Global Balances Post-GFC

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Introduction

- Global Financial Crisis (GFC08): Financial Bubble & bust
- Pre-GFC08: Reform & Globalization drive growth
  - EMEs: Investment led growth & excess saving
  - DCs: Credit Driven Excess (consumption) Demand in DCs
- Post GFC08
  - DCs: Aggregate Demand Collapse
  - EMEs: Excess capacity & Credit fueled Over Investment
- Role of Globalization & International Trade:
  - Pre-GFC08: EME Growth Export led vs Neutral
  - Post GFC08: Trade Stalls, Globalization Reverses
- Net Export & Investment led EMEs stall=>
  - Credit bubbles to sustain artificial growth above potential

Fig1:Additions to Real World GDP(%):

China(33%), India(15%), USA(10-12%), Euro(<10%)

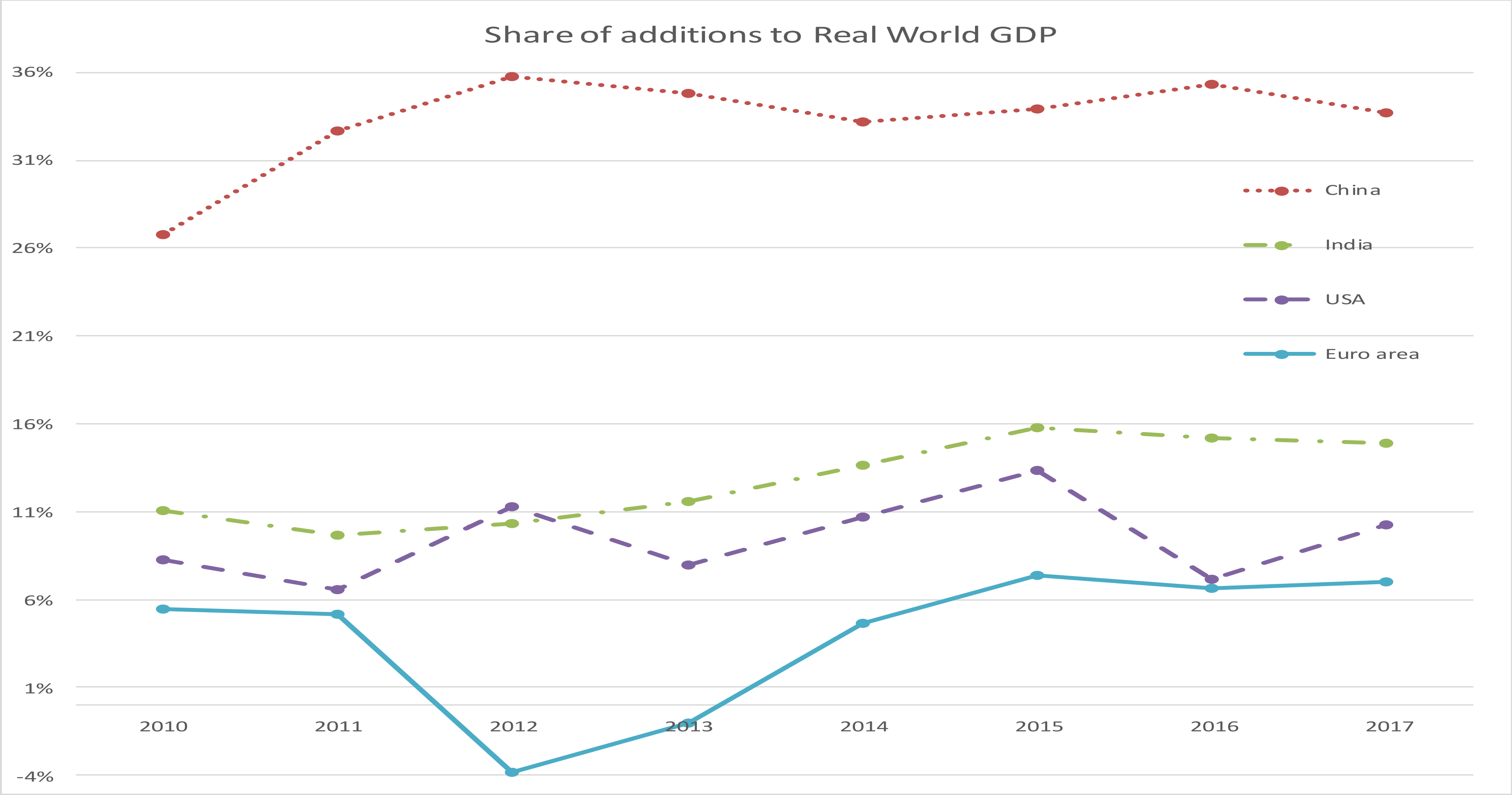


Table 1: Growth Slows World - wide

Pre-GFC: 2001-8

Post GFC: 2009-16

World growth decelerates

China's Growth slows most confirming that the Export led growth model is no longer viable in a world of de-globalization.

India is a notable exception. Growth accelerates marginally.

Data Source: World Bank, WDI, April 2018

	GDP growth rate		
	2001-8	2009-16	delta
China	10.7	8.2	-2.4
Euro	1.8	0.4	-1.5
UK	2.4	1.2	-1.2
World	3.0	2.2	-0.8
USA	2.1	1.5	-0.6
Japan	1.1	0.6	-0.5
India	7.1	**7.5**	**0.4**

Figure 2: Globalization of International Trade

Post war Globalization Era (1990s & 2000s): Global Trade/ World GDP rises dramatically .

