeded 1.5 million, and the number of qualified foreigners has reached 3.65 million. In

December 2018, Japan revised the immigration control law, the residence restrictions for foreigners with relevant special skills in 14 industries with severe labor shortage, such as agriculture, fishery, nursing and hotels, were relaxed, and they were allowed to work in jobs including simple labor. These residents basically get jobs that the Japanese don't look up to and don't want to do. Even the so-called Japanese nationality and permanent residence (green card) are far from each other. However, the bill has triggered a heated discussion in Japanese society, and the support rate of the then Abe government has declined. Moreover, the discussion on Japan's immigration policy will continue in the future.

In addition, in the 1990s, due to the impact of deflation, Japan's finance was hard to come up with the budget to deal with the shortage of children as it did with aging. In this way, it is not difficult for us to understand why the Japanese government simplified the population policy into a policy to deal with the decline in the birth rate, which was almost replaced by how women took care of their children and their work. In the end, it directly turned into the reform of nurseries and the elimination of waiting children. It may be considered that the Japanese government is trying to grasp the key to the problem in the pursuit of the balance between economic stability and population fertility. However, through the above analysis, we can see the reasonable logic why the Japanese government adopted such a policy based on social movement and relatively small investment, but has not achieved obvious results in curbing the decline of birth rate.

#### 4. Some enlightenment

##### 4.1. The population problem is related to "nation shaping" and "the rise and fall of great powers"

In 2019, the United Nations Department of economic and social affairs made a forecast on the future population size of the world before 2100: In 2020, China ranked first, India second and the United States third; after 2027, China ranked second, India ranked first and the United States third; after 2042, China ranked second, India ranked first, and the United States ranked fourth.

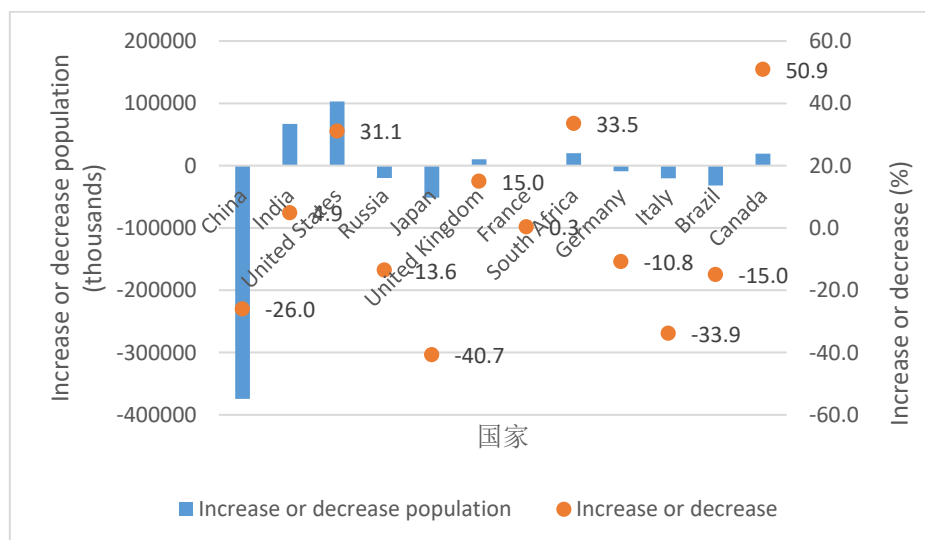


Figure 9 Population size change trend forecast of BRICs and 7 western countries in 2100 compared with 2020.

Data source: Population Division, Department of economic and social affairs of the United Nations (2019), "world population prospects for 2019", which is calculated from the user-defined data obtained through the website ([HTTPS://population.un.org/WPP/dataquery](https://population.un.org/WPP/dataquery)).

There is no doubt that in terms of ranking, China's population size will be surpassed by India to become the second largest in 2027, but China is still the world's most populous country. However, it is worth noting that although the United States was overtaken by Nigeria to the fourth place in 2042, the United States is still a country with a large population on the premise of immigration. Moreover, from the perspective of population size change trend, as shown in Figure 9, in 2100, compared with 2020, China's population decreased by 374 million, by 26%, while that of the United States increased by 31.1%, and that of Canada, one of the western developed countries, increased by 50.9%. Even among the BRICs countries, China had the largest decline in population size, with India increasing by 4.9% and Brazil by 33.5%.

