

Building a Birth-Friendly Society to Cope with the Challenges of a Low Fertility Rate

By Emmanuel Faber, Chairman and CEO, Danone

Executive Summary

Population problems have always been a major problem facing the development of human society. The core of such a problem is typically an imbalance among population trends, economic and social development and the management of ecological resources.

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In the second half of the 20th century, excessive population growth caused a series of problems, including global climate change and food crises. In the 21st century, more countries are beginning to face the problem of population aging and even negative population growth caused by low fertility rates, which also poses a challenge to economic and social development.

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The fertility revolution has led to changes in the development pattern of the world population. Low fertility has become a seemingly irreversible global trend. In 1960, only two countries in the world had a total fertility rate below 2.0. By 2018, nearly 80 countries had a total fertility rate below 2.0. About 40% of countries have become low-fertility societies.

Entering the 21st century, China's total fertility rate is also declining. There are many reasons for China's low birth rate. For example, the high cost of child rearing has reduced the willingness of the childbearing-age population to have children. Meanwhile, a decline in the marriage rate has contributed to the reduction in the birth population, as delays in the willingness of people to embark on a first marriage and make a first attempt at conception have led to a slowdown in population growth. Women are also seeking to control their pregnancies in order to realize their own personal potential.

Looking at the development process of some countries and regions in the world, low fertility often affects the age structure of the population, leading to systemic risks in the socio-economic field in the medium and long-term. For example, insufficient labor supply leads to sluggish economic development and increased spending pressure on the social security funds necessary to protect an aging population. Generally speaking, the effects of population structure adjustment through public policies come after a delay, so China should formulate public policies to encourage childbirth as soon as possible.

Danone believes that the Chinese government can build a birth-friendly society in an all-round way by adopting institutional measures, paying attention to resource supply, extensive encouragement and changes in the public mindset. Our proposal involves four dimensions.

First, the top-level redesign of the population policy. The state should review the fertility policy and build a more inclusive population policy framework.

Second, the establishment of birth-support policies. The state should establish a complete welfare allowance and tax relief system to share the cost of family upbringing; formulate a maternity/parental leave system; build a fully-covered childcare institution network to provide parents with alternative public childcare resources; provide institutional guarantees for the job security of women of childbearing age.

Third, progressive transformation of established views regarding marriage and childbirth. Here the state should advocate changes in marriage customs; change the concept of 'preferring sons over daughters' and return the sex ratio at birth to a normal level, and promote gender equality.

Fourth, formulation of a birth-friendly labor market and encourage companies to take social responsibility.

Finally, it needs to be emphasized that there are huge regional differences in the degrees of declining birthrate and aging in China. Therefore, when formulating population policies, it is necessary to consider local differences and adapt measures to local conditions.

The Chinese government has fully realized the potential risks of low fertility and is actively formulating a long-term population development strategy. It is striving to promote population policies in line with economic and social development. This demonstrates the accurate judgment of the Chinese government on population issues and the forward-looking concept of systematic governance. We believe that by respecting the law of population development and taking precautions, China will be able to successfully cope with low birth risks and achieve sustainable economic and social development.

1. The Fertility Revolution and the Global Population Evolution Pattern

Population problems have always been a major problem facing the development of human society. The core of such a problem is typically an imbalance between population trends or policies, economic and social development and the management of ecological resources. In the second half of the 20th century, excessive population growth caused a series of problems, including global climate change and food crises. In the 21st century, more countries are beginning to face the problem of population aging and even negative population growth caused by low fertility rates, which also poses a challenge to economic and social development.

In 2019, the global population reached 7.674 billion. Excluding the impact of unforeseen circumstances, the global population will continue to grow in the next few decades – but its growth rate will gradually slow down. The term 'fertility revolution' was put forward by western scholars, which is used to describe the process of declining fertility rate in contrast to advancing modernization. It can be divided into three phases^{1/2}: first, the phase driven by mortality change – the health revolution makes mankind no longer need to maintain high fertility to fight against high mortality, so the total fertility rate (TFR) tends to decrease to about 3.0; second, the phase driven by fertility preference change –

¹ Easterlin, Richard, A. Crimmins, & Eileen, M. (1985). The fertility revolution. University of Chicago Press.

² Schultz, T. (1986). Population and Development Review, 12(1), 127-140.

emotional fertility willingness replaces utilitarian fertility willingness³, and TFR drops to about 2.0; third, the phase driven by fertility cost constraint, as an increase in fertility costs reduces people’s willingness to give birth, and TFR drops to less than 2.0.

As of now, about 80 countries have reached Phase 3 (with their TFRs lower than 2.0), mostly in Europe, North America and East and Central Asia; about 50 countries have reached Phase 2 (with their TFRs between 2.0 and 3.0), mostly in Latin America, South Asia and North Africa; and the other countries are in Phase 1 or are yet to embrace the Fertility Revolution (with their TFRs higher than 3.0), mostly in Sub-Saharan Africa⁴. Differences in the process of fertility revolution among different countries and regions have caused profound changes in the global population pattern.

First, low fertility rates have become an irreversible global trend. Following the mid-20th century, human society experienced a move from universally high fertility rates, fertility rate differentiation and gradual transition to universally low fertility rates. As shown in Figure 1, the world average TFR in 1960 was 4.98, with at least 100 countries between 6.0 and 8.2, and only 2 countries below 2.0. In 1980 there was differentiation – about 60 countries had TFR higher than 6.0, and 26 countries had TFR lower than 2.0; in 2018, the world average TFR was 2.41, with about 80 countries lower than 2.0, and only 2 countries higher than 6.0.

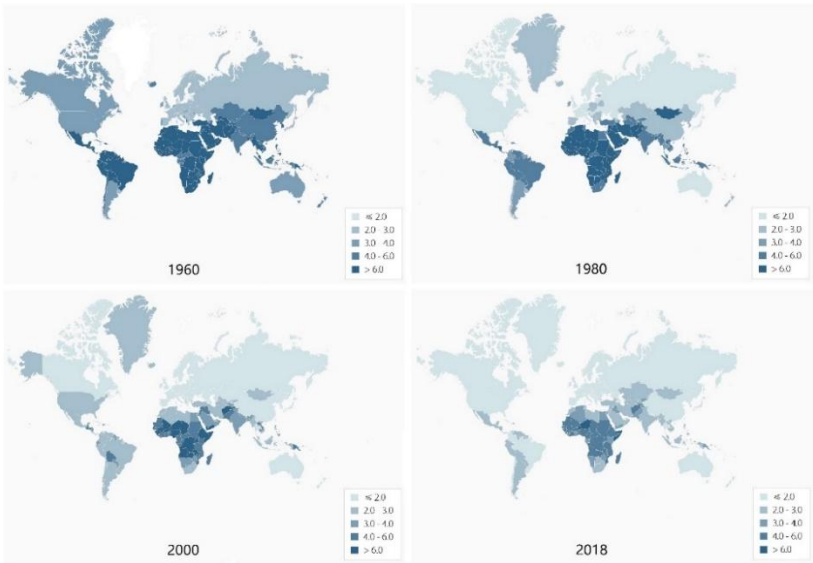


Figure 1: Spatial pattern evolution of global TFR (1960-2018)
Source: World Bank Database (<https://data.worldbank.org.cn>)

Second, the spatial distribution centers of the global population are constantly shifting to the southern underdeveloped areas. Under the influence of the fertility revolution, the spatial pattern of population proportion has also been changing. According to Figure 2, the proportion of Europe and Central Asia in the global population has fallen sharply from 22.0% in 1960 to 12.1% in 2018; correspondingly, the proportion of people from Latin America, South Asia, the Middle East and Africa in the global population has been continuously rising, posing a grave challenge to the sustainable social and economic

³ Utilitarian needs mainly refer to people's needs for aspects such as children's income utility, labor utility, security utility, and family status expansion utility.
⁴ Based on data published by World Bank.

development of the developed and some developing countries and even the world economy.

