

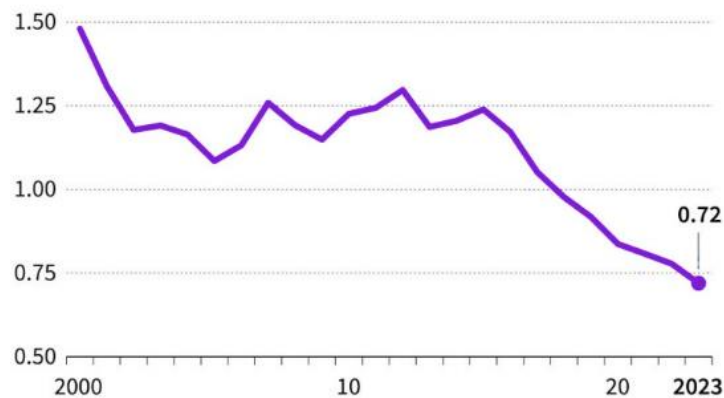


South Korea's Demographic Crisis

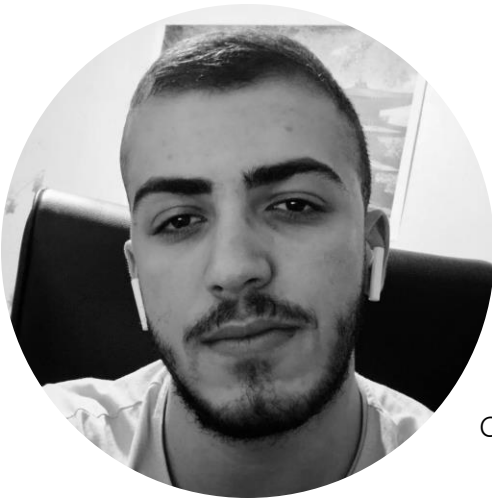
By Soroush Saki

Introduction

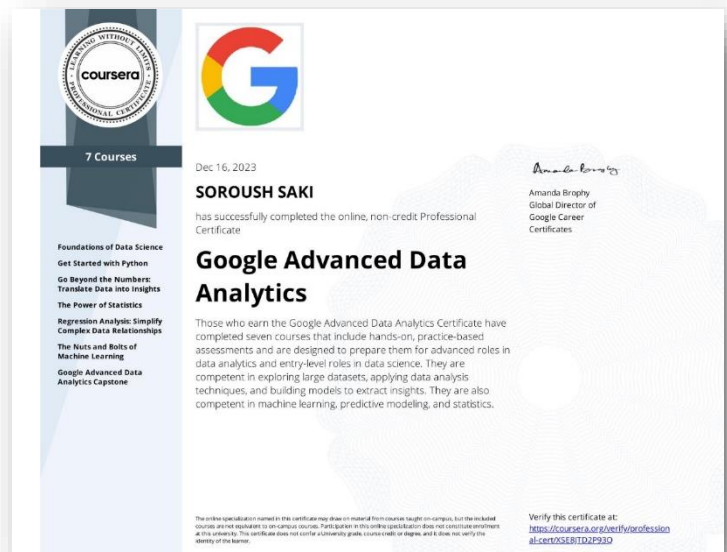
Like many developed countries around the world, South Korea is also grappling with a declining birth rate. According to the latest available data, births per woman have decreased to **0.72**, the lowest level since the fertility rate fell below **2.1** in **1984**. It is predicted to further decrease to **0.68** in **2024**.



A simple calculation can reveal the severity of the issue. Imagine a population of **2000** people, half men and half women. Assuming **70%** of women give birth to one child during their lifetime, **700** children would be added to the population. If half of the children are girls, the number of women in the next generation would reach **350**. If **70%** of them have children, the number of births in the next generation would decrease to about **200**, which means an **88%** decrease in just two generations.



My name is [Soroush Saki](#). I'm a graduate of Software Engineering with over 5 years of experience in data analysis. I've decided to analyze this problem and consider potential solutions to the best of my ability.



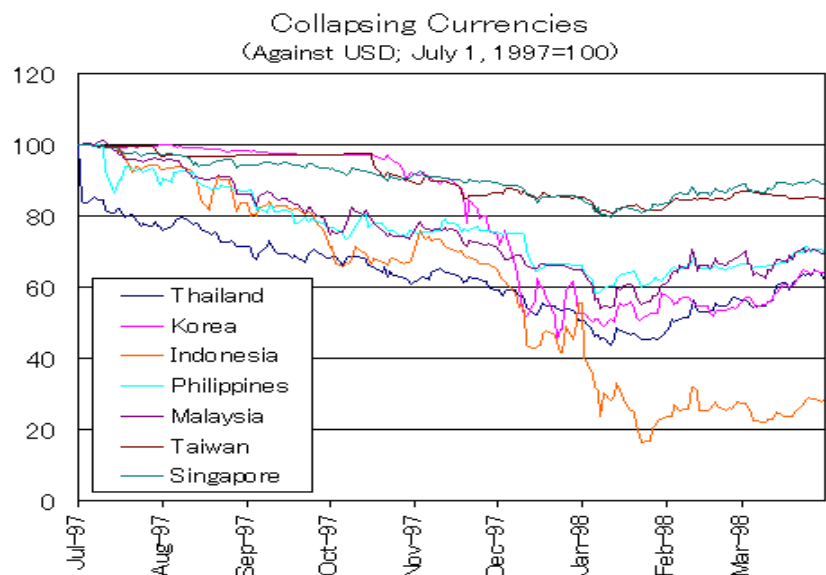
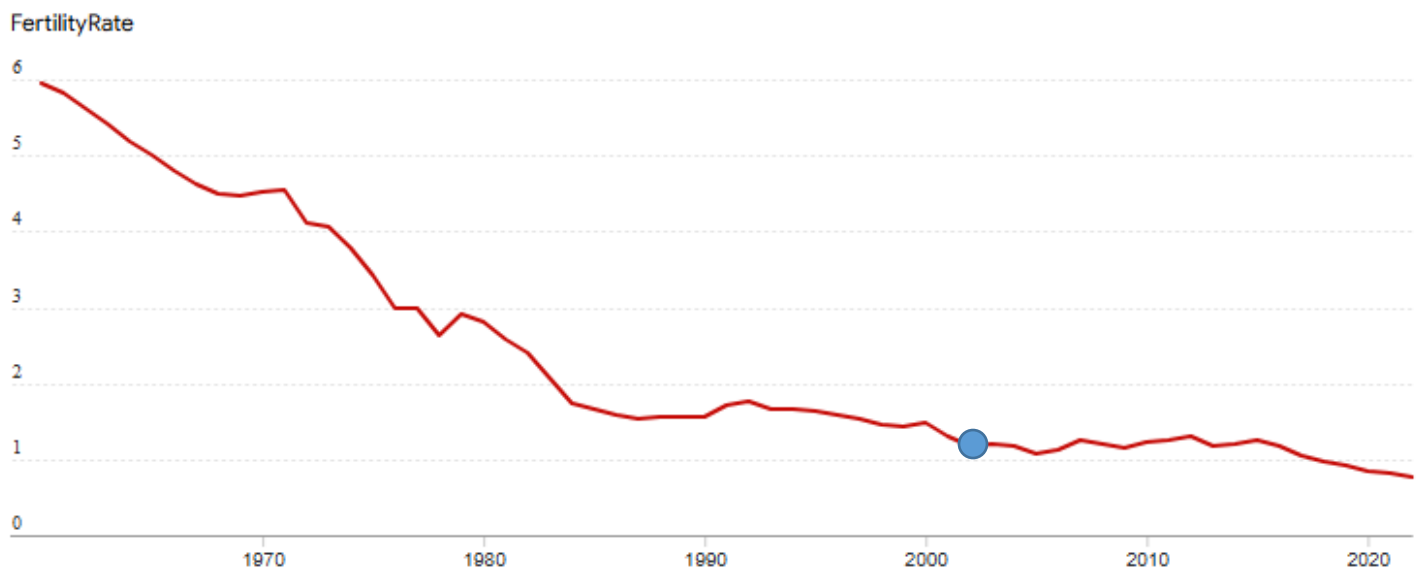
Contacts: [Gmail](#) [GitHub](#) [linkedin](#)