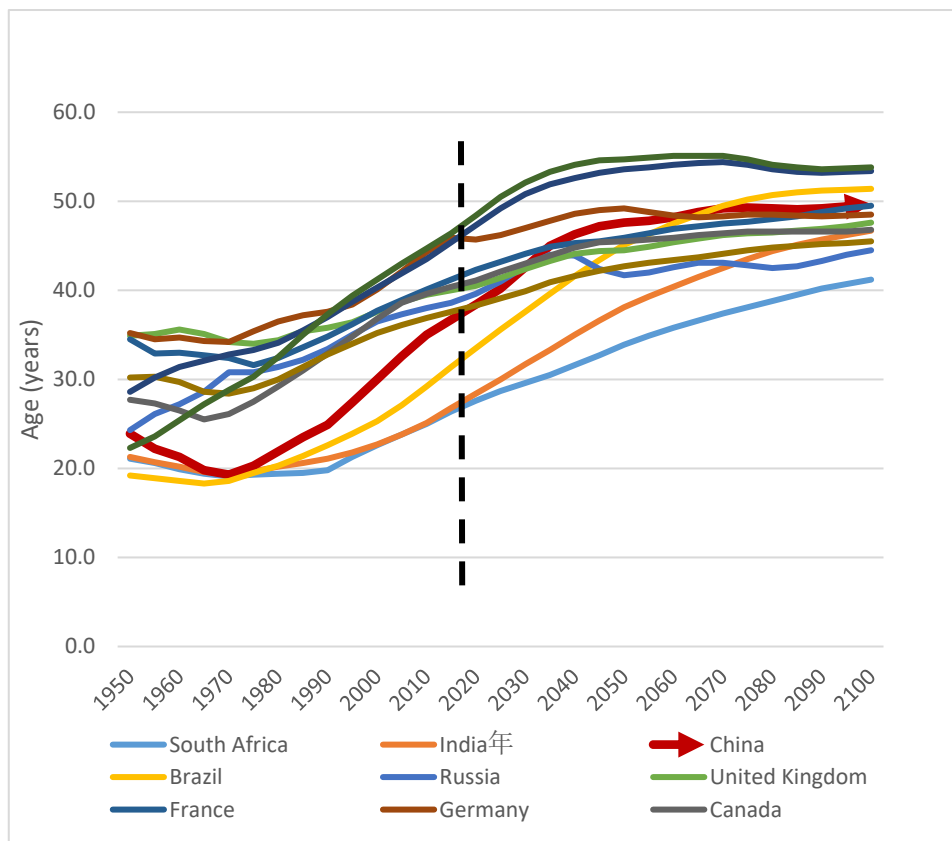


Figure 10 Trends in the median age of the total population in BRICs 5 and 7 western countries (1950-2100).

Data source: Population Division, Department of economic and social affairs of the United Nations (2019), "World Population Prospects in 2019", compiled from user-defined data obtained through the website ([HTTPS://population.un.org/WPP/dataquery](https://population.un.org/WPP/dataquery)).

As the support of national strength and the driving force of economic and social development, the age structure of population is particularly important on the basis of population size. As shown in Figure 10, in the early 1970s, China, together with India, Brazil, South Africa and other countries, was the lightest country in the seven western countries and the BRICs countries. According to the United Nations forecast, the median age of China's total population will be 38.4 years old in 2020, 45 years old in 2035, 47.6 years old in 2050, and 49.7 years old in 2100. By 2100, China will become the country with the highest median age of population after Japan, Italy and Brazil.

Because of this, according to the relevant data of world population prospects in 2019 issued by the population division of the Department of economic and social affairs of the United Nations (2019), the size of China's labor force will decline rapidly. As shown in Figure 11, India's population aged 15-64 will surpass China in 2027, becoming the country with the largest labor force. China's population aged 15-64 will be 1.01 billion in 2020, 940 million in 2035, and 780 million in 2050, and will be only 580 million by 2100, with a decrease rate of 42.8%, becoming the country with the largest decline after Japan and Italy. At the same time, the population aged 15-64 in some countries has achieved positive growth, with South Africa increasing by 29.5%, Canada by 28.7%, the United States by 14.2%, and the United Kingdom by 0.27%.

