

A Vision of Viksit Bharat

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Introduction

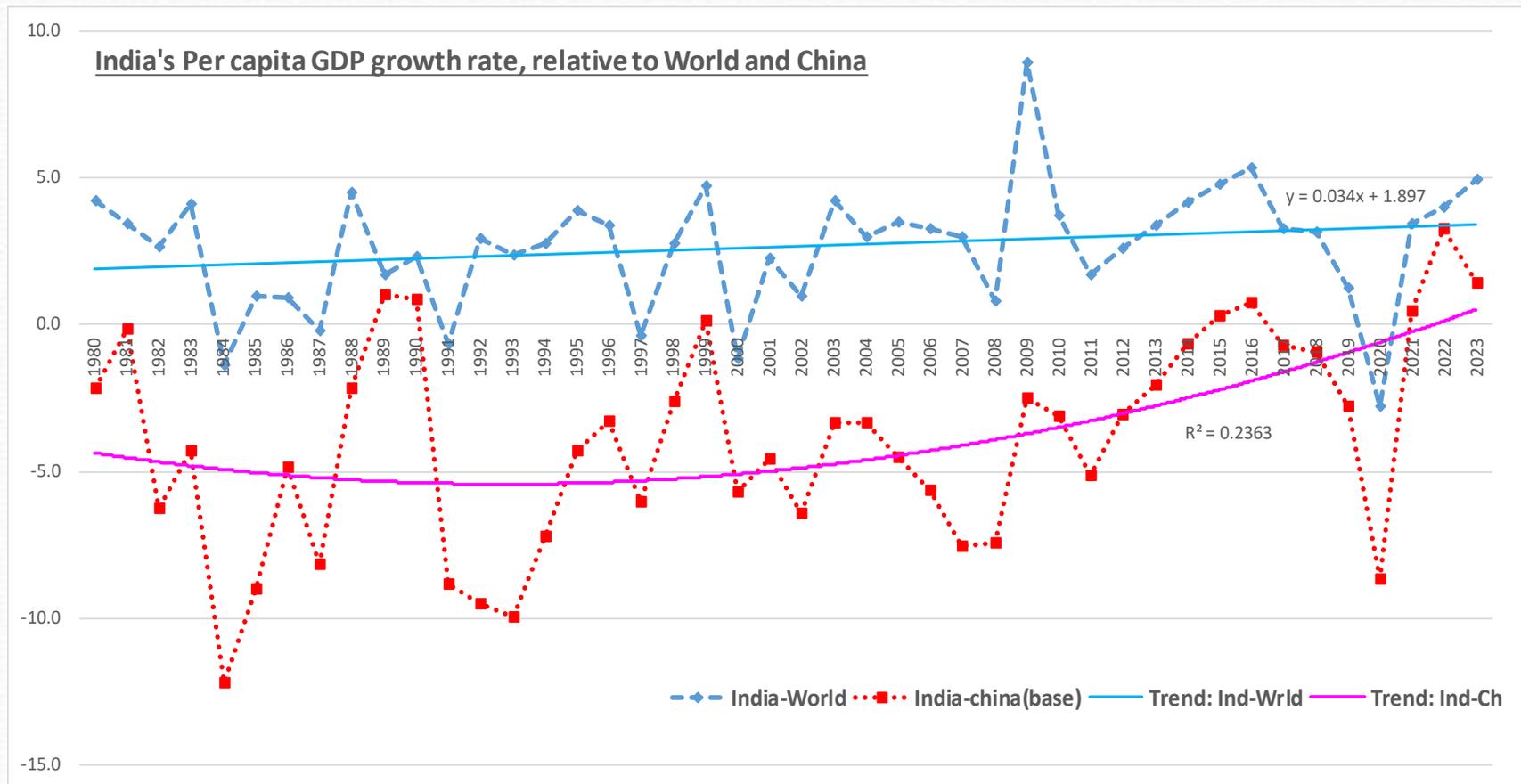
- How are we positioned for the future?
 - Relative Per capita GDP & PcGdp growth
 - Employment, Poverty, Income distribution
- Opportunity & challenge: Global
 - Demographic Changes: WAP
 - De-monopolization of manufactured exports
 - Services unbundling/fragmentation
- Challenges & opportunities: Domestic
 - Quality of Basic education & skilling
 - Bureaucratic Socialism legacy
 - Digital, Phygital, Hybrid, Expert systems, AI
- Projected outcomes: Growth, welfare

Where do we stand?