As a first step, I formulated three main questions that occupied my mind regarding the problem at hand. My goal was to be able to answer these questions based on reliable data provided by the government.

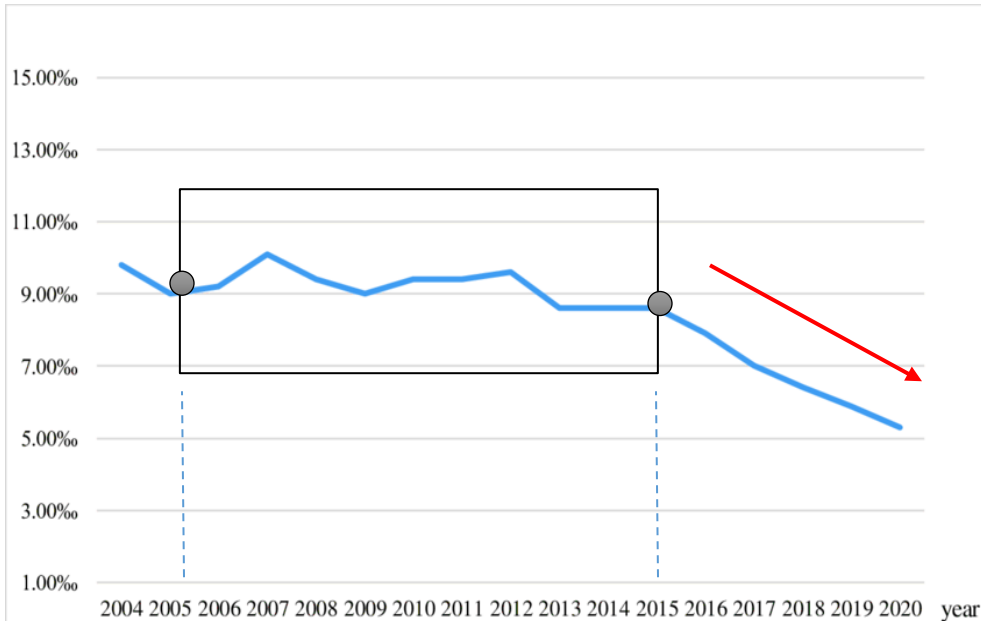
1

How serious is the birth rate decline in South Korea?

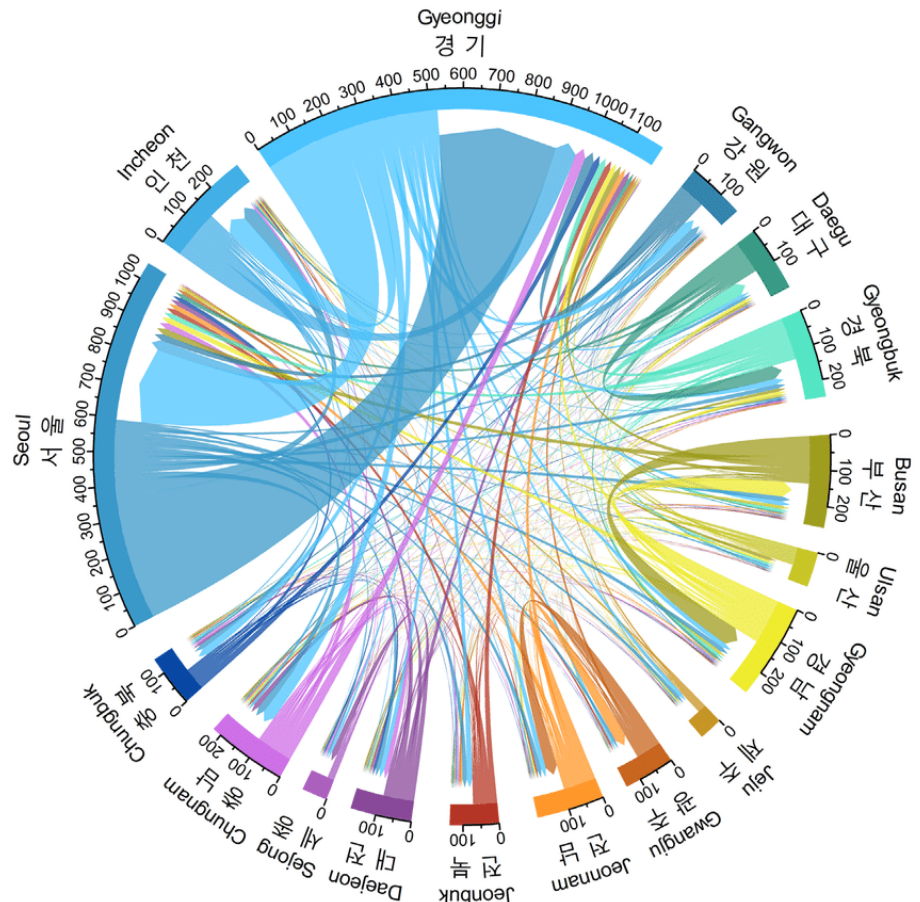
Analysis of the data revealed that the birth rate decline occurred in three phases. The initial phase began in 2002 when annual births dipped below 500,000. This decline was largely attributed to the economic challenges and restructuring that followed the 1997 Asian financial crisis.



