

# Ageing and Declining Birthrates: Economic Impact and Coping Strategies<sup>1</sup>

Date: September 7, 2024

Moderator: **Du Yang**, Director, Institute of Population and Labor Economics, Chinese Academy of Social Sciences Panelists:

**Cai Fang**, Chairman of the Academic Committee, China Finance 40 Forum; Chief Expert of National Think Tank, Chinese Academy of Social Sciences

**Masaaki Shirakawa**, Distinguished Professor, Aoyama Gakuin University; Former Governor, Bank of Japan **Albert Francis Park**, Chief Economist, Asian Development Bank

#### I. Building on the Existing Population Structure to Achieve Chinese-Style Modernization

**Du Yang:** Mr. Cai Fang, your book The Era of Negative Population Growth: Challenges and Opportunities for China's Economic Growth, published last year, has drawn a great deal of interest. The book systematically explains the economic impacts of the peaking of China's total population and the related policy issues. From the development over the past year or two, whether from a long-term or short-term perspective, we've noticed an increasingly close and direct connection between the economy and population. Could you elaborate on this view?

Cai Fang: The book was written in 2022. It mainly discusses the deepening aging process when the population enters negative growth and its impact on China's economic and social development, and provides corresponding policy recommendations. Data disclosed in 2023 show that negative population growth is indeed happening. The central government has also made new decisions and outlined new strategies to understand, adapt to, and lead this new normal of population development. In particular, it has proposed to support Chinese-style modernization through high-quality population development. As I

First, the current population situation is the result of long-term development. Many believe that without a reversal in population trends, China's development will suffer. However, it's infeasible to wait for this reversal to push forward with Chinese-style modernization. Therefore, we should improve development quality and support Chinese-style modernization based on the existing population structure and landscape.

In general, we can observe that in the years leading up to 2035, the target year for largely achieving modernization, or the year when China's per capita GDP reaches the level of a moderately developed country, population aging will continue to deepen, and the absolute size of the elderly population will keep expanding. Although China's population as a share of the world is decreasing yearly, the proportion of its elderly population will remain around one-quarter of the global total, reaching 440 million by 2040, a very large number. To be more specific, in 2023, the population aged 65 and above accounted for 15.4% of the total population, surpassing the "moderate aging" threshold, and is moving towards an "advanced aging" level where the elderly will account for more than 21%. It's expected that around 2032, China will cross the second threshold. At the same time, we are facing the challenge of low birth rates, with the most typical manifestation being an extremely low fertility rate.

discuss last year's book, I'll combine it with the current situation and policy progress for a new interpretation.

<sup>1</sup> The transcript was edited by CF40 Secretariat. Remarks by Du Yang and Cai Fang were reviewed by the speakers .



According to the seventh national census, China's total fertility rate in 2020 was 1.3, and it has been declining rapidly. Based on World Bank data, in 2023, China's total fertility rate dropped to just 1, far below Japan's, and is nearing South Korea's, the country with the lowest fertility rate.

Therefore, we face a national condition and challenge that the process of achieving modernization will inevitably be accompanied by aging, and China will continue to exhibit the characteristic of "getting old before getting rich."

Second, "getting old before getting rich" is both an additional challenge and an additional opportunity, which means the latecomer advantage can be utilized. From now to 2035, China is transitioning from a moderately aging society to a highly aging one. We can compare China with other countries at similar stages of development. According to World Bank data, there are 51 countries and regions where the population aged 65 and above accounts for between 14% and 24%. Generally speaking, these countries and regions did not experience high average GDP growth during their corresponding development stages, and many even had negative growth. However, according to our own estimates, when China is in this stage, its potential growth rate is much higher than these countries, suggesting that China has a solid material foundation to support modernization and high-quality population development.

On one hand, the most urgent demand right now comes from the retirement and elderly care industries. Deepening aging and a growing elderly population will generate needs, demanding the development of the silver economy while creating opportunities. On the other hand, there's an urgent need to provide more basic public services to support high-quality population development, and to shift more of the costs of childbirth, child-rearing, and education from private expenditure to public goods provision, thereby significantly reducing the burden of childbirth and boosting the fertility rate.

