RESEARCH REPORT

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Title: Predicting the Indian Capital Market Outlook (2025–2045) Through the Demographic Lens.

Abstract

This paper studies the hypothesis that a nation's GDP growth and capital markets witness significant growth when its median population age lies between 30 and 35 years, a demographic sweet spot. Using historical evidence from countries like Japan, the US, Taiwan, South Korea, and others, this study draws parallels with India's current and projected demographic structure. Combined with macroeconomic factors such as infrastructure investment, policy reforms, and technology adoption, we present a forward-looking analysis of India's GDP as well as capital market potential over the next two decades.

A. Introduction

As India stands itself as one of the key countries of global growth, the intersection of demography and economics has never been more crucial to understand. This report is driven by a singular, powerful hypothesis: 'Countries that undergo a demographic transition wherein the median age of their population moves from 30 to 35 experience sustained economic acceleration and capital market expansion.'

We refer to this period as the 'demographic sweet spot', a unique window where a country's working-age population is at its peak, dependency ratios are low, and consumerism, innovation, and productivity flourish simultaneously.

India, in 2024, finds itself right at the doorstep of this sweet spot. With a median age of ~29 and a young, aspirational population of over 1.4 billion people, the nation mirrors conditions previously seen in economic miracles such as post-war USA, post-industrial Japan, reform-era Taiwan, and tech-forward South Korea. These nations not only grew their GDP significantly during this demographic phase but also experienced exponential growth in their capital markets.

This research is not merely retrospective but predictive. By analysing historical precedents and overlaying them with India's current trajectory across policy, technology, financialization, infrastructure, and entrepreneurship; we aim to evaluate the **potential of India's capital markets from 2025 to 2045**.

This report is a blueprint for understanding why demographics matter, how they tie into economic and market cycles, and why India's next 20 years might be among the most transformative chapters in global economic history. India is entering a critical 20-year window where its demographic profile mirrors that of countries that witnessed massive economic expansions and market rallies. By studying historical precedents of nations such as Japan (1960s–80s), the US (1950s–70s), Taiwan (1990s–2000s), and South Korea (1980s–2000s), we aim to project India's capital market outlook during its demographic sweet spot from a median age of ~29 in 2024 to ~35 by 2045.

B. The Demographic Dividend Hypothesis

A **"demographic dividend"** generally refers to the boost in economic performance that can occur when a nation's age structure shifts to a higher share of working-age people relative to dependents.

In practical terms, as the median age of a population rises from around 30 to 35, it usually indicates a declining youth dependency ratio (fewer children per adult) and only a modest rise in retirees. This change creates a window where the labour force grows faster than total population, directly increasing output per capita if the extra workers find productive employment. Empirical studies confirm this: for example, the IMF found that per capita GDP growth is positively correlated with increases in the working-age population share, and negatively with rises in the elderly share. In fact, roughly every 1 percentage point increase in the working-age ratio tends to boost annual GDP per capita growth by about 0.5 percentage points, all else equal. This labour supply effect was a key driver of East Asia's economic "miracles" and is central to the demographic dividend hypothesis.

Higher labour supply and productivity. With more adults in their prime working years (and fewer young mouths to feed), per capita productive capacity increases. A larger workforce means greater potential output, and with the right policies, this translates into actual growth. As fertility declines, more women often enter the labour force as well, further expanding employment. Crucially, having a lower child dependency burden allows families and governments to invest more per child, improving education, health, and skills for the next generation. This human capital boost raises labour productivity over time. Historical evidence shows that when this demographic "sweet spot" is paired with investments in schooling and job creation, economies can produce significantly more output per worker and per capital. In contrast, if jobs are lacking, a youth bulge can

lead to underemployment or social unrest, underscoring that the dividend is an opportunity, not an automatic guarantee.