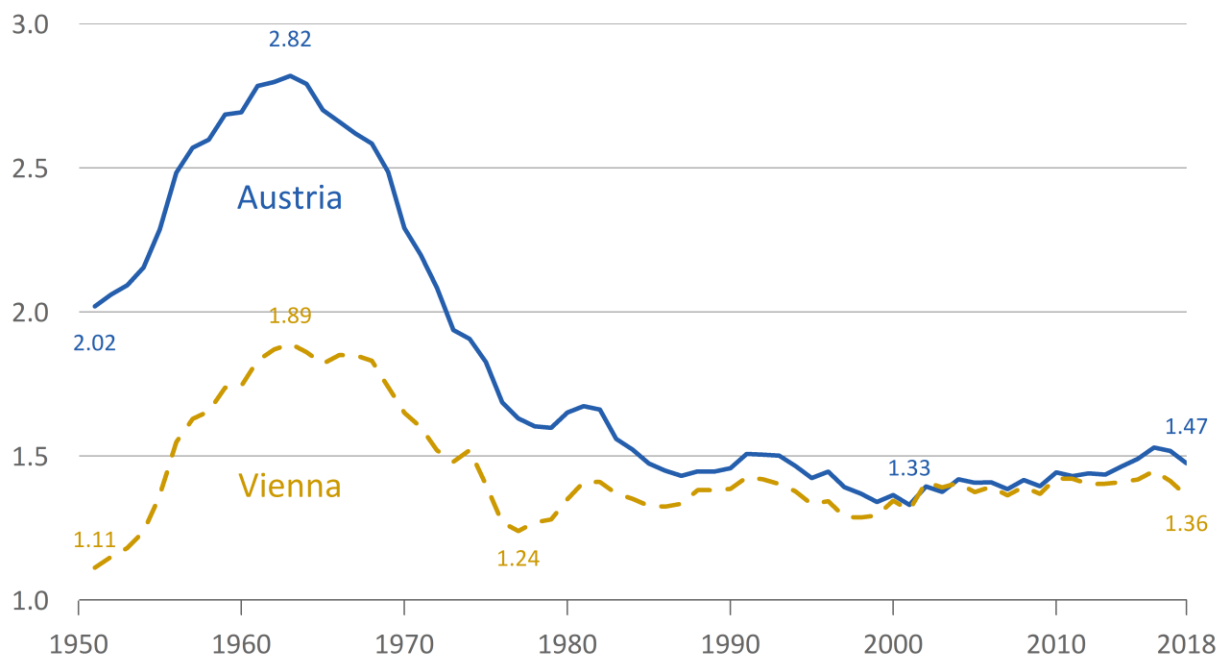
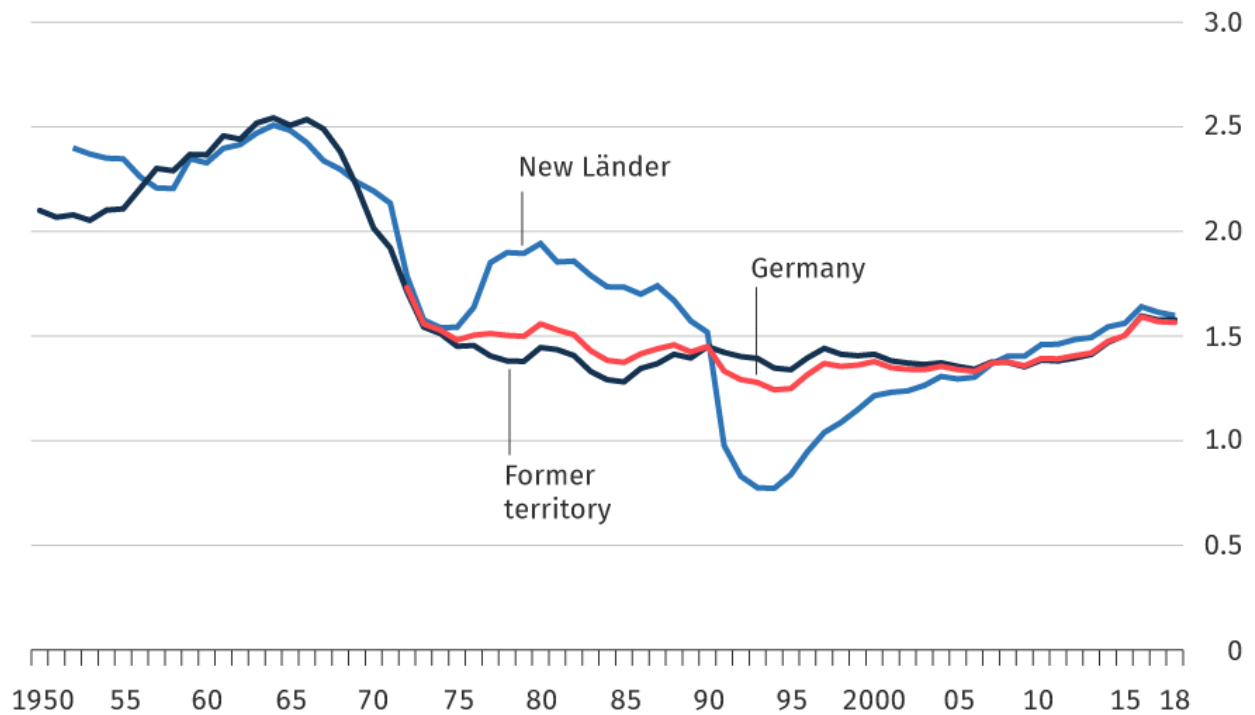
The second phase spanned a decade, from 2005 to 2015, characterized by fluctuating fertility rates in South Korea. However, a steep decline began in 2015, signaling the start of the third phase. This period was marked not only by a dramatic drop in fertility and marriage rates but also by an exodus of young people to metropolitan areas like Seoul.



