Malcom Elizabeth Adisheshiah Mid-Year Review of the Indian Economy

NCAER

November 11, 2017

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An Economy in Transition

Source: **Uttam Ghosh/*Rediff.com***

- Medium-run macroeconomic uncertainty
- Reforms
- Short-run Challenges
- Macroeconomic Outlook

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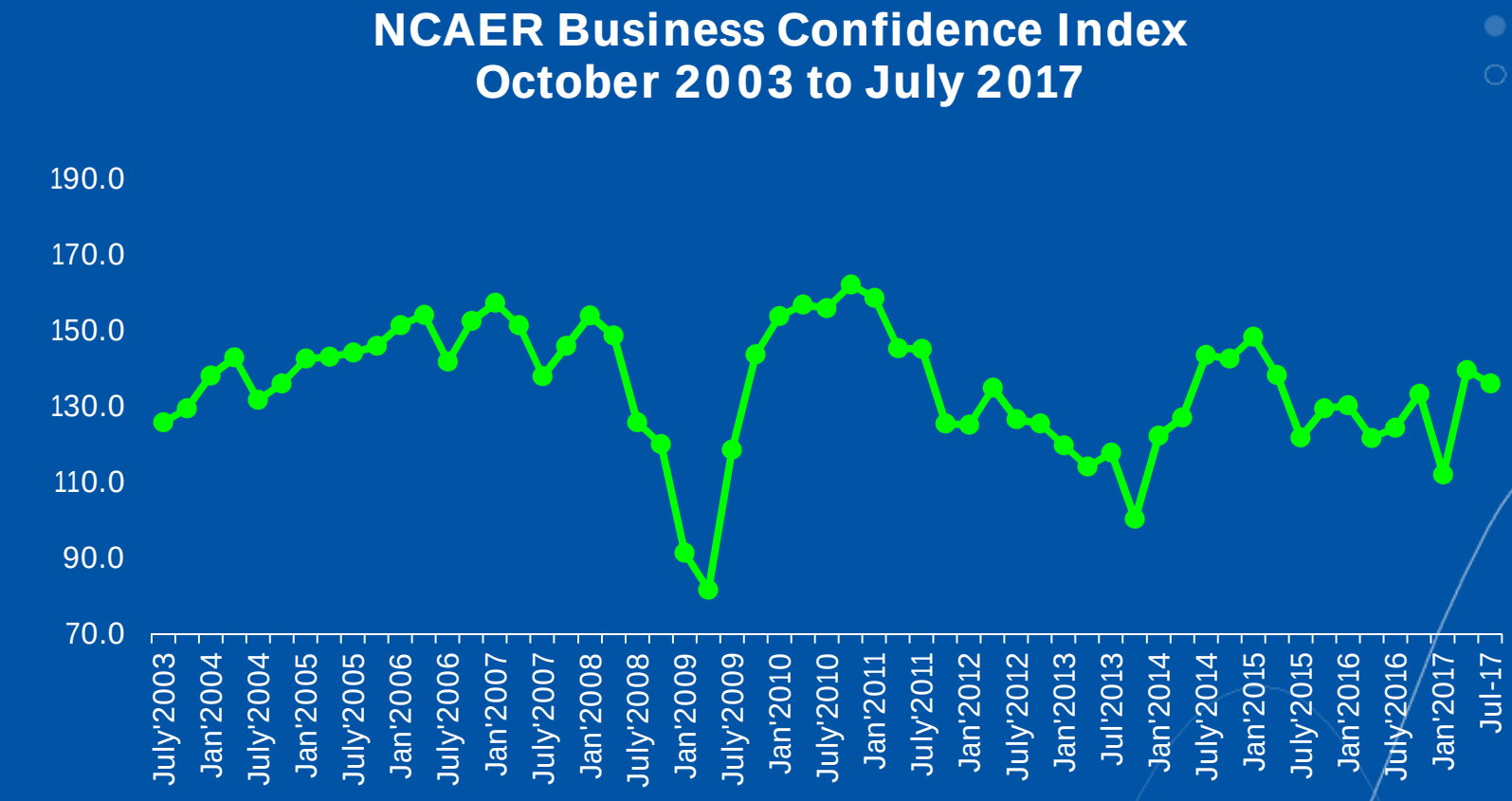
Medium-Run Uncertainty:

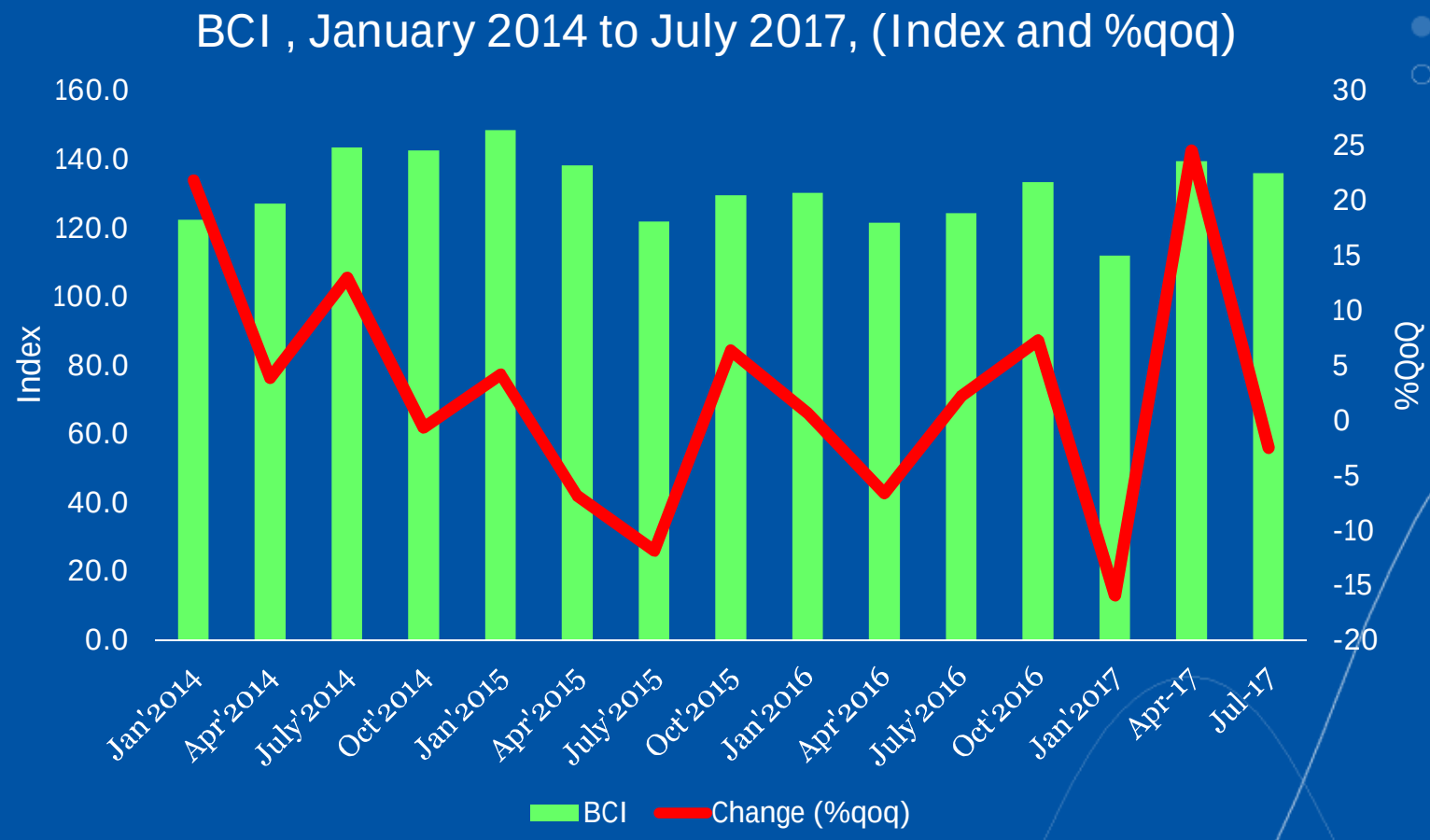
Economic Growth, Inflation, Fiscal Balance, Current Account Balance and Unemployment