Rising savings and investment. Demographic shifts also work through the life-cycle savings mechanism. Adults in their 30s and 40s tend to save a higher portion of their income (for housing, children's future, and retirement) compared to younger or older groups. Thus, as the median age climbs into the mid-30s, national savings rates often increase. The UN notes that during a demographic transition, "workers are typically active savers," which can substantially raise a country's domestic saving and investment capacity. These additional savings, whether channelled through banks, pension funds, or capital markets provide fuel for capital formation. Investment in infrastructure, factories, and innovation can then accelerate, creating a virtuous cycle of growth. At the same time, higher savings relative to investment can improve the current account balance, as seen in many emerging Asian economies that ran surpluses during their demographic peak.

Over the longer run, as life expectancy rises, older workers anticipating longer retirements also invest in financial assets, a phenomenon economists call the "second demographic dividend." This leads to the accumulation of pension funds and capital stock that can deepen capital markets and support continued growth even as the population ages. For instance, one analysis finds that as populations age, the increase in asset holdings can partly offset the growing support costs for the elderly, extending the dividend's benefits.

Innovation and consumption dynamics. A favourable age structure can influence the pace of innovation and consumption cycles in an economy. A large cohort of young adults and middle-aged workers is often associated with greater entrepreneurship, adoption of new technologies, and openness to change, which can boost total factor productivity. At the same time, people in their prime earning years not only produce more but also spend more, especially on housing, consumer durables, and services for their families. As a demographic dividend progresses and incomes rise, countries often see a surge in consumer demand that can propel business growth.

For example, recent research on Taiwan shows that its demographic dividend phase significantly increased per capita household consumption, both by raising disposable incomes and by improving the overall consumer market environment. Households upgraded their consumption to higher-quality goods and services as the working-age share grew. This kind of demand-driven growth reinforces the dividend from the expenditure side. However, the pattern may shift in later decades: as the median age goes beyond the 30s into the 40s and 50s, consumption priorities often pivot (e.g. more spending on healthcare and pensions, less on new homes), and saving rates can begin to fall when the population eventually ages out of the dividend period. In short, the demographic sweet spot of a median age ~30–35 tends to coincide with a high-saving,

high-investment economy that also enjoys robust consumption, a combination conducive to strong capital market development and broad-based economic expansion. As the median age transition towards 35, the population growth generally stabilises and that will gradually reduce stress on education, mobility and healthcare infrastructure of the nation.

C. Comparative Historical Analysis

Japan (1960s–1980s)

1. Demographic Advantage:

- Post-WWII baby boom resulted in a bulge of working-age population by the 1960s.
- Median age in the early 1960s was ~30.
- Dependency ratio was low, enabling high household savings and labour productivity.
- 2. Productivity Gains:
 - Technological leadership in electronics, automobiles, and precision engineering.
 - Kaizen and Total Quality Management revolutionized manufacturing.
 - Investments in R&D and industrial efficiency made Japan globally competitive.
- 3. Policy Environment:
 - Strong industrial policy under MITI (Ministry of International Trade and Industry).
 - Export-led growth model supported by a weak yen and trade surpluses.
 - Long-term collaboration between banks, government, and industry.

Median Age of Japan's Population (1960-2024)



United States (1950s–1970s)

1. Demographic Advantage:

- Baby boomer generation entered the workforce.
- Median age in the 1950s was ~30–32.
- Huge suburban expansion fuelled consumer demand and domestic industry.

2. Productivity Gains:

- Rise of mass production, assembly lines, and early computing.
- Dominance in aerospace, automobiles, and consumer goods.
- High innovation output from institutions like Bell Labs and NASA.

3. Policy Environment:

- GI Bill improved education levels and home ownership.
- Interstate Highway Act boosted infrastructure.
- Stable political environment and capital markets deepened.



Median Age of U.S. Population (1950-2024)

Taiwan (1990s–2000s)

1. Demographic Advantage:

- Taiwan's median age rose from ~30 in the mid-1990s to ~35 by the mid-2000s, aligning with its economic and market expansion phase.
- The country benefited from a highly literate and skilled working-age population, with strong emphasis on education and technical training.
- Unlike China's 4-2-1 structure, Taiwan maintained a balanced demographic profile during this period, avoiding both high youth dependency and premature aging.
- 2. Productivity Gains:
 - Taiwan rapidly transitioned from labour-intensive manufacturing to high-value electronics, semiconductors, and ICT exports.
 - Home to TSMC and other global chip leaders, Taiwan became the world's semiconductor hub—boosting both productivity and global integration.
 - Continued automation and supply chain sophistication fuelled gains in total factor productivity.
- 3. Policy Environment:
 - Pro-business policies supported SMEs and export-oriented manufacturing.
 - The government invested in science parks, R&D infrastructure, and technology clusters—especially in Hsinchu Science Park.
 - Trade liberalization, stable institutions, and strong IP protection created a reliable environment for foreign investment and domestic capital market growth.