Internal migration flows in
South Korea, 2016 (thousands).

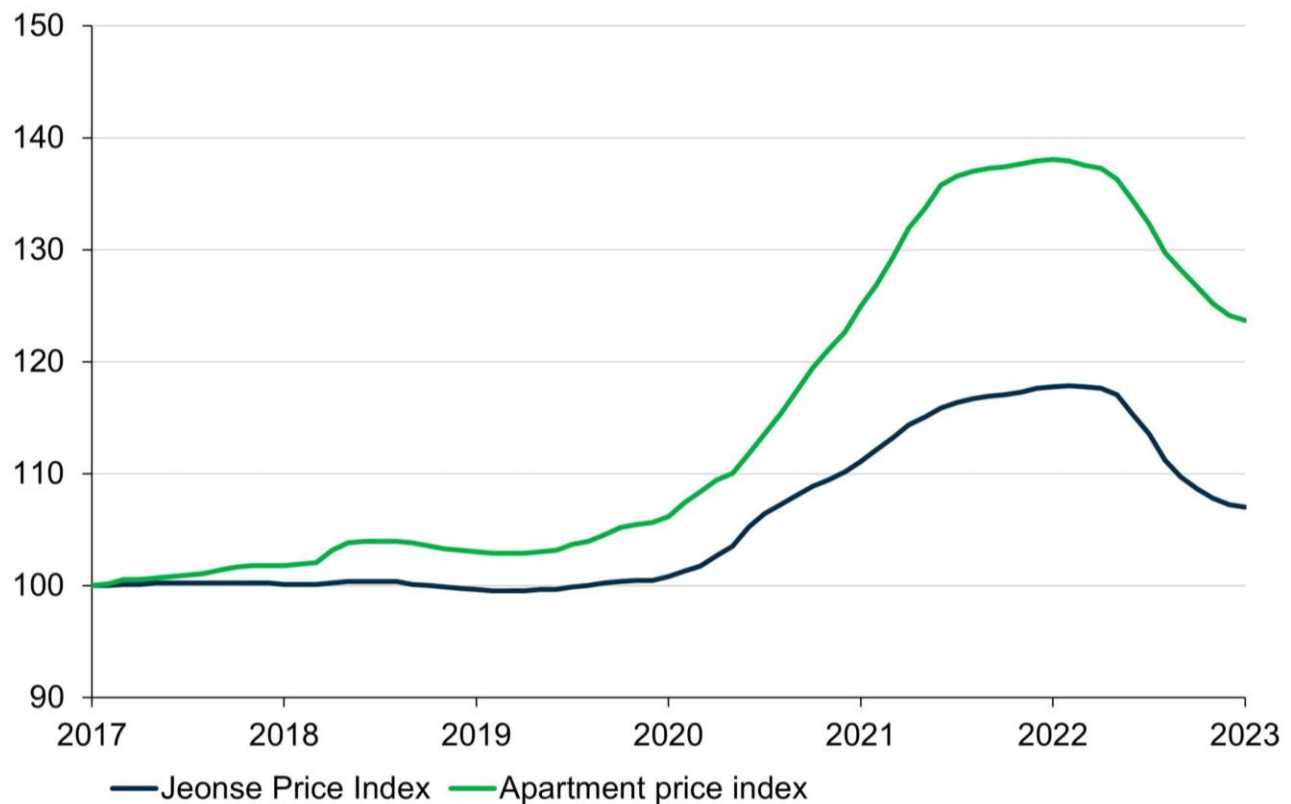


A fertility rate of **0.72** is unprecedented. Similar examples occurred during the German reunification in **1990**, when East Germany's fertility rate dropped to **0.77** in **1994**. Also, during the Great Recession, fertility rates in major European cities like Vienna fell below **1.00**. However, these declines were temporary. What makes South Korea's current situation unique is that this drastic decline is happening in the absence of a specific economic or security crisis.



2 What are the main causes of the decreasing birth rate since 2015?

In 2015, fertility rates across all age groups declined abruptly, driven by a multitude of factors. One such factor was the sharp increase in housing costs, making it difficult for young people to purchase or even rent homes. This challenge was exacerbated in 2019 when housing prices rose even more dramatically. Inaccurate policymaking played a significant role in these developments. In 2010, the government increased the maximum loan amount to stimulate the real estate market, inadvertently causing housing and rental costs to soar.



Note : Jeonse refers to the tenant entrusting the landlord with a certain amount as deposit and leasing the home for 1 to 2 years. Ten percent of the jeonse is paid as deposit and the rest should be paid upon moving in.



INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

August 3, 2010

Republic of Korea: Staff Report for the 2010 Article IV Consultation¹

Prepared by Staff Representatives for the 2010 Consultation with the Republic of Korea

