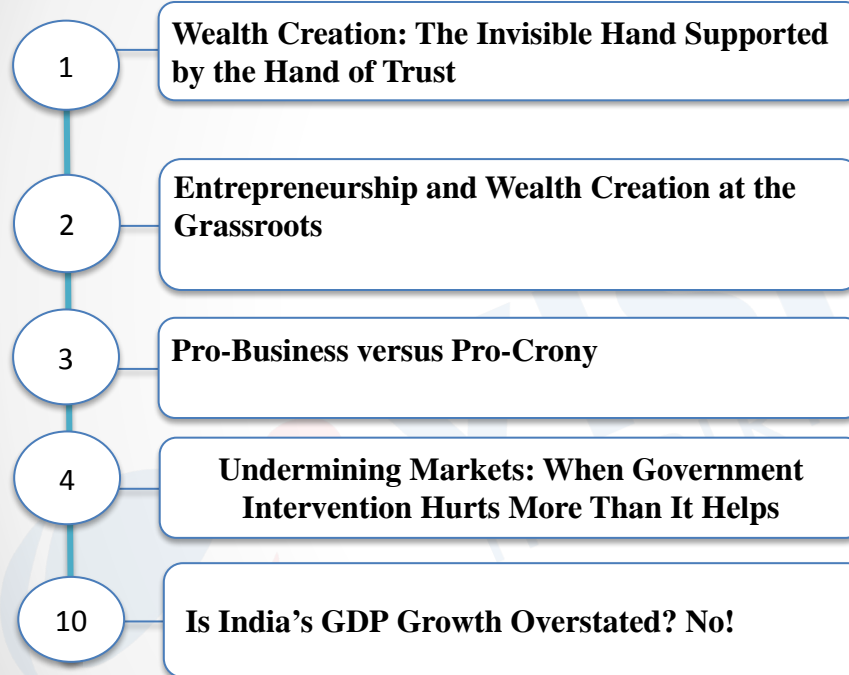
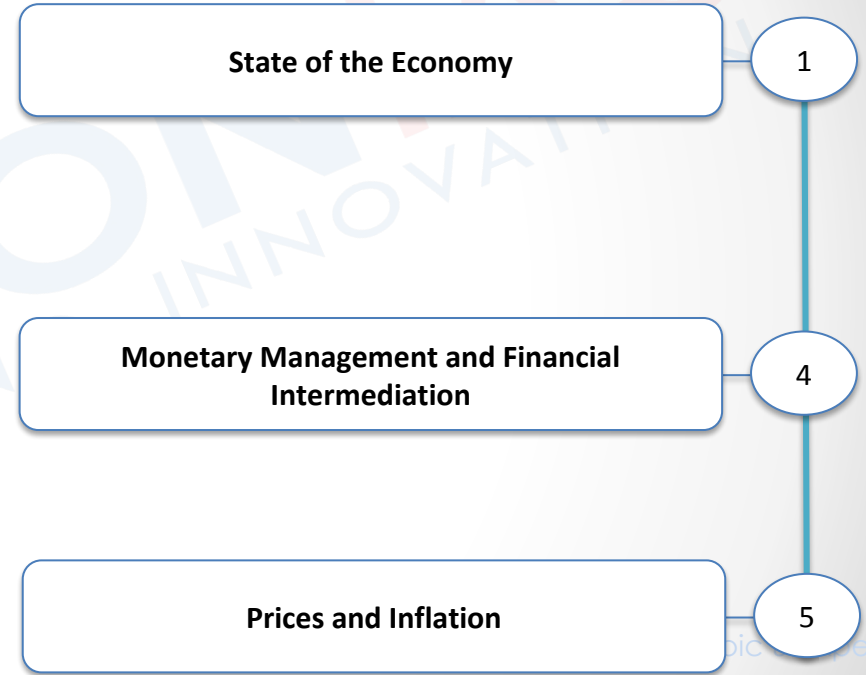


Economic Survey 2019-20

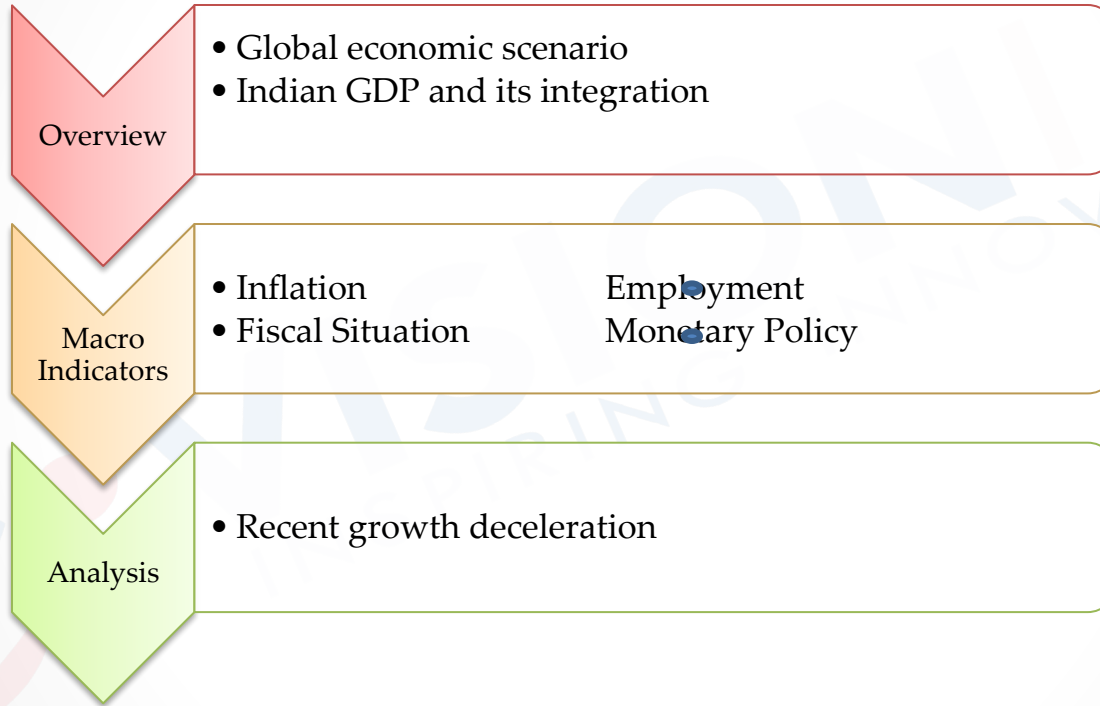
Volume 1



Volume 2



V2- Ch1: State of Economy



V2- Ch1: State of Economy

Figure 1: Growth of global output

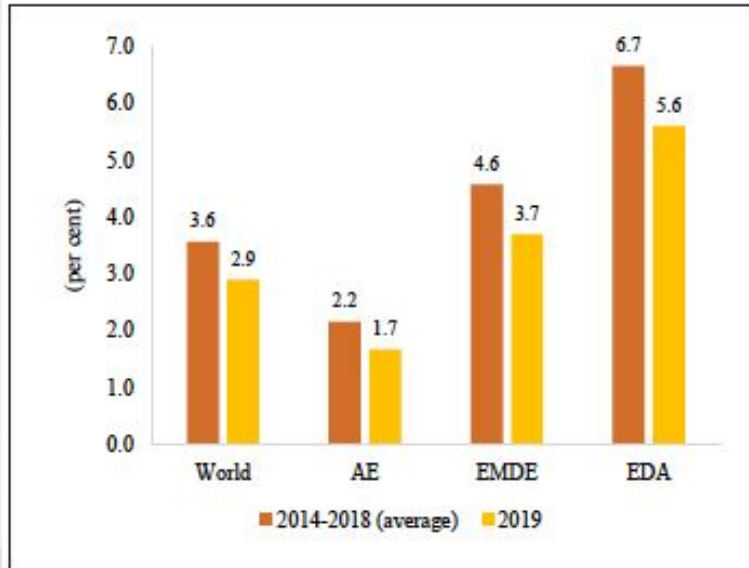
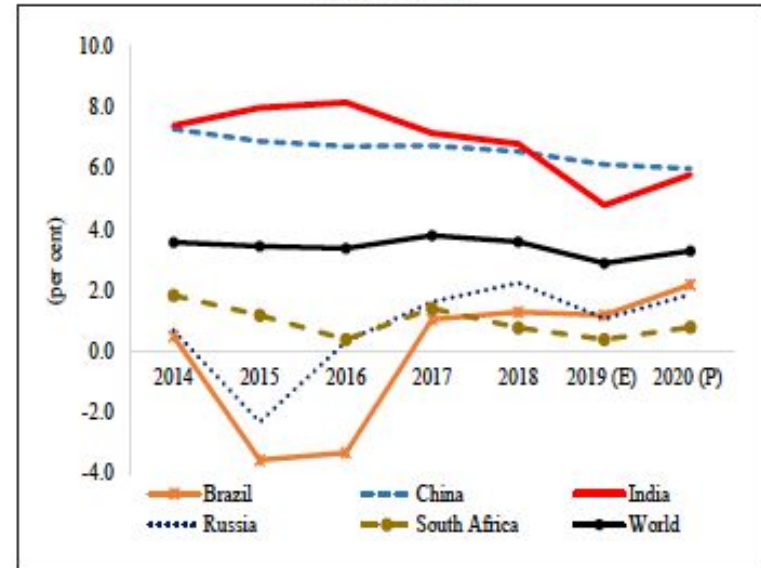