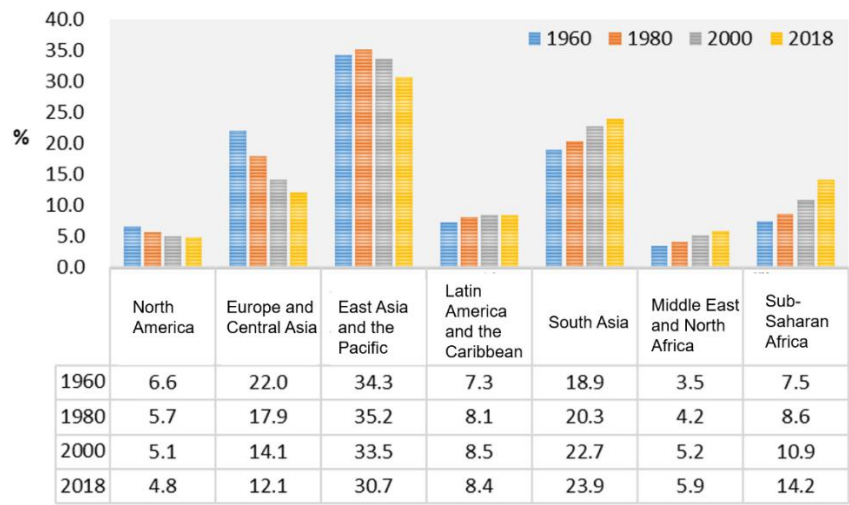


Figure 2: Spatial pattern evolution of the proportion of global population (1960-2018)
Source: World Bank Database (<https://data.worldbank.org.cn>)

2. Low Fertility Rates: An Irreversible Global Trend?

2.1. Global spread of low fertility crisis

In the late 20th century, the momentum of excessive growth of global population was obviously curbed. This was described as “the miracle of mankind in the 20th century”. But then, it was found that the fertility level of many European countries continued to decline, sinking even lower than replacement level fertility⁵. Such a phenomenon has continued to spread, and about half of the countries in the world have entered the Low Fertility Society phase. In the next few decades, these countries will see their populations peak and then enter the stage of negative population growth.

2.2. Low fertility rates will challenge social security systems

An excessively low fertility rate may lead to systemic risks in the socio-economic field by affecting the age structure of the population. Challenges such as a reduced labor supply, deepening of the aging degree, the distortion of the savings and consumption structure and increased financial expenditure burdens emerge.

First, low fertility rates lead to insufficient supply of the labor force in the medium and long term, resulting in an economic downturn

Low fertility rates in the medium and long term will lead to a sharp drop in labor supply and even a disruption. From the perspective of economic development, once a stable supply of labor is unavailable, it will have an impact on the existing social-economic structure,

5 The generational replacement level is a variable rather than a constant. The generational replacement level is affected by many factors (such as infant mortality, child mortality, mortality during childbearing age, sex ratio, etc.), and is also highly related to the level of social development. Some scholars believe that the generational replacement level in developing countries is generally between 2.5 and 3.3 (Espenshade, T.J., Guzman, J.C. & Westoff, C.F., 2003). At present, the most cited generational replacement level is 2.1 in developed countries.: Espenshade, T., Guzman, J., & Westoff, C. (2003). The Surprising Global Variation in Replacement Fertility. Population Research and Policy Review, 22(5/6), 575-583.

even if the working-age population accounts for a relatively high proportion. Take France and Japan for example, although it has a lower proportion of the working-age population than Japan for a long time (Figure 3), has a relatively high and stable fertility rate, which ensures a stable supply of labor force and provides human resources for sustainable economic development. But the situation in Japan is different, since the 1990s, the proportion of working-age population aged 15-64 in Japan has dropped sharply, while issue of the declining birthrate and aging population has increased. Some scholars in economics believe that the rapid changes in the demographic structure have negative effects on the Japanese economy in multiple aspects. Therefore, the demographic changes caused by the low fertility rate are one of the important factors of Japan's economic downturn.

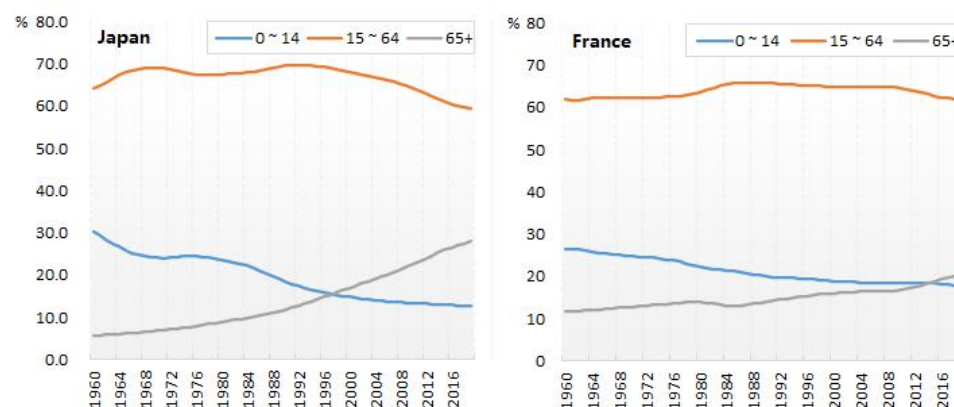


Figure 3: Comparison of age structure changing trends between Japan and France (1960–2019)
Source: World Bank Database (<https://data.worldbank.org.cn>)

Second, a low fertility rate accelerates the aging process, leading to challenges to the social security system

Low fertility rate and increased longevity lead to the rapid increase of the elderly population, together with the continuous decline in the proportion of the labor force, which brings great challenges to the social security system, especially to the old-age security system, and European countries are among the most affected. In 2018, the total expenditure on social protection benefits in the 27 EU member states accounted for 26.7% of GDP – the top three social protection benefits were pension, healthcare and child/family benefits, which accounted for 40.3%, 29.2% and 8.3%⁶ of the total expenditure respectively, while 70% of the expenditure on healthcare was used on the elderly population. The financial burden brought by the aging of the population can be seen. High social protection costs have not only aggravated the financial burden, but also slowed down economic growth, thus leading to many social problems.

3. Global Experiences in Tackling Falling Fertility Rates

Curbing the fertility rate decline has become the focus of many countries' population policies. The policy framework for encouraging childbirth in developed countries is

⁶ Based on data published by Eurostat.

generally complete, and the policy measures adopted are also very similar, including economic support policies (subsidies/tax relief), time policies (maternity/parental leave, flexible working schedule, etc.), childcare services and workplace rights protection (retaining jobs, providing training, etc.). However, due to differences in policy focus and support in various countries, the effects are different. In the 21st century, the total fertility rate of France, Sweden, Russia, Germany and other countries has rebounded, while that of South Korea and Singapore has declined with a slower pace, but the fertility rate is very low (TFR<1.5), which has even fallen to around 1.0 (see Figure 4 for details).