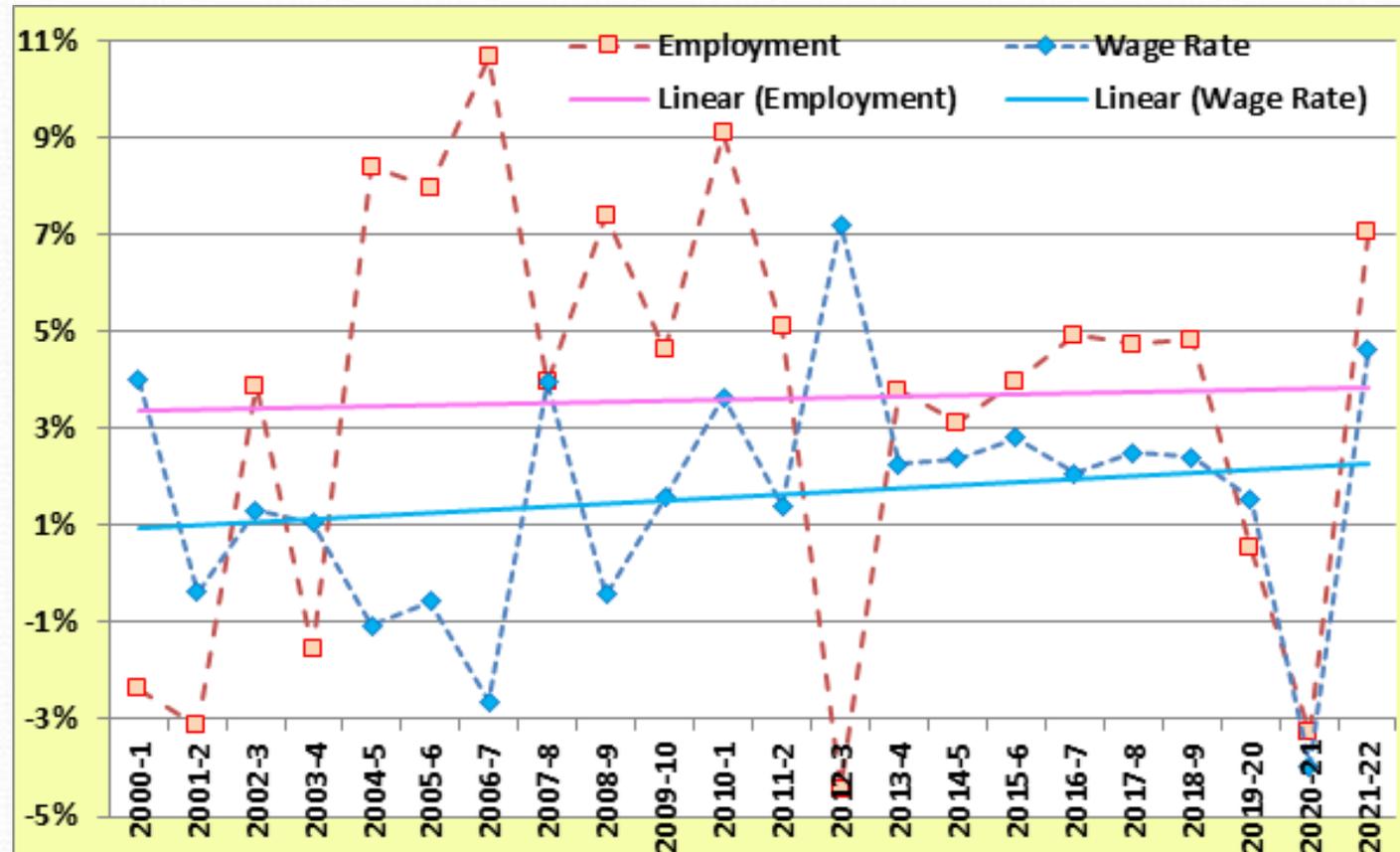
- Growth rate
- Employment & wages
- Poverty

- Social Indicators
 - Relative to our PCGDP (LMIC)

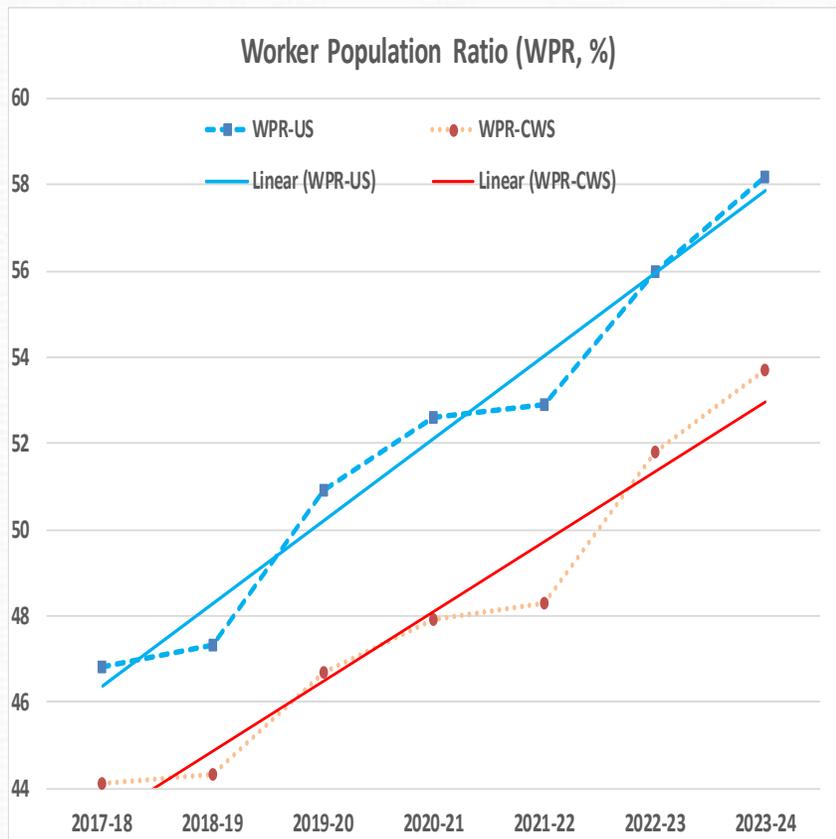
India: Accelerating growth



Growth of Employment (man-days) & Real Wage rate (ASI)