South Korea (1980s–2000s)

1. Demographic Advantage:

- Rapid fertility transition brought a bulge of young, educated workforce.
- Median age during boom years was ~30–35.
- Strong emphasis on education created skilled labour across industries.

2. Productivity Gains:

- Rise of chaebols (Family-owned large business conglomerates (Hyundai, Samsung, LG) created global industrial capacity.
- Moved from low-cost to high-tech in just two decades.
- High literacy and tech readiness aided transformation.

3. Policy Environment:

- Government-led capital allocation and support for exporting industries.
- Focused R&D spending on semiconductors, electronics, and heavy industries.
- Liberalization of financial and trade systems during the 1990s.



D. The Table of stats

This table compares how four economies: USA, Japan, Taiwan, and South Korea performed as their populations transitioned through the demographic sweet spot, defined as the period when the median age moved from approximately 30 to 35. It captures the real GDP growth, stock market returns (CAGR), and financial deepening metrics such as:

- Market capitalization growth (in USD)
- Market cap to GDP ratio (a proxy for capital market maturity)

Country	Start Year	End Year	Market Cap (Start, USD Bn)	Market Cap (End, USD Bn)	Market Cap to GDP Start (%)	Market Cap to GDP End (%)	Stock Index CAGR (%)	GDP CAGR (%)
USA	1980	2000	1200	15000	35	140	8.1	3.2
Japan	1977	1987	300	4200	30	130	16.2	4.3
Taiwan	1995	2005	148	386	70	117	9.9	5.2
South Korea	1998	2011	96	1100	30	92	9	6

Key takeaways:

- All four countries experienced strong real GDP growth during this period, confirming the economic potential of a favourable age structure.
- Taiwan showed impressive growth in both stock markets and market capitalization, validating the link between demographic momentum and capital market expansion in emerging economies.
- Japan and the USA, while more mature, saw a substantial rise in market cap-to-GDP ratios, reflecting deep financial market development.
- Equity index CAGR was highly positive across the board, though total market cap growth often provides a more comprehensive view than index levels alone.

This reinforces the central thesis: when supported by sound policy and economic foundations, the demographic sweet spot offers a powerful window for sustained growth and wealth creation through capital markets. Also, it is essential to have a mature capital market with inflow of domestic as well as foreign money to ensure smooth sailing of the capital market major indices.

E. India's Demographic and Macro-Economic Trajectory

1. India's Demographic Snapshot (2024)

- **Population**: Approx. 1.43 billion, now the most populous country in the world. •
- Median Age: ~29.0 years. •
- Working-Age Population: Over 65% of the population is aged between 15 and 64.
- Urbanization Rate: ~36% and steadily rising. •
- Per Capita Income: ~\$2,940 USD (2025 estimates). •
- **Population Growth Rate**: Slowing to below 1% per annum, offering a stabilizing • trajectory.



Median Age of India's Population (1980-2024)

2. Median Age Progression (2024–2045)

India is poised to move through the optimal demographic dividend window over the next two decades:

- **2024**: ~29.0 Young population, early-stage demographic potential. •
- **2030**: ~30.8 Enters the early phase of the 30–35 range.
- **2035**: ~32.7 Midpoint of the productivity sweet spot.
- 2040: ~34.7 Nearing peak demographic potential. •

• **2045**: ~36.5 — Gradual transition toward aging, but momentum may persist.

