Mizuho Economic Outlook & Analysis

Evaluating India's Growth Potential

Investment-led stable growth of 6%, with tailwinds for the IT/electronics sector

May 2023

Mizuho Research & Technologies, Ltd.

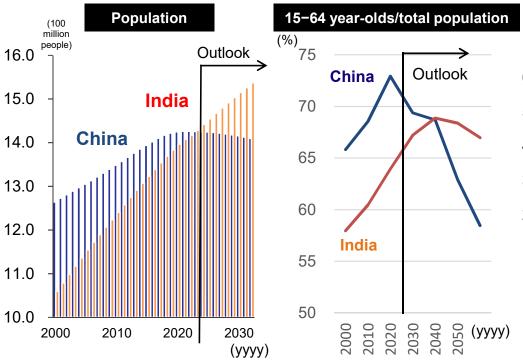


Expectations for 'the world's largest population'; amid rising geopolitical risk, India's status as leader of the Emerging economies is rising

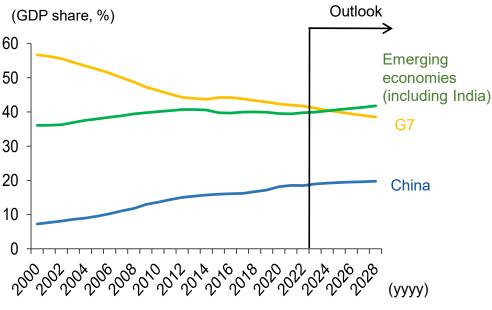
- According to UN statistics, in 2023 India's population (1.4286 billion) overtook China's (1.4257 billion) to become the world's largest.
 - Though China's population began falling in 2022, India's will continue growing until it hits approximately 1.696 billion around the mid-2060s.
 - The working-age population ratio has already peaked out and begun falling rapidly in China. India will enjoy a population bonus until 2040, with the working-age population declining at a gentle pace thereafter.
- Amid a growing awareness of geopolitical risk and economic security risks related to China, more investors are focusing on India as an alternative country and market.
 - With India also participating in the Indo-Pacific Economic Framework for Prosperity (IPEF), for example, it is becoming an attractive destination in an age of global supply chain diversification; it is also sees itself as a "leader of the global south" and it is raising its presence as leader of the emerging economies.

Population and working-age population ratio

Source: Compiled by MHRT based on data by the United Nations



The global GDP share of developed countries, emerging economies, and China



Source: Compiled by MHRT based on data by the IMF



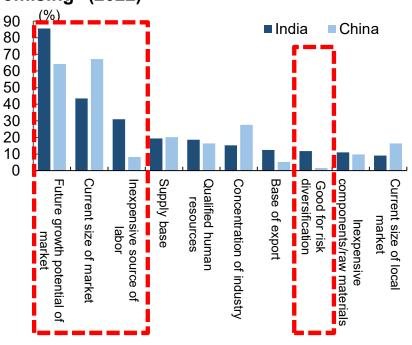
Japanese firms now rank India as the most promising country in the medium-term; India is enjoying it's third boom

- According to a JBIC survey, <u>India has overtaken China to become the most promising country in the medium-term</u>, with India enjoying it's third boom.
 - The other two booms were (1) the BRICs boom around 2002–2012 and (2) the boom around 2014–2018 on the inauguration of the Modi administration.
 - Amid growing uncertainty about China economy, investors are once again focusing on India's future potential.
- As for why India is so promising, many firms mention (1) the future growth potential and current size of the market and (2) the inexpensive source of labor. Some firms also talked about India being (3) good for risk diversification in a time of growing geopolitical risk.