Employment, Wages, Skills



Employment & Wages AY18 to AY24		
	Average growth rate	
	<u>Simple</u>	<u>Compound</u>
Worker/Population		
Crnt Wkly Status:CWS	3.4%	3.3%
Rural female	11.7%	11.2%
Usual Status: US	3.7%	3.7%
Rural female	12.2%	11.9%
Average AY18 to AY23		
WPR		
Casual workers	0.6%	0.6%
Self employed	5.1%	5.3%
Regular employe	1.5%	1.5%
Real wages		
Casual workers	2.8%	2.8%
Self employed	0.6%	0.6%
Regular wage worker	-0.4%	-0.4%

Poverty & distribution

Poverty in India: Head Count ratio (HCR)					
	<u>2011-12</u>	<u>2022-23</u>	<u>Change</u>	<u>BBV(2019-20)</u>	<u>Tendulkar</u>
In 2011–12 prices					2017-18 prices
<u>\$1.9 PPP/day/person</u>					<u>\$2.15 PPP</u>
<i>All India</i>	12.2%	2.3%	-9.9%	2.2%	2.4%
Rural	12.6%	2.6%	-10.0%		2.7%
Urban	10.7%	1.4%	-9.3%		1.7%
<u>\$3.2 PPP/day/person</u>					
<i>All India</i>	53.6%	21.8%	-31.8%	23.3%	
Rural	59.7%	24.0%	-35.7%		
Urban	40.1%	15.6%	-24.5%		
<i>Gini Co-efficient</i>					
Total				31.4	
Rural	28.7	27.0	-1.7		
Urban	36.7	31.9	-4.8		
<i>Consumption: Top 5%/Bottom 5%</i>					
Rural	8.6	7.3	-1.3		
Urban	14.7	10.0	-4.7		
Note: International poverty lines as defined in 2011-12 prices & exchange rate					
Source: Bhalla & Bhasin, Economic & political weekly, July 13, 2024, Vol LIX, No. 28.					
Calculations of GINI & top5%/bottom5% by author based on HECS 2011-12 & 2022-03					

Opportunity, Weakness

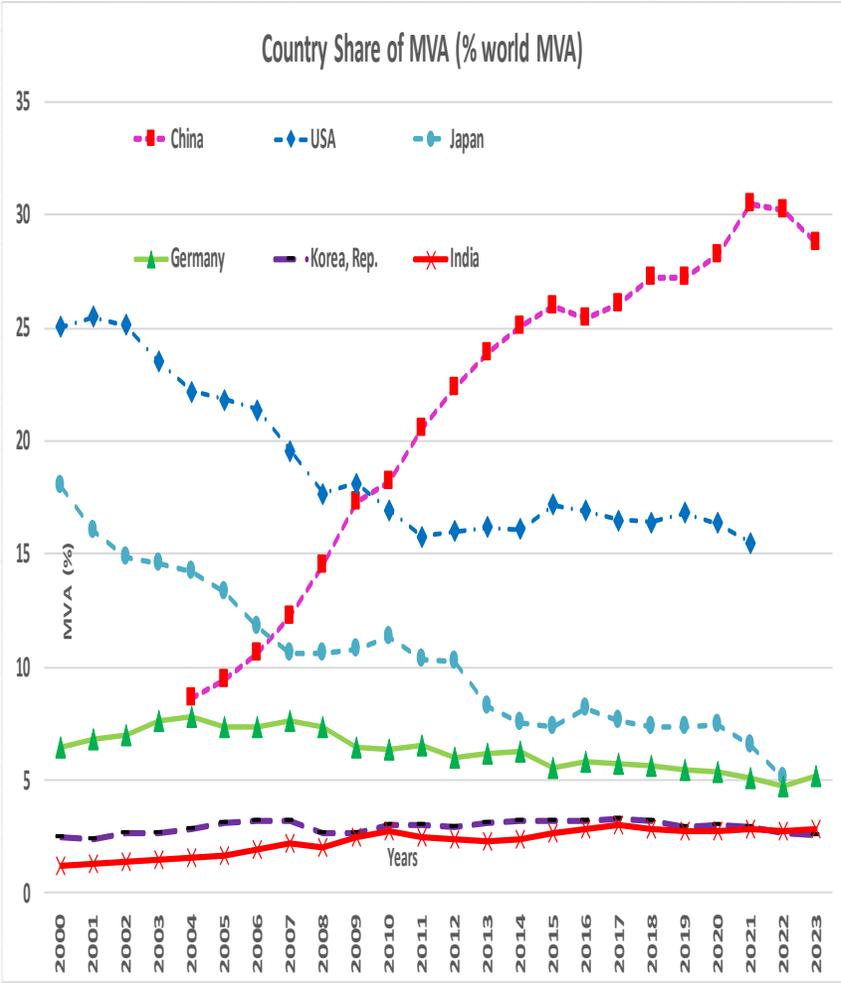
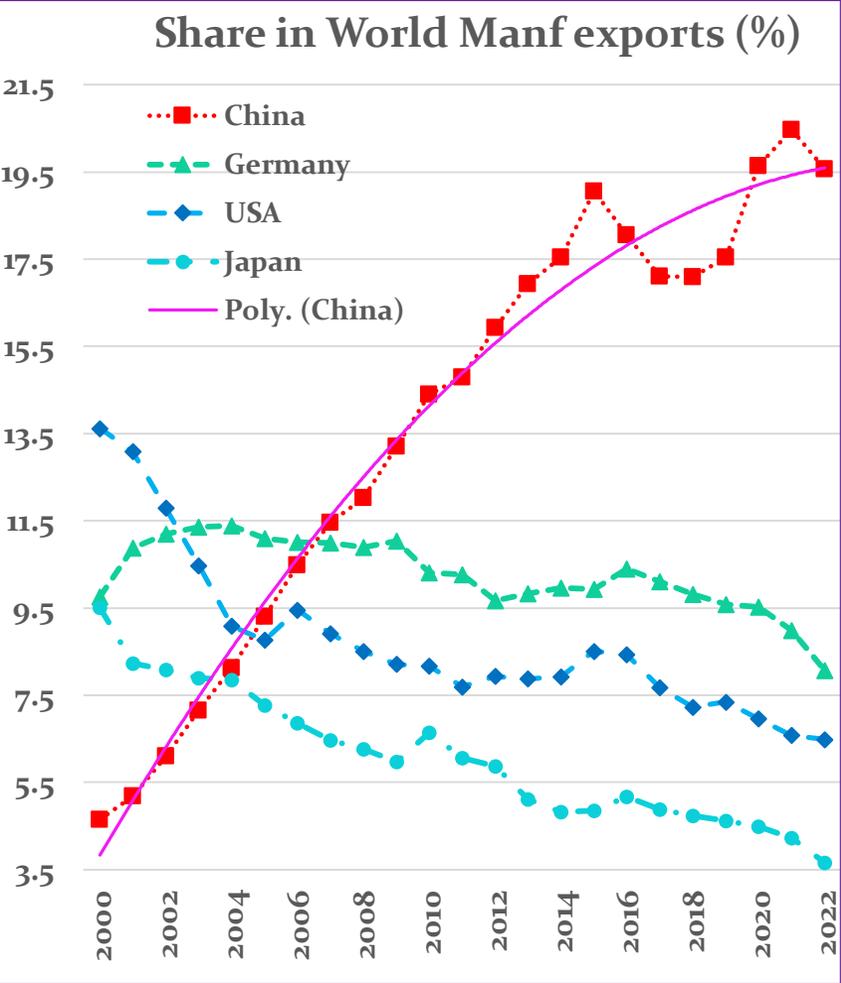
- Demographics
 - Basic Ed, Job skills: Quality of teaching/training
 - Technology, R&D & Innovation
- Supply Chain De-risking
 - Economic risk (PRC manf Duopoly/monopoly)
 - Domestic security risk (3Cs)
 - National Security (High Tech, critical minerals)
- E-services: Unbundling of Services
 - Skill for India, Skill for the World
- Digital, Blended/Hybrid: Expert systems, AI