Medium-run Uncertainty has increased post 2008



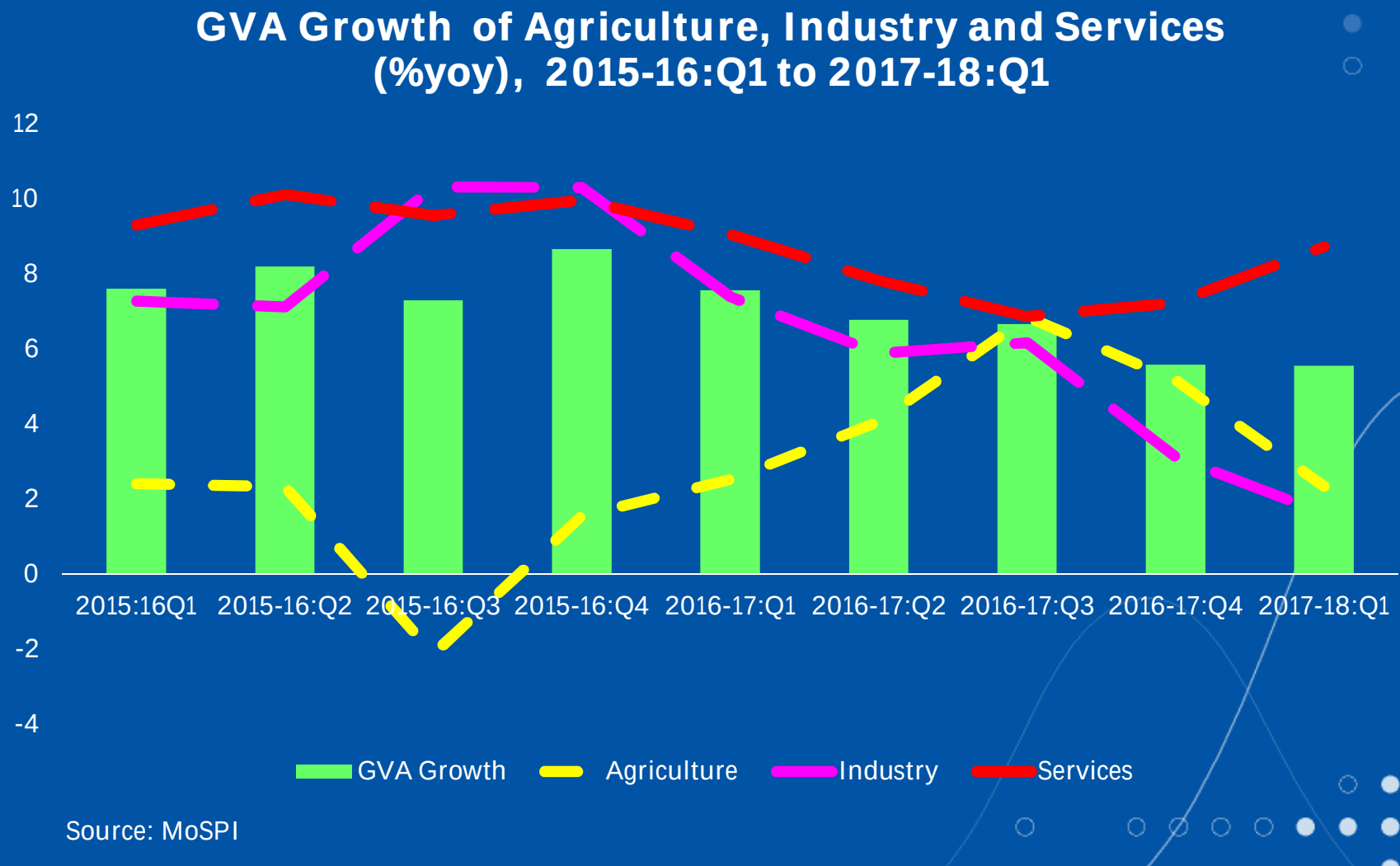
Source: NCAER

Short-Run Volatility

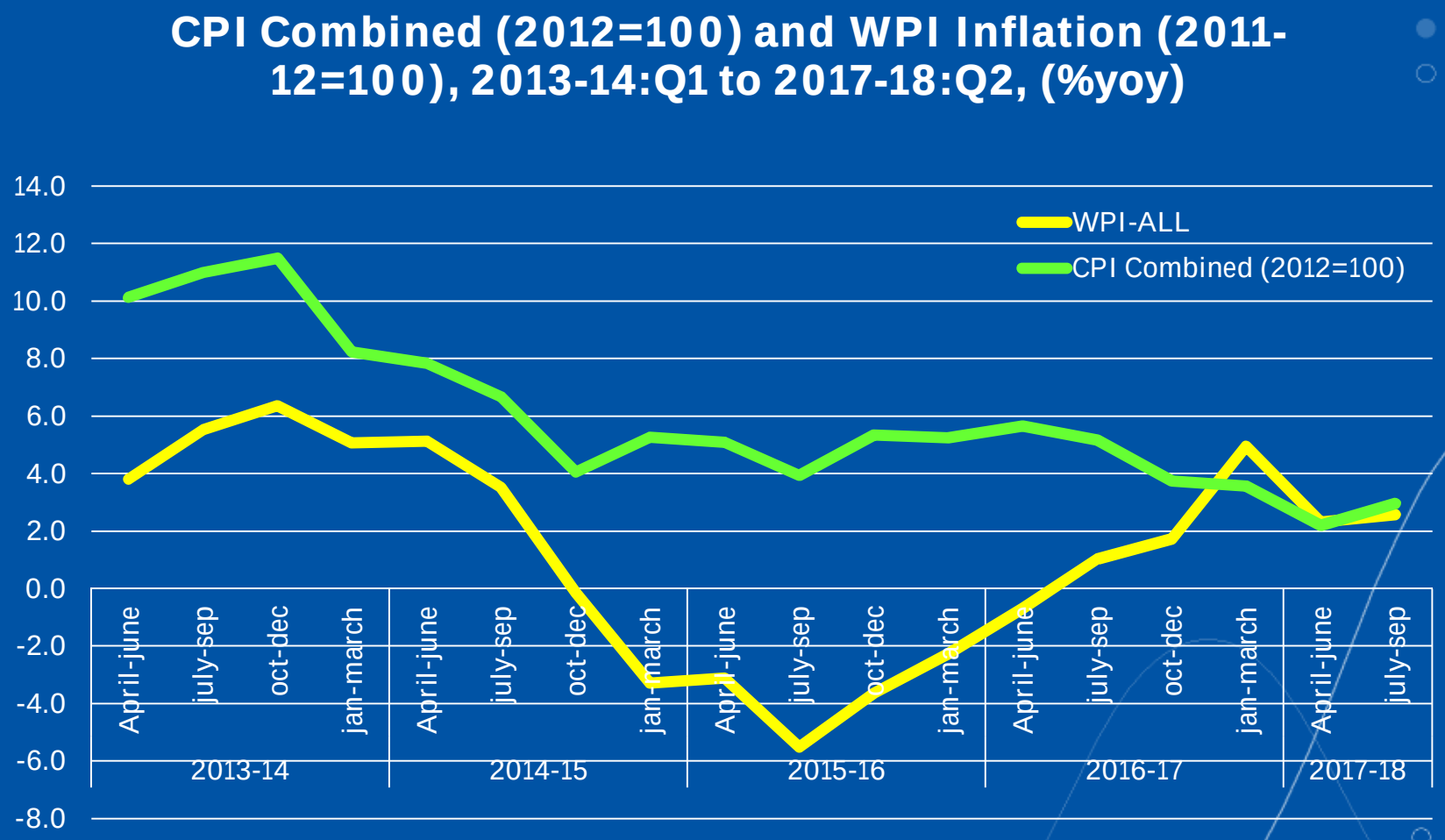


Source: NCAER

Growth has steadily fallen....

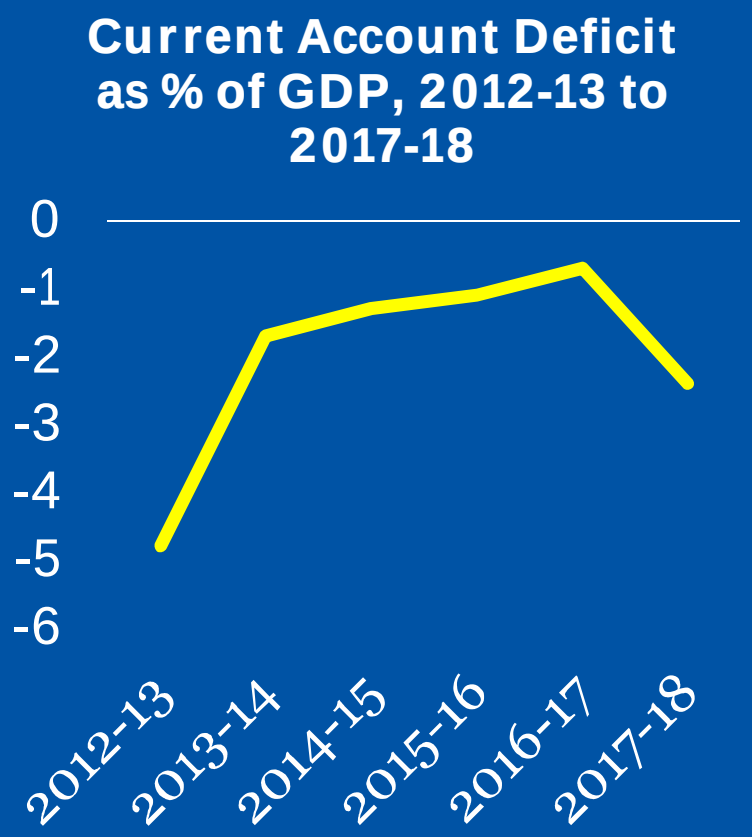