Promising countries/regions in the medium-term (JBIC survey of Japanese firms)

-Vietnam Russia India Thailand Brazil US Indonesia (Vote share) **Philippines** -Myanmar South Korea Mexico Taiwan Malaysia 100% 1st boom 2nd boom 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% (yyyy)

Reasons why Japanese firms think India is "promising" (2022)



Notes: Multiple answers

Source: Compiled by MHRT based on Japan Bank for International Cooperation's (JBIC)

Survey Report on Overseas Business Operations by Japanese Manufacturing

Companies

Notes: Multiple answers

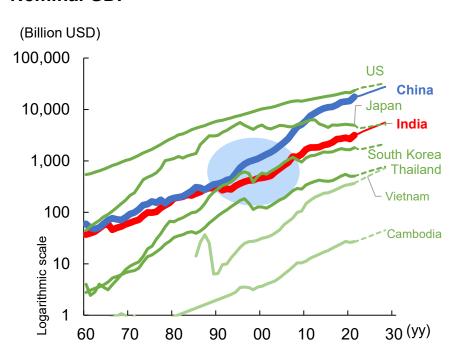
Source: Compiled by MHRT based on JBIC's Survey Report on Overseas Business Operations by Japanese Manufacturing Companies



Previous booms never led anywhere, with economic growth disappointingly lagging behind

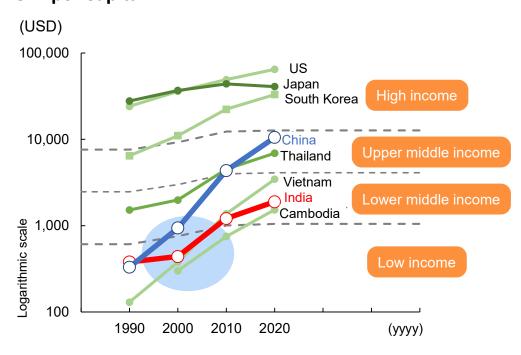
- India's GDP was at the same level as China's around 1980, but the gap between the size of the two economies ballooned thereafter.
 - India's economy is now around a fifth the size of China's (the vertical axis on the table below is a logarithmic scale).
- Until 1990 or so, India also matched China when it came to gross national income (GNI) per capita, but the gap then grew sharply.
 - A classification of development levels based on GNI per capita reveals that <a href="China is on the verge of becoming a "high income country." However, India remains a "lower middle income country." below Vietnam and around the same level as Cambodia.

Nominal GDP



Notes: IMF forecasts. The vertical axis is a logarithmic scale. Source: Compiled by MHRT based on data by the World Bank and the IMF

GNI per capita



Notes: The vertical axis is a logarithmic scale.

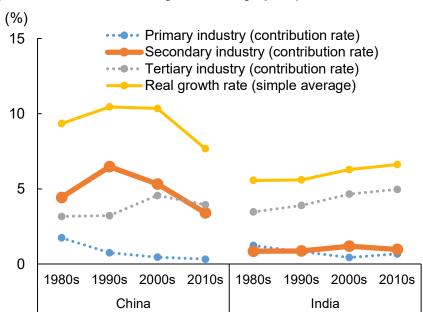
Source: Compiled by MHRT based on data by the World Bank



The lag is mainly due to an undeveloped manufacturing sector

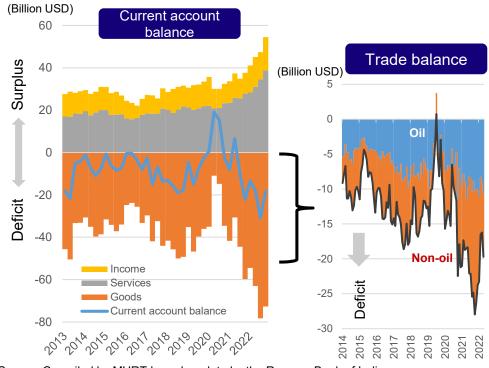
- China's breakneck economic growth was led by manufacturing.
 - China's policies to attract foreign capital after reform and opening-up <u>led to a surge in direct foreign investment into China from the 1990s, particularly into manufacturing.</u>
 - China utilized its low-cost, populous workforce to expand exports, particularly when it came to labor-intensive industries like textiles, and it became "the world's factory."
- India's manufacturing sector is patently weaker than China's, with this leading to a gap in total GDP growth potential.
 - With an economic structure dependent on energy and food imports, <u>India has not sufficiently developed a manufacturing sector for exporting goods.</u>
 - India's current account balance (and goods trade balance in particular) has been in the red, with the economy becoming more unstable on currency depreciation and inflation.

GDP real growth rate (contribution rate by industry, p.a.)