A French historical demographer, once said in an interview with a reporter: "no one among demographers believes that China has a bright future". His argument obviously ignores China's strong capacity for institutional innovation and transformation of production relations, as well as the substitution effect of China's scientific and technological progress on labor force. However, human beings are the basic elements and driving force for economic and social development, and also an important support for a country's national strength. Whether China's population can develop in a balanced way for a large country with a population of 1.3-1.4 billion, it will be a major issue concerning "nation shaping" and "rise and fall of great powers".

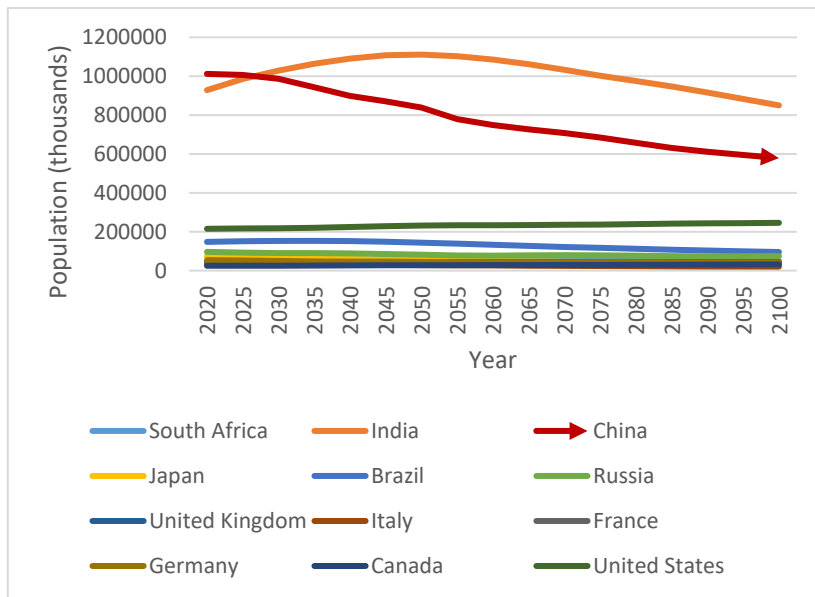


Figure 11 Trends of population aged 15-64 in BRICs and 7 western countries (2020-2100).

Data source: Population Division, Department of economic and social affairs of the United Nations (2019), "World Population Prospects in 2019", compiled from user-defined data obtained through the website ([HTTPS://population.UN.Org/WPP/dataquery](https://population.un.org/WPP/dataquery)).

**4.2. Maintaining steady economic growth and continuously improving the quality of employment are the important prerequisites for curbing the decline of the birth rate**

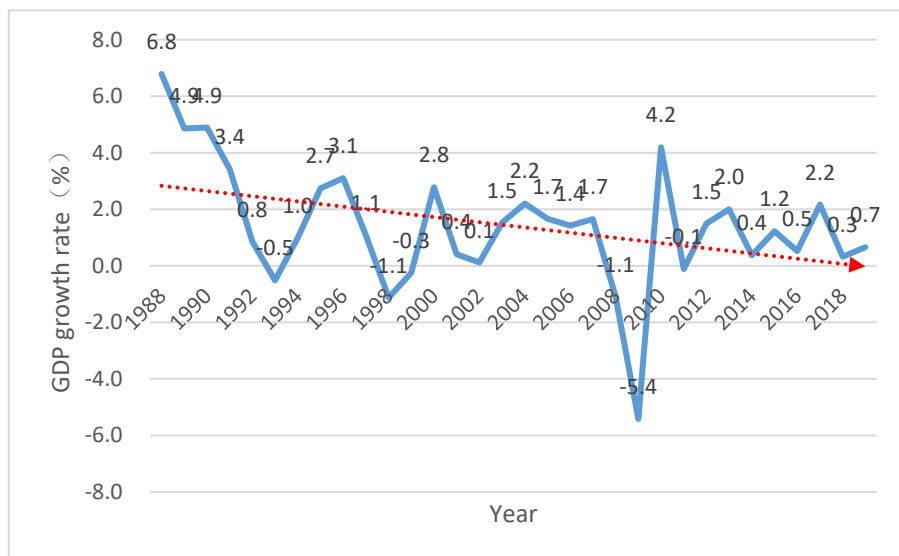


Figure 12 Trend of Japan's GDP growth rate (1988-2019).