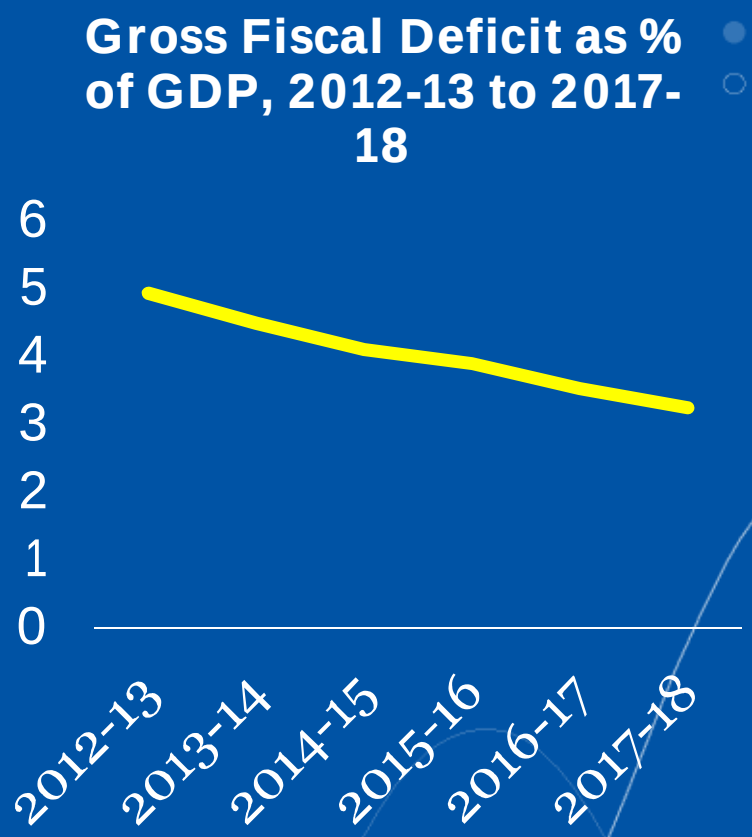
Inflation has moderated



Source: Office of Economic Advisor and MoSPI.

Twin deficits moderated…





Note: For CAD, this is for 2017-18:Q1 and for fiscal deficit this is Budgeted Estimate
Source: RBI