Export Oriented Economies (Export Promotion-EP) benefit enormously (China, E Asia, Germany, SE Asia).

Era ended with GFC 2008 (Trade/Gdp peaked in 2008).

Export led Growth model which flourished, is now at disadvantage. Countries with Neutral trade policy better positioned to continue growth

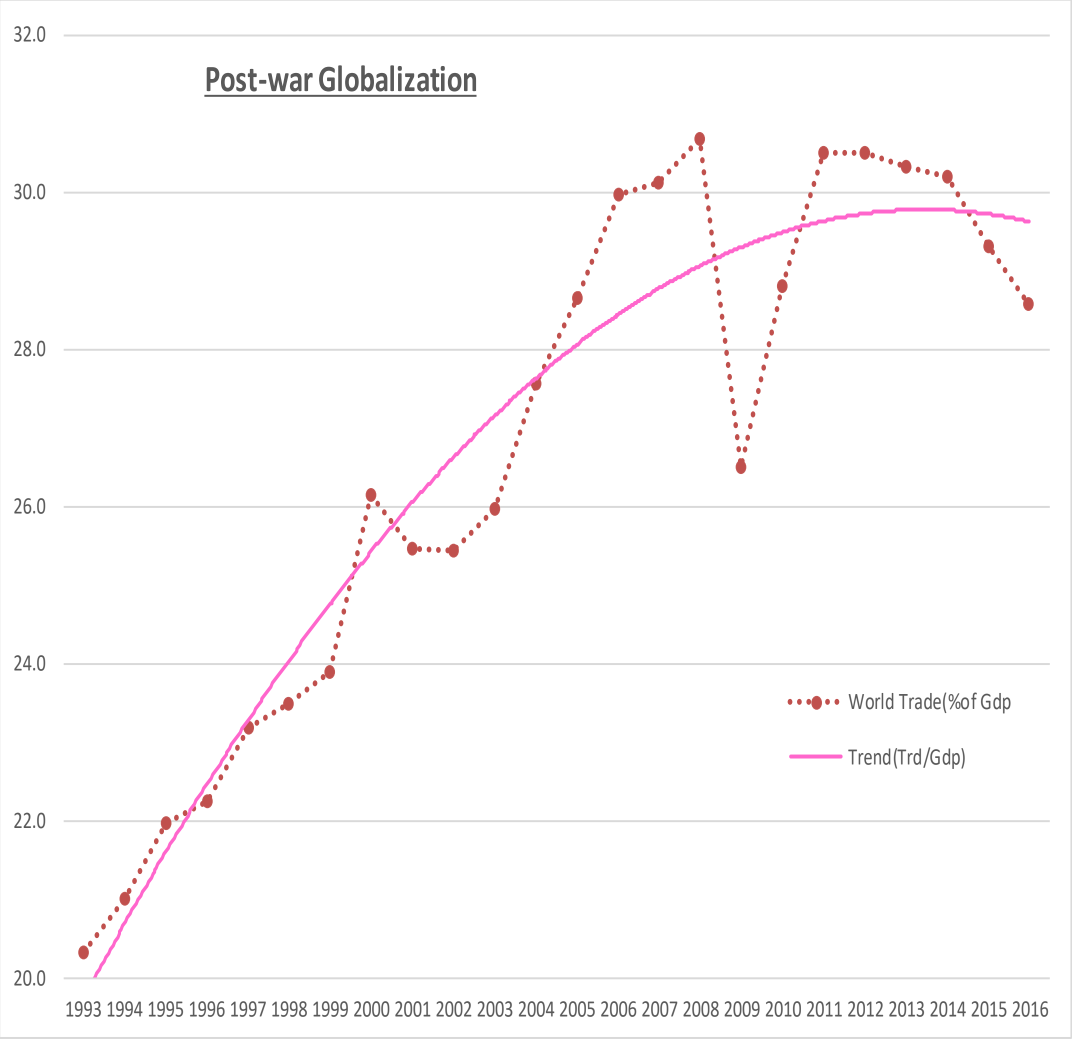


Table 2: Trade Imbalances (% of World exports)

Export growth declines (as does Import growth)

Merchandise Trade Imbalance:

Trade Deficits are more dispersed; away from USA and UK, but

Trade Surplus is more concentrated in China and Euro Area (Germany, Netherlands).

Role of Trade policy, Investment policy and Fiscal policy?

	Exprt-Imprt(%of WrldEx)			Export growth		
Country	2001-8	2009-16	delta	2001-8	2009-16	delta
China	1.0%	1.9%	0.9%	24.7%	5.8%	-18.9%
USA	-7.1%	-4.4%	2.7%	6.7%	2.2%	-4.6%
World				12.4%	0.9%	-11.6%
UK	-1.3%	-1.1%	0.2%	6.7%	-0.6%	-7.3%
Euro	0.9%	1.1%	0.2%	11.9%	-0.7%	-12.6%
India	0.0%	0.0%	0.0%	14.3%	-1.6%	-15.9%
Japan	0.0%	0.0%	0.0%	8.7%	-6.4%	-15.1%

Table 3: Saving-Investment Balance (S-I)

Both Investment rate and Saving rate decline World wide, reducing imbalances in USA, UK, & Japan, but worsening them in Euro area.

Saving surplus declines in China and Saving Deficit improves in India (Investment and saving rates rise, former more than the latter in India and the latter more than the former in China).