Source: Compiled by MHRT based on data by the World Bank and the National Bureau of Statistics of China

Current account balance and trade balance



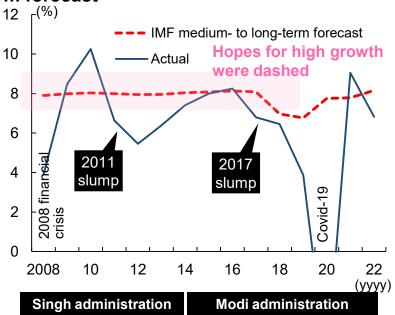
Source: Compiled by MHRT based on data by the Reserve Bank of India



Issue (1): investment slowed on a series of administrative mistakes, with capital accumulation stalling

- The economy suffered an investment-driven slump in 2011 on the tumultuous policies of the politically-weakened Manmohan Singh (Modi's' predecessor).
 - Large-scale corruption led to <u>an administrative logiam, worsening tax structures, and frequently-changing rules on foreign investment, with investment slowing on policy uncertainty.</u>
- In 2017, growth was weighed down by a credit crunch on non-performing loans.
 - Under the Singh administration, India's public sector banks carelessly ramped up financing for the government's infrastructure plans.
 - Under Modi, the Reserve Bank of India (RBI) introduced tougher bank supervision. This revealed the existence of NPLs, particularly when it came to the public sector banks (which accounted for 50% of all bank loans).
- There were hopes for high growth of around 8% during the last two booms, but these hopes were dashed, with investment slowing and capital accumulation stalling.

Actual GDP growth rate and IMF medium- to longterm forecast



Notes: The IMF's medium- to long-term forecast shows the forecast for each year, as made by the IMF made five years previously.

Source: Compiled by MHRT based on data by the IMF

The backdrop to unstable growth

Administrative instability	 Delayed investment licensing approvals due to large-scale corruption Retrospective tax system reform/enforcement going back 50 years Cabinet decisions on foreign investment deregulation rescinded after 11 days, etc.
NPLs	 Under the Singh administration, public sector banks carelessly ramped up financing to pay for the government's infrastructure plans From 2015, the RBI introduced tougher and NPL disposal rules; this revealed the existence of NPLs, particularly when it came to the public sector banks (which accounted for 50% of all bank loans). → It will take several years to deal with bad loans (see next page).

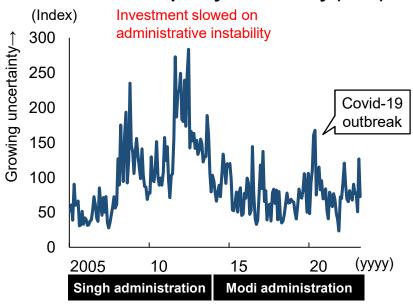
Source: Compiled by MHRT based on various materials



Economic policy is improving after the instability of the Singh administration

- Investment slowed on administrative instability in 2011, but policy is growing more stable under the Modi administration.
 - India's economic policy uncertainty (EPU) index rose sharply from 2011, though it has fallen since the launch of the Modi administration in 2014, thus suggesting the investment environment is improving.
- The net NPL ratio (which takes Allowance into account) hit the 8% range in 2018, though it has now fallen to a 10-year low of 1.3%.
 - This improvement is due to bankruptcy legislation reform and stricter bank/non-bank supervision.
 - Banks have taken a prudent stance towards new lending since the NPL crisis and the pandemic; this is a further reason why there is less risk of new NPLs emerging.

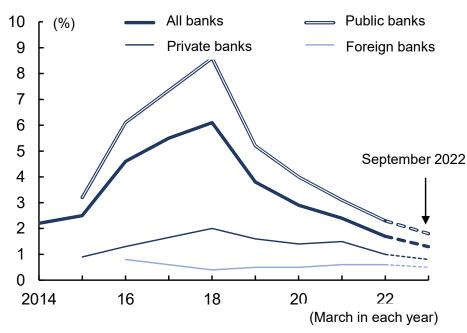
India's economic policy uncertainty (EPU) index



Notes: The EPU is based on an analysis of newspaper reports.

Source: Compiled by MHRT based on *Measuring Economic Policy Uncertainty* by Scott Baker, Nicholas Bloom and Steven J. Davis at www.PolicyUncertainty.com.