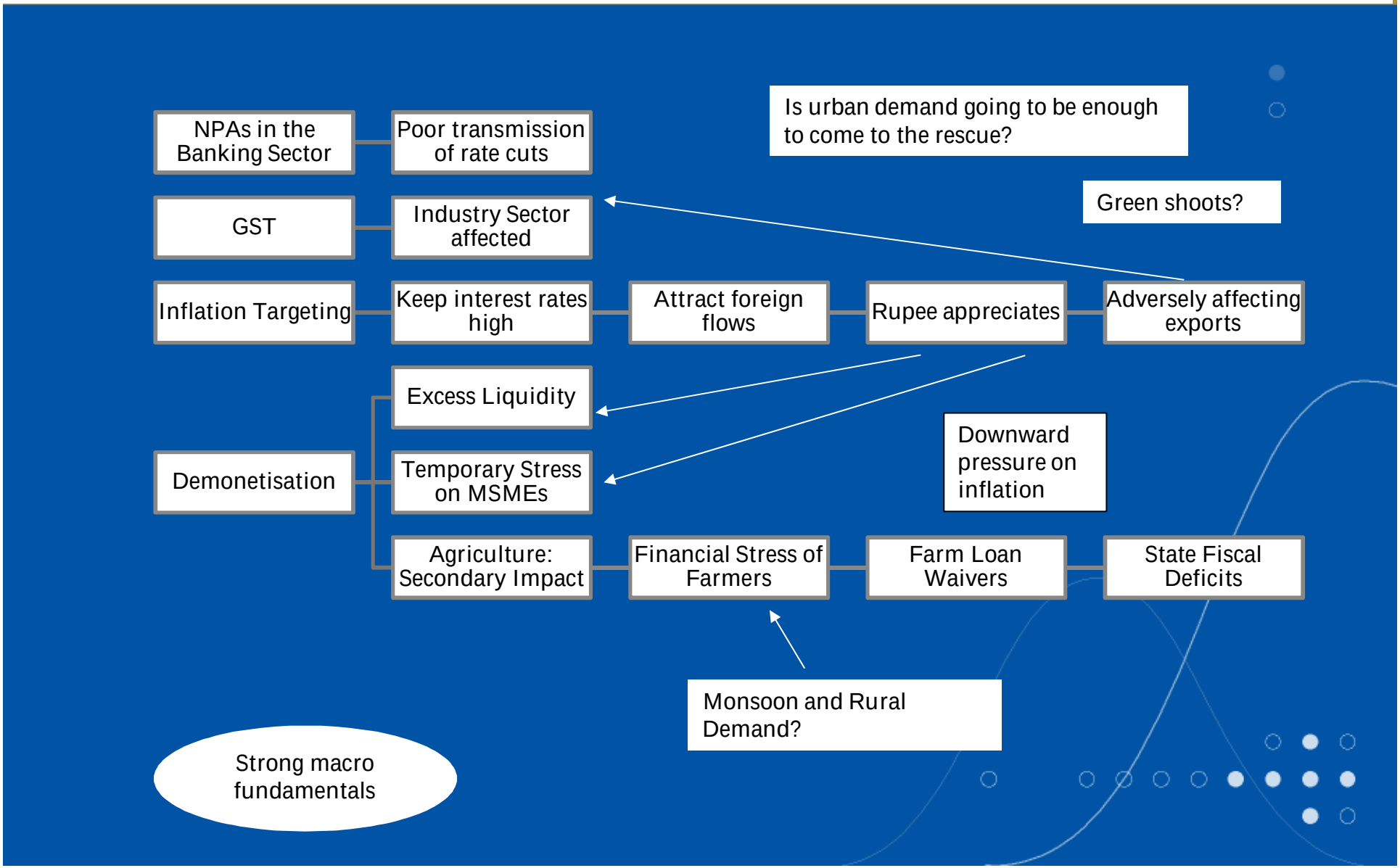
Underperformance of economic growth in the medium-run

- Employment
  - Evidence weakest on employment growth
  - Abraham (2017) suggests that employment improved between March 2010 and 2012 but shrunk by 0.4% per annum between 2013-14 and 2015-16

- India has underperformed on growth and employment fronts while performing well on inflation, fiscal and current account deficits

Short-Run

Problem of Plenty: Macro-imbalances?

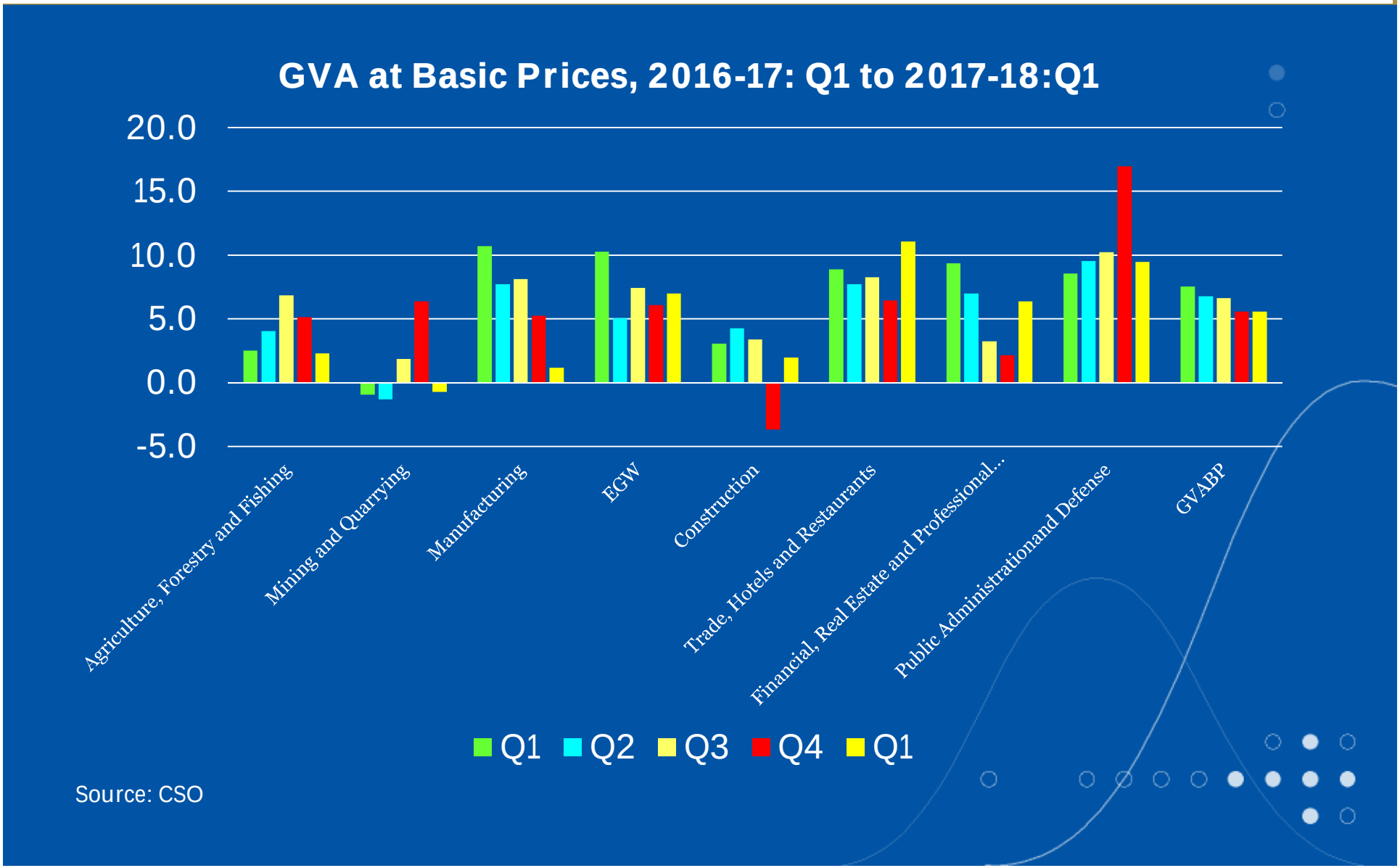


Projections for the World % (Y-o-Y)

Country/ Region	2016	2017	2018
US	1.6	2.2 (↑)	2.3 (↑)
China	6.7	6.8 (↑)	6.5 (↑)
Euro Area	1.8	2.1 (↑)	1.9 (↑)
Japan	1.0	1.5 (↑)	0.7 (↑)
India	7.1	6.7 (↓)	7.4 (↓)
Emerging Market and Developing Economies	1.7	4.6 (↔)	4.9 (↑)
Advanced Economies	1.7	2.2 (↑)	2.0 (↑)
World	3.2	3.6(↑)	3.7 (↑)