Data source: World Bank ([HTTPS://data.Worldbank.Org.CN](https://data.worldbank.org/CN)).

After the "1.57 shock", the important reason for Japan's "continuous decline in birth rate" is the continued downturn of Japan's economic growth. After World War II, Japan's economy experienced a period of rapid growth. In 1968, the annual growth rate of Japan's GDP was as high as 12.9%. In this year, Japan became the second largest economy in the world. As shown in Figure 12, the annual growth rate of GDP was only 4.9% in 1989, and dropped to 0.8% in 1991. Japan's economy has entered a period of slow growth or even negative growth.

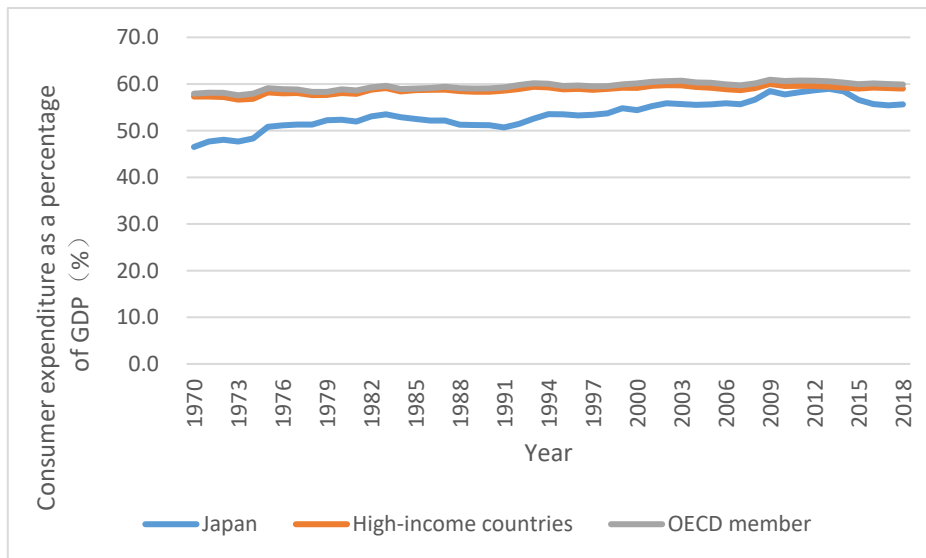


Figure 13 Trend of NPISH final consumption expenditure (% of GDP) in Japan (1971-2018).

Data source: World Bank ([HTTPS://data.worldbank.org.CN](https://data.worldbank.org/CN)).

As shown in Figure 13, due to the weak economy and low income, the proportion of the final consumption expenditure of households and non-profit institutions (NPISH) in GDP in Japan has increased to a certain extent, but the growth trend is very weak, and the data over the years are lower than the average level of high-income countries and OECD members, and about 10 percentage points lower than that of the United States.

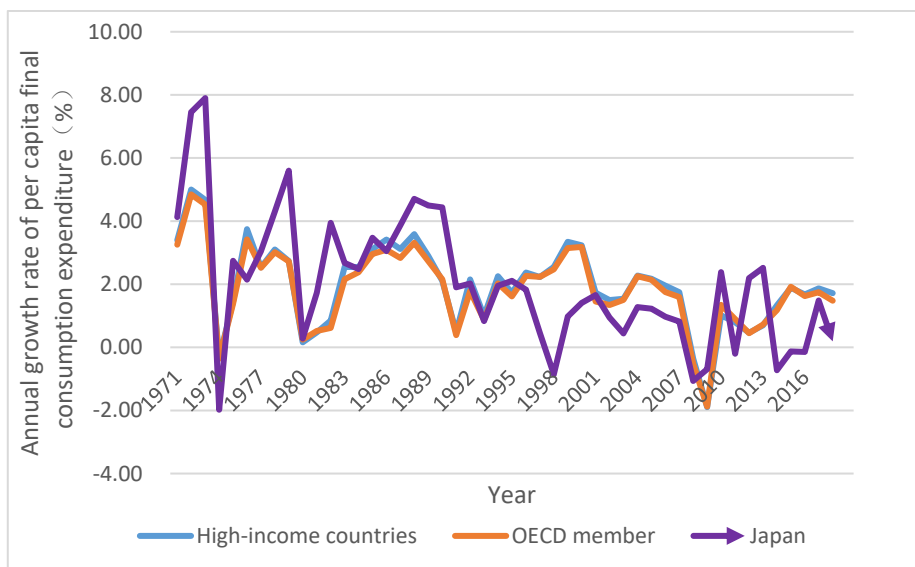


Figure 14 trend of final consumption expenditure (annual growth rate) per capita in Japan (1971-2018).