The NPL ratio (net)



Notes: The latest data is from September 2022.

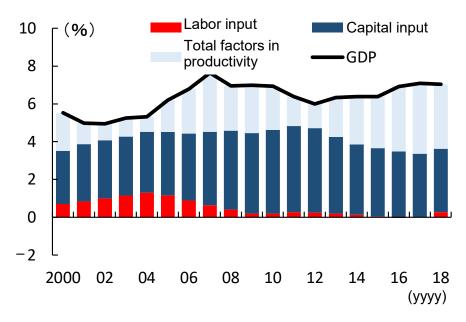
Source: Compiled by MHRT based on data by the Reserve Bank of India



Issue (2): India has not reaped the rewards of a growing population

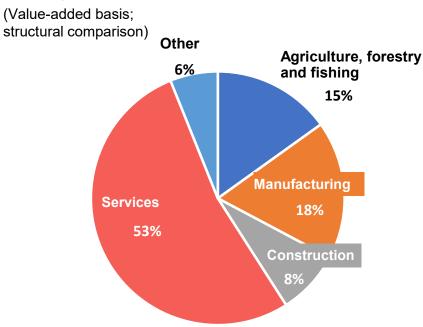
- A glance at the factors behind India's growth shows labor input making a negligible contribution to growth from the mid-2000s.
 - This suggests employment is not growing, with India not reaping the rewards of population growth.
 - China and other Asian countries by contrast have utilized the benefits of population growth to achieve economic growth based around labor-intensive industries.
- A high-added-value-per-capita IT services industry has developed before India managed to develop labor-intensive industries.
 - The flipside to high added value is the weak employment absorption capacity of the IT services sector, with India's economy growing without an accompanying increase in employment.

An analysis of the factors behind GDP growth



Notes: The annualized growth rate for the past 5 years is listed for each year. Source: Compiled by MHRT based on data by the Reserve Bank of India

GDP by sector (2022)



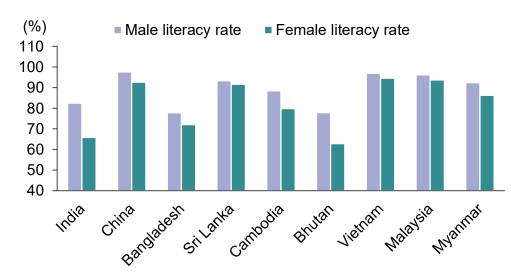
Source: Compiled by MHRT based on data by CEIC



Slow accumulation of human capital; the situation will not be resolved instantly, with several issues blocking India from reaping the rewards of population growth

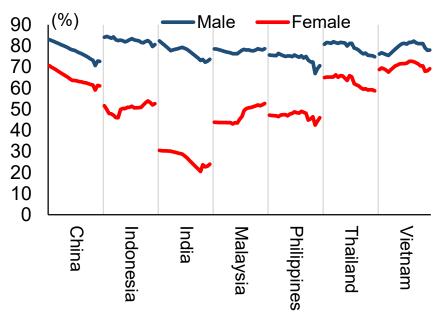
- The poor level of school education and employment training explains why India is finding it hard to reap the rewards of population growth.
 - The female literacy rate is particularly low, with <u>female labor force participation rate lagging at just 20%.</u> This contrasts with other Asian countries, where economic development is supported by female labor force participation in the textiles industry, etc.
- Compulsory education lasts around 10 years. It takes time to accumulate the human capital needed to take advantage of population growth.
 - The government is offering support for younger people and pursuing initiatives aimed at inclusive development, but these moves will take time to bear fruit.