Demography & Comparative advantage

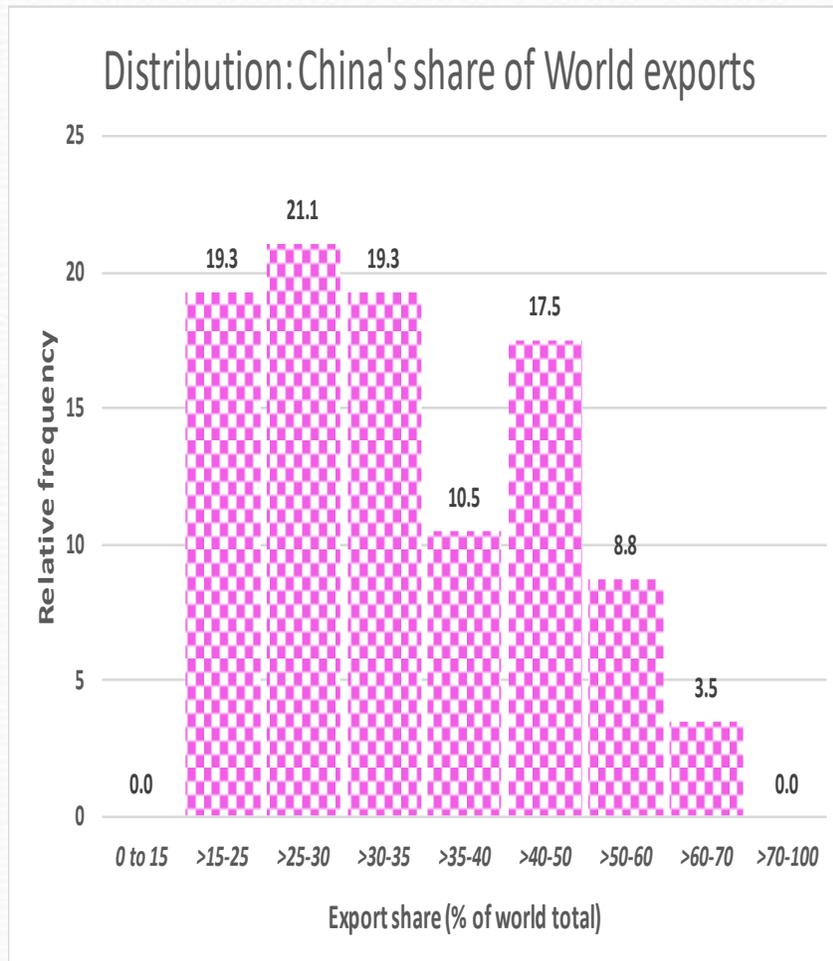
- World share of Working Age Population (WAP)
- Decline from 2020-2050
 - HICs: USA, EU, UK, Japan, S Korea, Taiwan; Russia
 - MICs: China, Thailand, Mexico, Indonesia; Viet Nam
- Increase in India(18.6/19.0)
- Comparative advantage
 - Low skill (~PRC'o8); 2024-2030
 - Med/Semi-skilled (2031-45)
 - High skill intensive 2046+