3. Enabling Factors Supporting Capital Market Expansion

Category	Drivers
Policy Reforms	Implementation of GST, expansion of PLI schemes, labour law simplification, land acquisition reforms. These build investor confidence and improve ease of doing business.
Infrastructure Growth	Massive outlays on roads, railways, ports, urban smart city initiatives, green energy, and logistics corridors. Infrastructure spending boosts employment, industrialization, and regional development.
Financialization	Rising penetration of mutual funds, SIPs, insurance, pension schemes, and increased digital banking adoption. Enhances domestic capital formation and market stability.
Urbanization	Rapid growth of Tier-2 and Tier-3 cities, migration-led demand for housing, infrastructure, and services. Drives consumption and real estate cycles.
Tech & Innovation	Emergence of UPI, AI startups, EV ecosystem, India Stack expansion globally. Technological leapfrogging fuels productivity and investor interest.
Education & Workforce	National Education Policy reforms, growing online education platforms, skill-based training linked to industry demand. Ensures employability of the demographic dividend.
Entrepreneurial Culture	Booming startup ecosystem with growing unicorn base and government support through Startup India, Fund of Funds, and Atal Innovation Mission.
Domestic Consumption Base	Rising middle class, growing disposable income, and aspirational youth drive demand across discretionary and essential categories.

F. India's Capital Market Growth Phases: Hypothesis (2025–2045)

Phase	Period	Characteristics
Accumulation	2025– 2030	Structural reforms take root, infrastructure and manufacturing gain momentum, early investors benefit from undervaluation and domestic institutional build-up.
Momentum	2030– 2037	Consumption growth accelerates, earnings expand across sectors, India becomes a core allocation in global portfolios, valuations rise with confidence in long-term growth.
Euphoria	2037– 2042	Peak investor participation, possible speculative frenzy in certain sectors, new retail entrants, startups turning into mega caps, asset prices decouple from fundamentals.
Correction	2042– 2045	Market realigns with fundamentals, policy tightening or global shocks prompt correction, sector rotation leads to renewed focus on fundamentals and value.

India's Capital Market Growth Hypothesis: 2025–2045									
	Accum	ulation	м	lomentum		Euphoria	C	orrection	
202	25.0 20	27.5 20	30.0 2032	.5 2035. Year	0 2037.5	2040.0	2042	.5 204	1 5.0

G. Risks and Mitigation

Risk Category	Risk Description	Possible Mitigations		
Employment	High youth unemployment and	Expand vocational training,		
	job-skill mismatch can dampen	foster MSMEs, incentivize		
	consumption and social stability.	employment-linked		
		education.		
Inequality	Regional and class disparities	Targeted welfare policies,		
	could lead to uneven growth,	digital public goods, rural		
	unrest, or underutilized markets.	infrastructure.		
Credit &	Over-leveraging by households or	Strengthen credit		
Leverage	NBFCs may fuel bubbles.	assessment norms, increase		
		financial literacy, monitor		
		shadow banking.		

Political Risks	Populist pressures or coalition instability may dilute long-term reforms.	Foster bipartisan consensus on key reforms, strengthen institutions.
External Shocks	Global slowdown, trade wars, supply chain issues, oil shocks.	Diversify exports, build sovereign reserves, pursue resilient trade partnerships.
Innovation Gap	Lack of globally competitive tech or consumer brands may limit India's ability to scale exports and productivity.	Encourage R&D spending, support IP protection, incentivize global market creation.
Sustainable GDP Growth Pace	India's growth may remain steady but not explosive, unlike China. This may temper investor expectations.	Emphasize long-term compounding, inclusive growth, and sector rotation strategies.

H. Caveats and Contrarian Views

1. Demographics Are Not Destiny

- Counterpoint: A favourable age structure is only *potential energy*—not a guarantee.
- Countries like Brazil and Egypt had strong working-age populations but did *not* experience sustained booms due to weak institutions, poor governance, or policy stagnation.
- If India fails to generate jobs, skill its youth, or control inequality, the demographic dividend may become a liability (i.e. social unrest or underemployment).