Literacy rate (2021)



Notes: The chart lists the latest data for each country. Source: Compiled by MHRT based on data by the United Nations

Labor force participation rate (by gender; from 2000 to 2022)



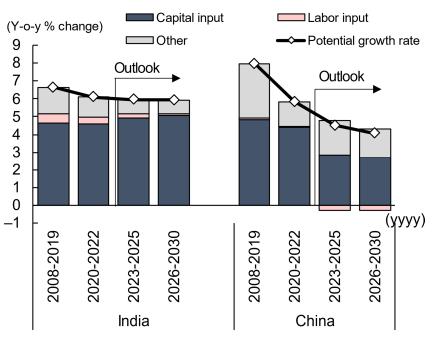
Source: Compiled by MHRT based on data by the United Nations



Despite the aforementioned issues, investment will grow stably, with India's potential growth rate surpassing China's

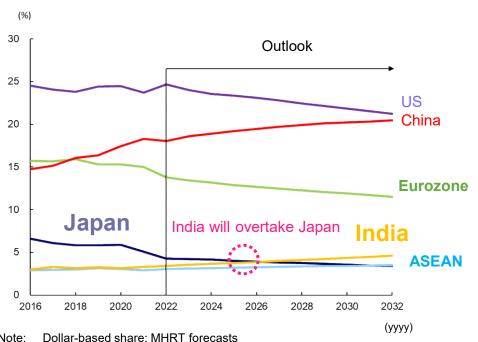
- India looks set to achieve stable growth of around 6% by 2030 (MHRT estimate).
 - The government is managing economic policy in a stable way as it prioritizes growth, with growth likely to be driven by investment (= capital input). Human capital shortages are starting to act as a drag, with labor input unlikely to make much of a contribution, though India will grow at a faster pace than China going forward.
 - Growth in China will gradually slow to the 3% range on the ageing population and moves to deal with excess capital stock.
- Real GDP will continue to grow by 6%, with India's nominal GDP set to overtake Japan's by 2027.
 - After entering the global top 5 in 2022, India will rise to third behind the US and China in 2027.

Growth accounting (analysis of factors behind growth; MHRT estimate)



Source: Compiled by MHRT based on data by the statistics of relevant countries, ILO. etc.

The long-term nominal GDP outlook by major country/region



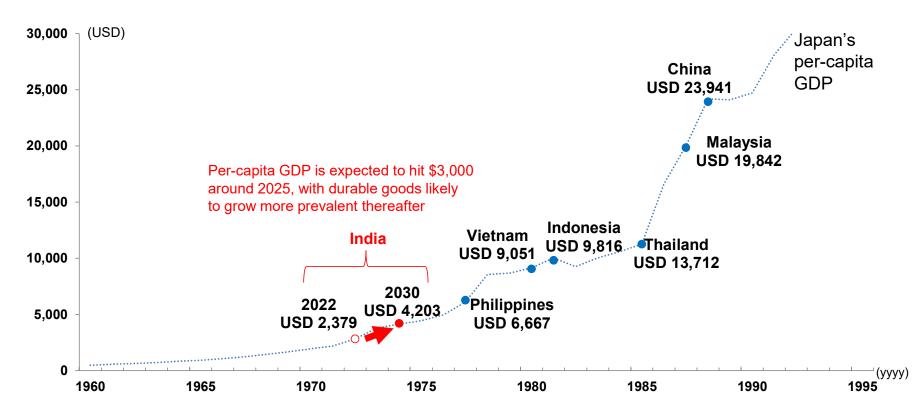
Source: Compiled by MHRT based on data by the IMF and the statistics of relevant countries



Income levels will improve when the economy grows by 6% growth, with India likely to prove attractive as a market for large durable consumer goods

- India's per-capita GDP will basically double by 2030.
 - It will hit \$4,203 in 2030 (2022: \$2,379), <u>around the same level as Japan in the mid-1970s, during Japan's phase of rapid economic growth.</u>
 - Per-capita GDP will easily top \$3,000, the level at which people start to buy durable goods, with cars, white goods and other large durable goods likely to grow more prevalent from here on.

Per-capita GDP (the transition of Japan's per-capita GDP vs the 2030 forecast for other countries)



Source: Compiled by MHRT based on data by the Centre for Economics and Business Research (CEBR)



Business investment is moving sluggishly, with India a difficult market for Japanese firms