Saving–Investment imbalance has declined marginally, due to lower variation in Saving rates (Coeff of variation).

	GDS-GFS(% of Gdp)			GDS (% of Gdp)			GCF(% of Gdp)		
	2001-8	2009-16	delta	2001-8	2009-16	delta	2001-8	2009-16	delta
World	0.9	0.7	-0.2	25.5	24.8	-0.7	24.6	24.1	-0.5
USA	-4.7	-3.1	1.6	17.5	16.1	-1.4	22.2	19.2	-3.0
China	4.3	2.8	-1.5	44.8	49.4	4.6	40.5	46.6	6.1
India	-5.1	-4.4	0.6	30.0	32.0	2.0	35.0	36.2	1.4
Euro	1.6	2.8	1.2	24.4	23.1	-1.2	22.7	20.3	-2.4
Japan	1.4	-0.5	-1.9	26.2	22.2	-4.0	24.8	22.8	-2.1
UK	-2.6	-2.0	0.6	14.9	14.1	-0.8	17.5	16.1	-1.4
Std/Avg	-4.8	-3.8	1.0	1.1	1.0	-0.1	0.31	0.33	0.02

Table 4 ICORs & Excess Capacity

ICORs as proxy for Excess capacity: If excess capacity in industry increases, possible inefficiency in new investment ie investment rate has not fallen enough to eliminate low returns & excess capacity).

ICORs have gone up dramatically in EURO area because credit bubble bursting in crisis countries, but also in UK, Japan and USA due to effect of necessary deleveraging but also due to excessive fiscal contraction.

In China both the fixed & total investment rate has actually risen(as % of GDP) as has the ICOR (by 50%) this suggests excessive investment and excess capacity.

India is the only large country in which ICORs remains unchanged suggesting that the slowdown in investment was enough to balance domestic capacity with demand.

	GFCF/Gdp			If/Ygr			Gfcf gr		
	2001-8	2009-16	delta	2001-8	2009-16	delta%	2001-8	2009-16	delta
Euro	22.3	20.2	-2.1	12.2	54.0	342%	2.1	-0.8	-2.9
UK	17.1	15.9	-1.3	7.3	13.2	82%	1.4	1.3	-0.2
Japan	24.7	22.8	-1.9	22.3	38.7	73%	-1.2	0.6	1.8
China	38.7	44.7	6.0	3.6	5.4	50%	16.2	11.2	-5.0
World	23.7	23.4	-0.4	7.9	10.4	31%	4.1	2.9	-1.2
USA	22.0	19.0	-3.0	10.4	12.8	23%	1.1	1.2	0.1
India	30.9	31.7	0.8	4.4	4.2	-3%	12.4	6.2	-6.2

Table 5: De-Leveraging or New Credit Bubbles?

We take the average world debt which has risen by 57% points from 157% of GDP to 184%, as a benchmark for success in deleveraging:

Deleveraging has occurred in UK(abs), USA, India, & Euro area.

In contrast both China and Japan have re-leveraged.

China has continued excess investment in tradable goods(T6), The resultant excess capacity reduces return on investment, increases & impedes deleveraging in other EMEs. It is also re-creating credit bubble in non-tradablereal estate & infrastructure

Japanese re-leveraging is financing fiscal expansion (T7) through infrastructure investment

	Total Dom Credit(% of GDP)				DomCrdt to Pvt (% GDP)			
	2001	2007	2016	delta	2001	2007	2016	delta
China	122	126	215	89	110	106	157	51
Japan	285	282	345	63	183	161	162	1
World	157	157	184	27	124	126	129	3
Euro	117	140	154	14	88	102	89	-13
India	55	63	75	12	29	46	50	3
USA	199	236	242	6	170	206	192	-14
UK	123	172	166	-6	122	171	134	-37

Table 6: Private Consumption

Growth of Private Consumption has decelerated world wide except in India, where it has accelerated. However, Pvt Cons/Gdp ratio has increased in Japan, USA in addition to India. This domestic demand driver has moderated Us, Japan growth decline

The Pvt Cons/Gdp has declined in Euro area, UK and China, but most dramatically in China. This is the opposite of the universal recommendation to China to shift from Investment to Consumption recommended by every economist since 2006.

	HHFC/Gdp			HFCE gr		
	2001-8	2009-16	delta	2001-8	2009-16	delta
Japan	55.8	57.8	2.1	0.9	0.6	-0.3
USA	67.3	68.3	1.0	2.6	1.8	-0.7
India	56.6	56.8	0.2	6.7	7.4	0.7
World	57.9	58.0	0.1	3.1	2.3	-0.8
Euro	56.0	56.0	0.0	1.5	0.3	-1.2
UK	66.1	65.7	-0.4	2.6	1.0	-1.7
China	39.8	36.9	-2.8	8.6	8.6	0.0

Table 7: Contractionary Fiscal Policy

Normal post-war recessions have been handled well with a combination of fiscal/govt expenditure contractions and monetary easing. The once in 75 year depression-recession in 2008-09 required a different mix of fiscal-monetary policy than the one adopted in DCs:

A sharp reduction in rate of growth of govt expenditure & excess QE was the wrong policy. DC's were punished with an excessive decline in growth.

Japan and India which bucked this trend were rewarded respectively with smallest growth decline and growth acceleration.

China seems to have adopted the wrong mix of monetary-fiscal policies: Excess credit expansion and tighter fiscal policy.