# II. The Challenges Posed by Negative Population Growth to Economic Development and Coping Strategies

**Du Yang:** Professor Shirakawa, you are one of the few macroeconomists who emphasize the importance of population issues in macroeconomic policy. We've heard a lot about the need to consider population issues in policymaking, but in practice, we rarely see examples of this. In your opinion, where do the difficulties lie?

Masaaki Shirakawa: Changes in population structure, represented by population decline caused by aging and declining birth rates, greatly influence longterm economic trends. Of course, conceptually, we all understand this. But what I want to highlight is that we have not fully recognized its significance in economic policy debates. A good example is the discussion around why Japan has low growth. Many economists, especially American ones, believe deflation to be the main cause, and therefore, they advocate for aggressive monetary easing. However, deflation is actually unrelated to low growth. It was only after Japan's large-scale monetary expansion failed to produce the expected results that many began to realize that Japan's low growth was more due to structural factors such as population changes.

Understanding the impact of aging and low birth rates is crucial, not only in itself but also in avoiding overly expansionary macroeconomic policies. In fact, part of the reason for recent global inflation is overly expansionary monetary and fiscal policies, driven by an excessive fear of deflation—a misinterpretation of Japan's experience. Population structure changes are also vital for China, as China seems to be following Japan's path from about 15 years ago.

I want to emphasize two points. First, we must conceptually distinguish between "aging" and "negative population growth." Recently, we've been discussing population structure changes more frequently, but the focus has been mainly on aging, while the seriousness of negative population growth has been severely



underestimated. Needless to say, as birth rates drop and population shrinks, aging will naturally worsen. Population aging refers to the increasing proportion of older persons compared to younger persons, especially as the baby boomer generation enters old age. Negative population growth, however, involves broader issues concerning economic and societal contraction. In such an environment, businesses and households act on the understanding that the population or domestic market will continue to shrink. Since pensions rely on successive generations of workers and the labor force is shrinking, the elderly feel insecure, causing social disruption.

Second, it's essential to distinguish the nature of negative population growth. Historically, there have been many cases of population decline. Many were caused by external shocks such as wars, famines, pandemics, or natural disasters. The negative population growth we are seeing now is entirely different. It is endogenous, reflecting decisions by individuals not to marry or by couples to have fewer children.

Now, moving onto the impact of negative population growth on economic growth. The best way to explain this might be to compare the economic growth rates of G7 countries. From 2000 to 2015, Japan had the lowest GDP growth rate among G7, but its per capita GDP growth rate for the working-age population was the highest. This shows how significant the impact of population decline can be.

Economic size is an important determinant of a country's political and military influence on the global stage, but in terms of individual living standards, what matters is not GDP but per capita GDP. Logically, if productivity improves, per capita GDP can increase even if overall GDP growth declines. Productivity is crucial, a standard argument among economists. In economic models, productivity growth is independent of population growth, but is this argument valid based on Japan's experience? I'm skeptical. At the very least, several mechanisms suggest that population decline can negatively impact productivity growth.

First, population aging influences productivity growth through voter preferences. The political consequence of aging is reduced government spending on basic research and education and increased spending on social welfare programs, which often slows productivity growth.

Second, aging affects society's acceptance of new technology. Overall economic productivity growth largely depends on society's ability to adopt new technology. Although new technologies can improve productivity, older people generally adapt more slowly to technological changes.

Third, population decline often delays necessary resource allocation across regions, which slows productivity growth across the economy. In shrinking cities, once the population falls below a certain level, the cost of maintaining the same level of public infrastructure—such as roads, hospitals, and schools—becomes high, and this also applies to various types of private sector services.

Fourth, the size of the local market is a key factor affecting productivity, especially in service industries, where economies of scale play a significant role.

We often hear that artificial intelligence (AI) and robots will solve these problems in an economy with a shrinking population, but I'm not entirely convinced. First, productivity in the overall economy is not just about technology; it also involves the ability to efficiently allocate societal resources. We must recognize the aforementioned complex political and social dynamics that lead to slowing productivity growth. Second, we cannot expect continuous capital deepening. According to economic principles, the use of AI and robots is equivalent to capital investment, which is necessary, but as investment increases, the return on investment diminishes as per the law of diminishing marginal returns. In other words, the resultant productivity gains will weaken. Additionally, in a society with a continuously declining population, who will provide the capital? Thus, I believe AI and robots can help alleviate the impact of negative



population growth but cannot completely solve the problem. We still need to work on increasing the labor force to prevent a decline in both the fertility rate and productivity.