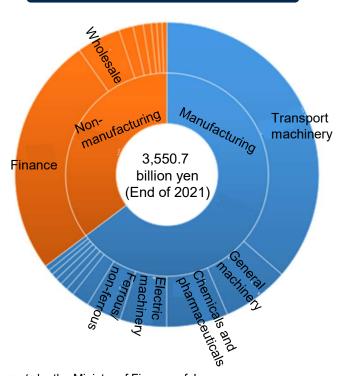
- India sits at the lower end of major Asian countries when it comes to direct investment from Japan (behind China, Thailand, South Korea and Indonesia).
 - When it comes to manufacturing, investment is mainly cantered on transport machinery.
- When it comes to <u>issues raised by Japanese firms about doing business in India, the emphasis has shifted from "undeveloped infrastructure" to "execution of legal system unclear" and "intense competition with other companies."</u>

Direct investment from Japan

The investment position by country/region (2022, %)

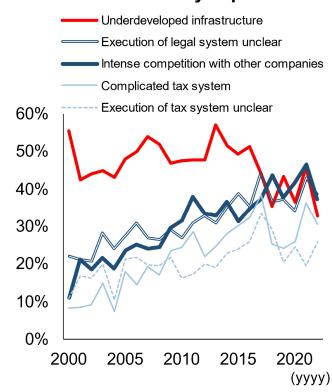
Country/region (Country/All (%)		
1	US		34.63%	
2	UK		7.96%	
3	China		7.58%	
4	The Netherlands		6.44%	
5	Singapore		5.52%	
6	Australia		4.28%	
7	Thailand		3.67%	
8	Switzerland		2.71%	
9	Germany		2.19%	
10	South Korea		2.14%	
11	Hong Kong		2.04%	
12	Indonesia		1.96%	
13	India		1.65%	
14	Luxembourg		1.49%	
15	Belgium		1.34%	

Composition by industry (2021, %)



Source: Compiled by MHRT based on the Balance of Payments by the Ministry of Finance of Japan

India issues raised by Japanese firms



Note: Multiple answers

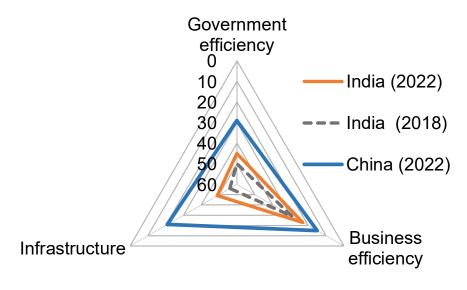
Source: Compiled by MHRT based on data by JBIC



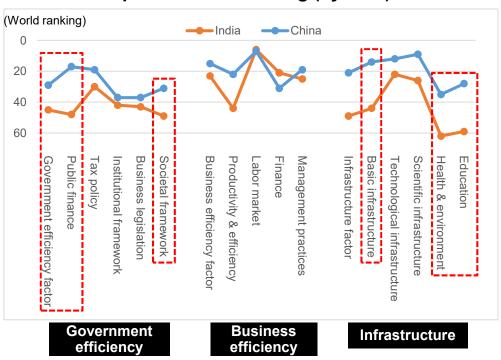
There is no large gap with China when it comes to business efficiency, but there is room for improvement when it comes to infrastructure and the system of government

- India is also getting better when it comes to the *IMD World Competitiveness Ranking*. With regards to business efficiency in particular, India is already at the same level as China.
 - However, there is a clear gap with China with regards to infrastructure and government efficiency. When it comes to government efficiency, there is a large gap regarding public finances and societal frameworks.
 - With infrastructure, India lags behind in terms of basic infrastructure and social infrastructure such as education and health.
 - In India, the environment has improved when it comes to sectors directly related to business, but there remain many problems in indirect sectors and so on.

The World Competitiveness Ranking



The World Competitiveness Ranking (by item)



Source: Compiled by MHRT based on the IMD's World Competitiveness Ranking

Source: Compiled by MHRT based on the IMD's World Competitiveness Ranking



Business expansion in India is a promising strategy choice given the country's potential for growth