	GCE/Gdp			GFCE gr		
	2001-8	2009-16	delta	2001-8	2009-16	delta
USA	15.2	15.5	0.3	2.1	0.0	-2.1
UK	18.9	20.2	1.3	3.0	0.9	-2.1
Euro	19.8	21.1	1.3	2.0	0.8	-1.1
World	16.5	17.3	0.8	2.4	1.4	-1.0
Japan	18.0	19.9	1.9	1.4	1.6	0.2
India	10.8	10.8	0.0	5.2	6.8	1.6
China	14.4	13.5	-0.9	?	?	

Fig 3: Growth rate of Working Age Population

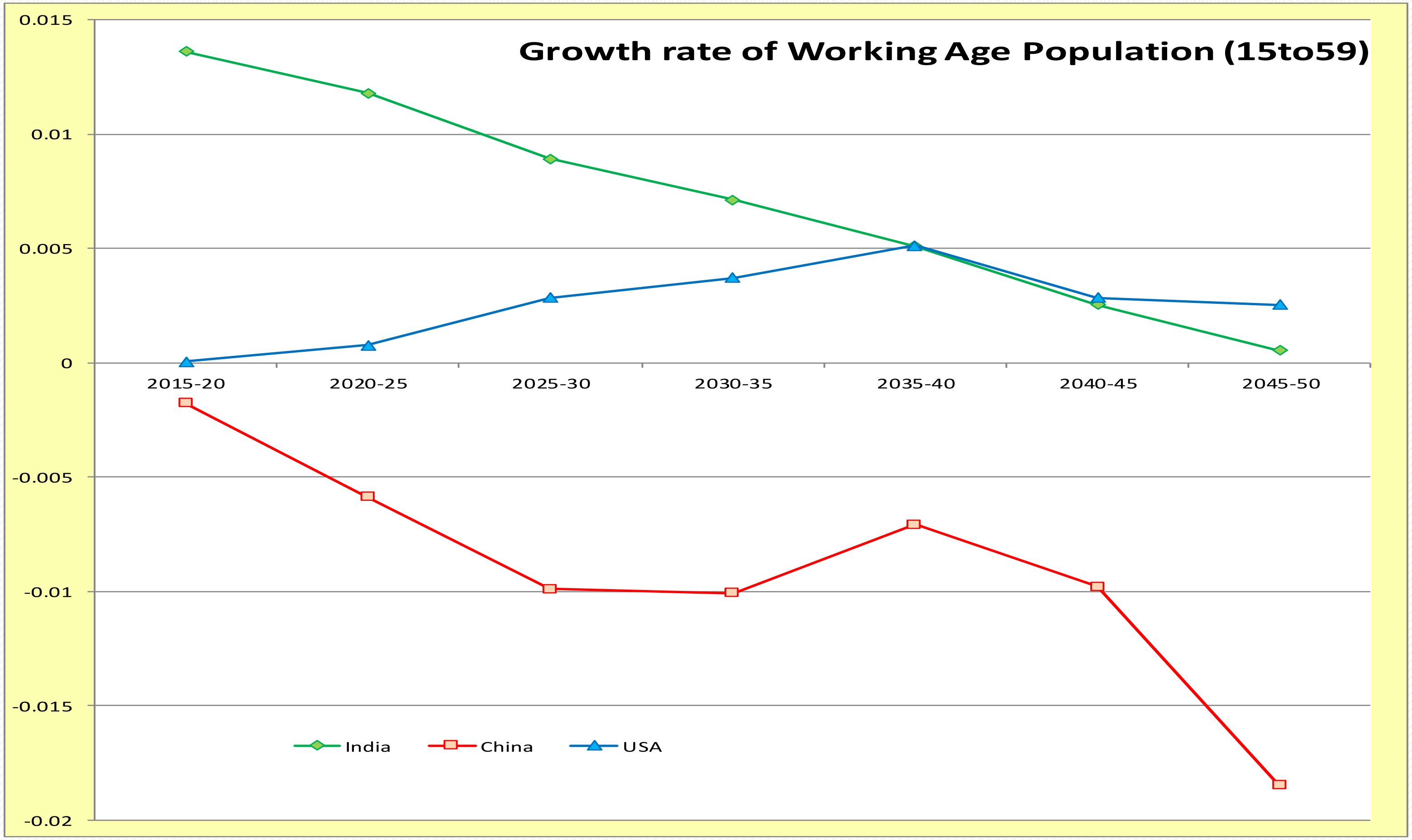


Table 8: Demographics and growth

Working age population expected to decline across the world. Decline is less than world average in India and Indonesia. It is modest in France, USA and UK. Largest declines in China, Germany and Russia.

However, Per capita GDP growth is not universally related to increase in working age population (% of total population). For instance it is +vely corelated in India but not in Indonesia. The correlation is negative in Germany and relatively low in China. Russia and Brazil.

The policy and institutional environment for production & business investment is as, if not more, important.