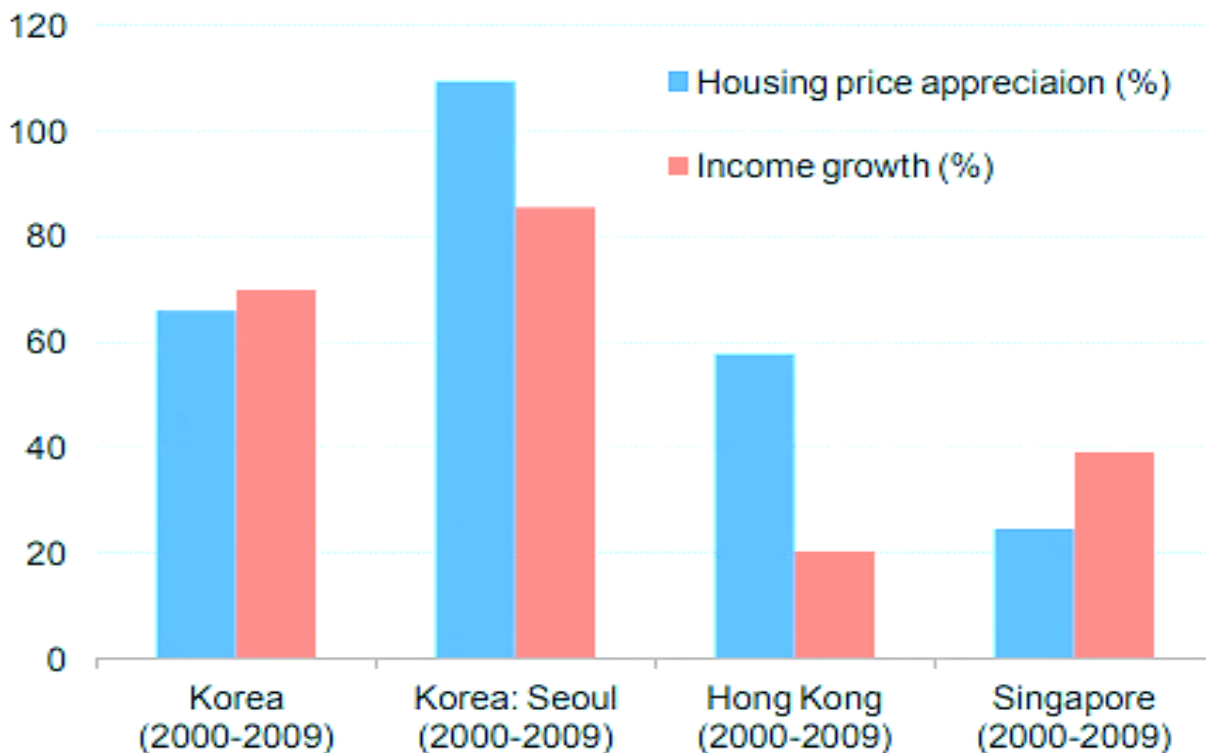
Approved by Mahmood Pradhan and Aasim Husain

Key Issues and Recommendations:

- **Growth prospects:** Growth is projected to recover to 6.1 percent in 2010, led by fixed investment and restocking, and ease to 4½ percent next year. Downside risks relate to the global economic and financial outlook, including a further escalation of the turmoil in southern Europe and a worsening of geopolitical tensions in the Korean peninsula. These are balanced by the potentially faster rebound in domestic demand.

To International Monetary Fund : Republic of Korea: Article IV Consultation -- Staff Report 2010

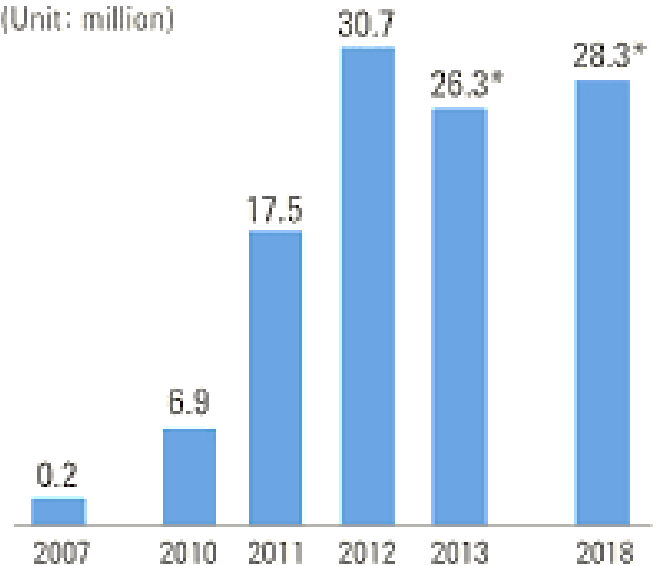
Housing Prices and Income



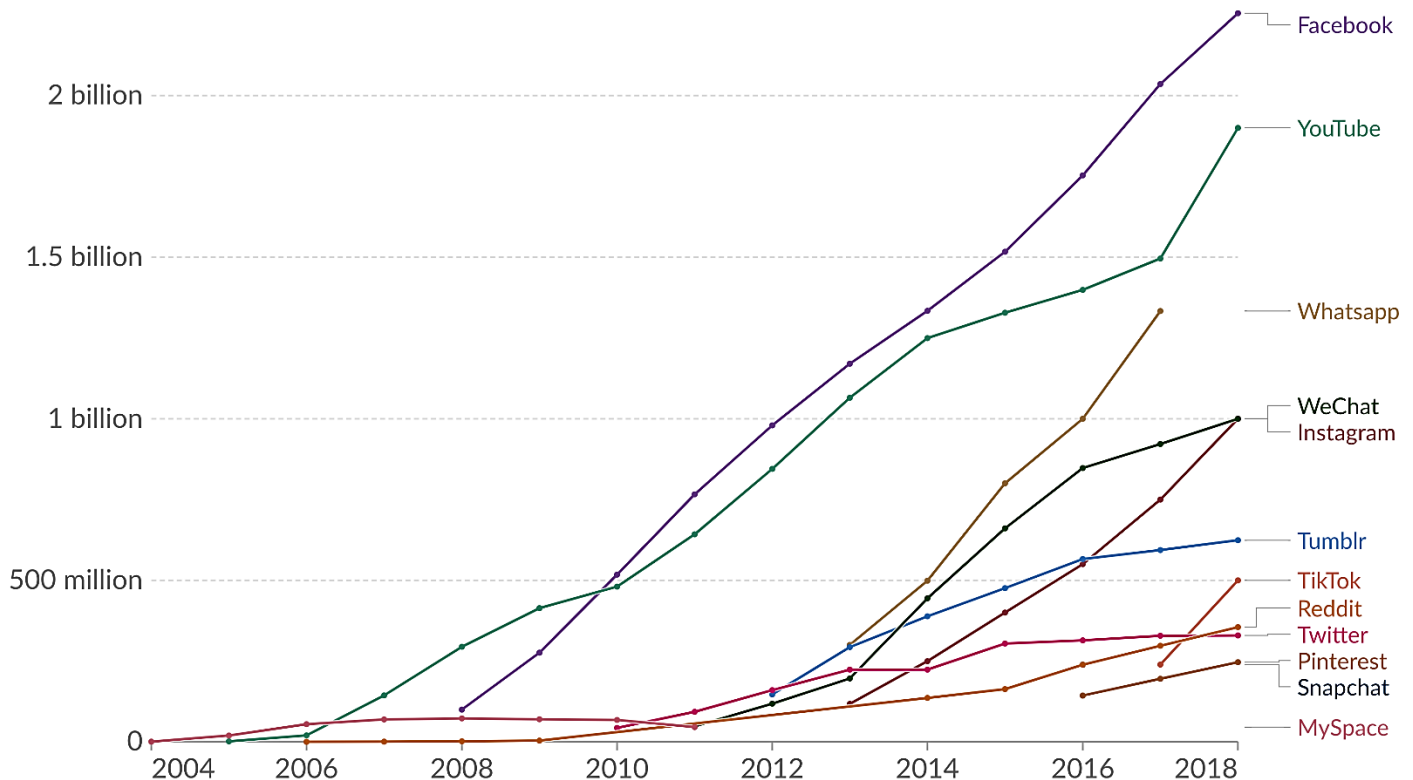
In addition to tangible factors, a significant shift in perception emerged among the younger generation around 2010. This period coincided with the widespread adoption of smartphones and social media. As young people began comparing their lifestyles and consumption habits with others online, a new form of competition emerged. Increasingly, many in society became more materialistic, prioritizing the display of their lifestyle on social media over the traditional path of marriage and family life, which is often seen as financially burdensome and less appealing.