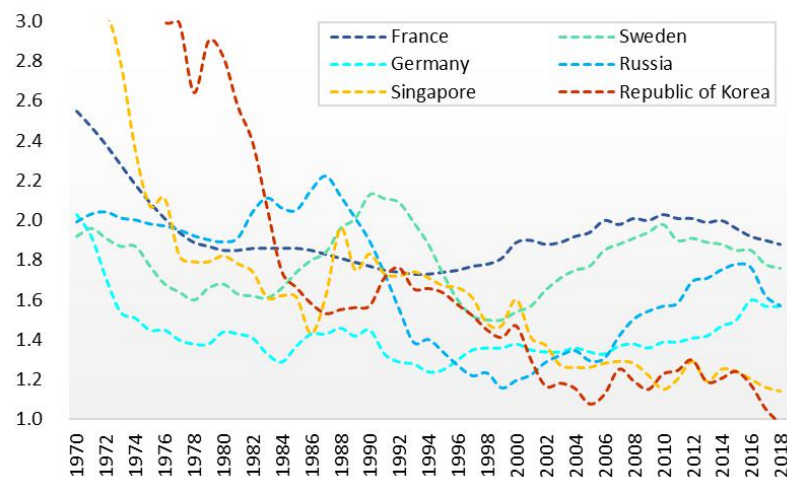


Figure 4: Trends of Total Fertility Rate in developed countries (1960-2018)

Source: World Bank (<https://data.worldbank.org.cn>)

France: a sustained and stable family policy is the key to keep a high fertility rate^{7/8}

The birth-friendly policy of France can be traced back to the Family Code, issued in 1939, which established the embryonic form of the family policy⁹, including child/family allowances. With the increase in the number of professional women, France gradually regarded a 'work-family' balance as an important policy goal after 1970. With policy support, France's total fertility rate has been maintained above 1.7, even approaching the replacement level of 2.1 between 2006 and 2014. In 2018, France's TFR was 1.88, ranking first in Europe. The French birth-friendly family policy mainly includes the following aspects:

- The maternity/parental leave. In France, mothers who have given births are entitled to at least 16 weeks of paid maternity leave, and fathers are entitled to 11 working days of paid paternity leave. Parents can share up to 3 years of unpaid parental leave, and

7 Magdalena Kacperska. The Importance of Family Policy for the Birth Rate and Activity Rate of Young European Females: An Analysis of France and Poland. Adam Mickiewicz University in Poznan.

8 The French Social Security System IV Family Benefits. 3 March 2021 accessed via the website of Centre des Liaisons Européennes et Internationales de Sécurité Sociale https://www.cleiss.fr/docs/regimes/regime_france/an_4.html

9 Kamerman S. B. (1994), Rodzina: problemy teorii i polityki, in: O polityce rodzinnej: definicje, zasady, praktyka, "Material z Zagranicy", IPISS, Warszawa. A generally accepted definition describes family policy as a set of legal regulations, activities and resources employed by the state in order to provide adequate living conditions to families, and facilitate their establishment, proper functioning and the fulfilment of all significant social roles of families.

the parent who stays at home with the child is entitled to monthly care allowances of a certain amount.

- Allowance. France provides a generous allowance for children and families, including one-time allowance for mothers who have given birth, monthly family allowances, childcare allowances for children aged 0-6 years, and back-to-school allowances for children aged 6-18 years. In addition, the government will provide additional subsidies for families with several children, low-income families, single parents, disabled children, and their caregivers. French allowances almost cover the costs necessary for the family to give birth/rear children, and also provide working women with the possibility to purchase the necessary care services from the market.
- Tax relief. Childcare expenses and part of the tuition fees can be deducted from the tax base payable by parents; if a company runs a childcare institution for its employees, the cost can be deducted before tax. In France, the amount of family tax relief grows with the number of children.
- Childcare services. France offers an efficient childcare system that meets the various needs of parents, allowing mothers to have more choices based on their working hours and types. Children aged 0-3 whose parents both returned to work are mainly taken care of by kindergartens and registered carers, while practically 100% of children aged 3-6 are entitled to go to kindergartens free of charge.
- In addition, the French family policy is also committed to protecting the rights of children born out of wedlock and their parents, encouraging companies to provide employees with flexible work schedules and childcare services.

Generally, France's family policy to encourage childbearing is continuous and stable, ensuring that people can obtain adequate childbearing support at any stage of childbirth and raising children, and achieve a 'work-family' balance. This has strengthened the positive expectations and full confidence of the childbearing age population on childbearing and rearing, thereby keeping the fertility rate at a relatively high and stable level¹⁰.

Sweden: Fully guarantee women's employment and encourage men to share care responsibilities

The most important goal of Swedish family policy is to promote complete employment and gender equality. Encouraging childbirth and supporting childbearing are its embedded goals.

First, promoting women's employment. The Swedish government bears almost all the costs of childbirth/raising. Through the policy of 'allowing adults to work, while the state helps parents raise their children to the greatest extent'¹¹, it ensures that women can

¹⁰ France's baby boom secret: get women into work and ditch rigid family norms. 21 March 2015 accessed via Guardian

<https://www.theguardian.com/world/2015/mar/21/france-population-europe-fertility-rate>

¹¹ Ketola, Outi and Kare Thomsen, Hanne Warming Nielsen. From Poor Relief to Social Rights and Social Care Services' Clienthood[A]. in Sipilä, Jorma, (ed.). Social Care Services: The Key to the Scandinavian Welfare Model[C]. Aldershot: Ashgate, 1997.

freely choose between work and family. In 2018, the labor force participation rate of women aged 15-64 in Sweden was as high as 81.1%. At the same time, the total fertility rate remained at 1.76 (ranked second in EU), which is a model country of work-family balance.

Second, gender equality. Sweden took the lead in establishing a parental leave system for fathers in 1974, encouraging men to share care responsibilities and promote gender equality in childcare. New parents are entitled to 240 days of paid parental leave respectively, while the father/mother has 90 days reserved exclusively for him/her, which can't be transferred to the other.¹²

Germany: Empower women to relieve birth pressure, accept international immigrants to supplement the population of childbearing age

During 1991-2006, Germany's total fertility rate has been at a low point (<1.4), but it has shown an upward trend after 2006. It reached 1.57 in 2018, which is higher than the EU average. Two policies were key to the success:

First, a policy to ease the pressure of raising children for women. The 'Federal Parental Allowance and Parental Leave Act' issued in 2007 stipulates working hours restrictions, allowance, leave and dismissal prohibitions for pregnant and breastfeeding women, and provides comprehensive protection for pregnant and nursing staff and the newborn family. It aims to ease the concern of women over giving birth and promote fertility levels.

Second, increase the population of childbearing age via international immigrants. From 2007 to 2017, Germany accepted 4,657,700 immigrants, many of whom came from countries where populations favor larger families, such as Syria, Afghanistan and Iraq. Immigrants have made an important contribution to the increase of Germany's fertility rate.

Russia: Extra-long parental leave and high maternity allowance boost the rapid increase in fertility rate in a short time

Russia's total fertility rate rose sharply from 1.16 to 1.78 between 1999 and 2015, mainly due to its long parental leave and high family/child allowances¹³.

First, the parental leave was extended to 4.5 years in 2014 from 3 years in 1991¹⁴. The government social security fund pays an allowance to mothers during their maternity leave and parental leave, protecting women on leave from the employer's ability to pay salary and other unexpected factors and suffer losses. The extra-long parental leave has

¹² Ann-Zofie Duvander and Niklas Löfgren. Leave Policies and Research Country Report: Sweden[R]. https://www.leavenetwork.org/fileadmin/user_upload/k_leavenetwork/country_notes/2020/PMeditd.Sweden.with_suplement.1sept2020.pdf. 6 March 2021 accessed.

¹³ Why Germany's birth rate is rising and Italy's isn't.

<https://www.economist.com/europe/2019/06/29/why-germanys-birth-rate-is-rising-and-italys-isnt>. 29 June 2019 accessed The Economist.

¹⁴ The minimum full-pay maternity leave (single birth) is 140 days, including 70 days before delivery and 70 days after delivery. Half-paid maternity leave is one and a half years, which receives a subsidy equivalent to 40% of the original salary. This subsidy is paid by the National Social Insurance Fund, and the maternity leave is counted into the length of service. After taking half-paid maternity leave for one and a half years, if a mother wants to continue to take care of her child at home, she can continue to take unpaid maternity leave until the child reaches 3 years old, although the leave during this period will be unpaid, but the employer has to keep her job. 3 March 2021 accessed.

not led to a decline in the women labor force participation rate aged 15-64 , which has been stable, at over 68%, over the past ten years. This is high above the average level of EU countries.