Figure 2: Growth of individual BRICS countries



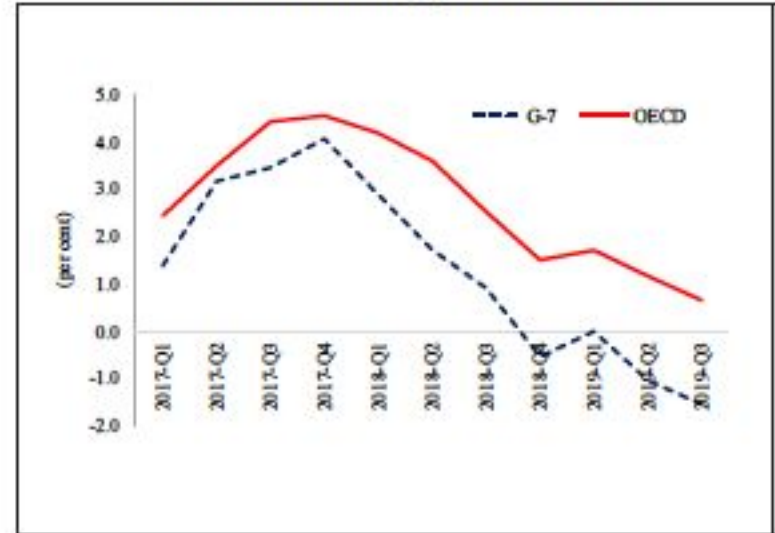
- Growth of Indian economy to increase to 5.8 per cent in 2020 expecting India to contribute significantly to an eventual pickup in the growth of world output.

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Figure 4: Growth of fixed investment



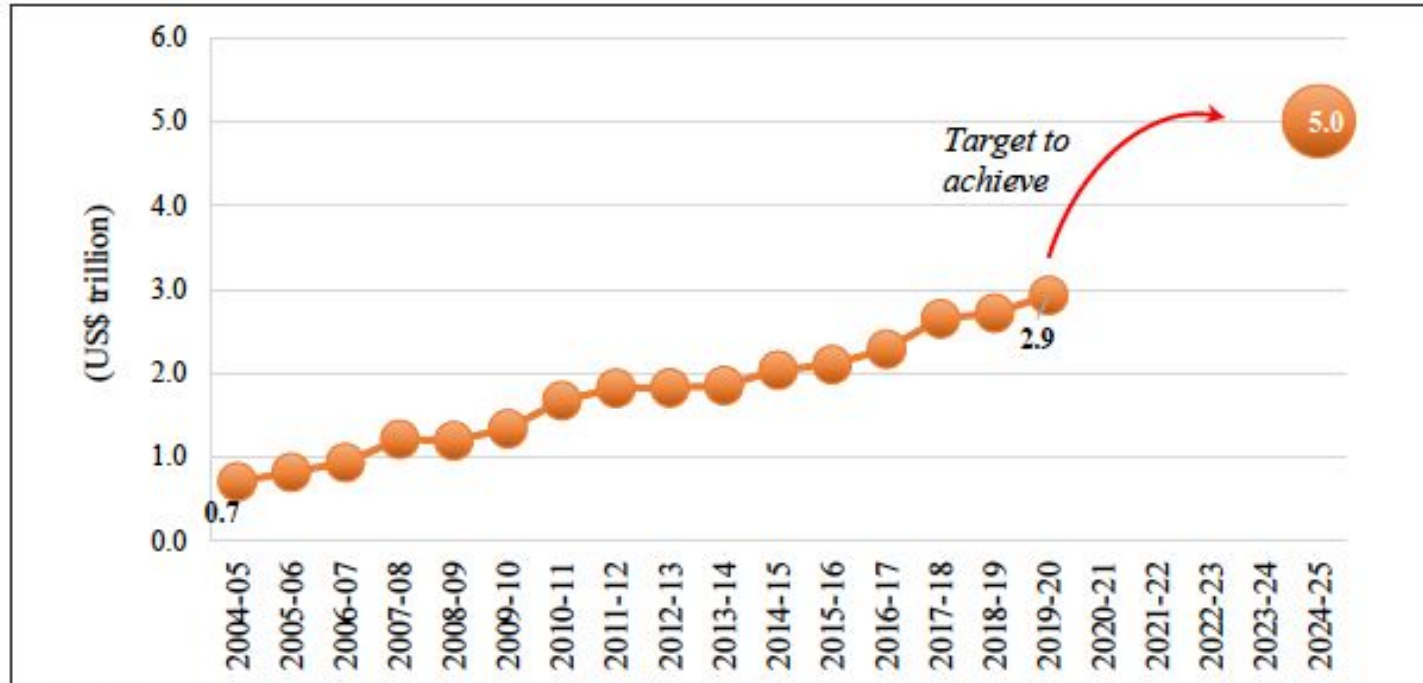
Figure 5: Growth of index of manufacturing production



E.g. Slowdown in Auto sector worldwide

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Figure 7: Increasing size of the Indian economy (GDP at current US\$)



Data Source: National Statistical Office, Reserve Bank of India (RBI) and IMF

V2- Ch1: State of Economy

Table 2: Quarter wise growth of real Gross Value Added (GVA) and GDP (per cent)

	2018-19				2019-20	
	Q1	Q2	Q3	Q4	Q1	Q2
GVA at basic prices	7.7	6.9	6.3	5.7	4.9	4.3
Agriculture, forestry & fishing	5.1	4.9	2.8	-0.1	2.0	2.1
Industry	9.8	6.7	7.0	4.2	2.7	0.5
Services	7.1	7.3	7.2	8.4	6.9	6.8
GDP at market prices	8.0	7.0	6.6	5.8	5.0	4.5

Table 3: Real growth of GDP (per cent)

	2017-18	2018-19 (PE)	2019-20	
			Q1	Q2
Gross Domestic Product	7.2	6.8	5.0	4.5
Total consumption	8.6	8.3	4.1	6.9
Government consumption	15.0	9.2	8.8	15.6
Private consumption	7.4	8.1	3.1	5.1
Fixed investment	9.3	10.0	4.0	1.0
Exports of goods and services	4.7	12.5	5.7	-0.4
Imports of goods and services	17.6	15.4	4.2	-6.9

V2- Ch1: State of Economy

Table 5: Sectoral shares in GVA (per cent)

	2009-10 to 2013-14	2014-15 to 2018-19	2018-19	H1: 2019-20
Agriculture, forestry & fishing	18.3	17.4	16.1	13.9
Industry	32.3	29.6	29.6	28.3
Mining & Quarrying	3.2	2.4	2.4	2.1
Manufacturing	17.5	16.6	16.4	15.4
Electricity, Gas, Water supply & other utility services	2.4	2.6	2.8	2.9
Construction	9.2	8.0	8.0	8.0
Services	49.4	52.9	54.3	57.8