Smartphone sales in Korea

(Unit: million)

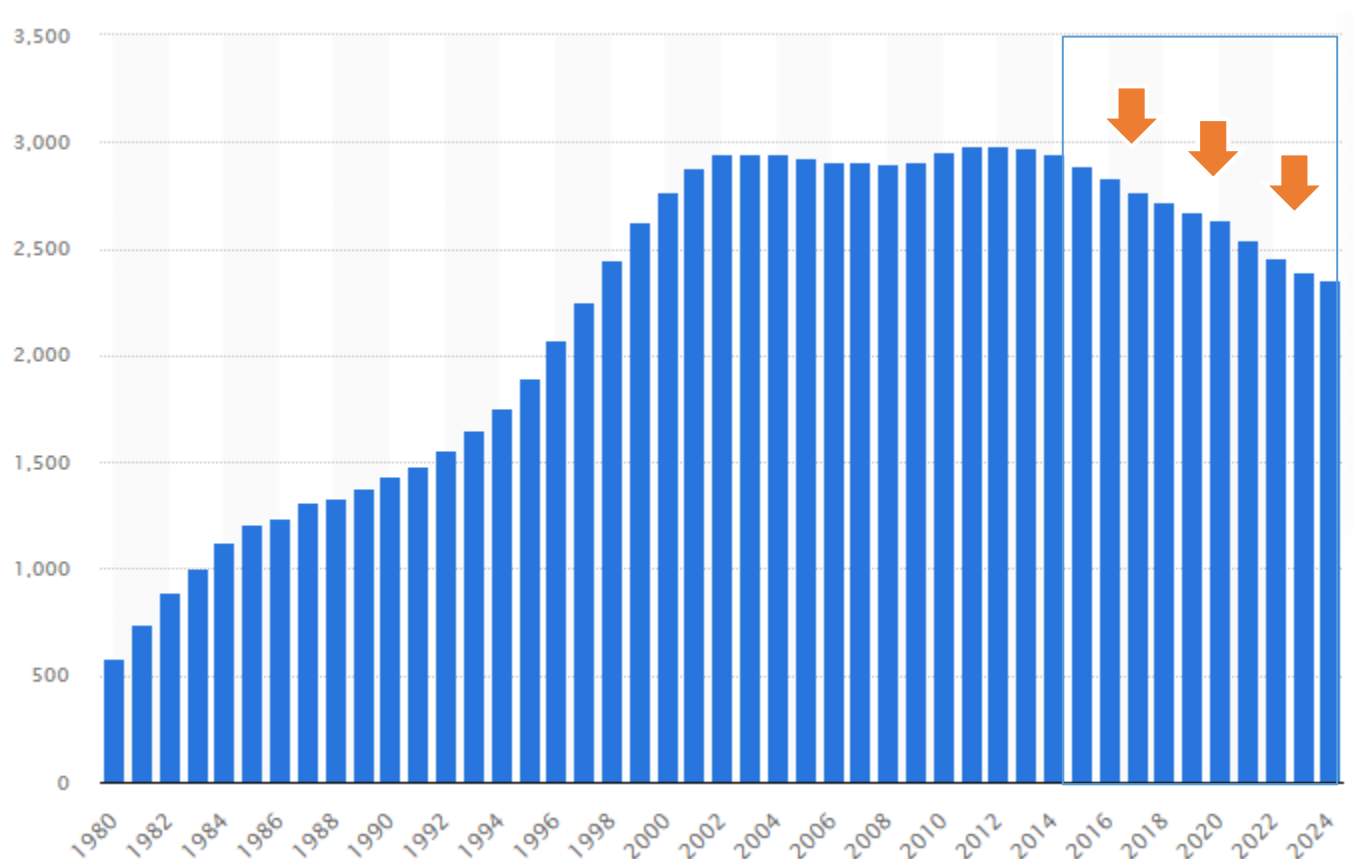


Number of people using social media platforms [2004 to 2018]