Second, a complete maternity allowance system. Each child under 1.5 years old is entitled to a monthly subsidy of 3,000-6,000 rubles, according to the family's income level. Mothers of two or more children are entitled to a 450,000-ruble 'Mother's Fund' after the child reaches the age of 3, which will be used to repay housing loans, pay education expenses, make pension savings¹⁵, etc.

South Korea: Intensive policies effectively control a rapid decline in fertility

South Korea canceled family planning and implemented the 'New Population Policy' in 1996, but due to the concept of 'fewer births', the fertility rate has not significantly improved. Since 2005, the South Korean government began to implement policies to encourage childbirth, formulated the 'Basic Law on Low Fertility and Aging Society', and established the Presidential 'Low Fertility and Aging Society Committee', which contained the decline in fertility rates for some time.

Since 2005, the South Korean government has spent over 150 trillion won in an attempt to increase the birth rate, mainly for building free nurseries, providing public daycare services, economic subsidies for families with many children and parental leave allowances¹⁰. After 2010, the unemployment insurance system was supplemented and improved to protect the rights and interests of female employees. After 2016, the government expanded its focus to young people and newlyweds to help them solve issues relevant to employment, medical needs, loans and housing; it extended the age of children receiving subsidies from 14 to 18, and the monthly subsidy was also increased from 130,000 won to 170,000 won. In addition, in order to increase the fertility rate, the South Korean government finetuned its policies to respect all means of births and protect unmarried mothers from social discrimination.

According to the figures in Korea's fertility rate, since 2005 the trend of rapid decline in the total fertility rate has been reversed, and recorded increases in certain years. For instance, the TFR reached 1.25 and 1.30 in 2007 and 2012 respectively (Figure 5). At the same time, women's employment situation was improved, with the women's labor force participation rate aged 15-64 increasing from 54.7% in 2005 to 60.1% in 2019, and the proportion of women in the labor market also boosted.

In summary, South Korea's birth-friendly policy is quite effective. On one hand, it reversed the rapid decline in fertility rate and delayed the process of population reduction. On the other hand, it provided favorable social conditions for women's development and laid a good foundation for subsequent policies. However, South Korea's total fertility rate witnessed a significant decline after 2016, it reached 0.98 in 2018. The situation clearly

¹⁵ Avdeyeva, O. A. (2011). Policy experiment in Russia: cash-for-babies and fertility change. *Social Politics*(3), 361.

¹⁰ Charlotte Gifford. Baby boom or bust: why South Korea is desperately trying to boost its birth rate. <https://www.worldfinance.com/featured/baby-boom-or-bust-why-south-korea-is-desperately-trying-to-boost-its-birth-rate>, 2019-10-10/2021-3-4. 4 March 2021 accessed.

demonstrated that the implementation of population policy is a long term process, which needs to be continuously adjusted and improved, in order to raise the fertility rate to a stable level.

4. China's Low Fertility Rate Dilemma

China has entered a low-fertility society phase, with a below-replacement fertility rate and an increasingly aging population, although it remains a developing country – in the future, China will face many uncertain challenges related to the population's age structure. This chapter will analyze the history of China's population changes, the situation of low fertility rate and the cause of low fertility rate based on empirical data.

4.1. Chinese population's historical changes and status quo

In 2019, China's total population was 1.4 billion, 2.58 times that of 1949. However, the growth rate of the Chinese population has continued to slow down, and the annual growth rate has gradually decreased, lowering from more than 2% in the 1960s to 0.33% in 2019 (See Figure 5). China's population growth slowed in the early 1990s, and its total fertility rate also fell below 2.1 in 1992. Back then, politicians and academics were still focusing more on the huge population size and were less aware of how low fertility rates would quietly change China's demographic structure.

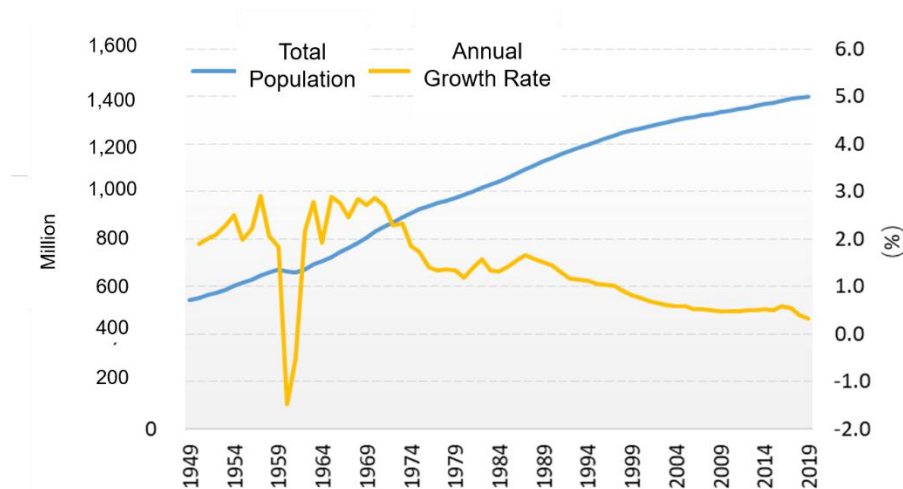


Figure 5: The total population in China and annual growth rate (1949—2019)

Data Source: National Bureau of Statistics of China

According to the age-gender pyramid of the Chinese population shown in Figure 6, as the life expectancy of the population increases, the pyramid moves towards the top and the proportion of the elderly population increases. In 2015, the bottom of the pyramid became smaller. If the fertility rate doesn't increase, the bottom will become smaller in size, resulting in an extremely unstable, spindle-shaped demographic structure; and even if the

Chinese population rises to the generational replacement level in the future, the total population will continue to shrink in the long term.

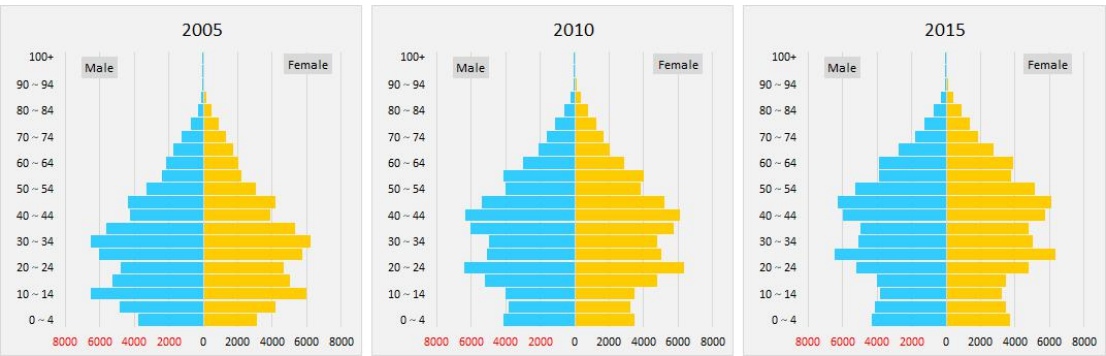


Figure 6: Changes in the Age-Gender Pyramid of the Chinese Population
Data Source: 2000 Census, 2010 Census, 2015 Sampling Survey

The change in the population’s age structure has led to a decrease in the proportion of the labor force aged 15 to 64 in China, along with an increase in the population they have to support. Figure 7 shows that the total dependency ratio increased by 7.4 percentage points from 2010 to 2019, of which 5.9 percentage points were contributed by aging.