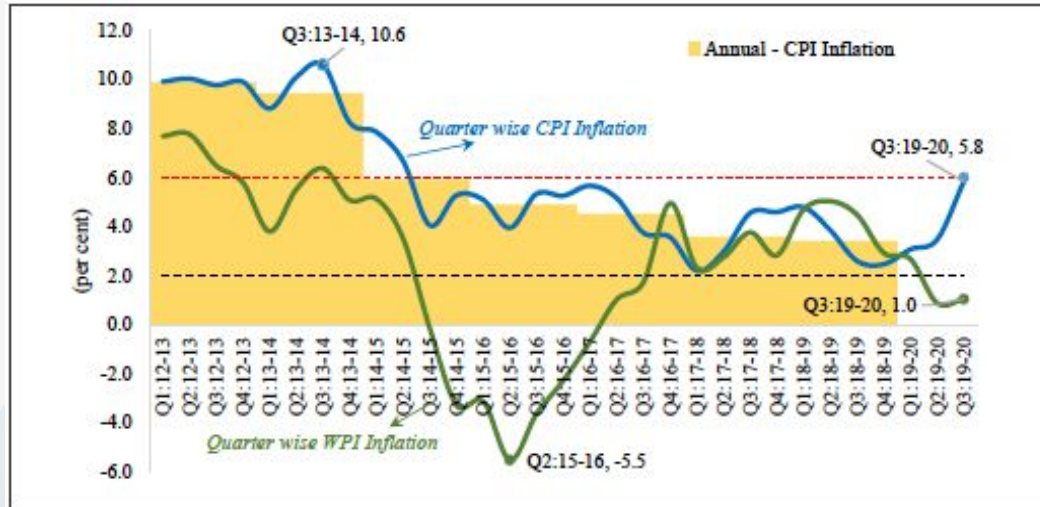
Table 6: Demand side components (as per cent of GDP)

	2017-18	2018-19	2019-20	Percentage points change in share in 2019-20 over 2018-19 [Increase (+)/ Decrease (-)]
	1 st RE	PE	1 st AE	
Total consumption	70.0	70.6	72.1	1.5
Government consumption	11.0	11.2	11.9	0.7
Private consumption	59.0	59.4	60.2	0.8
Gross Fixed Capital Formation	28.6	29.3	28.1	-1.2
Net exports	-3.2	-3.9	-2.8	1.1
Exports of goods & services	18.8	19.7	18.4	-1.3
Imports of goods & services	22.0	23.6	21.2	-2.4

V2- Ch1: State of Economy

Inflation – Divergence between CPI & WPI

Figure 10: CPI and WPI inflation

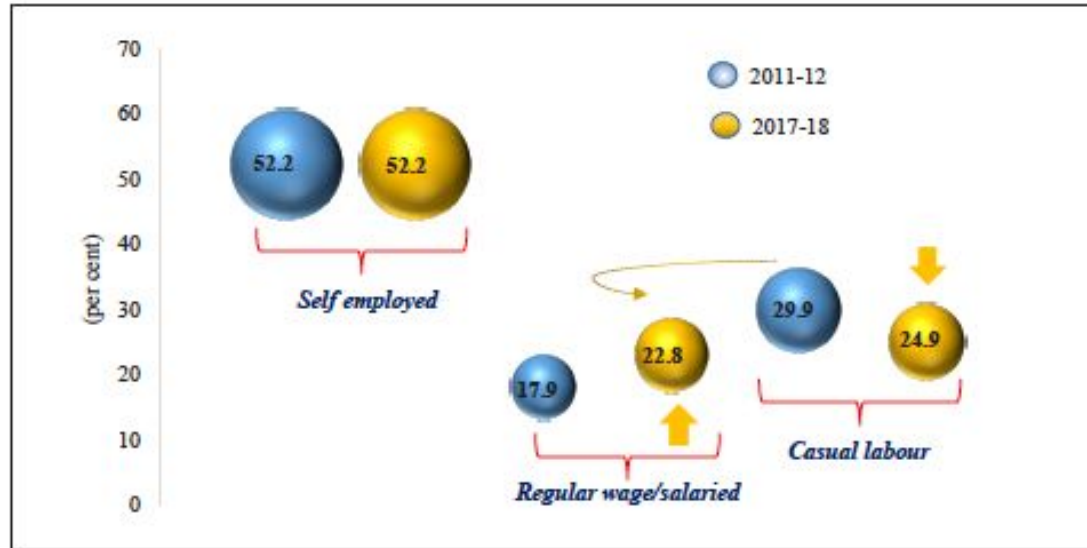


What about Core Inflation?

V2- Ch1: State of Economy

Employment – Formal v/s Informal

Figure 11: Distribution of workers by all ages in usual status (PS+SS) by statuses in employment