Country share of World's 20-59 yr olds (WAP)						
		Change in share(%pt)		Share of world WAP (%)		
		2020-1990	2050-2020	1990	2020	2050
1	<i>High income countries (HICs)</i>				12.0	9.0
2	USA	-1.0	-0.5	5.3	4.2	3.8
3	W Europe	-1.4	-0.6	3.8	2.4	1.8
4	UK	-0.3	-0.1	1.2	0.8	0.7
5	Japan	-1.3	-0.6	2.7	1.5	0.9
6	S Korea	-0.2	-0.4	1.0	0.7	0.4
7	Taiwan	-0.1	-0.1	0.4	0.3	0.2
8	Russia	-1.2	-0.7	3.1	1.9	1.3
9	<i>Upper middle income countries</i>				27.7	19.0
10	China	-3.4	-7.8	23.5	20.1	12.3
11	Thailand	-0.1	-0.4	1.1	1.0	0.6
12	Indonesia	0.3	-0.2	3.3	3.6	3.5
13	Mexico	0.3	-0.1	1.4	1.6	1.5
14	<i>Lower Middle Income countries (LMICs)</i>					
15	Viet nam	0.2	-0.2	1.1	1.3	1.1
16	India	2.9	0.3	15.4	18.3	18.6

Manufactured Exports, VA



Monopolization of Manf export



China's Merchandise Exports, 2021 (% of World exports)	
Product	China share
Pottery	67.4%
Lighting fixtures & fittings, n.e.s.	67.4%
baby carriages, toys, games & sporting goods	59.0%
Household equipment of base metal, n.e.s.	57.7%
Prefabricated building, sanitary, heating and lighting fixtures, n.e.s.	55.7%
Fabrics, woven, of man-made fabrics	55.4%
Knitted or crocheted fabrics, n.e.s.	53.8%
Made-up articles, of textile materials, n.e.s.	48.5%
Trailers & semi-trailers	48.5%
Cotton fabrics, woven	48.4%
Cutlery	45.8%
Automatic data processing machines, n.e.s.	44.0%
Tulles, trimmings, lace, ribbons & other small wares	43.3%
Household type equipment, electrical or not, n.e.s.	42.7%
Medium-skill: Electronics (excluding parts and components) (SITC 775)	42.7%
Clothing accessories, of textile fabrics	42.1%
Women's clothing, of textile, knitted or crocheted	40.9%
Textile yarn and related products	40.8%
Optical instruments & apparatus, n.e.s.	40.1%
Telecommunication equipment, n.e.s. ; & parts, n.e.s.	39.9%
Telecommunication and sound recording apparatus	39.0%

Threat=> Opportunity=Challenge

- PRC: Socialist market Economy (SME)
 - ELISID growth model & sREAD technology system
 - Goal: Monopoly over all important Technologies, manufactured exports, critical materials
- 3C: Communication, computation & Control: **ADP, Telecom, Optical**
- Military threat & defense supply chain
- Industrial policy: Trusted, competitive Supply chains
- Joint utilization of comparative advantage of India (manpower), USA(technology), EU+(demand)

Importance of MNEs/MNCs

- MNC anchored supply chains: 60% to 2/3rd of trade
 - Majority head quartered in US, EU, UK, Japan
 - Competitive disadvantage(Vietnam, Bangladesh): 12.5%
 - Anchor investor invests in: Skills, quality, timeliness
 - Critical for exports & domestic value added in export
- ROW : Near classic free trade + Atman Nirbharta w
 - Export as benchmark: global quality, competitiveness
 - Exporting firms profits & productivity > domestic
- India Manf: 5th in VA, 15th in exports
 - PLI : Capital subsidy (MES)

Higher Education (% of pop 25+)

	<u>Year</u>	<u>PcGDP</u>	<u>Expected</u>	<u>Actual</u>	UMIC	HIC
India relative to countries at diff pcGdp ppp (2021 int \$)					\$12,800	\$37,000
<u>School Enrollment</u>						
Tertiary (% gross)	2023	\$9,160	34.0	33.1	40.7	61.7
<u>Educational attainment, at least completed pop25+ yrs, (%)</u>						
Bachelor's or equivalent	2023	\$9,160	13.0	13.2	15.6	23.9
Master's or equivalent	2023	\$9,160	4.2	3.5	5.4	9.2
Doctoral's or equivalent	2023	\$9,160	0.9	3.5	1.0	1.6