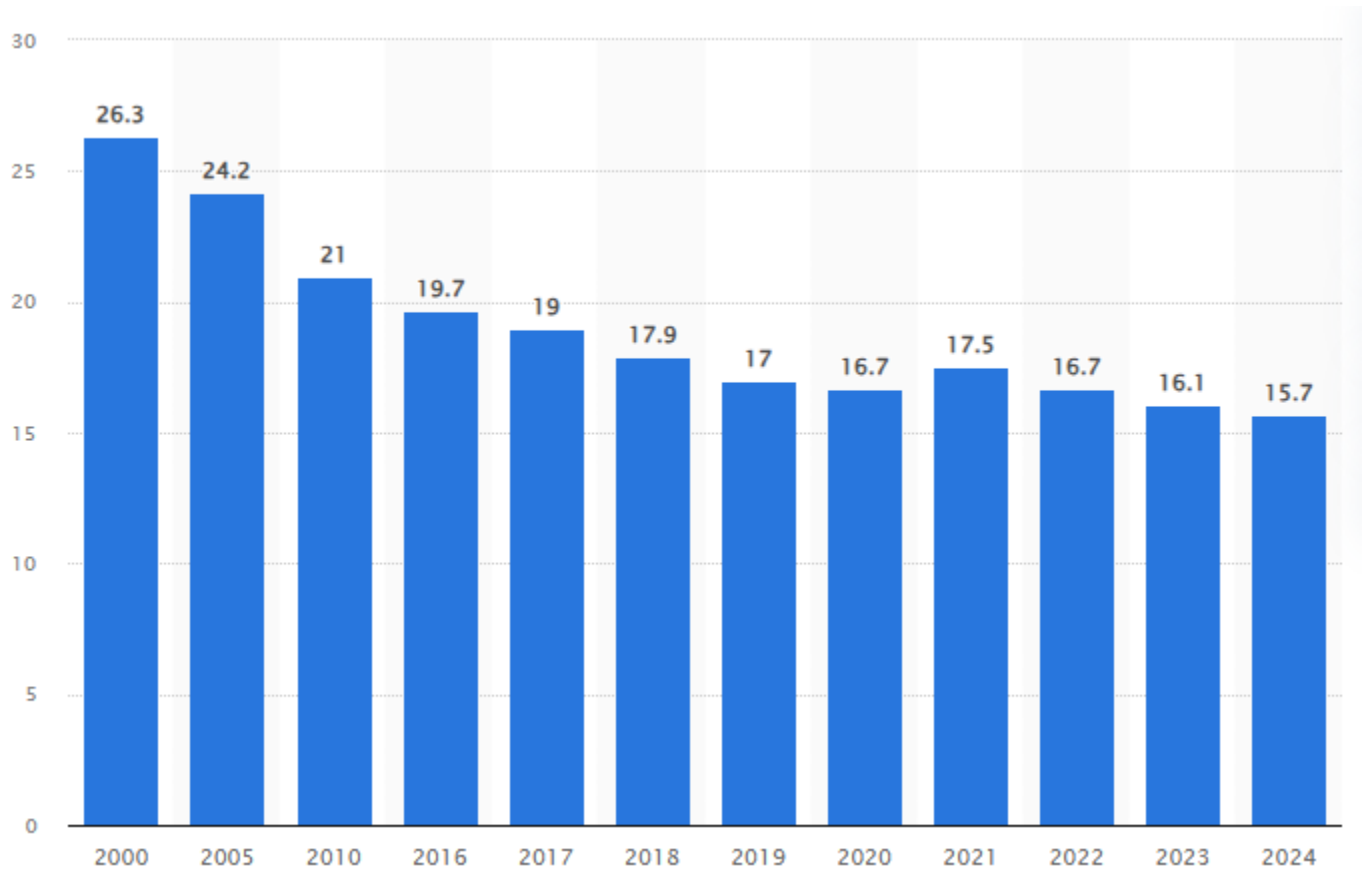
3 What are the potential consequences of a low birth rate?

First and foremost, education and childcare will become significantly more challenging. Many kindergartens and schools in rural areas are already closing, and this trend is expected to intensify in the coming decades. Moreover, universities across the country are also feeling the impact of declining enrollment.



As you can see, the **declining trend** in university enrollment began in 2014 and has continued to the present day.

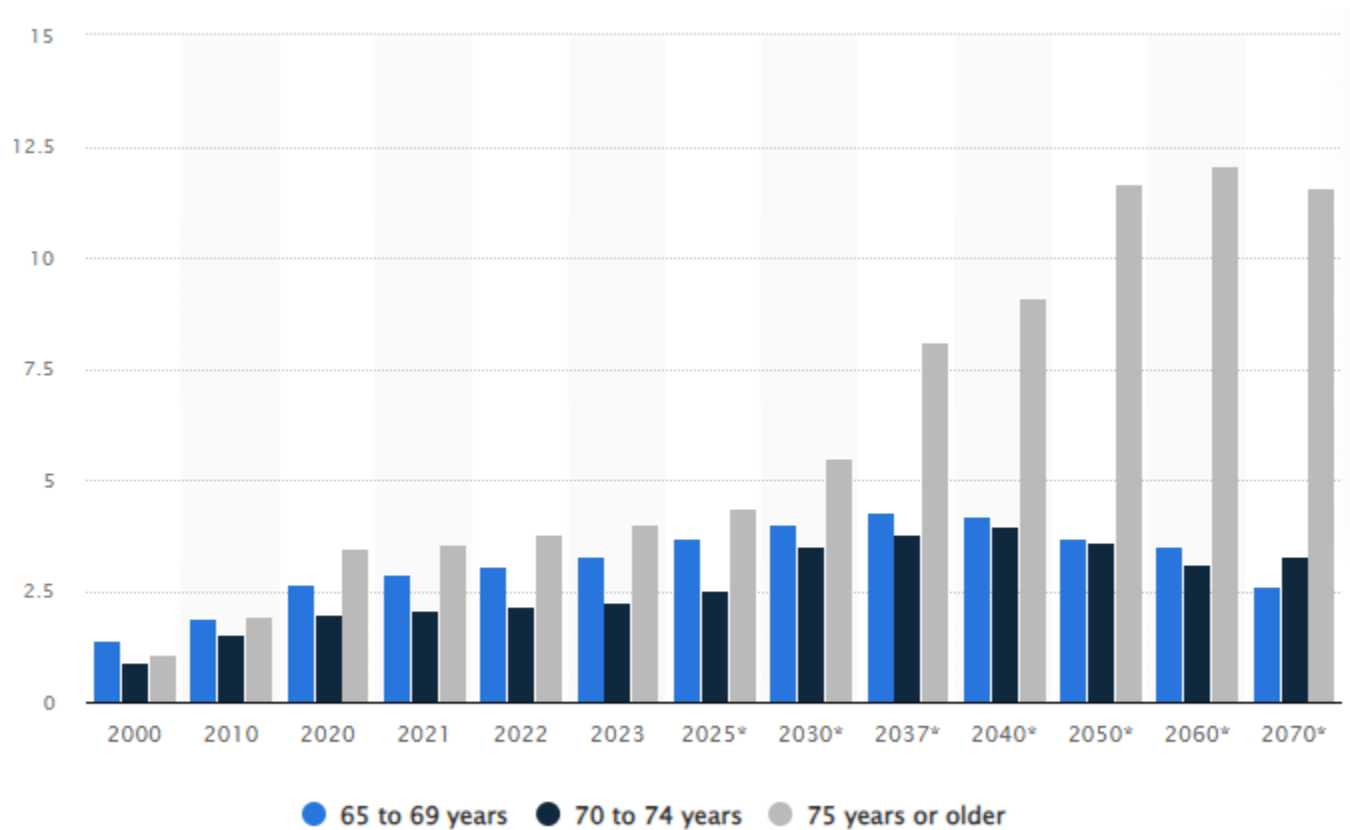
Average number of children per class in kindergartens in South Korea from 2000 to 2024