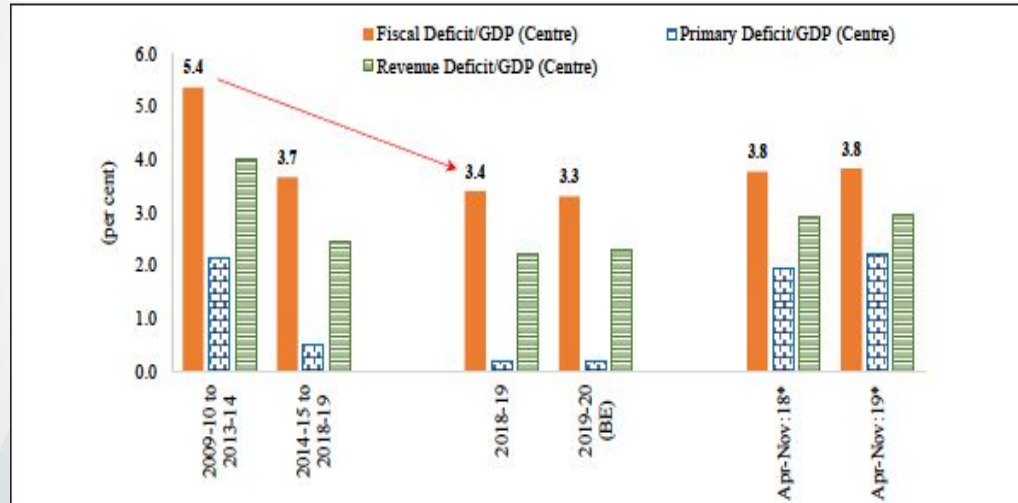


Increase in share of women in formal jobs from 12 to 21%

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Fiscal Deficit

Figure 12: Gross Fiscal Deficit (Centre) as percentage of GDP

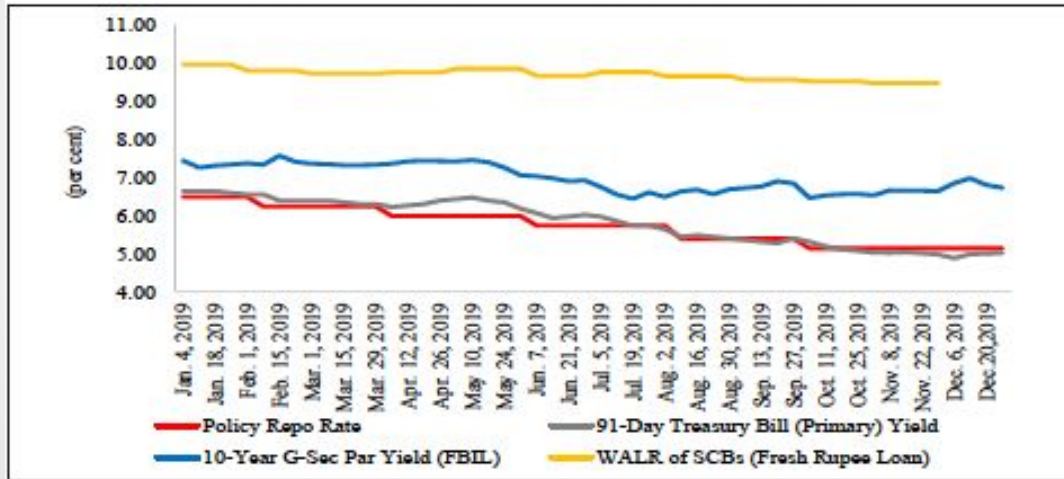


Three times
increase in
CapEx.
+ Greater
increase in
Revenue Exp

V2- Ch1: State of Economy

Monetary Policy

Figure 13: Policy rate, yield and lending rate



Transmission of
MP

Decline in Credit
Growth

V2- Ch1: State of Economy

External Sector at a Glance

Figure 16: Growth of merchandise exports and imports

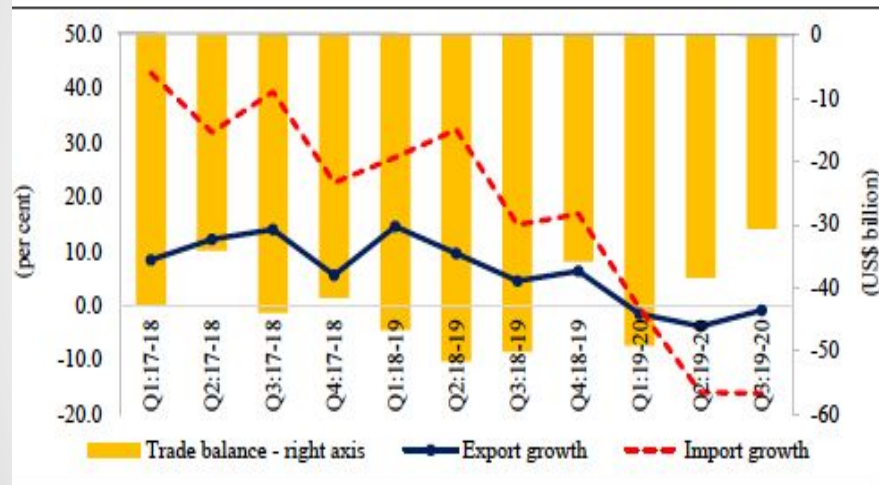
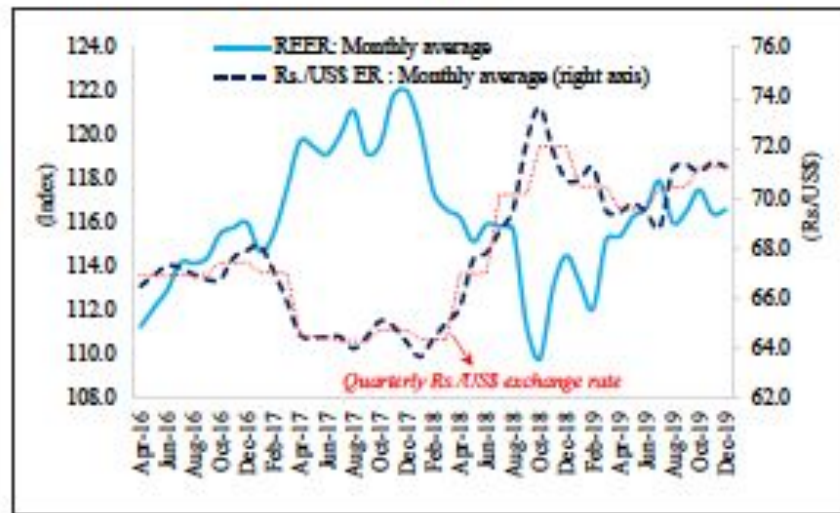


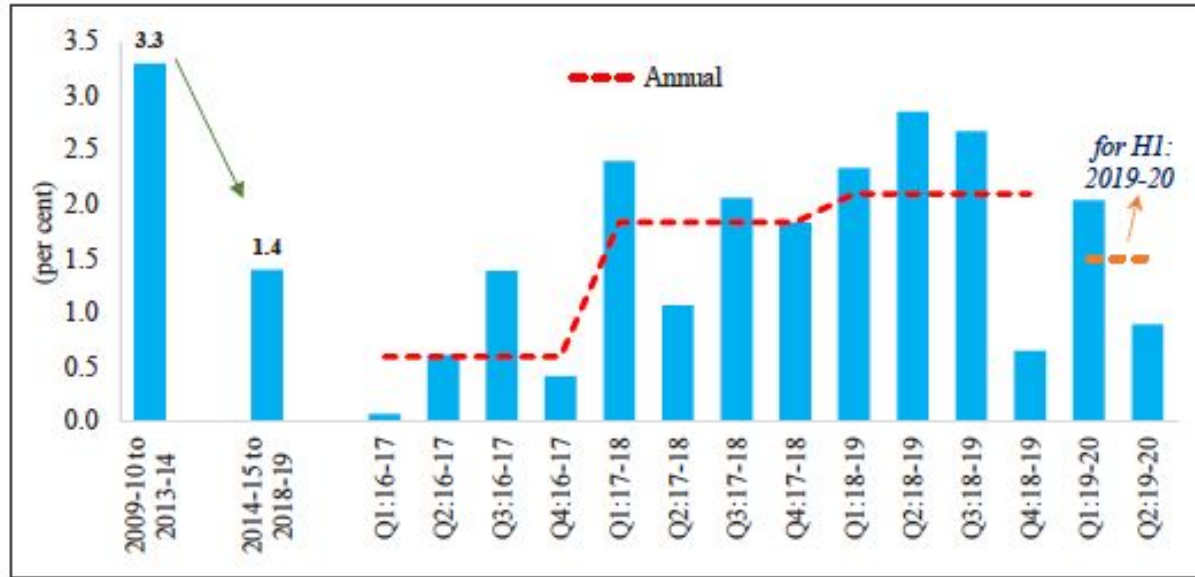
Figure 18: Exchange Rate of Indian Rupee



V2- Ch1: State of Economy

External Sector at a Glance

Figure 20: Current Account Deficit as percentage of GDP



Reasons for fall
in CAD?

