



India's Demographic Transition

For Prelims: [Demographic dividend](#), [United Nations Population Fund](#), [Support ratio](#), [Demographic transition](#), Replacement rate

For Mains: Demographic Dividend and its economic implications, India's demographic transition, Silver economy

[Source: BS](#)

Why in News?

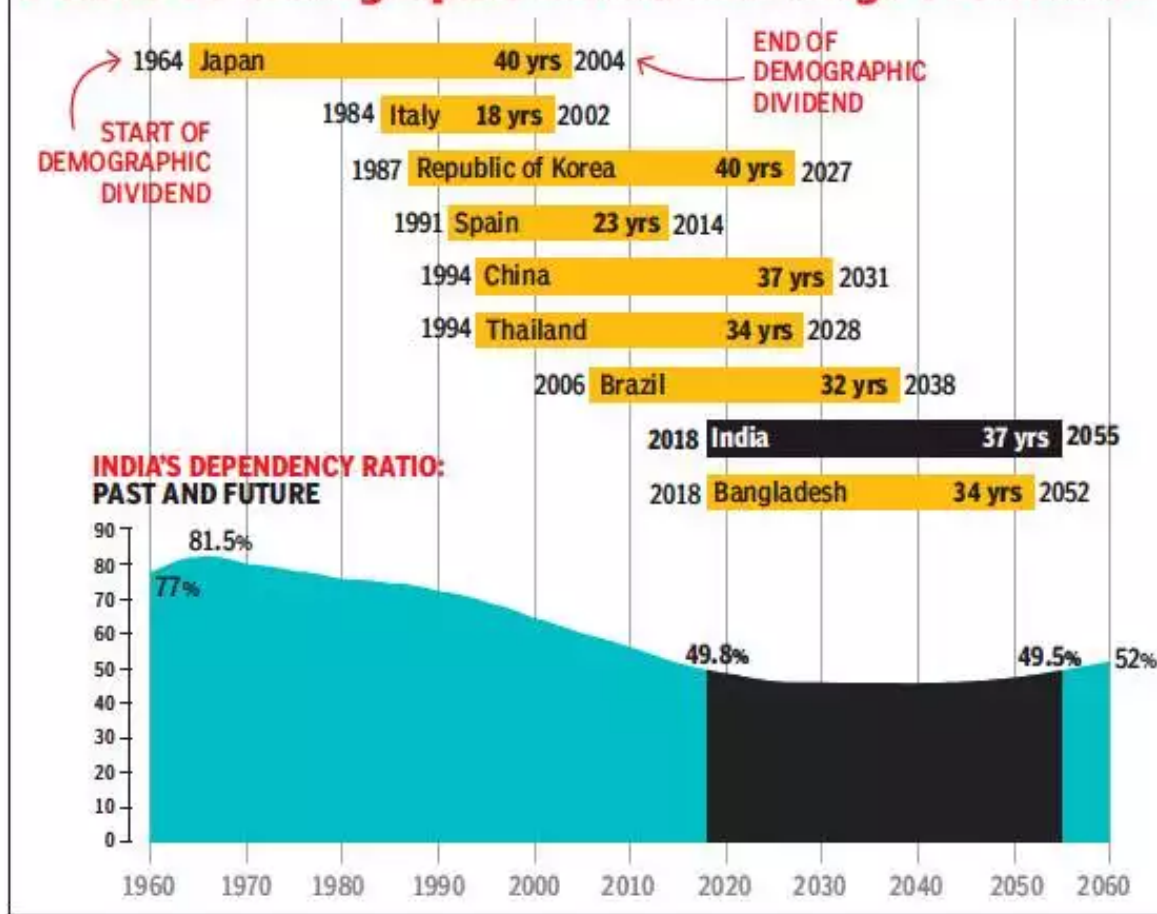
A report by McKinsey & Company highlights that **India has only 33 years left to leverage its [demographic dividend](#)** before transitioning into an **["aged" economy](#)** (silver economy) **akin to developed nations by the 2050s.**

- The report also highlights slower growth, rising dependency, and fiscal pressures as India's working-age population declines relative to its elderly.

Note: According to the [United Nations Population Fund](#), Demographic dividend is the **economic growth potential** when a country's **working-age population (15-64 years) exceeds the dependent population (children and elderly)**, creating a **"window of opportunity"** for increased productivity and economic output.

- India entered the demographic **dividend opportunity window in 2005-06** and will **remain there until 2055-56**, according to the [Economic Survey 2018-19](#).

Period of demographic dividend in large economies



What are the Key Highlights of the Report on India's Demographic Transition?