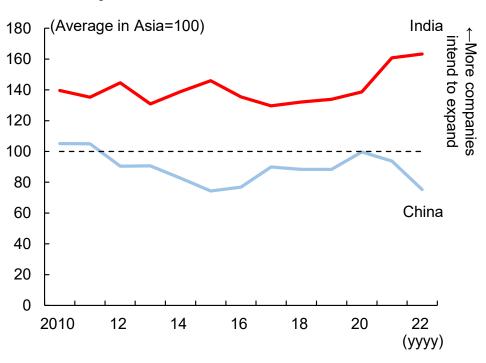
- <u>The profitability of Japanese companies investing in India has improved recently</u>, with the gap between India and other Asian countries shrinking.
 - Profitability has been pushed up in 2022 by the post-pandemic recovery, though profit rates are rising steadily on the whole. <u>This trend has been propelled by expanding markets and the increased local knowledge of Japanese firms.</u>
- When compared to China, there remain issues related to the government sector and infrastructure, <u>but India's growth potential makes it</u> a <u>promising choice when it comes to overseas strategy.</u>
 - As mentioned later, industrial policy has provided a boost, with industry clusters set to accumulate in sectors receiving support.

Profitability of Japanese companies (by destination)

(%) India has —Average in Asia China overtaken China 80 and the rest of Covid-19 Asia, in part due to the post-70 pandemic recovery 60 50 The gap with Asia shrunk 40 There was a large gap with the rest of Asia 30 10 12 16 18 20 2022 14 (yyyy)

Source: Compiled by MHRT based on the *Survey on Business Conditions of Japanese Companies Operating Overseas* by the Japan External Trade Organization (JETRO)

Japanese companies intending to expand over the next 1 to 2 years



Source: Compiled by MHRT based on the Survey on Business Conditions of Japanese Companies Operating Overseas by JETRO



Under the PLI Scheme, the Modi administration is prioritizing support for IT/electronics manufacturing

- The Production-Linked Incentive (PLI) Scheme was announced in the budget bill for FY2020 announced. The scheme offers IDR 2 trillion (approx. JPY 3 trillion) of support to 14 sectors over a 5-year period.
 - The Modi administration's first manufacturing promotion policy *Make in India* was too sweeping and did not yield sufficient results, so a more targeted approach was adopted for the PLI.
- The mobile phones sector receives the most support. Electronic/technology products, telecom/networking products and other IT/electronics sectors are also prioritized.
 - Incentive applications/approvals involving Japanese firms are mainly centered in the automobiles/auto components and white goods sectors, with Japanese firms not expanding beyond a few sectors.

The PLI Scheme target industries

		Sector	Implementing Ministry/Department	ntives budget 100 million)	•	Number of approved companies	Number of approved Japanese companies	
sting	1	Mobile Manufacturing and Specified Electronic Components	MeitY	4095.1		32	1	
re-exis target	2	Critical Key Starting Materials/Drug Intermediaries and Active Pharmaceutical Ingredients	Department of Pharmaceuticals	694	41	l sectors	0	
正	3	Manufacturing of Medical Devices	Department of Pharmaceuticals	342		42	1	
	1	Advance Chemistry Cell (ACC) Battery	NITI Aayog, Department of Heavy Industry	1810		10	0	
	2	Electronic/Technology Products	MeitY	732.5	I.	14	0	D
	3	Automobiles & Auto Components	Department of Heavy Industry	2593.8		20	15	
	4	Pharmaceuticals Drugs	Department of Pharmaceuticals	1500		55	0	
ets	5	Telecom & Networking Products	Department of Telecommunications	1219.5		31	0.	
arg	6	Textile Products: MMF segment and technical textiles	Ministry of Textiles	1068.3		64	1	
i ×	7	Food Products	Ministry of Food Processing Industries	1090		182	0	
ž	8	High-Efficiency Solar PV Modules	Ministry of New and Renewable Energy	2400		14	0	
	9	White Goods (ACs & LED)	Department for Promotion of Industry and Internal Trade	623.8		42	8	
	10	Specialty Steel	Ministry of Steel	632.2		30	5	
	11	Drones and Drone Components	Ministry of Civil Aviation	12		23	0	/

Notes: The Indian government's HP lists 13 sectors, though some have overlapping components. Source: Compiled by MHRT based on Indian government press releases and JETRO data

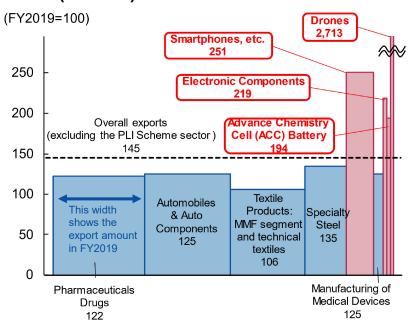
Sectors with large incentive budgets that Japanese firms have been slow to enter