V2- Ch1: State of Economy

Analysis of the deceleration in growth – Drag of financial sector

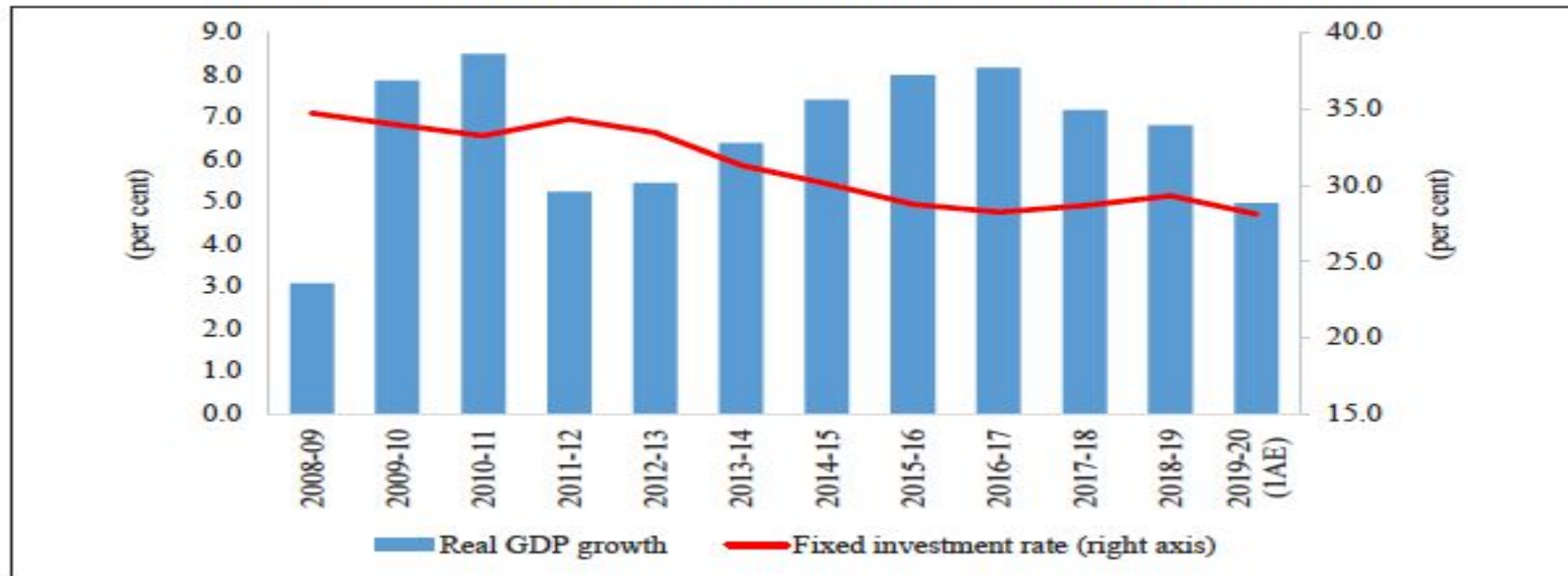
Figure 23: Virtuous cycle of growth



V2- Ch1: State of Economy

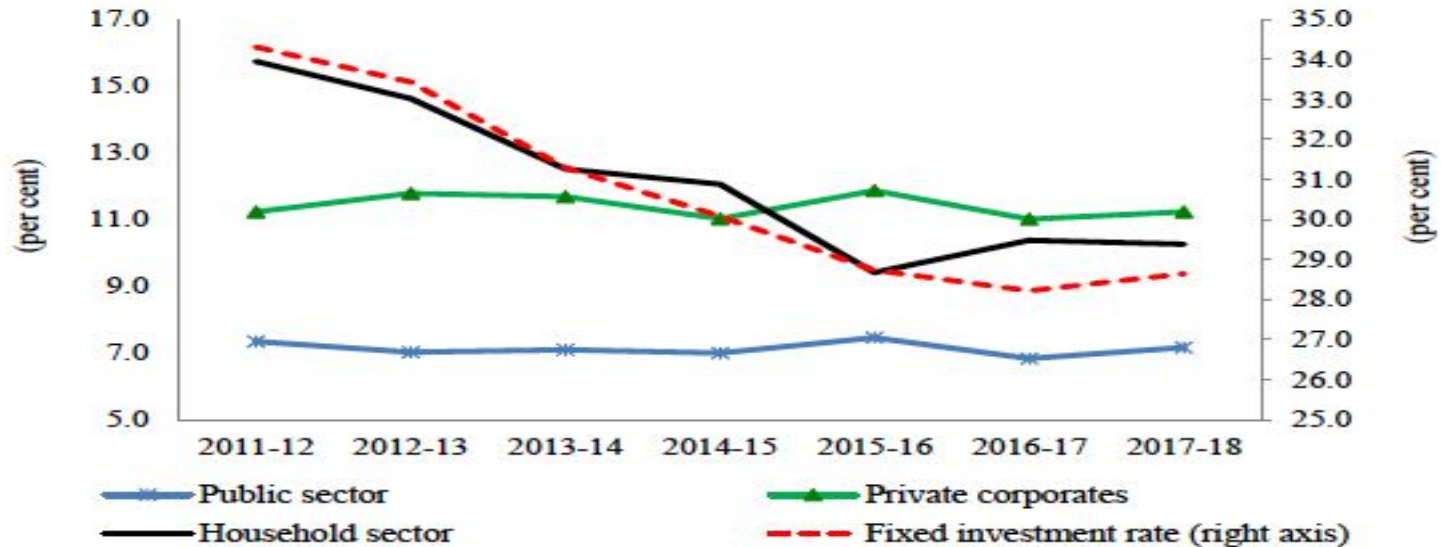
Decline in investment - The lag between rate of fixed investment and its impact on GDP growth is seen to be of three to four years.

Figure 26: Real GDP growth and Investment – Annual movement



V2- Ch1: State of Economy

Figure 27: Fixed investment by institutional sector (as per cent of GDP)



V2- Ch1: State of Economy

- A sudden credit expansion, which is purely supply led, results in short lived expansion of output and employment but causes significant contraction in the long run.
- For the year 2013, the relationship is significant --> firms that excessively borrowed between 2007- 08 to 2011-12 actually ended up investing significantly less during 2012-13 to 2016-2017.
- For households, that include quasi-corporates, 'Machinery and equipment' and 'Dwellings, other buildings and Structures' together account for more than two-thirds of total household sector investment. These show a significant decline in investment.

V2- Ch1: State of Economy

Similarly, the impact of GDP growth on consumption growth gets reflected in one to two years.



V2- Ch1: State of Economy

□ Is the slowdown cyclical in nature?

When GDP is accelerating the business cycle on average is 12 quarters; in the deceleration phase, the business cycle on average reduces to 9 quarters.

Is growth expected to rebound now? What are the upside and downside risks?

V2- Ch1: State of Economy

Downside Risks:

- Trade tensions
- Geopolitical tensions – Crude prices
- Situation in advanced economies – How they chose to correct it? Fiscal or Monetary measures
- Risk aversion to lending by banks
- Crowding out of private sector
- Savings in physical instruments

V2- Ch1: State of Economy

Upside Risks:

- Measures to boost infrastructure – National Infra Pipeline
- Thrust on affordable housing – Increasing investment
- Global sentiment as witnessed by FDI and FII
- Reduction in business costs and EoDB
- Merger of PSBs to reduce risk aversion
- Refer recent reforms to boost investment, consumption and Exports from Annex

Volume 1- Chapter 10: Is India overestimating its GDP Growth? No!

V1- Ch10: Overestimating its GDP Growth?

Estimating GDP correctly– Importance and Challenges

V1- Ch10: Overestimating its GDP Growth?

Difference – in – difference methodology

Correlation is not causation

V1- Ch10: Overestimating its GDP Growth?

Arvind Subramanian Methodology: Variables chosen:

- Exports
- Imports
- Real Credit to industry
- Petroleum Consumption
- Railway Freight traffic, etc.

V1- Ch10: Overestimating its GDP Growth?

Problem 1: Omitted variable bias

E.g. Services sector, Agriculture sector

V1- Ch10: Overestimating its GDP Growth?

Problem 2: Structural differences between economies

- Country specific/country fixed effects for unobserved variations

E.g. Difference in Institutional and legal structures across countries does not get captured in observed variables.

- Effect of the observed variable would be significantly different for each country because of unobserved variable.
- Also, year specific effects, such as that of 2008 crises.

V1- Ch10: Overestimating its GDP Growth?

Problem 3 : DID method in itself

- ❑ No trend line to correlate with.
- ❑ Relation to GDP of the chosen variables themselves?

All variables not only change magnitude of correlation but also sign of correlation.

- ❑ No stable and predictable relationship with GDP
- ❑ In fact, Export, Import and Credit Growth rate have statistically insignificant correlation with GDP prior to 2011

V1- Ch10: Overestimating its GDP Growth?

How to check whether new methodology is correct?

- ❑ Test for correlation of various indicators with old GDP series and new GDP series
- ❑ Further, one can even test by slicing data at any other year rather than 2011.
- ❑ Both results confirm the robustness of new GDP series.

V1- Ch10: Overestimating its GDP Growth?

Further improvements:

Include new sectors and variables like:

- Health and nutrition
- Access to electricity
- New firms creation in India

Volume 1- Chapter 1: Wealth Creation: The Invisible Hand Supported

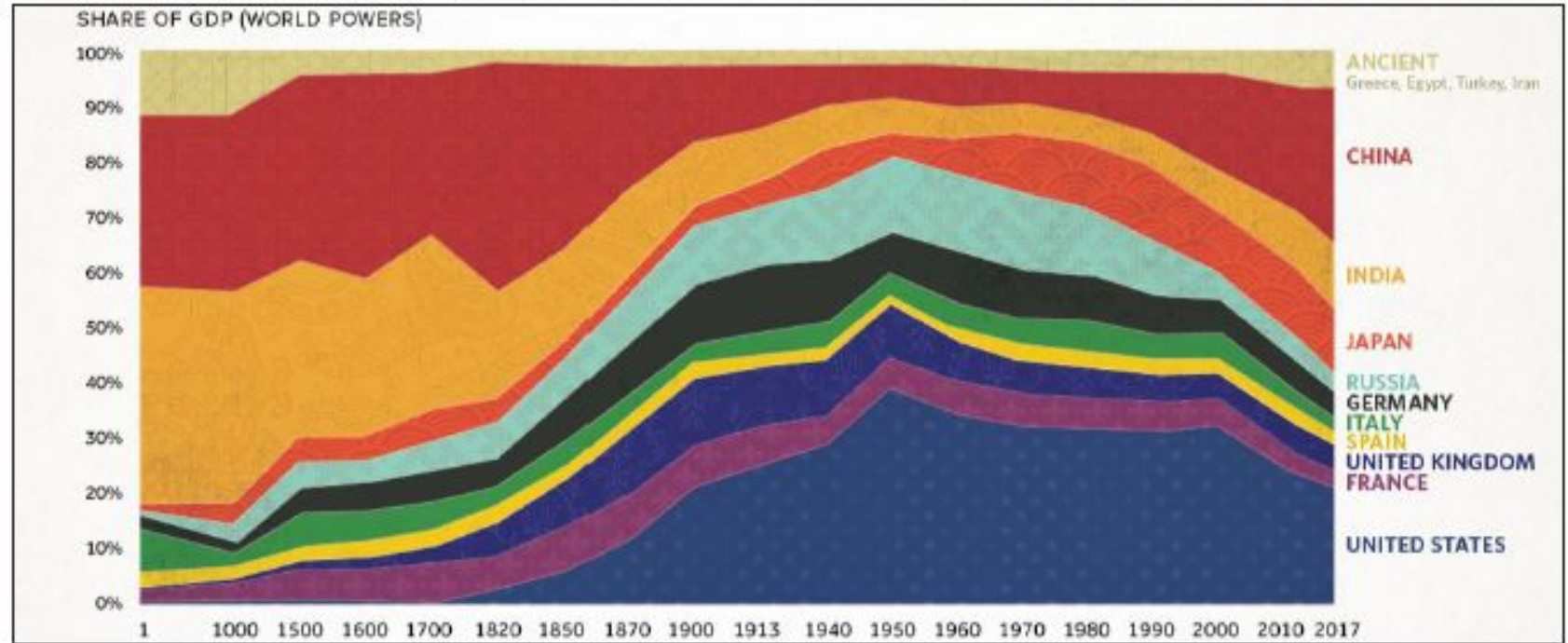
by the Hand of Trust



VISION IAS
INSPIRING INNOVATION

V1- Ch1: Wealth Creation – Markets and Trust

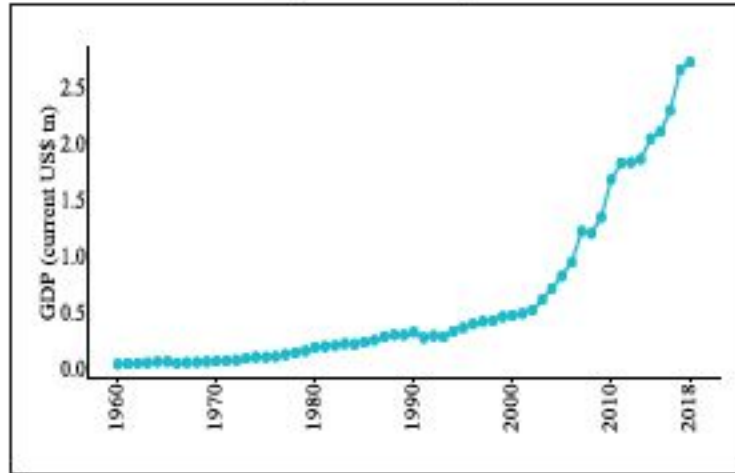
Figure 1: Global contribution to world's GDP by major economies from 1 AD to 2003 AD



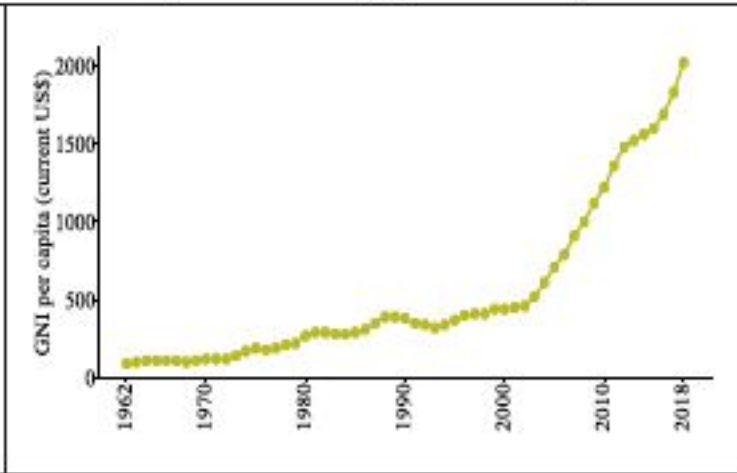
V1- Ch1: Wealth Creation- Markets and Trust

India's tryst with socialism

**Figure 2a: India's GDP (current US\$ tn)
(1960-2018)**

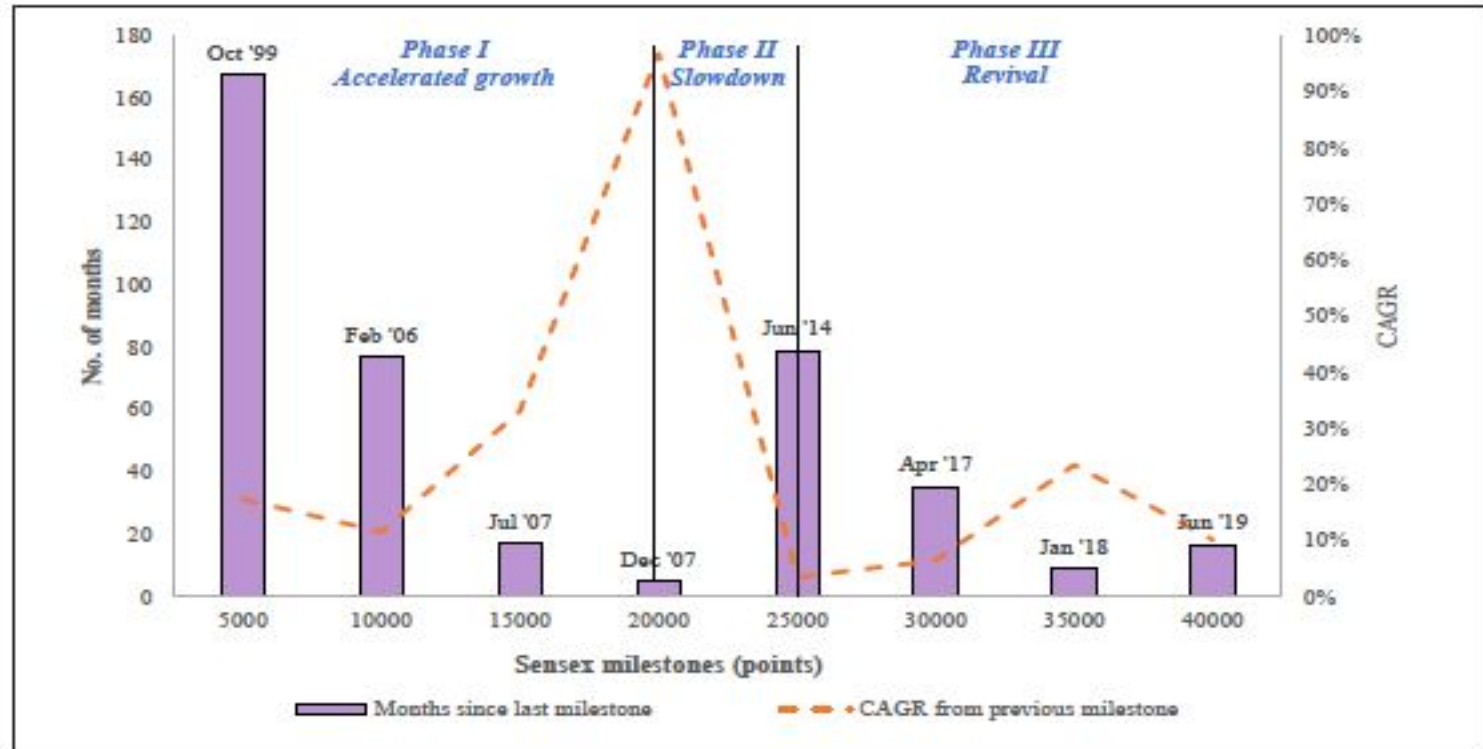


**Figure 2b: India's GDP per capita
(current US\$) (1960-2018)**



V1- Ch1: Wealth Creation- Markets and Trust

Figure 3: Incremental months taken for Sensex to cross each 5000-point milestone



V1- Ch1: Wealth Creation- Markets and Trust

Wealth creation by entrepreneurs results in:

- Benefits to employees
- Benefits to suppliers
- Capital expenditure
- Forex Reserves
- Citizens in general

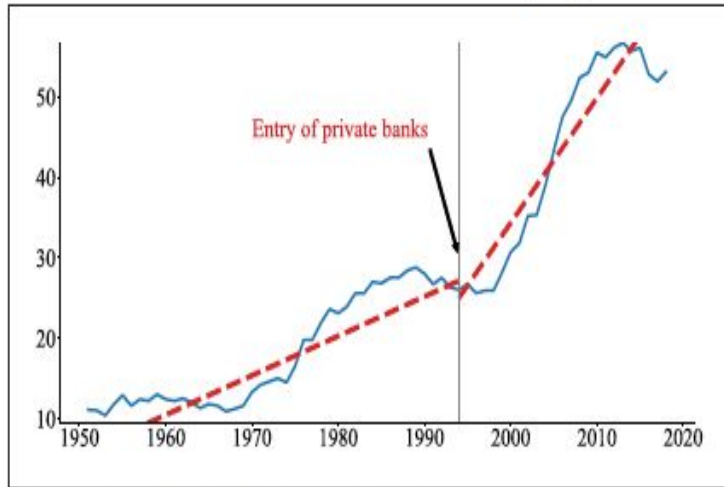
V1- Ch1: Wealth Creation- Markets and Trust

Wealth creation and economic development in several advanced economies has been guided by Adam Smith's philosophy of the invisible hand. Despite the dalliance with socialism – four decades is but an ephemeral period in a history of millennia – India has embraced the market model that represents our traditional legacy. However, scepticism about the benefits accruing from a market economy still persists. This is not an accident as our tryst with socialism for several decades' makes most Indians believe that Indian economic thought conflicts with an economic model relying on the invisible hand of the market economy. However, this belief is far from the truth.