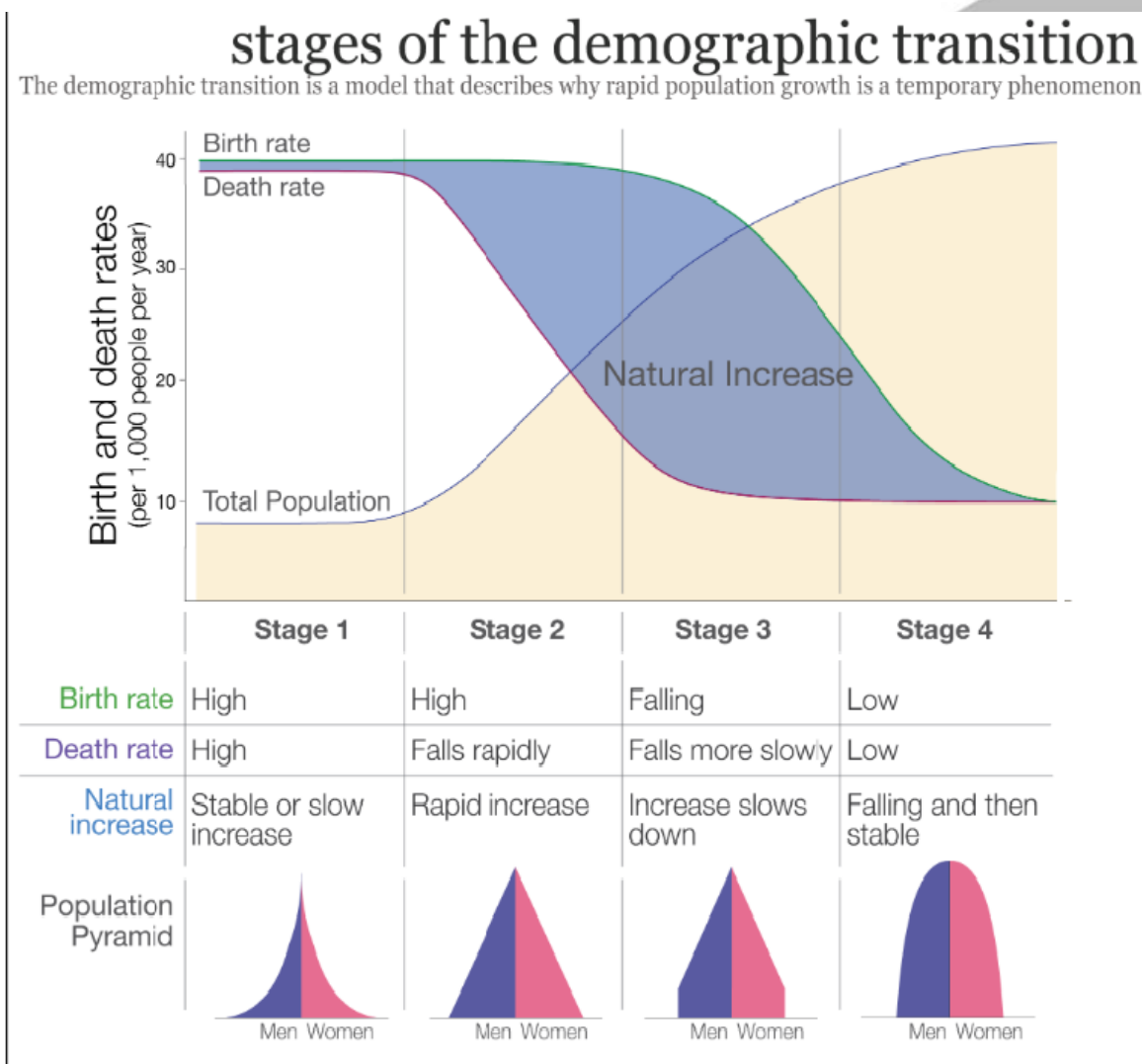
- **Declining Support Ratio:** India has 33 years until it reaches the same aging status as advanced economies by the 2050s.
 - India's **support ratio** (working-age individuals per senior aged 65 or older) has declined from **14:1 in 1997 to 10:1 in 2023** and is projected to drop further to **4.6:1 by 2050** and **1.9:1 by 2100**, reaching levels seen in advanced economies like Japan.
- **Rising Pressure on Public Finances:** By 2050, seniors will account for **15% of total consumption, up from 8% today**.
 - An increasing elderly population will **strain pensions, public healthcare, and family resources**.
 - India's share in global consumption is projected to rise from **9% today to 16% by 2050**.
- **Low Labour Market and Productivity:** India's labor force participation, particularly among women, remains **low and is a major area for improvement**.
 - Worker productivity in India is USD 9 per hour, significantly lower than the USD 60 per hour average in high-income countries.
- **Birth Rate Decline:** The **global decline in birth rates is severe**, affecting both emerging like India and advanced economies.
 - This demographic trend will have wide-ranging impacts on **Gross Domestic Product (GDP) growth**, labor markets, pension systems, and consumer behavior.
- **Recommendations:** **Increase labor force participation, particularly for women**, to maximize the demographic dividend.
 - To boost worker productivity, **India must focus on technological adoption, foster innovation**, and make strategic investments in infrastructure, education, and skill

development.

- Prepare for a **demographic shift by strengthening public finances** and social support systems to address the needs of a growing elderly population.

What is Demographic Transition?