R&D Indicators

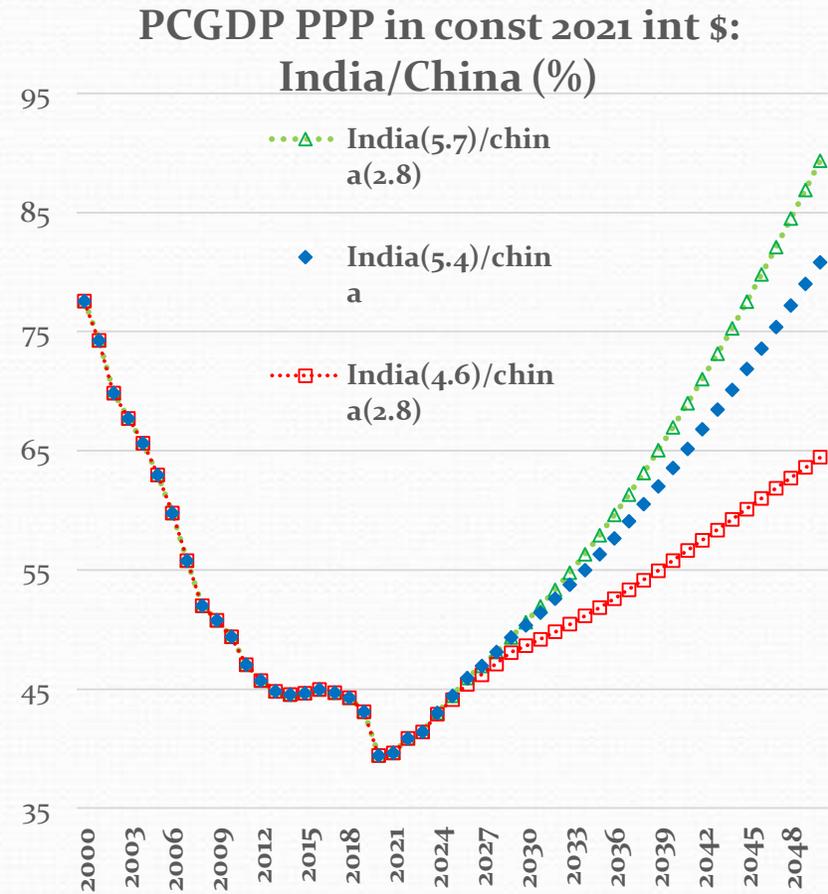
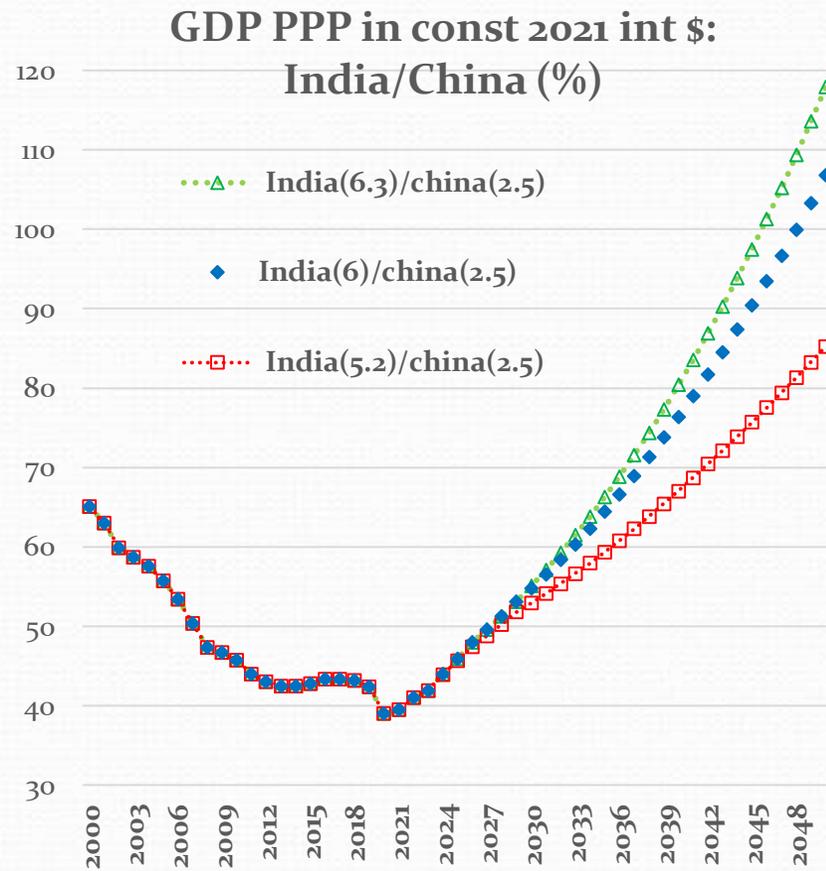
India relative to countries at diff pcGdp ppp (2021 int \$)	Year	PcGDP	Expected	Actual	UMIC	HIC
					\$12,800	\$37,000
R&D expenditure (% of GDP)	2020	\$7,400	0.4	0.6	0.7	1.3
Researchers in R&D (/Billion)	2020	\$7,400	0.7	0.3	1.5	2.9
Patent applications, residents (/Million)	2021	\$8,050	33.0	19.0	66.0	141
Firms that spend on R&D (% of firms)	2022	\$8,545	19.2	4.3	19.9	21.7
Technicians in R&D (/Billion)	2018	\$7,714	0.2	0.1	0.4	0.8
High-technology export (% of manf exprt)	2023	\$9,160	8.3	14.9	10.2	16.0
Source: Authors calculation based on WDI, Dec 2024						

Global Innovation Index 2024			
	GII	Input	Output
Countries	Rank	Sub-Index	
Lower Middle Income Countries			
India	39	44	33
Viet Nam	44	53	36
Upper Middle Income Countries			
China	11	23	7
Thailand	41	41	39
Indonesia	54	54	67
Mexico	56	73	52
High Income Countries			
United States	3	4	5
United Kingdom	5	10	3
France	12	17	10
Japan	13	12	14
Count	133		
Source: GII Database, WIPO, 2024			