V1- Ch1: Wealth Creation- Markets and Trust

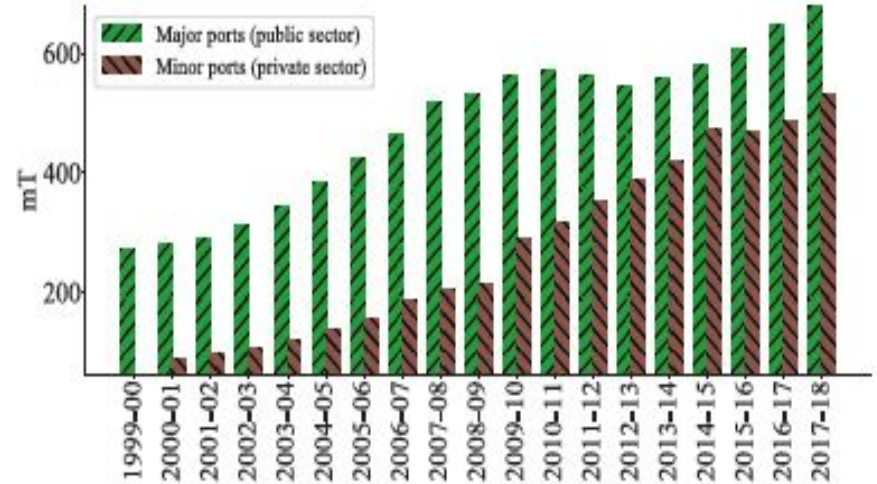
Evidences to bat for openness: Comparison of Open and Closed sectors

Figure 9: Increase in domestic credit to GDP after entry of private sector banks



Source: World Bank WDI and Survey calculations.

Cargo volumes in the Ports



V1- Ch1: Wealth Creation- Markets and Trust

Instruments of wealth creation: Pro-business (And not pro-crony!)

1. New Firms – Efficiency and Opportunity
Innovation + Competition for the old
2. Allowing competition – Govt intervention hurts.
E.g. Pharma
3. Ease of doing business – Focus on export and employment intensive sectors
4. Efficient Financial sector
5. Privatization – valuation of Stocks of BPCL and HPCL

V1- Ch1: Wealth Creation- Markets and Trust

Trust as a public good – increases when consumed

- ❑ Markets are liable to debase ethics in the pursuit of profits at all cost.
- ❑ E.g. Financial crisis – breakdown of trust.
- ❑ Need to build trust in the markets
- ❑ E.g. In India – look at the ‘connected firms’ – outperformed Sensex500 before 2011, underperformed post 2011
- ❑ E.g. Allocation of natural resources
- ❑ E.g. Wilful Defaulters, siphoning off public money

V1- Ch1: Wealth Creation- Markets and Trust

How to build and gain trust?

1. Reason for low trust is lack of reward and recognition of good behaviour, stemming purely from intrinsic motivation:
E.g. banks recognising those who pay back loans on time – Behavioural nudge to trustworthy actions.
2. Reducing Information asymmetry - E.g. through CRILC
3. Enhancing quality of supervision – Increasing capability of regulators through more resources and technology (AI)

Volume 1- Chapter 2:

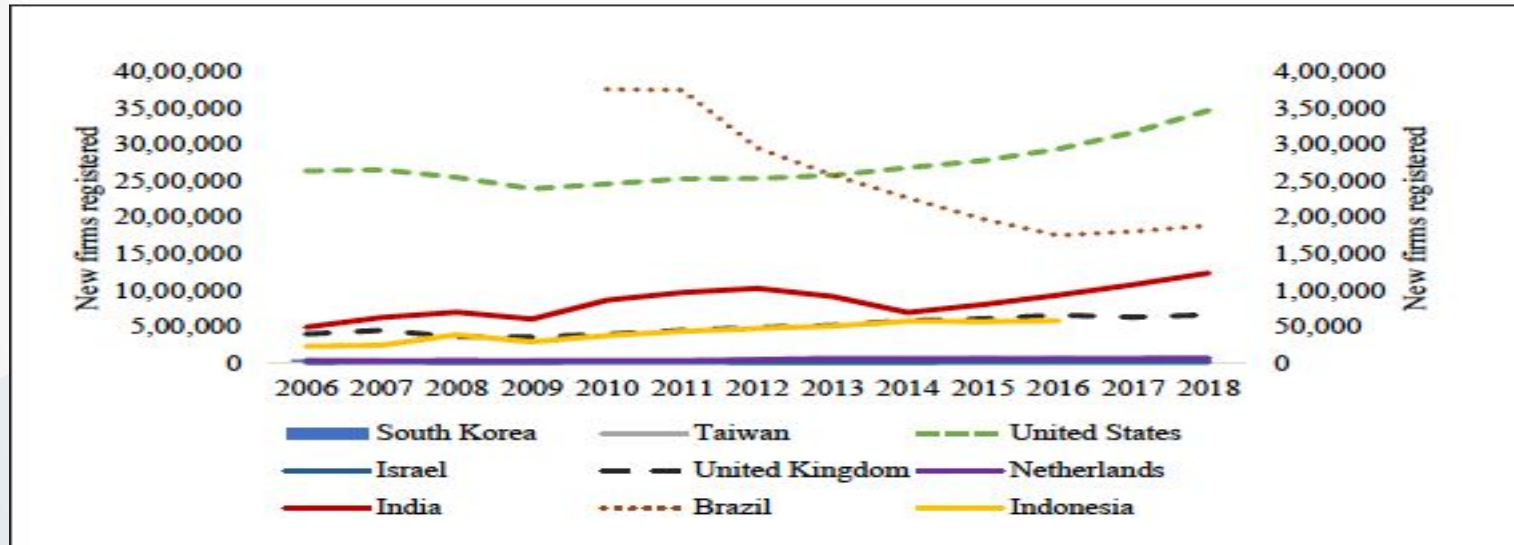
Entrepreneurship and Wealth Creation at the Grassroots



V1- Ch2: Entrepreneurship

Entrepreneurial activity in India

Figure 1: Comparison of entrepreneurial activity (new firms) across countries



V1- Ch2: Entrepreneurship

Entrepreneurial activity in India

New firms in the formal sector grew at a CAGR of 3.8% from 2006-2014, The growth rate from 2014 to 2018 has been 12.2%.

As a result, from about 70,000 new firms created in 2014, the number has grown by about 80 per cent to about 1,24,000 new firms in 2018.

Still, very low per capita rates of entrepreneurship.

V1- Ch2: Entrepreneurship

Relationship with Growth (GDDP)

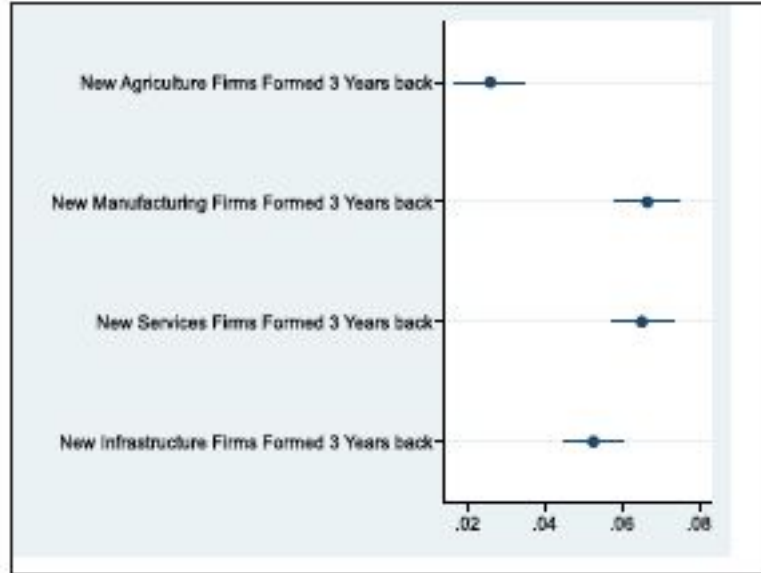
10 per cent increase in registration of new firms per district-year yields a 1.8 per cent increase in GDDP