The most direct way to increase the labor force is to raise labor force participation. For example, Japan's labor force participation rate among the elderly is already the highest among developed economies, meaning there is little room for further increases. On the gender side, it's well known that Japan's female labor force participation rate has historically been low, but it has increased significantly over the past decade. Japan's female labor force participation rate is now higher than that of the U.S., though still lower than in Nordic countries. The issue with female labor force participation in Japan is that there are fewer women in management positions.

Accepting more foreign workers or immigrants is a second way to increase the labor force. Currently, the proportion of foreign-born residents in Japan's total population is still very low, only 2%. However, if we look at the number of incoming workers, the situation in OECD countries is changing rapidly. Before the pandemic, Japan was already the fourth-largest recipient of foreign labor annually. Now, the actual increase in foreign workers is equivalent to one-fifth of the number of newborns in Japan. If this trend continues, the proportion of foreign workers could rise to 10.8% of the population by 2070.

The third way to increase the labor force is to raise the birth rate. Japan needs to increase both the number of marriages and the fertility rate among married couples. Unfortunately, we don't know exactly how to effectively increase fertility rates among couples, but societal efforts to create a favorable environment for young couples to raise children are still crucial.

In recent years, the Japanese government has provided various economic incentives for couples, such as subsidies for kindergarten and school fees. However, we must recognize that a large part of the cost of raising children is the income mothers lose by halting

their careers. Traditionally, wives have taken on most of the housework and childcare. In this regard, changing the social norms surrounding child-rearing is critical. Internationally, it's worth noting that birth rates are positively correlated with how much men are involved in housework and childcare. Coincidentally, both Japan and South Korea have very low birth rates and very low rates of male participation in housework and childcare.

Aging and declining birth rates present a huge challenge. Of course, the situation is very different in African countries, but this issue is particularly important in East Asia, which is now the center of global economic growth.

If low birth rates, as a result of individual decisions, have any external effects, there's ample reason to believe that some form of societal effort is justified. The logic here is similar to work in ESG or climate change. Of course, if no externalities are involved, there's no reason for societal effort. In any case, we must take these issues more seriously in our discussions.

## III. The Government Should Increase Investments to Ensure the Well-being of the Elderly Population

**Du Yang:** Thank you. Professor Park, we have noticed that the demographic transition is accelerating globally. Some Asian countries, such as Thailand and Malaysia, are already experiencing some aging trends. I know that you recently led the writing of a report on aging in Asia, which covers the aging issues in many countries. Could you give us a brief introduction?

Albert Park: Earlier this year, the research department of the Asian Development Bank, which I lead, released an Asian Development Policy Report titled "Aging Well in Asia." First, I would like to share some key insights from the report and try to relate them to the challenges China is facing.

The first message is that Asia is aging rapidly, but it is not yet prepared. One of the main goals of the report is to try to create a greater sense of urgency among governments so that they truly begin to consider and



address these issues as early as possible. According to our definition, Asia includes over 40 countries from South Asia to the Pacific. In this region, the proportion of people aged 60 and above will double by 2050, reaching 25% of the total population, or 1.2 billion people. By 2030, China's population aged 60 and above will reach 25% of its total population, which is imminent, as it has already exceeded 20%. As Du Yang mentioned, different countries in Asia are at different stages of demographic transition, but one thing seems to be in common: regardless of the stage these countries are in, they are experiencing an aging process faster than in established developed countries, which brings many challenges. Many countries are aging before they become rich.

The second message the report conveys, which is its focus, is how governments can ensure the well-being of their elderly populations. We focus on four different dimensions of well-being, health, productive work, economic security, family and social engagement, or mental health.