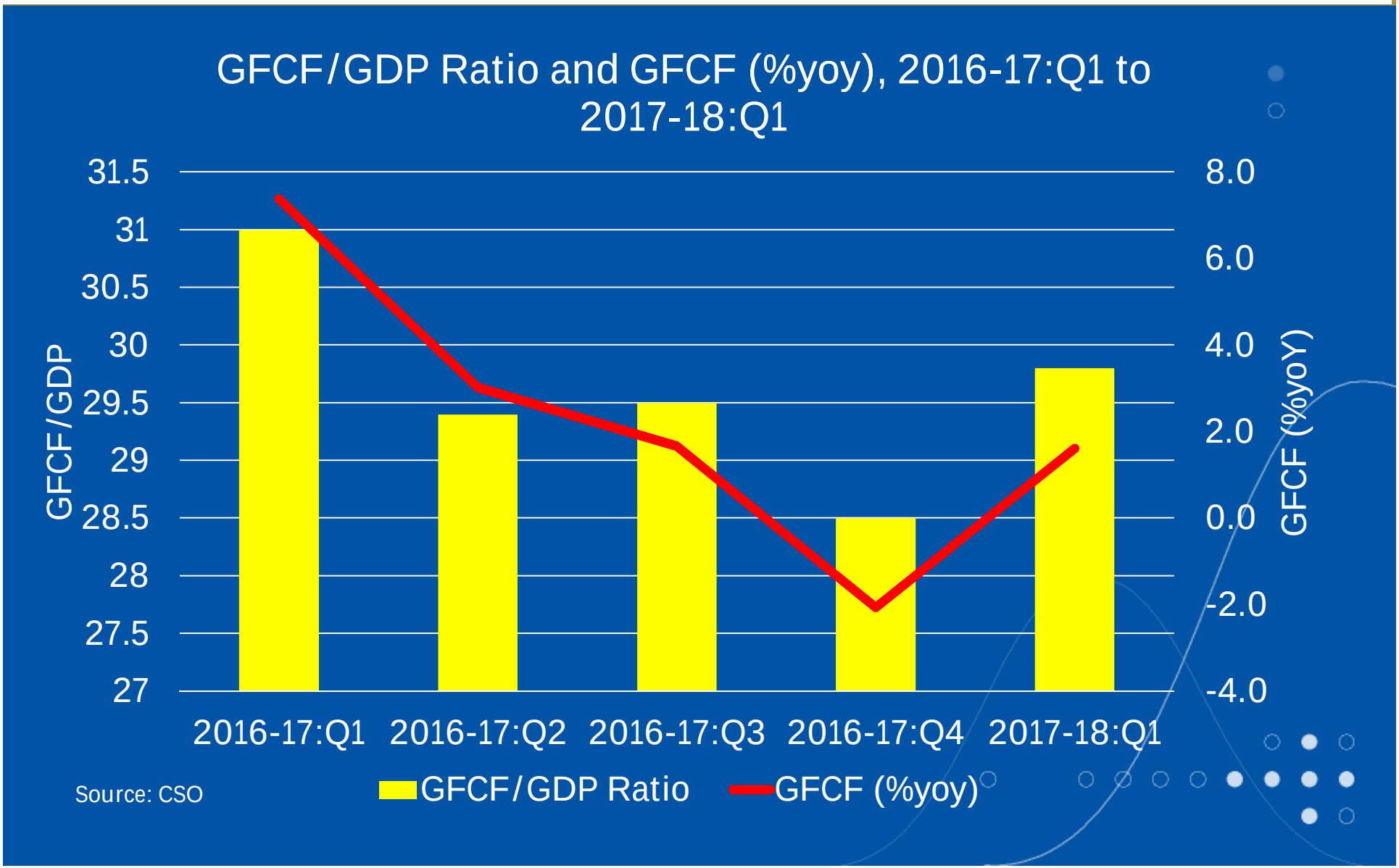
Note: The arrows indicate changes in direction from April 2017 forecasts. Source: IMF World Economic Outlook (WEO) Update, July 2017