- ☐ Engine of economic growth
- ☐ Not merely a necessity forced out of unemployment

V1- Ch2: Entrepreneurship

Impact of sector in which activity is taken

Figure 4a: Differences in the Impact of Entrepreneurial Activity by Region



V1- Ch2: Entrepreneurship

Figure 6a: Effect of Labour Laws on New Firm Formation

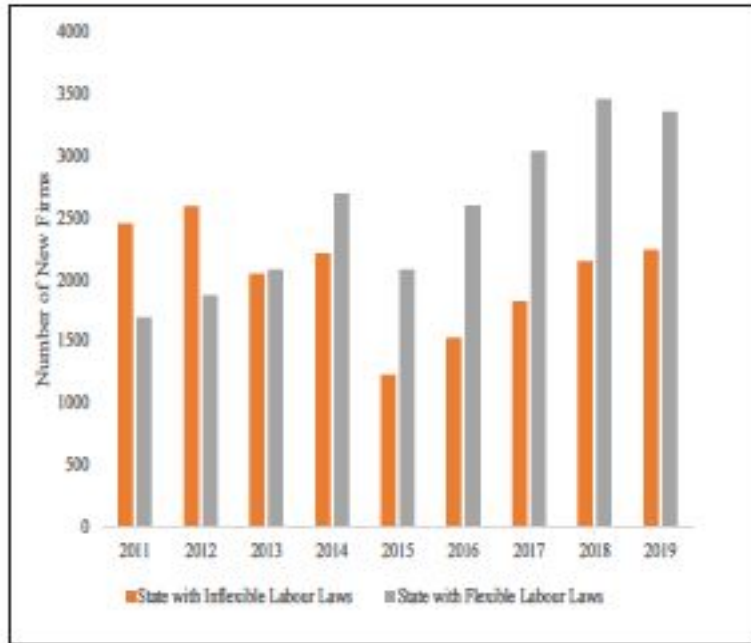
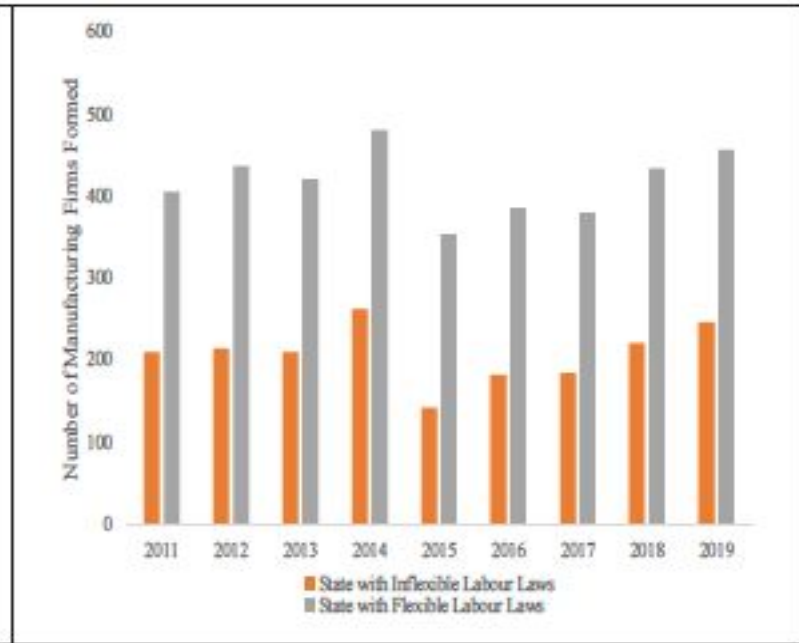


Figure 6b: Effect of Labour Loss on New Manufacturing Firms



V1- Ch2: Entrepreneurship

Factors affecting activity: Importance of manufacturing enterprises

- Labour laws
- Pre-existing industries
- Social and Physical infrastructure

V1- Ch2: Entrepreneurship

Social infrastructure – Education

- Higher and better quality new firms, longer survival

Figure 8a: Literacy and entrepreneurship

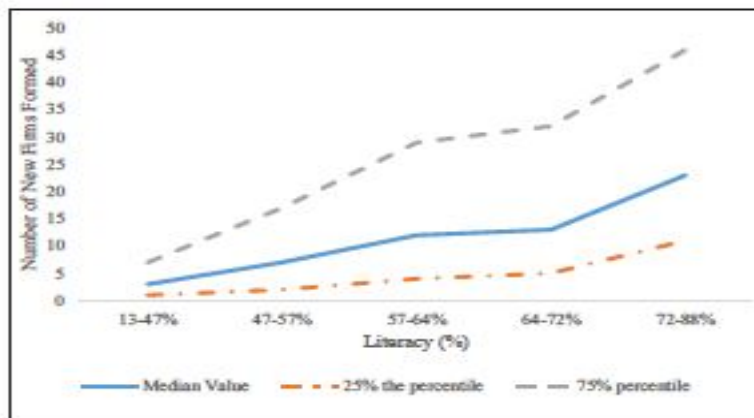
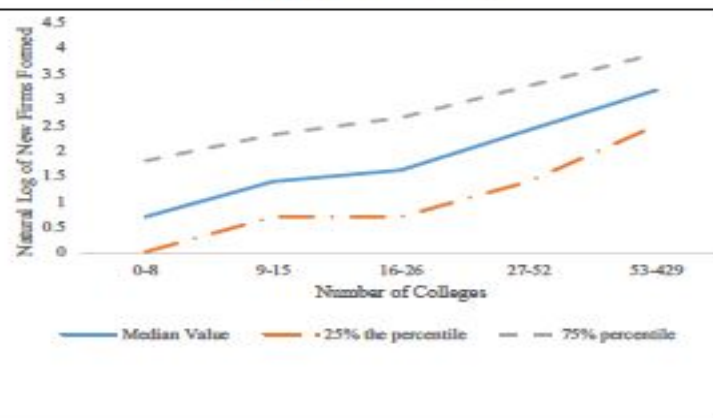


Figure 8b: Number of Colleges and entrepreneurship



V1- Ch2: Entrepreneurship

Physical infrastructure – Roads and Market Access (distance) - Saturation

Figure 9a: Market Access and Entrepreneurship

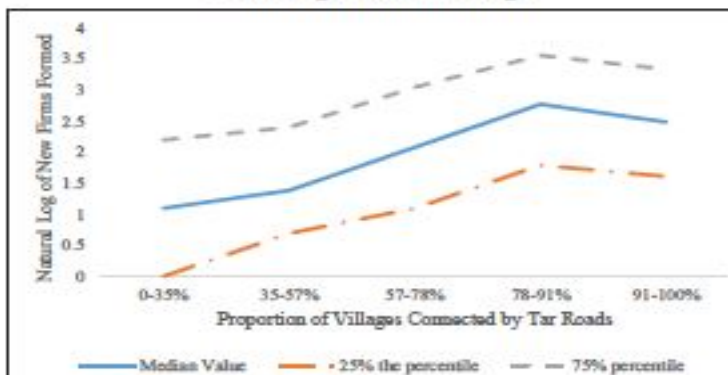
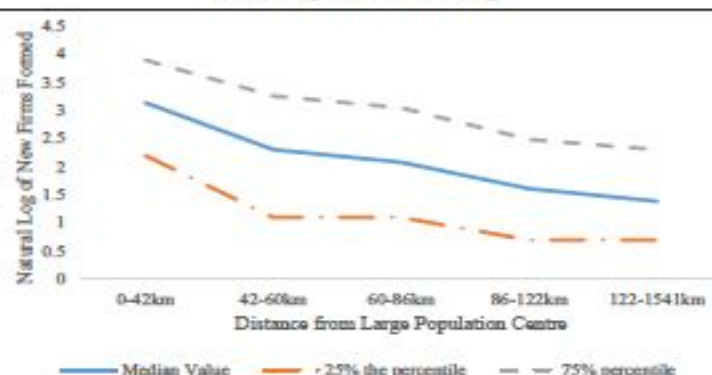


Figure 9b: Distance from large centres and Entrepreneurship



Source: MCA-21, SHRUG and Survey Calculations

V1- Ch2: Entrepreneurship

Recommendations:

- Need to enable more new firm creation in manufacturing than in services (as seen currently)
- Better physical and social infrastructure:
 - Makes a recommendation to explore privatization of education
 - Better connectivity to villages
 - Policies to foster EoDB

Thank You!
(Until Next Class 😊)