Although our framework is not really related to GDP growth, I believe that if governments can better consider the well-being of the elderly, it will undoubtedly help improve their quality of life, reduce health problems, and lessen the burden on healthcare systems, thereby saving governments from paying excessively high costs. Among these four dimensions, health is probably the most important, as it directly affects a person's productivity, mental health, and economic security.

To help everyone understand why we say the region is not prepared, we provide some descriptive statistics on the current state of the elderly in the report. We found that 57% of people aged 60 and above have been diagnosed with at least one non-communicable disease, 60% of the elderly do not have regular health checkups, and 40% do not have access to a pension. We know that the relative poverty rate among the elderly is higher than that of the general population. Additionally, 43% of elderly people with mobility issues does not have adequate access to long-term care...

Differences between men and women in these groups are particularly pronounced, with women being more vulnerable. There are also disparities between those working in informal sectors and those in formal sectors, as well as between urban and rural populations.

In this regard, I think China is a good example. In China, the rural population consists mainly of farmers who typically do not have employer-provided pension plans and tend to work until they are physically unable to continue. Although China has done well in expanding basic health insurance and pension coverage, the level of support remains relatively limited. In urban populations, many people enjoy very generous health insurance and pension plans. They retire early, even though they are still healthy enough to work. So, it's almost a mirror issue where we hope to see these people work longer and rural people work less.

What are the solutions? The report offers a range of suggestions in each of the aforementioned dimensions, but overall, I think the key is to adopt a life-cycle, population-wide approach. Supporting the elderly is not just about addressing their needs today but considering their entire life course, particularly health, which is actually determined by all the health investments and outcomes from birth.

#### IV. Interpreting the Population Policy Deployment in the Third Plenary Session Resolution

**Du Yang:** Professor Cai, we are all very concerned about the population-related policies adopted at the third plenary session of the 20th Communist Party of China Central Committee. My personal understanding is that the third plenary session has paid substantial attention to population issues, which is reflected in two aspects. First, the framework of population policy in the "Resolution" (Resolution of CPC Central Committee on Further Deepening Reform Comprehensively to Advance Chinese Modernization) is very comprehensive, covering many issues such as childbirth and child-rearing, and some specific policies are also suggested. Second, we



did a keyword search and found that "population" was mentioned 18 times in the "Resolution." Population factors were also considered in the formation of other policies, which is rarely seen in similar reports in the past. You have a good understanding of this, could you give us more insights?

Cai Fang: If you read the text of the "Resolution," you will find that population policy occupies a large part of the "ensuring and improving the people's wellbeing" section, with a series of meaningful deployments. Let's briefly go through the logic.

First, the 20th Central Committee's third plenary session proposed to "improve the population development strategy in response to population aging and the declining birth rate." The challenges faced by the population are twofold: low birth rate is caused by low fertility, and long-term low fertility will also lead to population aging. This clarifies two priorities, which will be the policy focal point of future endeavors to improve China's population development strategy. However, it's not just about the young and the elderly at either end of the population life cycle, but more about the spectrum, or rather, two ends and a line.

Second, the "Resolution" also proposes to institute a system for supporting population development that can "provide full life-cycle population services to all" from "young" to "old." The proposed policies cover childbirth, child-rearing, education, employment, healthcare, housing, and finally, ensuring that the elderly are cared for, have opportunities for productive activities, and enjoy their old age. This constitutes a basic public service system for the entire life cycle. If this key point can be achieved, it will form a policy system with compatible incentives, aligned goals, and appropriately designed support measures, which can improve people's behavior, particularly fertility behavior.

Third, for the first time in a central document, the concept of promoting the formation of a "childbirth-friendly society" was introduced, indicating that efforts will be made to create such an atmosphere in all aspects of society, encouraging and incentivizing

childbirth through both social opinions and material support. Historically, China implemented a strict family planning policy, using various measures to prohibit excessive births and reduce the fertility rate. In recent years, the family planning policy has been relaxed in response to changing circumstances, and couples are now allowed to have three children. The "Resolution" can be viewed as a formal declaration that China's population policy is now one that encourages fertility.