Economic Growth has stagnated between January and June 2017

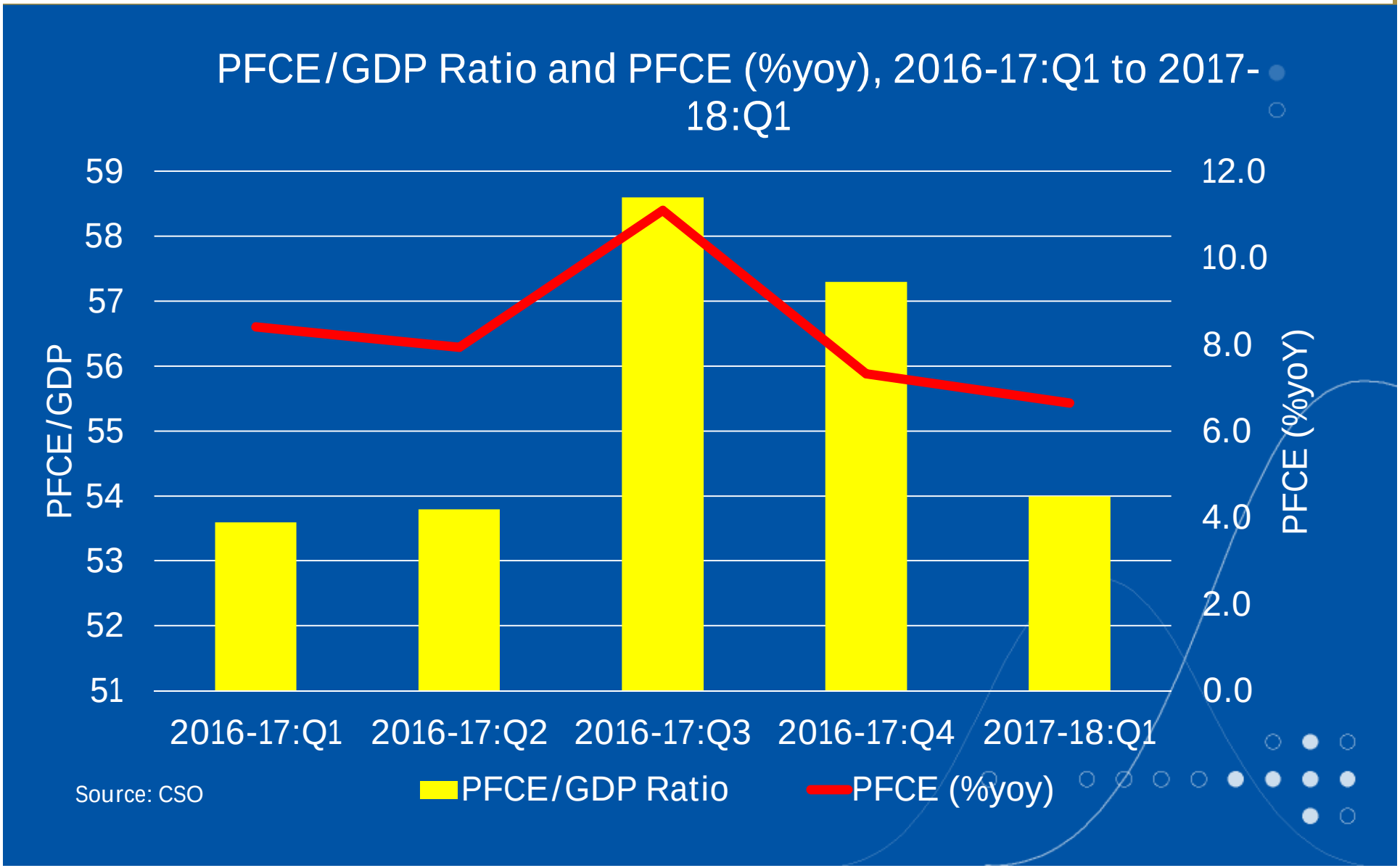


Source: CSO

GFCF recovers in 2017-18: Q1



Consumption Expenditure has come down



An Economy n Transition Indicators from 2017-18: Q2

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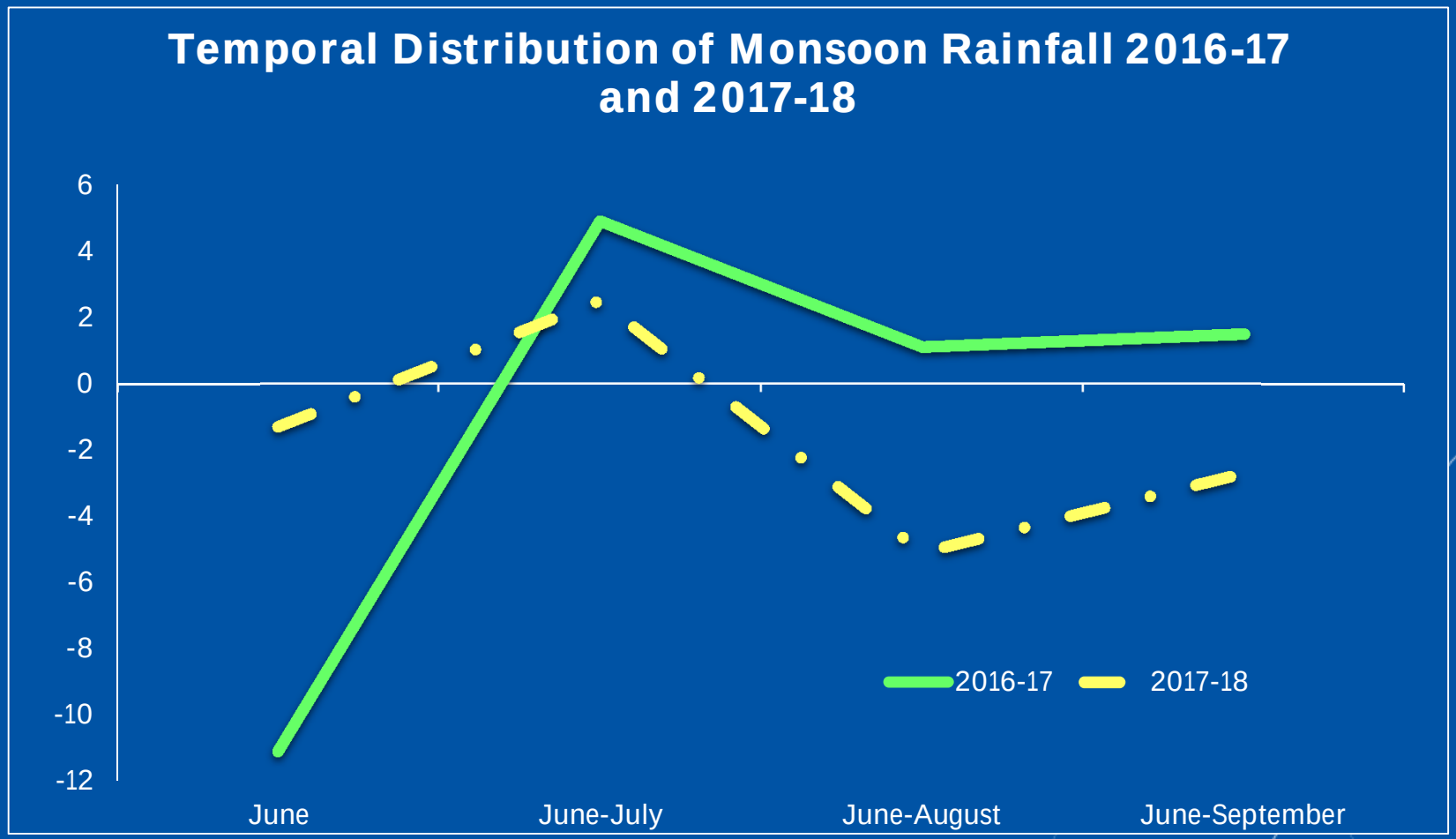
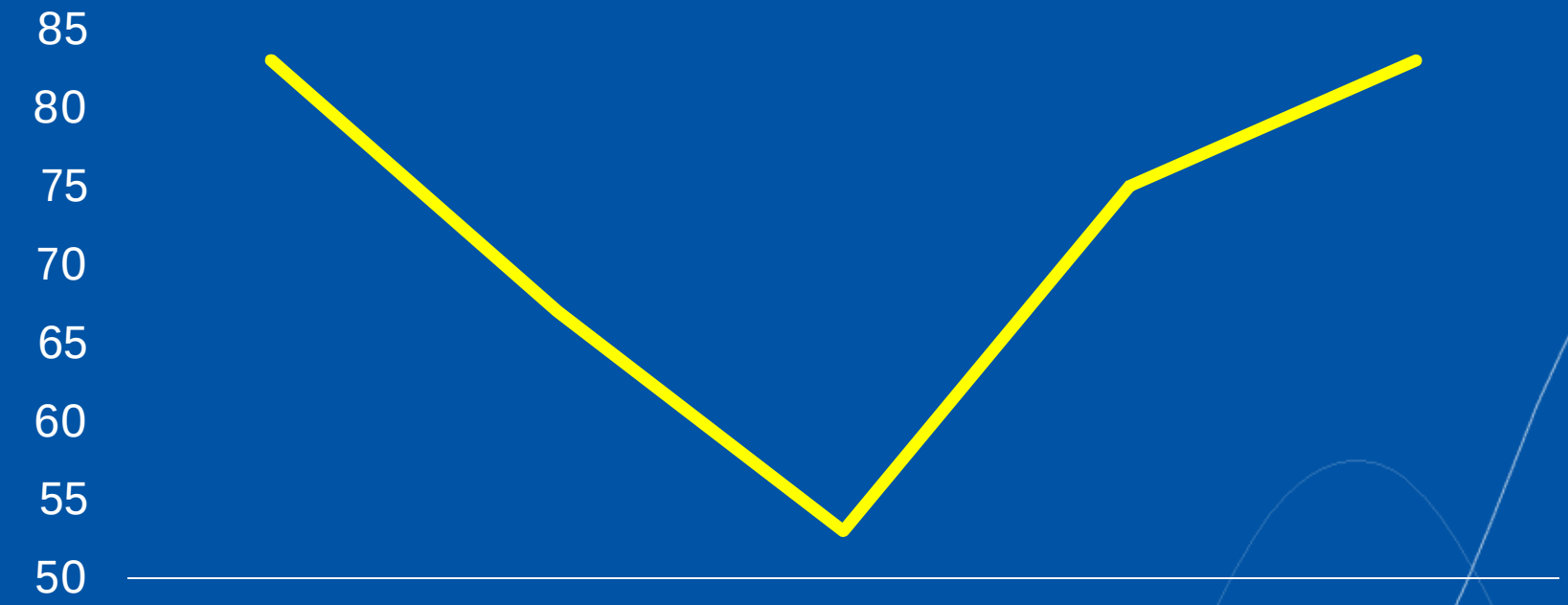
Agriculture