Smartphone exports have already risen noticeably on the PLI Scheme

- Since the introduction of the PLI Scheme, exports have noticeably risen, particularly when it came to the IT/electronics sector, which was quick to take advantage of the scheme.
 - Smartphones have had the biggest impact on overall exports. Smartphone exports are quite substantial, with the sector seeing the second largest growth among all sectors targeted by the PLI Scheme.
 - Electronic components like IC and semiconductors are next up behind smartphones. Drone exports have also surged, though the drone export amount remains low.
- When it comes to high-growth sectors, <u>smartphones are particularly high value</u>, <u>with exports to Europe and the US expanding</u>.

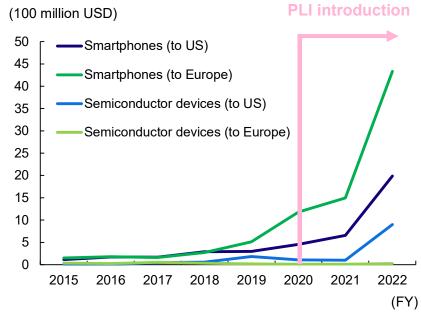
The export growth rates of PLI Scheme target sectors (FY2022)



Notes: The most recent data is the accumulated data for April 2022–February 2023, so this data was annualized and a comparison made with fiscal 2019. The width of the rectangles corresponds to the size of each sector's export amount (FY2019).

Source: Compiled by MHŔT based on data by India's Ministry of Commerce and Industry

Smartphone and semiconductor exports to Europe and the US



Notes: The figure for FY2022 shows the annualized rate for the accumulated data for April 2022–February 2023.

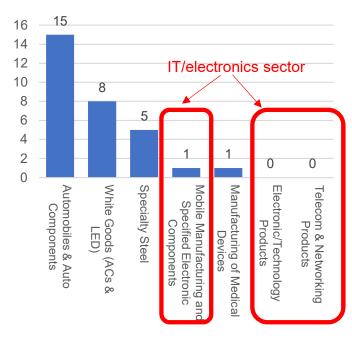
Source: Compiled by MHRT based on data by India's Ministry of Commerce and Industry



Japanese firms are concentrated in the automobile sector, but there are also opportunities in the IT/electronics sector, including when it comes to parts and materials

- The PLI Scheme has many promising sectors, but Japanese firms remain concentrated in the automobile sector, followed by the white goods sector.
 - With India's large durable goods market set to grow, these sectors also have a lot of growth potential.
 - The pace of EV growth will be slow owing to the lack of infrastructure and so on, but the automobile sector could undergo structural changes, so caution will be needed.
- On the other hand, <u>South Korea, Taiwanese and US firms are leading the way when it comes to the IT/electronics sector (a PLI target), with Japanese firms lagging behind.</u>
 - Industries might cluster in India on the rise of Chinese geopolitical risk. Japanese firms will also have a chance to enjoy the fruits of India's growth potential.
 - If industrial clusters accumulate in sectors in which Japanese firms have an edge when it comes to parts, this will spur on expansion by these Japanese firms.

Japanese firms with PLI approvals (unit: no. of firms)



Source: Compiled by MHRT based on data by JETRO and various materials

Examples of foreign capital involvement in smartphone manufacturing

Company	Recent activities
Company A (a major smartphone firm)	2017: Commenced production in India 2021: Global production volume: 1%–3%* 2022: Global production volume: 7%* 2025: Potential global production volume: 25%* Targeting of a maximum 45% share of the global production volume* Seeking to expand contracts with major suppliers and increase production in India
Company B (a major supplier)	2022: Began manufacturing the latest models at its factory in Sriperumbudur on the outskirts of Chennai, southern India May 2023: Telangana state government announced that Company B will invest \$500 million to build plants in the state
Company C (a major supplier)	2022: Began manufacturing the latest models in Mahindra World City in southern India
Company D (a major smartphone firm)	Reports suggests Company D will shift part of its Vietnamese manufacturing operations to India

Source: Compiled by MHRT based on data by JETRO and various materials



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