If we compare the features of the systems for supporting population development with the systems of basic public services, which focus on providing inclusive services, meeting essential needs, and providing a cushion for those most in need, since the latter also aims to provide life-cycle coverage for the whole population, it can be said that China's population policy and the policy endeavor to improve people's wellbeing are aligned in goals, highly overlapping in content, and complementary in measures. The policies and measures that encourage people to have children are also reflected in various aspects of basic public services, forming a supply system of public goods with Chinese characteristics.

The "Resolution" emphasizes the need for "improving the people's quality of life." At a higher stage of development, improving the quality of life no longer relies solely on the increase of private goods, such as relying only on the increase of personal and household income, but increasingly depends on the supply of public goods to collectively meet the needs for better life quality. This reflects the general law of expanding the scope of public goods. Since the policy plan for improving the population development strategy and the requirements for improving people's wellbeing are entirely consistent, the long-term improvement of the basic public service system should lead to the improvement in fertility levels.

Fourth, the level of security and service for the elderly must be improved so that the elderly are cared for, have opportunities for productive activities, and enjoy their old age. At the same time, the standard of living for the elderly must be improved, which will enhance



their capacity and willingness to consume. Compared with countries at the same stage of development, China still has a higher potential economic growth rate, which is a very important economic fundamental. However, the potential growth rate, which is a supplyside capability, can only be achieved when certain demand-side conditions are met. In the future, external demand will no longer be as strong as in the past, and investment demand will also weaken, leaving household consumption as the most sustainable and reliable source of demand. The policy systems that support the improvement of people's life and the population development will help increase consumption capacity and willingness, thereby helping China realize the potential growth rate and ensuring that China maintains a reasonable and desirable growth rate before becoming a moderately developed country by 2035.

### V. Increasing Investment in Human Capital and Public Services to Promote Employment among the Elderly Population

Du Yang: In the previous discussions, you all mentioned the need to encourage elderly employment. From what I understand, in Japan, the labor participation rate of the elderly is very high. However, our own survey shows that the rate in China is much lower than in Japan. Therefore, I would like to ask both guests the same question. What policies have driven Japan's high elderly labor participation rate? Since you both mentioned the importance of labor productivity growth in an aging society, perhaps relevant policies are crucial for economic growth and social stability.

Masaaki Shirakawa: As you mentioned, Japan's elderly labor participation rate is quite high, which can be attributed to three reasons.

First, a very simple fact: labor shortage itself can increase job opportunities. My generation is a good example of this. I am 74 years old and part of the "baby boomer" generation. Fifteen years ago, baby boomers were approaching 65 years old, and if they exited the

labor market, there would have been a severe labor shortage. At the same time, even as wages gradually increased, companies found it difficult to recruit employees from the labor market. Therefore, driven by rising wages, the elderly tend to delay retirement, which is a very important mechanism for increasing elderly labor participation.

Second is health. We often say that Japanese elderly people are very healthy, and Japan has the highest life expectancy in the world. This means that Japan's healthy lifespan is longer than in other countries. Even though 65-year-olds are classified as non-working-age population, they are still healthy, which allows them to work longer.

Third, the government has taken various measures to extend the retirement age. For example, 20 years ago, the retirement age in Japan was 60, then it was gradually raised to 65. Now, the Japanese government encourages companies to extend the retirement age from 65 to 70. Additionally, public pension reforms have also had an impact on delayed retirement.

In short, I can summarize the answer to your question into three reasons: labor shortage, healthy elderly people, and certain institutional reforms.

Albert Park: I think Japan is a great example of how many things can be done to extend the working life of the elderly. In fact, we have analyzed the health capacity to work of elderly workers in many countries. We found that in many different countries, about 70% to 80% of elderly people in their 60s are healthy enough to engage in productive work. If you look at how health affects the labor supply of younger people, and if you compare the health status of elderly people to younger people, this group is capable of working. But in reality, many of them have already retired and are no longer working.

We have estimated this untapped labor resource. For elderly people aged 60 to 64, the country with the most job opportunities is India, where their labor participation rate could increase by 23%. They just need



to allow more healthy people to work. For those aged 65 to 69, labor participation in Thailand could increase by 37%. They have many healthy people not working, and if these people worked, GDP could immediately increase. We estimate that for countries like India and South Korea, letting people over 60 work could increase GDP by 1.5%, while in China it could increase by less than 0.5%.