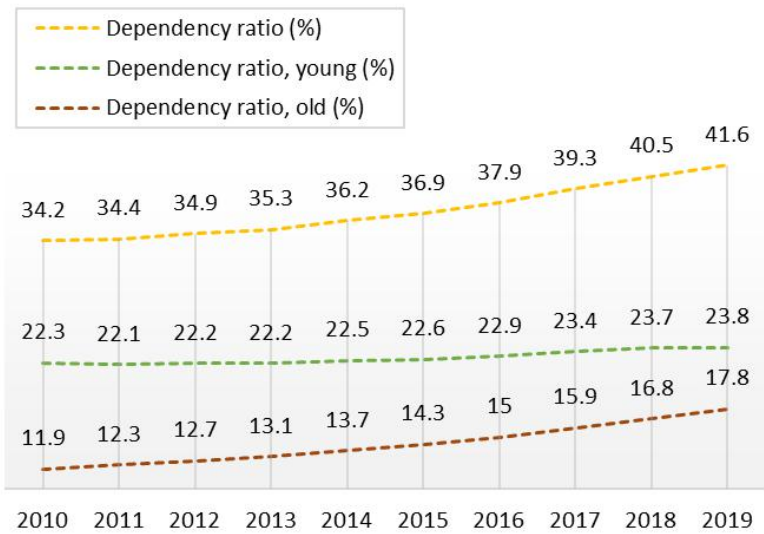


Figure 7: Changes in China’s Dependency Ratio (2010-2019)
Data Source: National Bureau of Statistics of China

4.2. Low fertility status and regional differences

China’s family planning policy has restrained the rapid growth of its population, effectively alleviated the population’s pressure on resources and the environment, and boosted China’s economic development – its positive implications can never be denied. As the historical mission of the family planning policy has been completed, China’s population challenge is shifting from controlling the size to adjusting the structure. According to National Bureau of Statistics of China, China’s new-born population showed a downward trend in the past 30 years. (See Figure 8). However, according to the data of China’s 1%

population sample survey in 2015¹⁷, the country's total fertility rate was estimated to be only 1.047, which is a very low fertility rate.

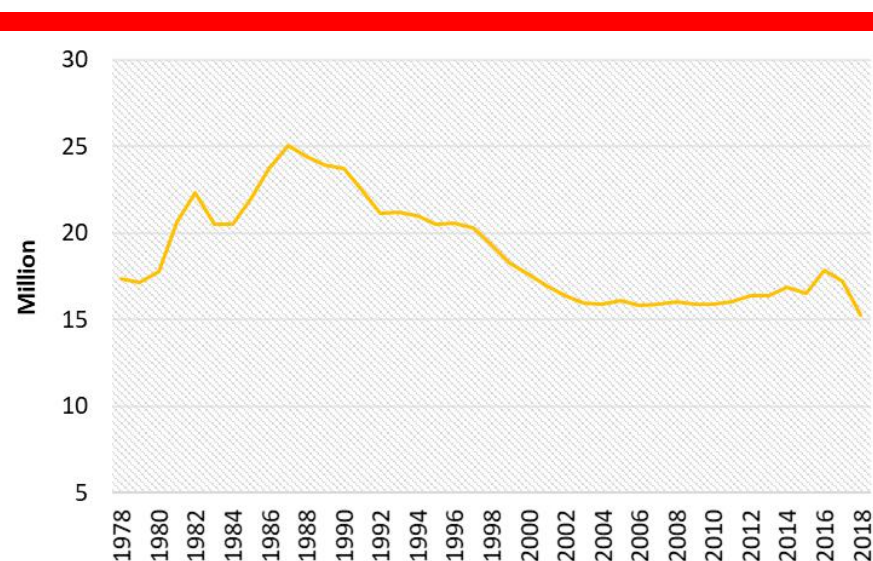


Figure 8: Changes in China's Annual New-Born Population and TFR (2010-2018)
Data Source: New-Born Population: National Bureau of Statistics of China

Since China boasts a vast territory, there are significant regional differences in population status and fertility situation. It is necessary to consider local differences and adapt measures to local conditions. The child dependency ratio and the old-age dependency ratio can indicate the degree of declining fertility rate and raising of population aging rates in various regions. Based on the 2018 data, we can divide Chinese mainland into four types of regions, as shown in Figure 9. Provincial-level administrative divisions in Section A are youth-majority areas, with a high proportion of children and a small proportion of the elderly, most of which are underdeveloped areas; those in Section B are demographic-dividend areas, with a low proportion of children and the elderly and a high proportion of labor force; those in Section C are demographic-potential areas, with a relatively high proportion of children and the elderly, meaning the current pressure on elderly care is greater, but the labor force can be replenished in the future; and those in Section D are severely troubled with below-replacement fertility and aging. Provincial-level administrative divisions in each section should consider local realities when formulating population policies.

¹⁷ The survey includes data from the Chinese mainland only, and none from Hong Kong, Macau and Taiwan.

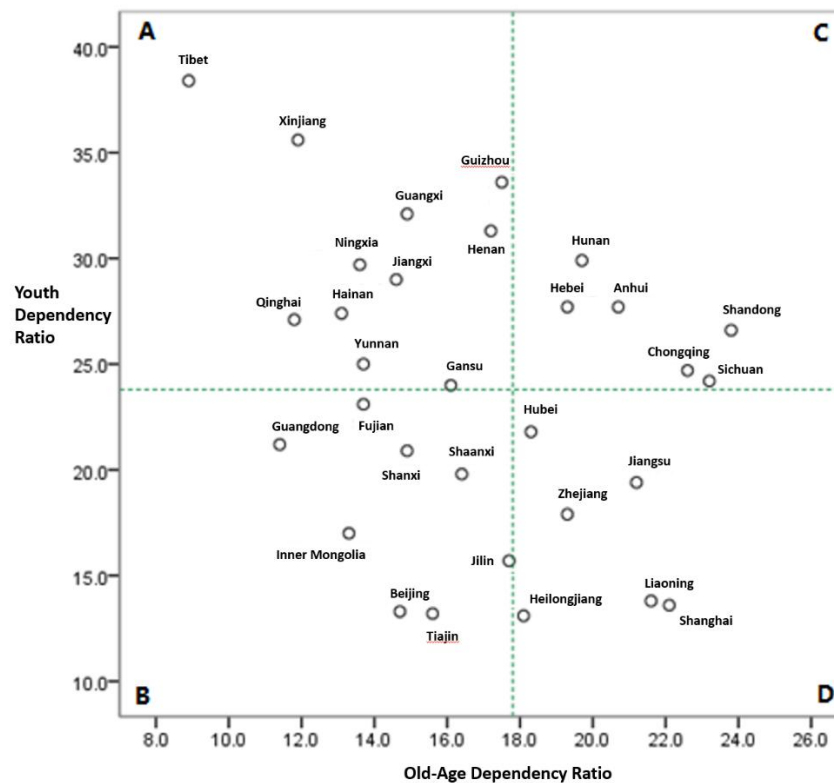


Figure 9: China's Provisional Situation of Below-Replacement Fertility and Population Aging - 2018
Data Source: National Bureau of Statistics of China

4.3. Main influencing factors of China's low fertility rate

The reasons behind China's low fertility rate are very complicated, but they mainly include the high costs of child-rearing, changes in marriage and childbirth, and evolving social norms and mentalities of marriage and childbirth.

First, the high costs for families to rear their children hinder their willingness to give birth.

The costs of raising children for Chinese families are relatively high. The first of such costs is the direct cost. According to estimates from the 2014 *China Family Panel Studies*, the direct cost for rearing a child from 0 to 17 years old was RMB 191,000 – the number for an urban child was RMB 273,200, while that for a rural child was RMB 143,400. And for lower-income families, the costs of child-rearing are higher. The second of such costs is the indirect cost. According to data from the *3rd China Survey on the Status of Women*, child-rearing will increase the time parents spend on housework and reduce their labor market gains. In the case of controlling other variables, for each new child born to a family, the mother faces an income penalty of 12.8%^{18/19}.

A survey in 2016 showed that, among women who were yet to have a second child, the proportion that did not want to have a second child was 58.7%; and among women who

¹⁸ Ma Chunhua. Chinese Families' Cost of Child-rearing and Its Policy Implications [J]. Collection of Women's Studies, 2018(05).