	Chg in% Shr/yr	Corell (growth of PcGdp & Pwap-Ptot	
Country	2050-2015	1965-2015	1980-2015
China	-0.50	0.30	0.17
Germany	-0.32	0.56	-0.13
Russia	-0.28	0.22	0.25
Saudi Arabia	-0.28	-0.15	0.37
Brazil	-0.27	0.05	0.25
Italy	-0.26	0.34	0.75
Japan	-0.26	0.71	0.83
Korea, Rep	-0.26	0.65	0.95
UK	-0.19	0.40	0.68
USA	-0.16	0.47	0.64
France	-0.14	0.62	0.79
World	-0.13	-0.27	0.10
Indonesia	-0.09	-0.08	-0.14
India	-0.02	0.79	0.75

Market Socialism to Party Capitalism:

- 1980s Socialist Ownership (SOEs & TVEs), Market competition
- 1990s Foreign Private & Domestic "Party Sector"
  - Foreign Owned Enterprises: SEZ to FDI(in Coastal area).
  - Domestic Enterprises : Subsidiaries of SOEs or hived of from TVEs => Party Capitalists (Ownership by party members, family, friends; Party controls policy direction, approach, critical decisions, not day to day management)
- 2000s: Domestic Private Corporate Sector (genuine) allowed in New Economy Enterprises (eg Internet based, non-brick & mortar)
- 2010s : New domestic Private Sector Cos re-absorbed into the "Party sector"

China (non-market) Growth Model: Net Export (EP+ISI) cum Investment Led

- Post-GFC needed shift from
  - Exports to Domestic orientation
  - Investment to Private consumption
  - Manufacturing to Services
- Actual
  - Global share of exports rising despite de Globalization
  - Investment share rose & is higher than before
  - Pvt Consumption share low
  - Manufacturing over capacity remains in tradables (eg metals)
  - Services driven by credit bubble?

Figure 4: China Gr model &Macro Balances unchanged

Investment Rate (blue, L scale): Rose to a new peak of 47.7% (after the GFC 2008. Fallen since the mini-exchange rate, credit crises in 2015. But is still higher than pre–GFC peak of 42.9%.

Pvt/Household consumption (red, L scale) has risen slowly from 36.4% of GDP in 2006 to 37.1% of GDP in 2015. Rising marginally since then.

BOT-G&S(green, R scale) at 2.2% of GDP back to long term average excluding the export bubble years of the 2000s

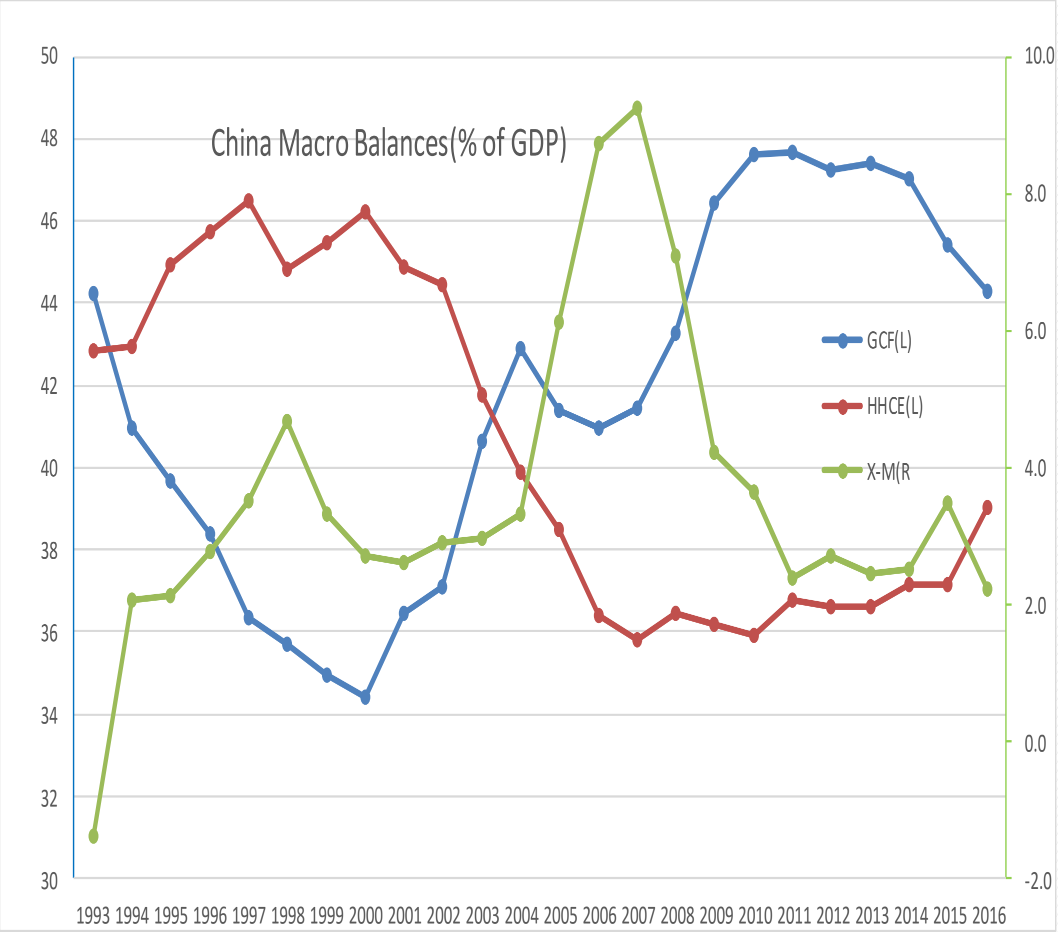


Fig 5: China Merchandise Export share

China continues to pursue export led growth (EP), supplemented by Import substituting (ISI) growth.

China had marginally lower export share than Germany (8.9%)in 2008.

China becomes largest merchandise exporter in 2009& increases its global export share by54% to 13.7% by 2015.