Temporal distribution of rainfall worse than last year



Source: Authors' Computations from the IMD

Spatial Distribution better in 2017-18 versus 2016-17



Source: Authors' Computations from the IMD

Agricultural Production Prospects

Table A.2: Estimated Growth Rate of Selected Agricultural Crops in 2017-18		
	Estimate 1	Estimate 2
Kharif Rice	2.1	3.3
Kharif Coarse Cereals	-1.0	0.1
Kharif Pulses	0.9	2.0
Kharif Food grains	0.9	2.0
Kharif Oilseeds	0.0	-0.6
Cotton#	3.4	1.5
Sugarcane	-0.6	1.4

Source: NCAER

Note:

Estimate I: Based on output equations.

Estimate II: Based on area and yield equations.

Muted Food Inflation

Changes in Wholesale Price Indices of Food Articles in 2016-17 and 2017-18 (April-September)			
S. No.	Product	Increase in 2016-17 over 2015-16	Increase in 2017-18 over 2016-17
1	Food Articles	6.2	0.9
2	Cereals	8.5	2.2
3	Pulses	28.7	–24.4
4	Vegetables	4.7	5.6
5	Fruits	7.9	2.1
6	Milk	2.5	4.2
7	Eggs, meat and fish	2.2	2.2
8	Condiments and spices	6.8	–14.5
9	Other food articles	9.2	–1.1
Source: Computed from the Office of Economic Advisor.			

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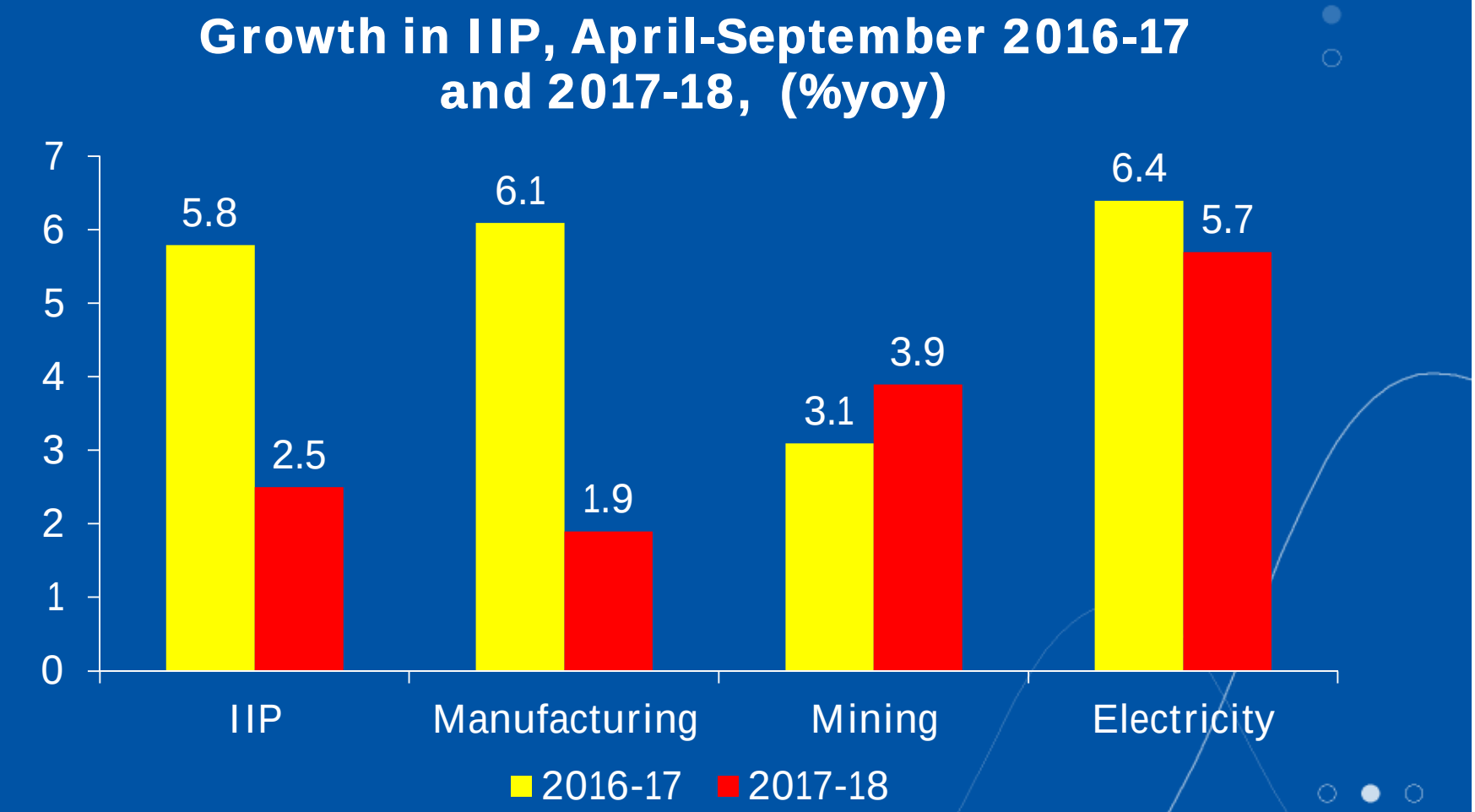
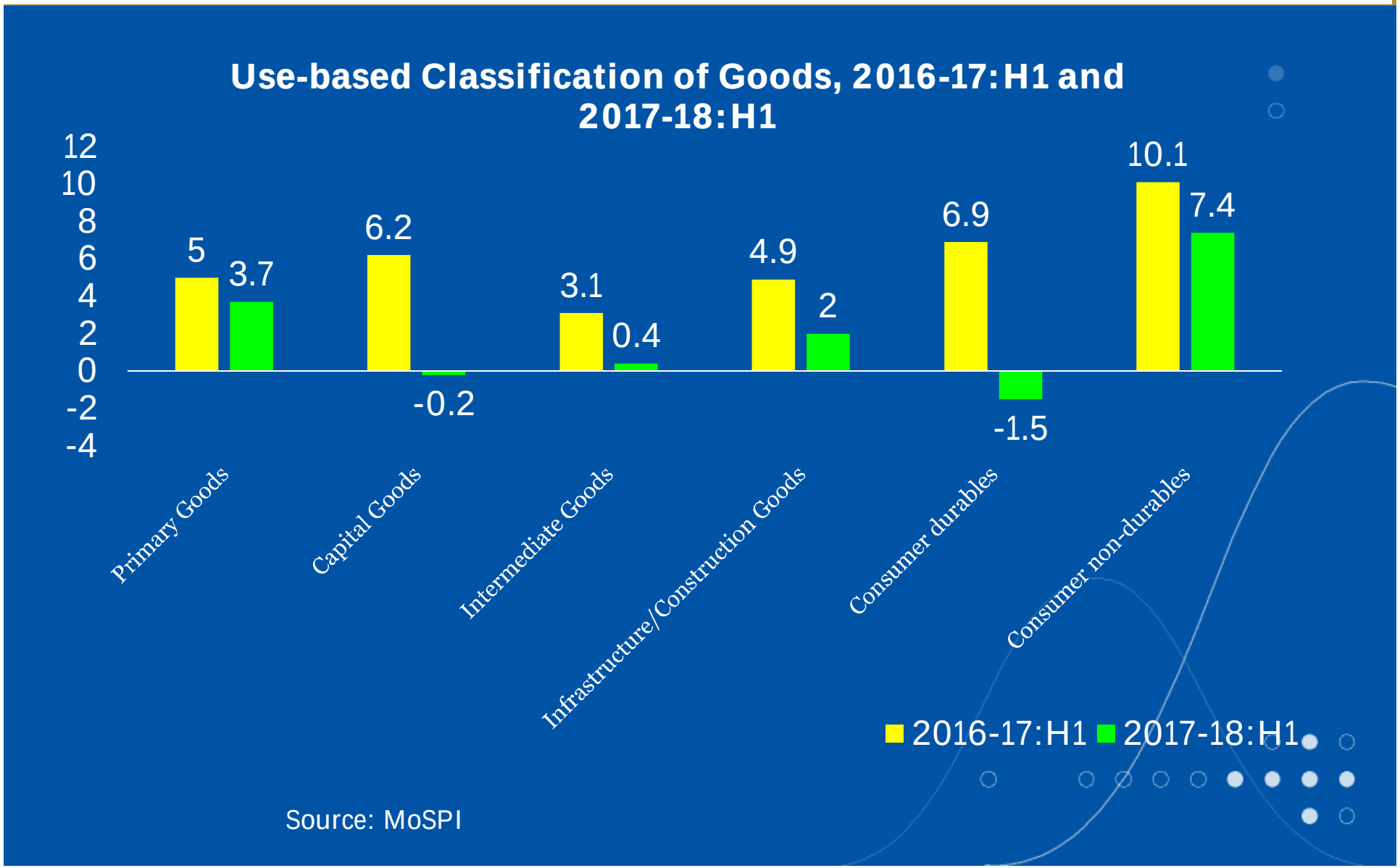
Industry