¹⁹ Calculation method: If the salary income of non-mothers (women without children) is set as A, and the salary income of mothers (women with children) is set as B, then mothers' income penalty = (A-B)/B.

were yet to have a child, the proportion that did not want a child was 20.5%. Reasons for their low childbirth willingness were mostly focused on the costs of childbirth – 56.8% of women said that "the cost of raising a child is too high", 53.6% cited "insufficient time and energy", and 41.9% chose the reason that they were "worried about having their job and career development affected."²⁰

Second, China’s situation of marriage and childbirth has changed.

How China’s situation of marriage and childbirth has impacted its fertility rate is mainly associated with the declining marriage rate and the delay in the first marriage and first childbirth. 1) The decline in the marriage rate has helped to reduce the number of births. Figure 10 shows that the marriage rate in China has been declining in recent years, and the divorce rate has continued to rise. From 1999 to 2013, the marriage rate showed an overall upward trend; but after 2013, the marriage rate began to decline. Despite the incentives of the universal second-child policy, the number of births decreased significantly after 2017. At the same time, China’s divorce rate continues to rise, weakening the attractiveness of marriage to young people, and further contributing to the decline in the marriage rate. 2) The delay in the age of first marriage and first childbirth has led to a slowdown in population growth. From 1990 to 2017, the average age of first marriage for women of childbearing age in China has been postponed from 21.4 to 25.7 years old, and is continuing to rise; and the average age of first childbirth has also increased from 23.4 to 26.8 years old²¹. Late marriage and late childbirth will increase the age gap between the two generations and slow down the population growth.

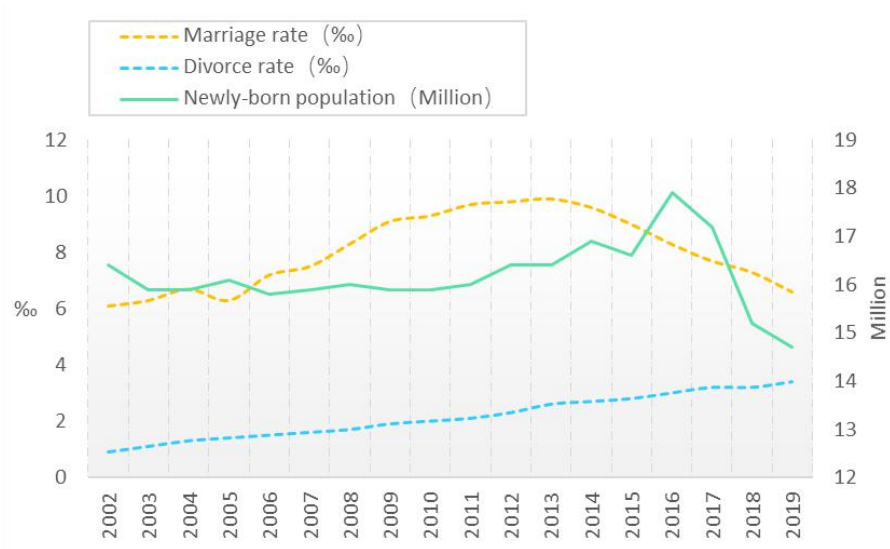


Figure 10: Changes in China’s Marriage Rate, Divorce Rate and New-Born Population

Data Source: New-Born Population: National Bureau of Statistics of China;
Marriage Rate & Divorce Rate: Social Development Statistical Bulletins by Ministry of Civil Affairs

Third, China’s social norms and mentalities of marriage and childbirth have been evolving.

²⁰ Data Source: 2016 Investigation Report on Living Conditions of Working Mums by Zhaopin.com
²¹ Data Source: Official website of National Bureau of Statistics of China http://www.stats.gov.cn/zjtjc/ztfx/ggkf40n/201809/t20180918_1623598.html

Changes in social norms and young people's mentalities around marriage and childbirth have led to insufficient motivation for marriage and childbirth. These changes are not difficult to identify: 1) The social norms of gender equality have made women's roles change. With women's rising status, they are increasingly pursuing independence and self-reliance, trying to realize their value in the labor market, rather than being confined to childbirth and housework. To reduce the loss of professional opportunities due to childbirth, they will choose not to marry, not to have children, or to control the number of births. 2) Changes in childbirth mentalities have made the decision less utilitarian. The traditional mentalities of 'family succession', 'more children for greater blessings', and 'raising children to ensure old-age support' are no longer recognized by young people. They choose to have children more out of emotional needs and to freely choose whether to have children and/or how many children to have.

5. Danone's Opinion and Suggestion: Building a Birth-Friendly Society in an All-Round Manner

In November 2020, the Chinese government issued the 'CPC Central Committee's Proposal on Formulating The 14th Five-Year Plan for National Economic and Social Development and The Long-term Goals for 2035'. The document points out the need to "Formulate a long-term development strategy on population, optimize fertility policies, increase the inclusiveness of fertility policies, raise the level of services for better natal and prenatal care, develop an inclusive child care services system; reduce the cost of childbirth, child care and education; promote balanced long-term demographic development, and raise the quality of the population. "

The Chinese government has raised the issue of coping with low fertility and aging to the level of national strategy, and all parties in society are obliged to contribute opinions and suggestions. Given the complexity of factors that influence fertility, it is necessary to carry out a top-level design based on a systematic analysis and strive to build a birth-friendly society, to effectively deal with the risks of low fertility rate. Therefore, Danone proposes the following recommendations for Chinese government to consider:

5.1. Review the fertility policy and make it more inclusive

More inclusive population policies can better serve social and economic development. The original intention of China's family planning policy was to relieve the pressure on society, environment and resources incurred by excessive population growth. With China's falling birth rate, the social basis of birth restrictions no longer exists. Over the past almost 10 years, the Chinese government has successively implemented the 'second-child policy for parents both being a single child', 'second-child policy for either parent being a single child' and the 'universal second-child policy'. At present, the country should take a further step –completely abolish all the fertility restrictions and make it more inclusive.

A more inclusive approach does not mean the end of China's population policy. On the contrary, it will provide an opportunity for the country to build a more inclusive population

policy system. Confronted with the dilemma of the low fertility rate, the momentum of fertility level will largely determine China's future population size and structure. Therefore, the government should continue to take fertility policy as the core component of China's population policy and move from a 'birth-restrictive' to a 'birth-friendly' orientation. At the same time, it is necessary to not over-implement such a 'birth-friendly' policy, and fully respect people's rights of choices and equalities in fertility.

Instead, the country should fully respect its citizens' rights of building inclusive population policies in China needs to pay attention to the temporal dimension of the family life cycle²² and the spatial dimension of adult social activities. In terms of temporal dimension, social protection policies should cover a family's whole life cycle, including housing benefits in the family formation period, child/parent benefits in the family expansion and stabilization period, employment benefits for grown-up children in the family downsizing period, elderly medical benefits in the live-alone elderly period, etc. In terms of the spatial dimension of social activities, benefits policies should not only protect individual rights and interests in family living space and workspace but also provide support to avoid the 'work-family' conflict.

5.2. Improving Fertility Support Policies to Build a Birth-Friendly Institutional Environment

First, having the state share parenting costs and relieve the economic pressure of child-rearing families.

China should establish a sound welfare allowance and tax reduction system to share families' parenting costs. Relevant policies should be carried out gradually, before eventually covering all families' direct costs of birth-giving and child-rearing, to reduce the pressure of child-rearing families. Cost-sharing mechanisms can include: 1) Cash allowances, which can include child allowance, mother allowance, caregiver allowance, family allowance, etc. Cash allowances should be able to meet the needs of children at different growth stages and be inclined towards families with more children and vulnerable families. 2) Tax reductions. The expenses paid for childbearing, childcare services, and education and training can be deducted from the tax base of parents, and a tiered tax reduction system can be established according to the number of children, family income, regional development level and other factors; families with more children and vulnerable families can enjoy tax relief when they purchase a first home or home of improved housing conditions; enterprises can access tax rebate when they set up nurseries for the children of their employees.