Resistance builds in affected countries, particularly USA, exploding in latter just after China export share peaks in 2015. Declines by 1% point in next two years.

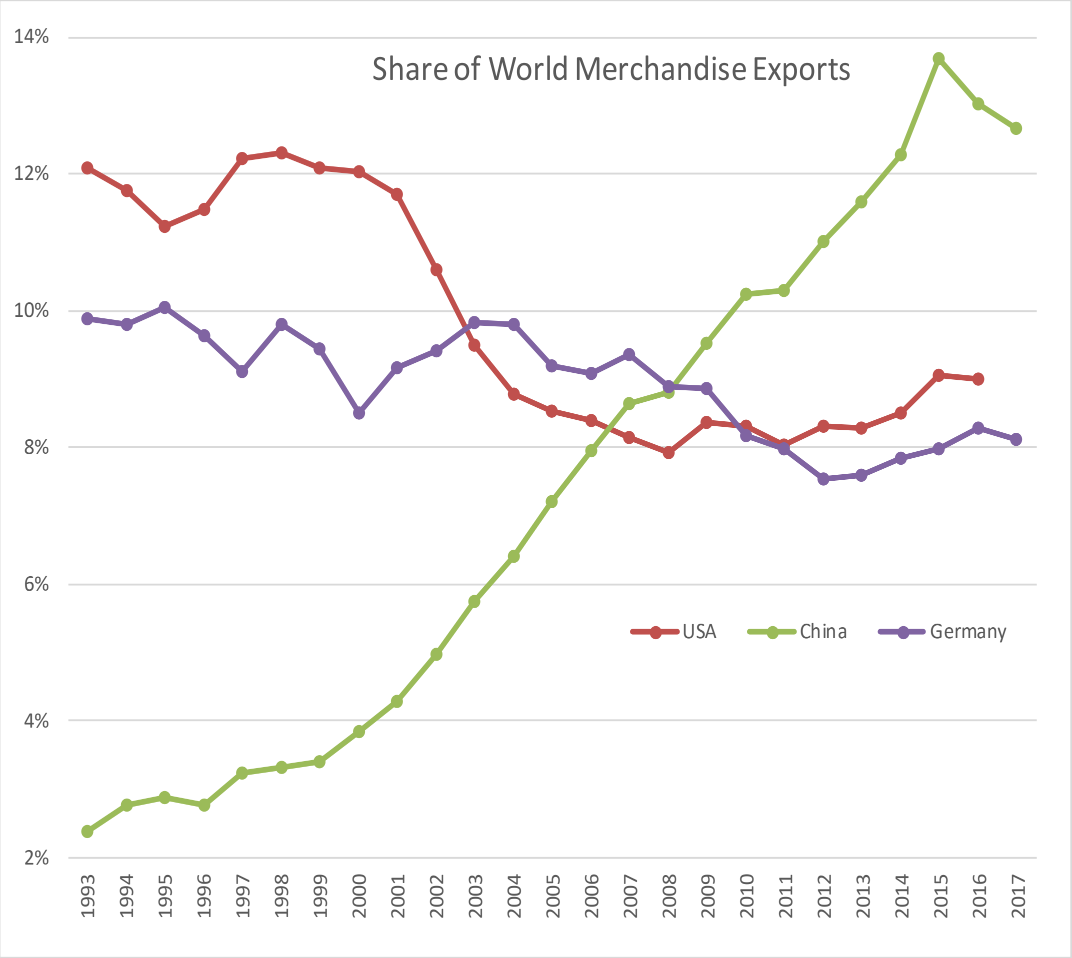


Fig 6: China: Credit fueled Investment

The enormous increase in credit (% of GDP) since the GFC 2008 has been noted by many (red, R scale).

With variable lags it is corelated with (GFCF) fixed investment (blue, Left scale).

Pre-GFC credit led GFCF suggesting demand factor;

Post-GFC credit leads GFCF suggesting credit supply driven effort to sustain investment.

Credit worked best during the crisis in pushing up investment (2009), it was able to sustain investment rate till 2014. Since 2015 its become ineffective in sustaining GFCF