2. Capital Market Expansion Is Not Uniform

- Stock index performance can diverge sharply from economic reality due to:
 - Narrow index concentration (e.g., SOEs or tech-heavy indices)
 - Currency devaluation
 - Global shocks (e.g., 2008 or COVID-19)
- Even with strong GDP growth, retail participation, financial literacy, or regulatory maturity may limit capital market depth.
- 3. Demographic Windows Are Narrow and Aging Comes Fast
 - The sweet spot (30–35 median age) is not very long-lasting.
 - Countries like Japan and China quickly transitioned from dividend to aging bringing challenges like:

- Declining labour force
- Rising healthcare and pension burdens
- Slower growth and deflationary pressures
- India will also need to plan for the post-dividend phase.
- 4. Global Context and Geopolitics Matter
 - Capital markets and GDP growth are influenced by external demand, FDI, global financial conditions, and geopolitical stability.
 - If global capital flows shift or trade relationships weaken (e.g., de-globalization), even a demographically favourable country could struggle.
- 5. Technology and AI Could Decouple Demographics from Growth
 - With automation and AI, some argue that working-age population may matter less.
 - A shrinking population might still sustain GDP with high productivity.
 - Conversely, India's labour surplus could become obsolete if industries automate before absorbing the workforce.

Countries That Missed the Demographic Dividend Opportunity

Brazil: Median Age 30 → 35: ~2005 to 2020

What Went Wrong:

- Weak productivity: Overreliance on commodities and limited industrial diversification.
- Political instability: Frequent corruption scandals (e.g., Lava Jato), weak fiscal discipline.
- Underinvestment in human capital: Low educational quality and poor health infrastructure despite a young population.
- Populist policies: Unsustainable welfare and subsidies distorted labour and investment incentives.
- **Market impact**: Brazilian equities and investment climate remained volatile with limited sustained growth.

Egypt: Median Age 30 → 35: ~2008 to 2022

What Went Wrong:

- Authoritarian governance & corruption: Low transparency, high military control over the economy.
- Low female workforce participation: A massive loss in potential labor force leverage.
- Lack of industrial competitiveness: The economy remained consumption- and remittance-driven.
- **Underutilized youth**: High youth unemployment despite millions entering the workforce.
- **Currency devaluations**: Weakened investor confidence and purchasing power.

South Africa: Median Age $30 \rightarrow 35$: ~2004 to 2018

What Went Wrong:

- **Structural unemployment**: Especially among youth and low-skilled workers.
- **Social inequality and crime**: Economic gains were not equitably distributed, fuelling unrest.
- **Electricity and infrastructure crises**: Power shortages (Eskom) stalled industrial growth.
- **Policy uncertainty**: Mixed signals to investors, regulatory bottlenecks, and corruption (e.g., Gupta scandal).

Common Root Causes	Impact on Demographic Dividend	India's Current Status	Verdict
Weak governance	Misallocation of resources, corruption	Governance reforms like GST, IBC, Digital DBT, capex discipline have improved accountability.	✓ Improving
Poor education & skilling	Underprepared workforce	National Education Policy (NEP) + Skill India are steps forward, but learning outcomes remain weak in public sector.	Mixed
Insufficient job creation	Youth unemployment, unrest	Services & gig economy are expanding, but formal manufacturing and high- quality jobs lag behind.	At risk
Lack of global integration Missed FDI and trade opportunities		India is better integrated via services exports , growing FDI inflows, PLI-led exports rising.	Stronger than peers
Shallow capital markets	Weak investment ecosystem	Rapid retail participation, deepening MF base, SIP culture, ONDC, bond markets maturing.	✓ Improving Fast
Overdependence on few sectors	Economic fragility and volatility	India has sectoral diversity — IT, pharma, infra, fintech, agri-tech. Though informal sector still large.	More More balanced

India's Position vs. Common Demographic Dividend Pitfalls

I. Conclusion

India's demographic advantage places it in a rare historical position shared by other economic powerhouses at the peak of their rise. While demographic momentum is a strong tailwind, the realization of capital market potential will require concurrent growth in institutional maturity, governance, innovation, and financial inclusivity. If managed wisely, India's capital market over the next two decades could echo the growth patterns of past economic miracles and offer long-term wealth creation opportunities for both domestic and global investors.

J. Illustrations for Reference



Top 10 Countries by GDP Share in 2025 (B&W Illustration)



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