Second, formulating work-family balance policies and respecting the dual roles of individuals as both 'employee' and 'parent'.

Developed countries generally take 'work-family' balance as an important goal to build a policy system to encourage fertility. With the economic globalization, rapid technological

²² Paul Glick divided the family life cycle into six classic stages. 1) formation stage: from the beginning of the marriage of two young people to the birth of the first child; (2) development stage: from the birth of the first child to the birth of the last child; (3) stability stage: from the birth of the last child to when the first child leaves the parents; (4) contraction stage: from when the first child leaves the parents to when the last child leaves the parents; (5) empty nest stage: from when the last child leaves the parents to the death of one of the spouses; (6) disintegration stage: when both spouses are dead. The author declares: This classification does not cover family forms such as DINK and divorce, but we respect any family form that the law permits.

progress and increasingly fierce competition in the labor market, it is more and more difficult for people who play the dual roles of ‘employee’ and ‘parent’ to find a work-life balance, which troubles parents who take care of their children. They will need institutional support to alleviate the ‘work-family’ conflict.

The main focuses of ‘work-family’ policies should include but are not limited to 1) Setting up maternity/parental leaves to protect parents’ fertility rights and infants’ rights of being taken care of; 2) Allowing parents to cut working hours or adopt a flexible working system; 3) Allowing parents to work remotely or provide more flexible workplace arrangements; 4) Implementing social support measures at workplaces, such as breastfeeding room, office-building embedded nurseries and so on; (5) and implementing educational counseling to improve parents’ ability to deal with the ‘work-family’ conflict.

Third, building a full-coverage nursery institution to provide parents with alternative public care resources

According to Figure 11, the labor force participation rate of Chinese women aged 15-64 has been declining since 1990, with the decline happening faster than the world average. However, the labor force participation rate of women in several developed countries mentioned earlier in the report has been rising otherwise. Moreover, the proportion of Chinese women in the labor force has dropped from 45.2% in 1990 to 43.6% in 2019, which indicates Chinese women’s falling socio-economic status to some extent. There are many reasons for such a situation, with the lack of alternative childcare resources being an unneglectable factor. Since China's economic transformation in the 1980s, a large number of kindergartens/nurseries run by urban business units and rural communes have disappeared, which forces the focus of childcare responsibility to go down to individual families, and more women are forced to return to the family to take care of their children²³.

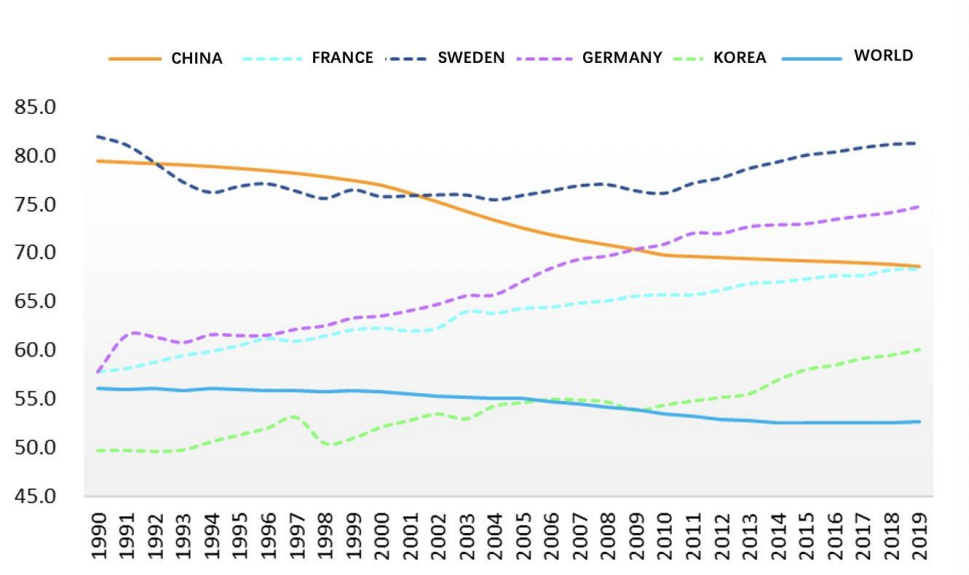


Figure 11: Changes in labor force participation rate of women aged 15-64 in the world and some countries (1990-2019)
Source: World Bank Database (<https://data.worldbank.org.cn>)

23 Hu Zhan, Peng Xizhe. China's Family Policy in the Context of Family Changes [J]. Population Research, 2012(2).

Even now, China's preschool nursery/education resources are still in short supply. There are few social institutions in China that can provide infant care services. Infant aged 0-3 are mainly taken care of by their mothers or grandparents. In 2019, the nursery enrollment rate of children aged 0 to 3 years old was only 4.3%²⁴, while the kindergarten enrollment rate of children aged 3 to 6 years old was 83.4%²⁵, still unable to fully meet the needs of all Chinese families. From the perspective of fertility policy, China should continue to increase the supply of nurseries, kindergartens and multiple pre-school childcare institutions, such as family childcare and mutual childcare to provide parents with diversified alternative childcare resources and provide women with employment support.

When the Chinese government increases the supply of preschool institutions, two points deserve special attention. First of all, the regional imbalance of China's pre-school education resources is very serious²⁶. Therefore, in the process of planning pre-school education resources and allocating financial expenditures, such regional differences should be taken into full consideration, with policies tilting towards underdeveloped regions. Second, the planning and building of nurseries and kindergartens should be pegged with the local population's age structure and fertility level to meet the potential needs of pre-school population growth of the infant population after the birth policy changes.

Fourth, providing institutional guarantees of workplace security for women of childbearing age, and reducing the 'motherhood penalty'

One of the most important reasons why a considerable proportion of women in China 'don't have children, have children at a late age, or have fewer children' is that they are worried that having babies will affect their career development. This worry also happens to be rooted in truth. Studies have shown that, after giving birth, women will often encounter the so-called 'motherhood penalty'²⁷ such as employment difficulties, reduced promotion opportunities, slashed wages, and loss of work experiences in their subsequent career development. Take salary income as an example. For every child in China, the mother faces an income penalty of at least 7%^{1128/29}, while some scholars put the figure at 12.8%³⁰. No matter what the real situation is, providing mothers with guarantees of workplace security is an inevitable choice to safeguard women's rights and build a birth-friendly society.

Concrete measures include: 1) Offering wage subsidies during maternity/parental leave. For example, Russia has 140 days of full-paid maternity leave and 1.5 years of half-paid parental leave. 2) Counting maternity leave into 'length of service' to avoid reduction of

24 2019-2020 White Paper on Development of China's Childcare Industry by iiMedia.cn

25 2019 National Educational Development Statistical Bulletin by the Ministry of Education of China

26 Huo Liting, Wang Guixin. A Study on the Changes in the Spatial Equilibrium of Chinese Preschool Education Resources — Also on the Implementation Effects of Two Rounds of "Three-year Action Plan for Preschool Education" [J]. Modern Education Management, 2019(10):14-20.

27 Domestic researchers have many translations of the term 'motherhood penalty', such as 'motherhood penalty', 'birth cost', 'motherhood penalty', 'motherhood penalty' and so on. In foreign literature, 'motherhood penalty' is used to describe the negative effects of job hunting, job evaluation, salary, and promotion opportunities that employed women suffer because of the role of mother. The author believes that it is more accurate to use the term "mother's job" to express "mother's role", so this article adopts the term "mother's job punishment".