In our research, we also proposed some suggestions for extending the working age. One of them, which we just mentioned, is to raise the retirement age. In China, the retirement age for men is still 60, and for women, the maximum retirement age is 55, and those in manufacturing or labor-intensive jobs could retire even earlier. The Chinese government has announced its intention to raise the retirement age many times, but making political progress and actually implementing it seems difficult (Editor's note: China will start its delayed retirement reform from January 1, 2025<sup>2</sup>).

There are several ways to overcome the political hurdles of raising the retirement age. First, follow the UK's example and announce the increase years in advance. For instance, announce "In 10 years, we will raise the retirement age by 2 years, and in 15 years, we will raise it by 3 years." This could spark less opposition because it won't affect people currently working, but they will start changing their expectations, making delayed retirement easier to accept.

Second, we allow people to retire at the retirement age but implement some kind of economic incentive to encourage them to keep working. So, if they work a few more years, they might get better pension benefits. This doesn't mean telling people "You cannot retire," but instead incentivizing them to retire later.

Third, ensure that the pension system's design doesn't

encourage productive workers to stop working when they reach mandatory retirement age. We can allow more flexible work arrangements for people after they retire, such as part-time jobs or working from home using new technologies, which would be very meaningful for the elderly. Also, wage determination can be more flexible. Japan has such a mechanism, where employers can pay elderly workers based on their actual work and productivity, which avoids the perception that employers want to replace elderly workers with younger, more productive employees.

Fourth, consider investing in lifelong learning for the elderly. Singapore and France have very interesting programs where the government sets up funds for individuals to choose to take training courses or learn new skills throughout their lives, helping them stay up to date with new technologies and maintain productivity. Of course, delaying the retirement age is also important. In this way, employees, especially women who retire earlier, will feel that investing in themselves while they are still working is worthwhile, and they will continue to work for a longer period.

Finally, employers often don't realize that there are many investment opportunities that can truly enhance the productivity of elderly workers. Thus, it's essential to build workplaces with more ergonomic structures so that elderly people can improve productivity. Providing health maintenance and other types of support for elderly workers will help them maintain high productivity for longer.

**Du Yang:** Professor Cai, what is your view on the "silver economy"?

Cai Fang: Increasing labor participation across society, especially among the elderly, and improving the level of basic public services are not mutually exclusive. Instead, they complement and promote each other. Research and the experiences of other countries show that improving the level of basic public service security can promote employment in the following ways.

First, it encourages workers of any age to have the

<sup>2</sup> Starting from January 1, 2025, the statutory retirement age for male employees will be delayed by one month every four months, gradually extending to 63 years. For female employees whose original statutory retirement age was 55, the retirement age will be delayed by one month every four months, gradually extending to 58 years. For female employees whose original statutory retirement age was 50, the retirement age will be delayed by one month every two months, gradually extending to 55 years old.



confidence and patience to invest in human capital, receive training, improve their employment skills, and adapt to the labor market. This all requires the support of public employment services.

Second, public employment services are an essential part of the overall public service system. The judgment made at the third plenary session is that the primary employment contradiction is now a structural one. The core of addressing structural employment contradictions is solving the "matching" problem, whether it's matching the supply and demand of skills or matching workers with employers. These contradictions ultimately stem from low labor market efficiency, which often manifests as market failure, requiring government intervention to provide public employment services.

Third, if people are given more options, meaning more public services, the quality of employment will also improve. While the unemployment rate is currently relatively normal, we haven't yet achieved high-quality employment. Workers are facing structural employment difficulties, manifesting as "involution" and "lying flat." For young people, it often means accepting informal jobs, working in fields unrelated to their studies, and frequently changing jobs, reducing the utilization of human capital. For some older workers, it's reflected in the rapid decline of their labor participation rate, with many exiting the labor market before reaching the legal retirement age. This is related to low employment quality and other structural employment difficulties.