- **About:** [Demographic transition](#) is a model that describes the changes in **birth and death rates, along with shifts in population age structure**, as societies develop economically and technologically. It typically involves several stages.
 - **Stage 1: High birth and death rates** result in a stable population.
 - **Stage 2:** Death rates decline due to improvements in healthcare, sanitation, and food production, while birth rates remain high. This leads to **rapid population growth**.
 - **Stage 3:** Birth rates begin to fall, slowing population growth. Factors include urbanization, lower child mortality, access to contraception, and societal shifts favoring smaller families.
 - **Stage 4: Both birth and death rates are low**, leading to a stable or aging population. This stage reflects higher living standards, **advanced technology, and societal development**.



- **India's Demography:** As per the [2011 Census](#), India is in stage three of the four stage model of demographic transition, moving from high to low mortality and fertility rates.
 - India's [Total Fertility Rate \(TFR\)](#) stands at 2.0 as per [National Family Health Survey-5 \(2019-21\)](#), below the replacement rate of 2.1.
 - TFR is the **average number of children a woman would have** based on current fertility patterns throughout her reproductive years (15-49).
 - The replacement rate of fertility is the average number of children per woman

needed to keep a population stable, in the absence of migration.

- The [World Population Prospects 2024](#) report by the [United Nations Department of Economic and Social Affairs \(DESA\)](#), projects India's population to peak at **1.7 billion in the early 2060s** and decline by **12% thereafter**, while remaining the world's most populous country.

Malthusian Theory of Population

- The Malthusian Theory of Population, proposed by **Thomas Malthus**, English economist in 1798, suggests that **population grows exponentially, while food production increases arithmetically**.
 - This imbalance leads to overpopulation, resulting in famine, disease, and mortality, which would eventually reduce the population.
 - Malthus identified "preventive checks" (e.g., delayed marriage) and "positive checks" (e.g., famine and disease) as ways to control population growth.
 - While influential, the theory has been criticized for underestimating technological advancements and human adaptability.

What are the Challenges of the Aging population in India?

- **Declining Workforce Participation:** With a decreasing proportion of working-age individuals, **India's economic growth could slow significantly**.
 - For example, **Japan, with 27% of its population over 65**, faces labor shortages and strained social security. Sluggish growth and stagnating wages have led to **reduced household spending**.
- **Healthcare System Strain:** Older populations typically experience higher rates of chronic illnesses, putting additional strain on India's already stretched healthcare system.
 - A surge in healthcare needs, without adequate infrastructure, could exacerbate health disparities and reduce the quality of life for the elderly.
- **Lower productivity and innovation:** An aging population may lead to reduced economic activity and innovation.
- **Impact on Family Structures:** With rising urbanization and nuclear families, the **burden of eldercare** on working-age adults may cause economic and emotional strain. An increasing **dependency ratio** could further strain social and economic resources.

Way Forward

- **Skill Development of Aging Workforce:** Investing in education and training programs to **equip the aging workforce with skills essential for the 21st-century economy**, such as digital literacy, creativity and innovation, and technological proficiency.
- **Healthcare Infrastructure:** Strengthening public healthcare systems to provide quality and affordable healthcare for the elderly.
- **Financial Inclusion:** Ensuring financial security for the elderly through **accessible and affordable pension schemes**, social security programs, and financial literacy initiatives.
- **Innovation and Productivity Growth:** Investing in research and development, promoting entrepreneurship, and leveraging technology to enhance productivity and address labor shortages.
- **Intergenerational Inclusion:** Fostering intergenerational dialogue and social inclusion to address the concerns of both the young and the elderly.
- **Addressing Demographic Dividend:** India's demographic dividend is hindered by poor education, [gender inequality](#), [skill mismatches](#), and [jobless growth](#) from the [informal economy](#), with a 134th [2023- 24 Human Development Index](#) ranking.
 - Addressing these challenges through improved education, healthcare, and increased [female workforce participation](#) is crucial.

Drishti Mains Question:

What are the potential consequences of India becoming an 'aged' economy before achieving full economic development?

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims:

Q. To obtain full benefits of demographic dividend, what should India do? (2013)

- (a) Promoting skill development
- (b) Introducing more social security schemes
- (c) Reducing infant mortality rate
- (d) Privatization of higher education

Ans: (a)

Q. Consider the following specific stages of demographic transition associated with economic development: (2012)

1. Low birthrate with low death rate
2. High birthrate with high death rate
3. High birthrate with low death rate

Select the correct order of the above stages using the codes given below:

- (a) 1, 2, 3
- (b) 2, 1, 3
- (c) 2, 3, 1
- (d) 3, 2, 1

Ans: (c)

Mains:

Q. "Demographic Dividend in India will remain only theoretical unless our manpower becomes more educated, aware, skilled and creative." What measures have been taken by the government to enhance the capacity of our population to be more productive and employable? (2016)

Q. "While we flaunt India's demographic dividend, we ignore the dropping rates of employability." What are we missing while doing so? Where will the jobs that India desperately needs come from? Explain. ? (2014)