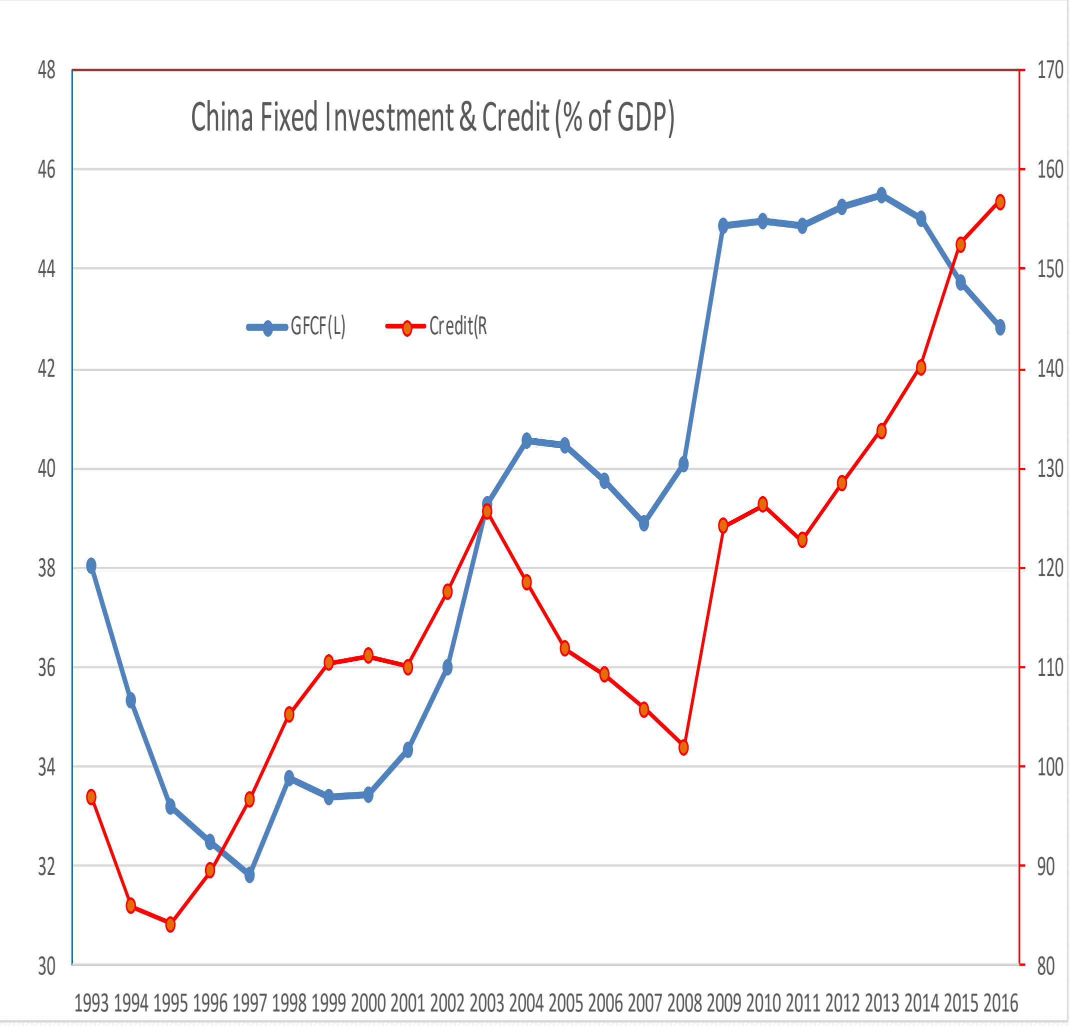
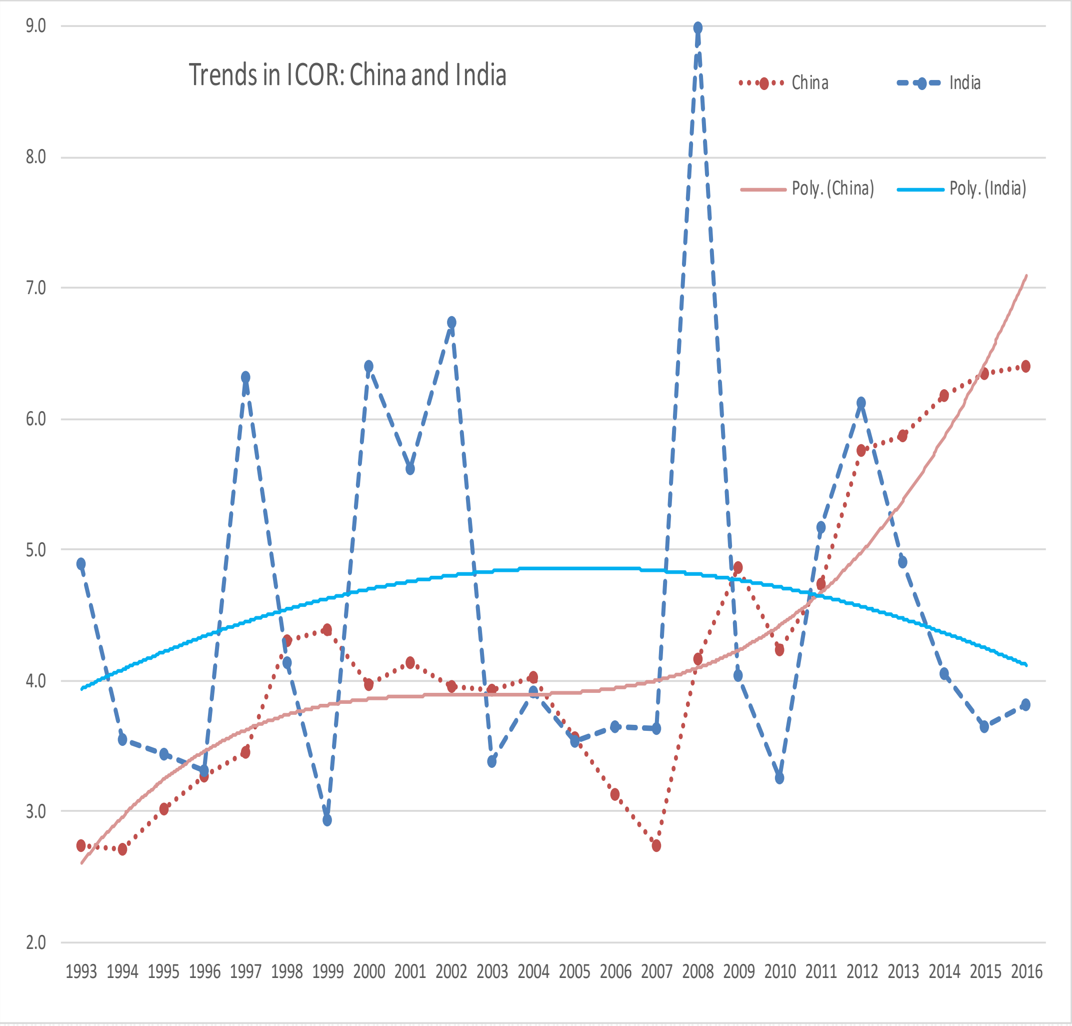