Albert Park: I agree with many of the excellent points, especially about how lifelong investment in human capital can truly improve the productivity of elderly workers and support the macroeconomic goal of boosting consumption. I would like to talk about the economic security issues related to supporting the welfare of the elderly in their later years. One challenge is that, in developing countries, including China, as I mentioned, many rural populations do not receive pension insurance from employers. Therefore, China has established a social pension insurance system, and many other countries need to do the same, although

there is sometimes controversy over this, as social pension programs not funded by employers require government payments.

Additionally, China has established a mixed financing system, where rural residents can qualify for pensions through voluntary contributions, but this includes a significant amount of government subsidies. China's goal is to cover the entire rural population, while countries with limited fiscal resources may need to provide these benefits more selectively based on available resources, but it is undoubtedly an effective way to support the poorest populations.

Studies on the impact of China's rural pension system have shown that it has greatly helped improve people's health and life satisfaction. These positive outcomes all come from the support provided through the rural pension program. Therefore, I believe that if China expands these benefits and tries to extend the same level of benefits to rural and urban populations, more positive results can be achieved.

Moreover, we've also found that encouraging people to prepare for their retirement means they need to have some planning abilities, financial knowledge, and awareness of their savings needs. Extensive research shows that financial literacy programs and school campaigns indeed help people save more.

People always say that the Chinese save too much, but when we analyze the data, we find that most rural people are not financially prepared for retirement, and they end up having to work longer, which reduces the quality of life in their later years. In China, urban residents are much better prepared, with 82% of urban residents financially ready for retirement, while only 44% of rural residents are prepared. Therefore, we also need to support people's retirement savings need by providing financial tools, among other things.

Masaaki Shirakawa: We have spent a lot of time discussing the issue of aging, and this discussion reminds me of how the debate on these issues evolved in Japan. Twenty or ten years ago, we mainly discussed



aging, but aging is only one aspect of demographic change; the most important issue is the population decline itself. We should prepare for the impending negative population growth, which is very important. Economists tend to discuss this issue from an economic perspective, but I've gradually realized that this issue is not only an economic problem but also a sociological one. We must address this problem from both economic and sociological angles.

**Du Yang:** Okay, thank you. Now, each guest will have one minute to summarize.

Albert Park: One astonishing fact is that demographic changes are always expected; the data for the coming years is clear, with no surprises. However, these issues seem to never receive sufficient attention from decision-makers because they are slowly developing crises, unlike wars or surges in food prices that attract attention, so the government often does not take immediate action. I believe this leads to insufficient preparation on the government's part, and what we need to do is to fight against this status quo and create a sense of urgency.

Another point I want to highlight is that these issues are also changing people's perceptions of aging. We must break away from traditional ways of thinking, such as assuming one will retire at a certain age. Even though I am still young, I have already begun to think this way. Once a mindset is formed, it is difficult to change. Therefore, we need to work hard to make people realize that the world their parents lived in when they aged is different from the world they will live in as they grow old. There will be more elderly people and fewer younger generation to support them, but the future world will also present more opportunities. Today's elderly are healthier, more educated, and have

greater technological support. However, people need to change their mindset while they are young rather than waiting until they are old to change because it is hard to shift perspectives in old age.

Masaaki Shirakawa: I often think about why it takes so long for a society to take necessary measures to respond to demographic changes. First, the pace of the evolution of demographic issues is very slow, and thus people's awareness of their importance is also delayed. The second reason comes from the optimistic views of economists, who believe that innovation and productivity can solve this problem. However, in my view, this perspective may be overly optimistic. According to standard growth models, population and productivity are two different things. Despite population decline, per capita income, which reflects productivity, is the most important indicator. However, in a society with a declining and aging population, it is already challenging to improve productivity due to political and social reasons. Thus, we often fail to recognize the importance of this issue in a timely manner. Therefore, the most important thing is to recognize the severity of this problem, and that is the starting point.

Cai Fang: The issues of aging and declining birthrates have become the persistent topics of economics and sociology. Countries are trying to raise fertility rates to return to the sustainable or replacement level of 2.1 as much as possible. However, many policies have not produced satisfactory effects. Nonetheless, there are some countries showing initial signs of improvement, and the lesson we learn is that increased social mobility is conducive to enhancing the willingness to give birth, thereby increasing the fertility rate. Therefore, the third plenary session particularly emphasized "smooth social mobility channels."