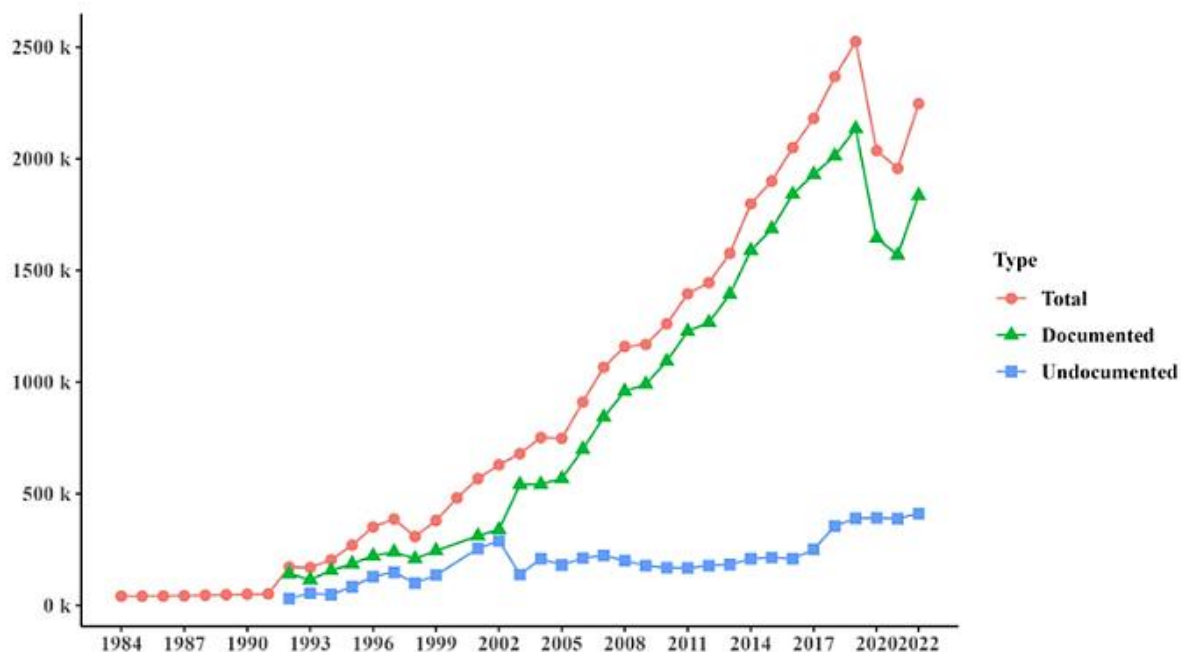
The local industrial sector will also face a severe crisis. Domestic industries such as construction, transportation, food and beverage, and housing will experience **decreased** production and shrinking markets.

By the end of the decade, the elderly population will increase, exacerbating welfare issues. It's important to note that this aging population will coincide with a declining birth rate, further compounding the challenges we face.

Elderly population of South Korea from 2000 with projections to 2070, by age group



Some experts believe that immigration can help fill these gaps, but I doubt it will be enough to address the population crisis. South Korea's immigration policies are not designed to improve demographic issues but rather to alleviate labor shortages. While this approach may alleviate immediate labor needs, it has limitations when it comes to addressing the broader issue of population decline.



South Korea's shrinking society has prioritized efficiency and productivity. However, according to available data, most immigrants entering South Korea are blue-collar workers who do not significantly contribute to innovation or productivity increases. Therefore, expanding immigration under the current framework could actually exacerbate existing social tensions.



Foreign migrant workers in South Korea (1987-2011) estimate in thousands.



The government expanded the annual cap for its Employment Permit System -- a program targeting low-skilled foreign workers -- to 165,000 for 2024 from around 50,000 for 2021. The program was also expanded to include workers in the restaurant, hospitality and aquaculture industries.

<https://asia.nikkei.com/Spotlight/Immigration/South-Korea-lets-in-more-foreign-workers-vying-with-Japan-and-Taiwan>

A brief evaluation of government actions and conclusions :

South Korea, once a model of rapid economic growth, now faces a pressing demographic challenge. The nation's declining birth rate and aging population pose significant risks to its long-term economic and social stability. While the government has taken steps to address the issue, a more comprehensive approach is necessary.

Immediate Concerns and Short-Term Solutions

The immediate concern is the rapidly aging population and the shrinking workforce. The government's focus on housing and childcare subsidies is a step in the right direction, as it addresses some of the immediate concerns of young couples. However, these measures alone are insufficient to reverse the trend.

Addressing Deeper Structural Issues

To achieve sustainable population growth, South Korea must address a range of deeper structural issues. These include:

Labor Market Reform : The rigid labor market can hinder job creation and economic growth. Reforms are needed to increase flexibility and reduce job insecurity.

Education System Overhaul : The education system should be modernized to better prepare young people for the challenges of the 21st century, fostering innovation and creativity.

Affordable Housing : High housing costs are a significant barrier to family formation. Government policies should aim to increase housing affordability through measures like rent control, subsidized housing, and tax incentives.

Regional Disparities : Addressing regional disparities can improve quality of life and encourage young people to settle in less populated areas.

Cultural Shift : A cultural shift is needed to promote family formation and child-rearing. This could involve campaigns to encourage early marriage and childbearing, as well as policies to support working parents.

By addressing these issues, South Korea can create a more favorable environment for young people to start families and contribute to the nation's future. However, it is important to recognize that demographic change is a complex issue with no easy solutions. A long-term, multifaceted approach is necessary to ensure the country's continued prosperity.

South Korea's future is bright. With concerted efforts and a focus on comprehensive solutions, the nation can overcome its demographic challenges and ensure prosperity for generations to come.

I hope this article has provided valuable insights :)

Soroush Saki

December 2024