28 Yu Jia, Xie Yu. The Impact of Childbirth on Women's Wage Rates in China [J]. Population Research, 2014(1).

29 Calculation method: If the salary income of non-mothers (women without children) is set as A, and the salary income of mothers (women with children) is set as B, then mothers' income penalty = (A-B)/B.

30 Ma Chunhua. Chinese Families' Cost of Child-rearing and Its Policy Implications [J]. Collection of Women's Studies, 2018(05)

women's pensions; 3) Having employers reserve jobs for child-bearing women, except under special conditions; 4) Having employers meet specific conditions allowing women returning from maternity leave to make flexible work arrangements, such as flexible working hours or remote working.

5.3. Emphasizing guidance of public opinions and advocating modern mentalities of marriage and childbirth.

Building a birth-friendly society must take 'changing people's mindset' as the priority. It is necessary to guide and correct misconceptions through public opinions.

First, advocating changes in marriage customs to denounce the abnormal marriage concept that 'prioritizes financial requirements but neglects spiritual needs.'

There is now a widespread abnormal marriage concept in Chinese society that "prioritizes financial requirements but neglects spiritual needs". A series of high spending items such as housing, car, wedding expenses have become important factors when considering marriage, which has undoubtedly lengthened the time for young people to choose their partners, thereby postponing the age of marriage and childbirth. It is recommended that the government and all sectors of society should work together to guide public opinions to gradually change the abnormal marriage concept, so that marriage and family can return to their original roles in the society and take on more emotional functions.

Second, changing the childbirth mentality of 'preferring boys over girls', and say no to 'missing women'³¹

The restriction on the number of children in China's family planning policy cannot satisfy some population group's 'preference of boys over girls.' Therefore, there are more or less social phenomena such as gender-selective abortion and abandonment of female infants, leading to the so-called situation of 'missing women.' According to Figure 12, China's sex ratio at birth in the 1960s and 1970s was around 107, which was within the normal range³² (The UN sets the normal range of the sex ratio at birth at 103-107). However, the ratio began to rise rapidly in the 1980s, and although it began to slowly decline after 2008, it still deviates from the normal range. This has led to a decrease in the number of future mothers, as well as challenges for males to get married. Therefore, through the guidance of public opinions and the provision of equal childcare benefits, China should change the traditional mentality of 'preferring boys over girls', and further advocate the modern mentality that 'boys and girls are equal' so that it can be deeply rooted in the minds of the Chinese people.

³¹ Missing women was a term first proposed by Nobel laureate in economics, Amartya Sen, in the 1990s. It was used to refer to the female population who failed to be born to this world due to human intervention or died earlier because of gender preference. According to Amartya Sen's estimates, there are more than 100 million women in the world who have disappeared due to gender selection. Among them, China and India are the hardest hit areas. These women could have become future mothers.

³² The UN sets the normal range of the sex ratio at birth at 103-107.

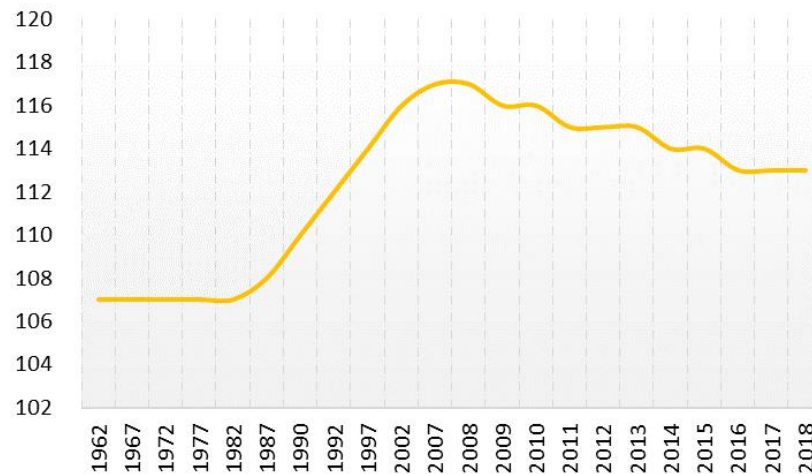


Figure 12: Changes in China's sex ratio at birth (Female=100)

Data Source: China Population & Employment Statistics Yearbook

Third, creating a social atmosphere of gender equality and improve women's socio-economic status

The journey of promoting gender equality in China still needs to be advanced. First, there is an unequal division of housework in Chinese families. Data from China Family Panel Studies show that the average daily housework hours of mothers and fathers in families with children aged 0 to 6 were 2.71 hours and 1.36 hours respectively, with the former almost doubling that of the latter. Second, there are also significant gender differences in the labor market. In 2018, males accounted for 56.3% of the labor force in China, while females accounted for only 43.7%³³, and the average female salary was only 84%³⁴ of that of males. Therefore, in the future, on one hand, men should be encouraged to share housework and childcare duties; and on the other, measures should be taken to achieve equal pay for women and men for the same job in the labor market.

Changing the abovementioned mentalities requires the joint efforts of the whole society. It is necessary to not only provide support at the policy level but also to guide public opinions, replacing unreasonable traditional mentalities with modern ones when it comes to marriage and childbirth. China should let the family play its due emotional function and child-raising function, so that young parents (especially mothers) are no longer troubled by the 'work-family' conflict, and strengthen young people's confidence in starting a family and raising children.

5.4. Encouraging enterprises to assume social responsibilities and forming a birth-friendly labor market

In reference to the experience of developed countries, it is no longer sufficient to effectively stimulate an increase in fertility rate by only relying on government subsidies and the provision of childcare services. That's because the formation of a birth-friendly

³³ Data Source: World Bank Database

³⁴ Data Source: 2018 Insights to Gender Pay Gap in China by Career Science Lab

and family-friendly labor market can also have positive impacts on a population's fertility level.

Enterprises should respect the role of employees as family members and create a family-friendly corporate culture. They can set flexible working hours for employees; oppose a corporate culture of workaholic nature; say no to long working hours and overtime; drive the career promotion of female employees; and encourage fathers to use fully paid parental leave, etc. In addition, qualified enterprises should also provide employees with childcare services, arrange parent-child activities etc. Helping employees achieve work-life balance will also bring 'corporate benefits', such as higher productivity, lower employee turnover rate, lower absenteeism rate and so on.

As a French company, Danone has made efforts to build a family-friendly corporate culture. In 2017, Danone released the Danone Global Parental Policy, which applies to long-term employees around the world. It aims to help parents of newborn babies perform their parental duties and support them in successfully returning to the workplace after their babies are born. The policy mainly involves three aspects: 1) advocating gender equality and preventing discrimination; 2) providing benefits like up to 18 weeks of paid maternity leave and unpaid leave; 3) offering a number of support and protection measures during pre-natal, mid-natal, post-natal and return-to-job stages, such as nutrition advice, protection of working conditions, flexible working hours, workplace breastfeeding support, and support in postpartum work resumption. These 'parent-friendly' measures are generally welcomed by employees and may provide some references to Chinese companies.

Ending

In the face of emerging low fertility risks, the Chinese government has proposed solutions such as 'enhancing the inclusiveness of birth policies', 'promoting the integration of birth policies and related economic and social policies', and 'strengthening research on population development strategies. It shows the Chinese government's accurate judgment on population issues and reflects its concept of systematic governance. The relaxation of China's population policies has created the conditions for building a birth-friendly society. Danone believes that the goal of building a birth-friendly society should be to adopt measures such as institutional guarantees, resource provisions, extensive mobilization and changing societal mindsets to form a 'state-society-family' institutional framework for joint child-rearing, to build a 'diversified, fully-covered' childcare resource supply system, to create a 'government-community-enterprise' coordinated birth/care social support system, and to foster a 'family-friendly and birth-friendly' environment of social values and public opinions. We believe that by respecting the laws of population development and taking precautions, China will be able to successfully cope with the risks of low fertility and achieve sustainable economic and social development.