Fig 6: ICOR & Excess Capacity

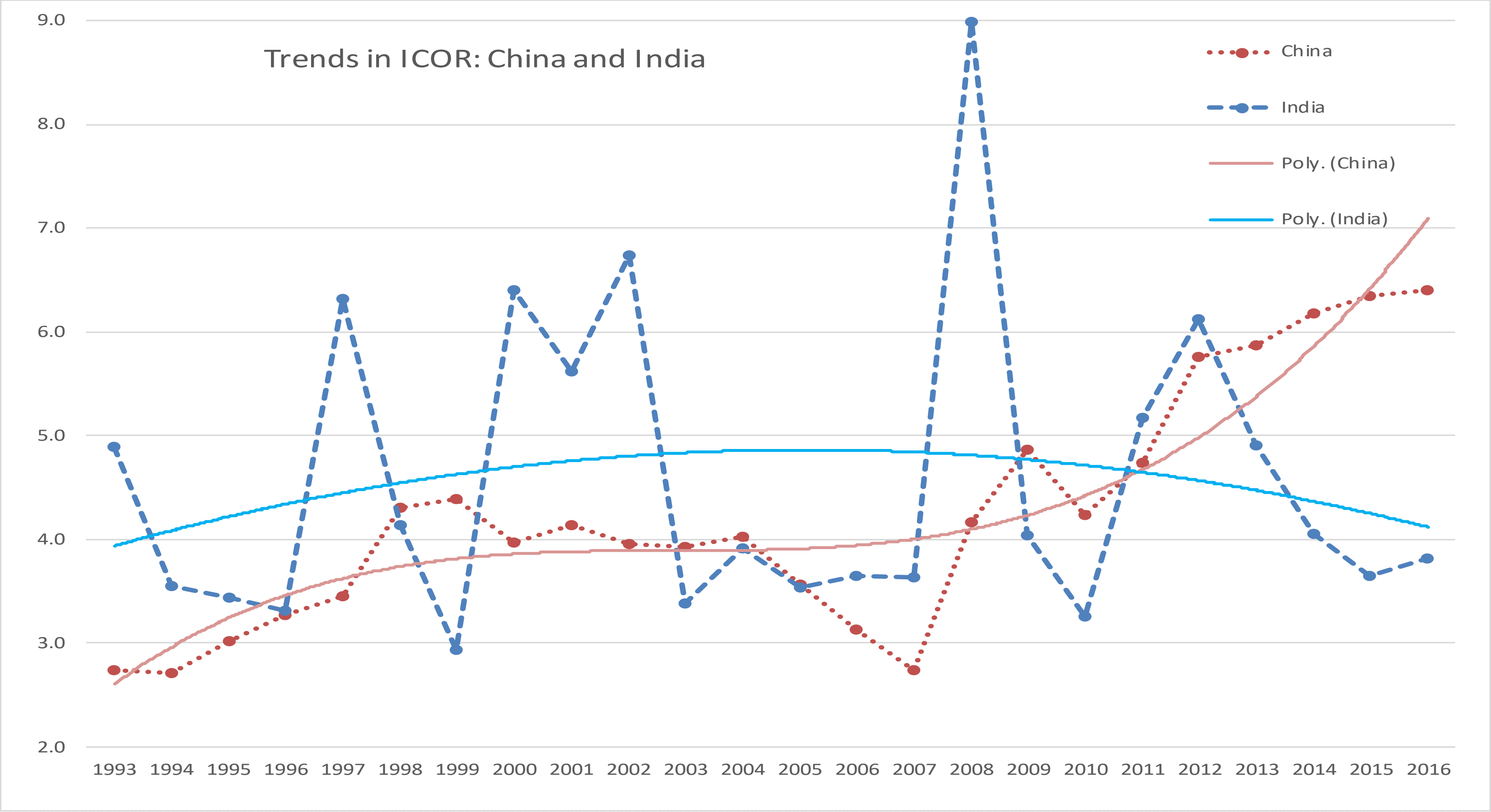
India as benchmark: India has also suffered from excess capacity in both tradable (e.g. metals) and non-tradable sectors (e.g. real estate), & has some data & policy explanations.

India's ICOR rose sharply post-GFC and has gradually declined, mirroring available data on Capacity Utilization.

China's ICOR rose marginally during 2009-2011 but has risen dramatically since 2012. This suggests large, unsustainable increase in excess capacity.



F3: ICOR & Capacity: China & India



Conclusion: China

- China's sustainable growth rate is 4.5% to 5.5%
  - GdpGr 5% (I=30%, C=55%, G=15%, X-M = 0% of Gdp)
- Domestic Credit bubble burst & "Tariff War" (Trade war) likely to bring growth down to ~5%
  - Short term pain for Asian economies dependent on China for intermediate & capital goods export
  - MLT: Excess Investment and Excess capacity in tradable goods will decline thereafter.
  - Good for Rest of World as Profitability of Tradable goods investment will improve.
  - ROW NPAs will decline to more sustainable level.