Data source: World Bank ([HTTPS://data.worldbank.org.CN](https://data.worldbank.org/CN)).

The economic downturn has led to the deterioration of residents' income structure, and the consumption ability and confidence of Japanese residents have been greatly frustrated. As shown in Figure 14, Japan's per capita final consumption expenditure (annual growth rate) was 4.71% in 1998, which was 1.39 and 1.12 percentage points higher than the average level of OECD and high-income countries, and then continued to decline, reaching - 0.86% in 1998, which was 3.33 and 3.4 percentage points lower than that of OECD and high-income countries respectively. There was a brief rebound after 2010, but most annual growth rates were below the OECD average. In 2018, Japan's index was only 0.19%, ranking second from the bottom among OECD countries. Because of Japan's economic slowdown, the number of men in informal employment has also increased, and their income has become unstable, which makes many men lack confidence in establishing a family, which leads to an increase in the number of unmarried and late married people in Japan. According to the data released in 2018 (2015 data) by the

Institute of social security and population issues of Japan's Ministry of health, health and labor, the lifelong unmarried rate of Japanese men was 23.4%, while that of women was 14.1%. Both men and women increased by 3% compared with the data released last time (2010 data), setting a record high. Because there are unmarried people, only if married people have three children can they approach the total special birth rate of 2.0, but at present, the average age of first marriage of Japanese women reaches about 30 years old. Even if they are willing to have children, they can only have two children before the age of 40. Therefore, due to late marriage, it is difficult to achieve the goal of a total special birth rate of 2.0. Also for economic reasons, the era of one husband working to support the whole family has come to an end. Many families have to work together to earn income to support their lives. This makes it difficult for women to achieve both employment and child care. Therefore, this is one of the reasons why Japanese women are not willing to have more children. In addition, due to economic reasons, the government's financial tightening and the pressure of the aging population make the budget give priority to elderly measures including pension, which is difficult to substantially increase the budget for reducing the birth rate and children. Therefore, the effectiveness of relevant policies is naturally affected.

The Fifth Plenary Session of the 19th Central Committee of the Communist Party of China (CPC) adopted the proposal of the CPC Central Committee on formulating the 14th five year plan for national economic and social development and the long-term goals for the year 2035, which clearly defined that "socialist modernization will be basically realized by 2030" and that "China's economic strength, scientific and technological strength and comprehensive national strength will be greatly increased, At the same time, it proposes to "achieve more full and high-quality employment, and basically synchronize the growth of residents' income and economic growth", which will provide a good economic environment for China to curb the rapid decline of birth rate and population size.

#### 4.3. Effective measures should be taken to build a family friendly support system

There is a so-called "M-shaped curve" phenomenon in Japanese women's employment due to the phenomenon of giving birth and raising children as shown in Figure 14. Under the influence of a series of measures to promote child care and work balance introduced by the Japanese government, Japan's female labor force participation rate has gradually increased. By 2019, the proportion of female labor force population aged 15-64 will reach 72.6%, among which the female labor force ratio of 25-34 years old, 35-44 years old and 45-54 years old will reach 81.1%, 78.6% and 80.7%, respectively, as shown in Figure 11, The so-called "M-shaped curve" is very close to the "T-shaped curve". If according to the common view of Japanese female scholars that "the M-shaped curve is the reason for the decline of birth rate", and "if the female labor participation rate increases, the birth rate will be correspondingly higher", obviously, this situation has not occurred in Japan.