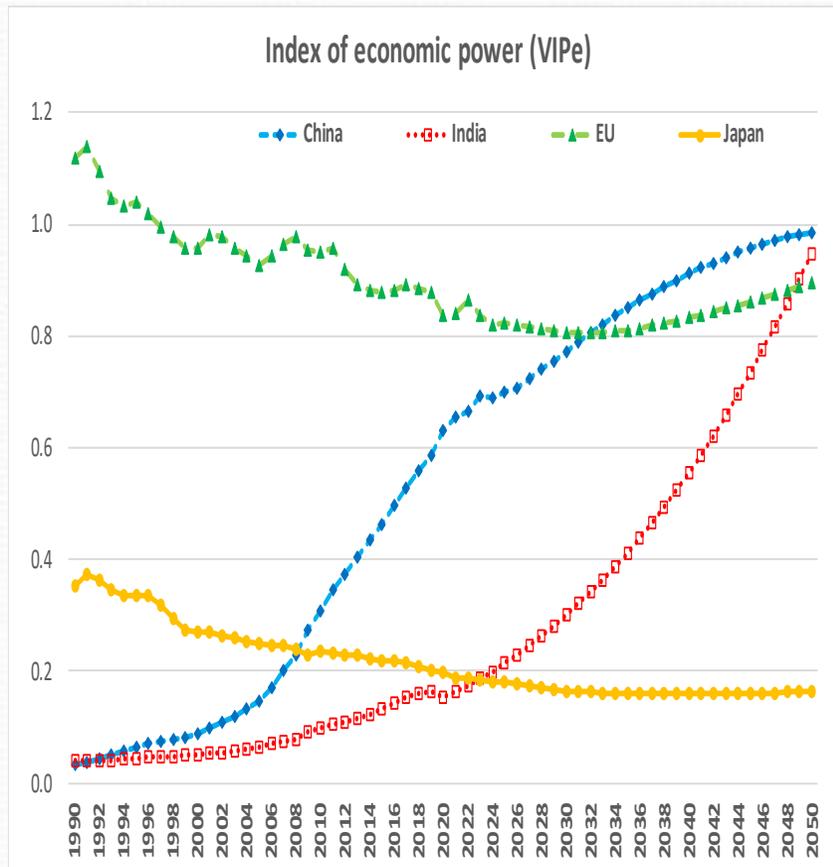
Where do we want to be?

- World Bank defn of UMIC & HIC equated to
 - PcGDP at PPP (in international \$ at constant 2021 prices)
- Goal: From LMIC(\$9,200 in 2023) to
 - UMIC (\$13,000) by 2030, HIC (\$36,800) by 2050
- India: Base proj average GDP growth = 6.0%(2020-49)
 - (~7% 2020-29, ~6% 2030-39, ~5% 2040-49)
- Other countries are based on IMF & OECD
 - For India this is taken as Pessimistic projection
- Social Parameters/Indicators(eg Public Health)
 - Targets based on Global benchmarks

Projections: India/China



Evolution of Economy(1990-2050)

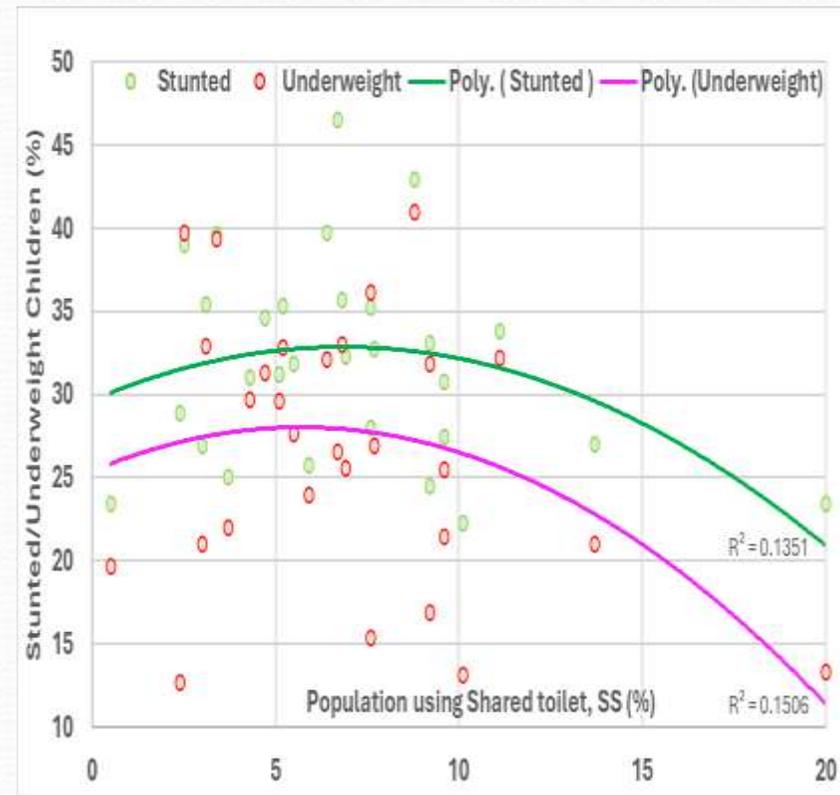
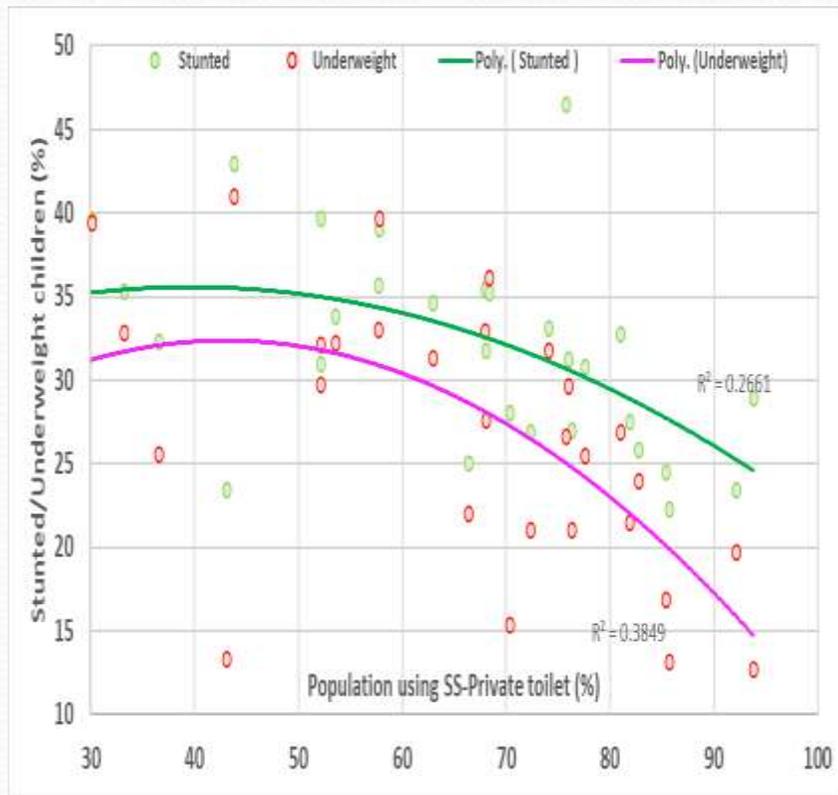