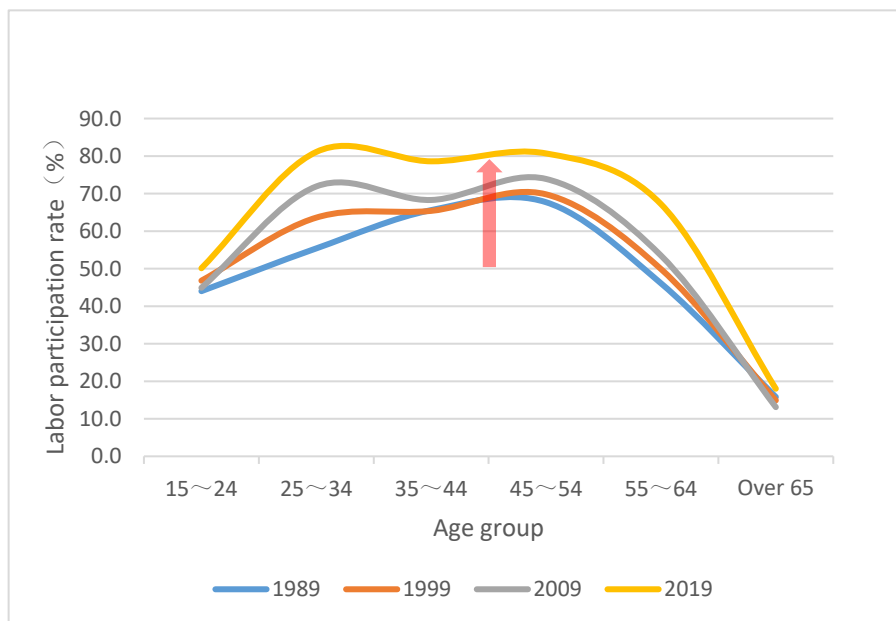


Figure 15 Trend of M-shaped curve of female employment in Japan.

Data source: Based on the labor force survey data of the Ministry of general affairs of Japan.  
So what's the problem? First of all, women of childbearing age and women returning to the labor



market after childbirth are engaged in temporary work or lifelong employment, which may have the biggest loophole. Under the background of labor shortage and labor mode reform, Japanese enterprises have increased the employment of women, but there is still a gap between men and women in the ratio of informal employees. In 2019, the proportion of male regular employees and informal employees is 77.2% and 22.8% respectively, but the proportion of female regular employees and informal employees is 44% and 56% respectively. Moreover, the treatment gap between regular employees and informal employees in Japanese enterprises is also large. In 2019, 20.39% of Japanese formal employees earn more than 7 million yen per year, while only 4.91% of female regular employees earn more than 7 million yen; only 0.99% of male regular employees are less than 1 million yen, and 3.97% of female regular employees. The income level of informal employees is not only significantly lower than that of regular employees, but also that of women is significantly lower than that of men. Secondly, Japanese enterprises have adopted the life-long employment system, which is not conducive to women's re employment after childbirth. Third, the pertinence of some parenting support measures in Japan is also questionable. For example, the premise of "must be a dual working family" is set in the application for child care. However, before the children enter the kindergarten, it is very difficult for women to study and get employed again. Therefore, many families fall into a passive cycle of "chicken or egg first". When children are sent to kindergartens when they have to, they usually need to be delivered at 9:30 in the morning and picked up at 2:00 in the afternoon. It is impossible to spare time and energy to work. The Japanese government advocates that men should take parental leave. However, due to the long-term dual division between men and women in Japan, many Japanese women have complained that the husband's leave only adds a burden of care to the family. In addition, the economic and mental burden caused by education and housing conditions are also the reasons that affect the birth rate. Therefore, the fact is that it is still difficult for Japanese women to take care of their children when they are working. Therefore, the ratio of female labor force has increased, but child care has not increased. This is also the key reason why Japan's relevant policies did not achieve the expected effect after the "1.57 shock".

As China is anchoring its long-term goal for the year of 2035, and taking advantage of the situation, China can implement the policy of full liberalization of child-bearing on the basis of implementing the policy of "comprehensive two-child". Specifically, it includes the implementation of positive incentive policies for childbearing, increasing the supply of child care services (especially 0-3 years old), increasing the investment in education and medical care, reducing the direct cost of child care, building a reasonable sharing mechanism for the cost of childbearing by the state, enterprises and families, and establishing a flexible labor mode and career development mode that is conducive to women's re employment after childbirth. Through these practical and effective measures, a series of pressures on women and their families in terms of childbirth can be resolved, and a family friendly social environment can be truly constructed, so that women can achieve both work and child care.

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