- Index of economic power
 - VIPE relative to USA(= 1)
- China 0.69 => 0.99 (blue)
- India 0.19 (2 => 0.95 (2050) – red line
- EU (incl Germany, France): 0.84 to 0.89 (green)
- India is level with Japan (fawn) & Germany in 2023.
- Will overtake them in crnt USD GDP within 3 years.

Public Goods Infrastructure

- Civic Infrastructure
 - Drinking water, garbage collection, sanitation, sewage
 - State Grids for collection, processing, recycling
 - Roads, footpaths, drainage, utility tunnels; street lights
 - Parks, lake/river fronts; grassed areas, public toilets
 - Monuments, iconic buildings/areas, culture centers
 - Air, water, land pollution abatement/elimination
 - Shopping, commercial centers, parking, toilets
- Public Transport, Land use planning

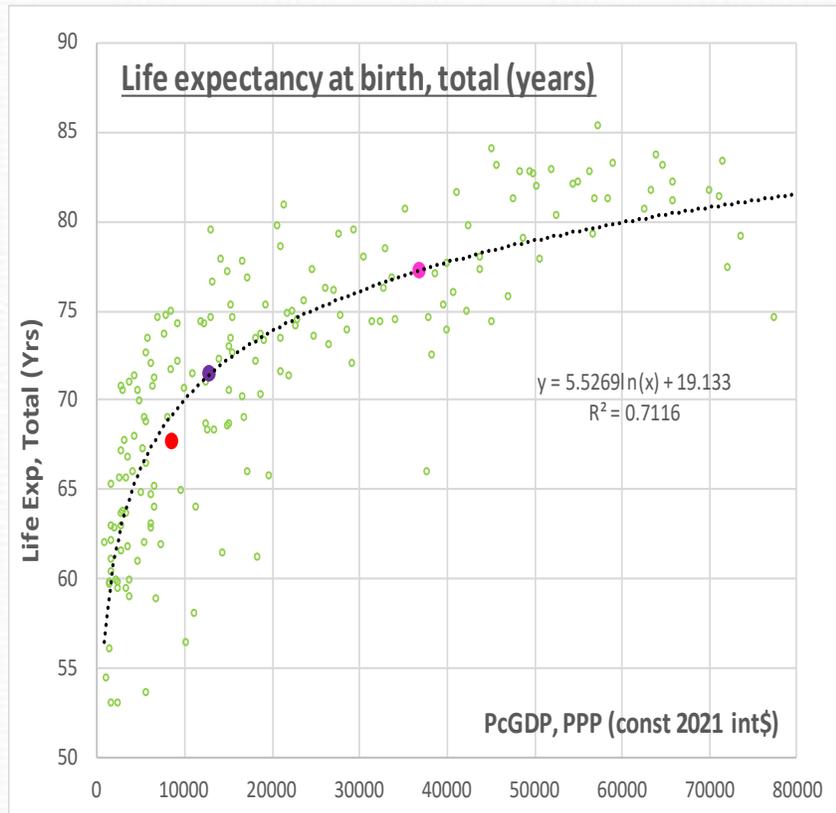
Viksit Bharat Swachh Bharat: Viksit Bharat = Swachh Bharat (Child stunting & under weight)



Conclusion

- We are well placed to become a UMIC/HIC
- New Opportunities must be grabbed
 - Demographic Changes: WAP
 - De-monopolization of manf exports
 - Services unbundling/fragmentation
 - Digital=>Phygital: Blended/Hybrid Expert systems/AI
- Old challenges to address
 - Quality of Basic education(FLN) & skilling
 - Use expert systems, Blended AI
 - Higher Ed, R&D & Innovation

Social Indicators improve with PcGdp



- India's Life expectancy at birth is now = 67.7 yr(**dot**) (Female = 69.4)
- Target: 2030 UMIC (**dot**), with LE Total(71.4 yrs), Female(74.1 yrs)
- Target: 2050 HIC(**dot**), with LE total (77.2 yrs), Female (80 yrs)
- Similarly, Public Health, Education, & other social indicators



THANKS