Industrial Growth driven by manufacturing has slowed down

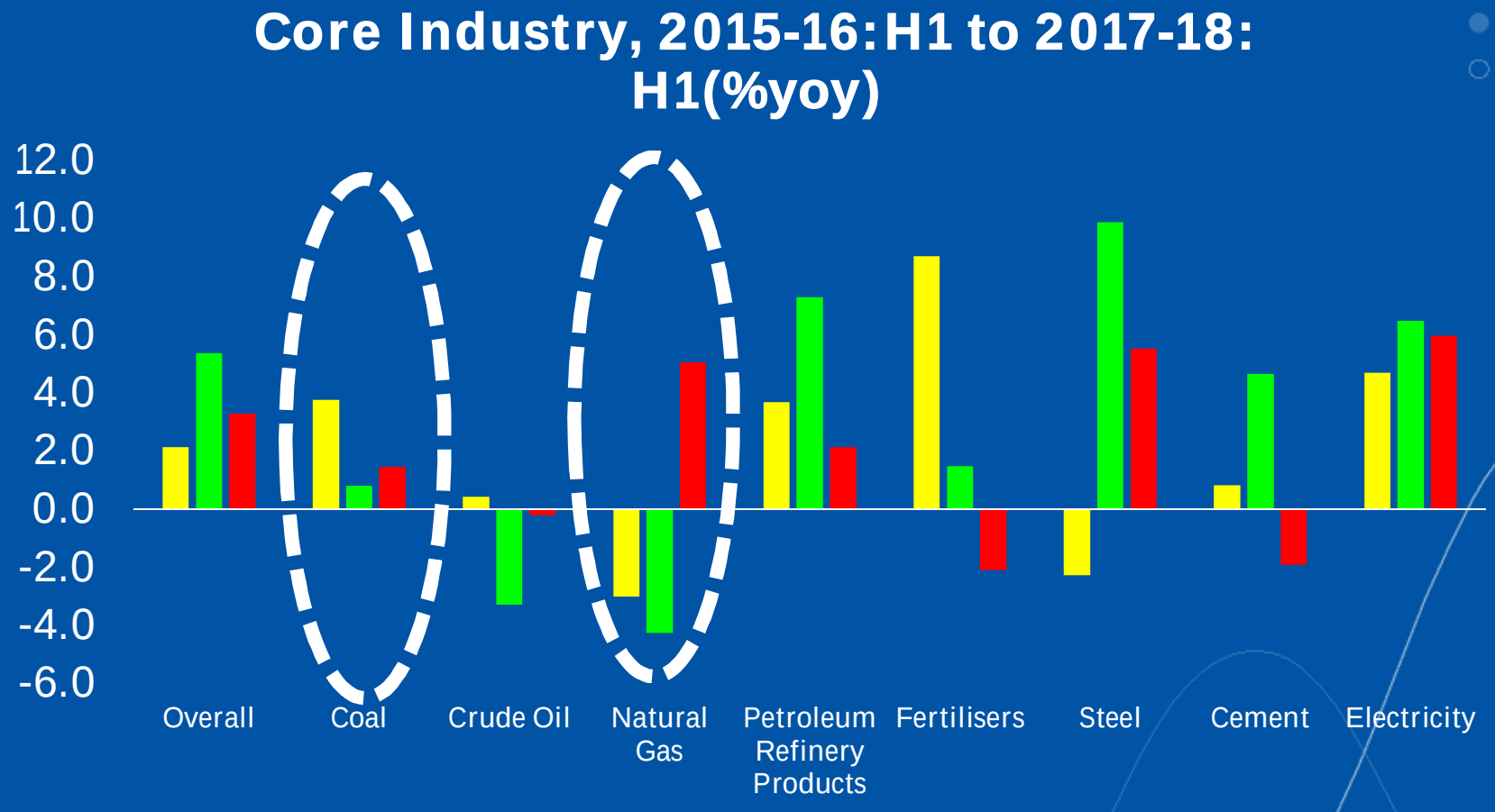


Source: MoSPI

Capital Goods has shown growth in August and September 2017



Core Industry slowed down in the first half except.....



Source: Office of Economic Advisor

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Services

Mixed Growth

Fiscal Year/Quarters	Tourists Arrival (Numbers)	Revenue Earning Goods Traffic by Railways (Mn Tonnes)	Cargo Handled at Major Ports ('000 tonnes)	Production of Commercial Vehicles ('000 Numbers)	New Telephone Connections (Fixed+ Wireless in Millions)	Growth in Aggregate Deposits (Rs Cr)	Bank Credit to Commercial Sector (Rs Cr)
2016–17: H1	11.1	–1.5	5.3	6.1	5.0	13.2	12.1
H2	30.5	2.4	8.1	0.2	12.8	11.2	8.1
2017–18: H1	15.6	4.9	3.4	–5.4	14.3*	8.1	6.3

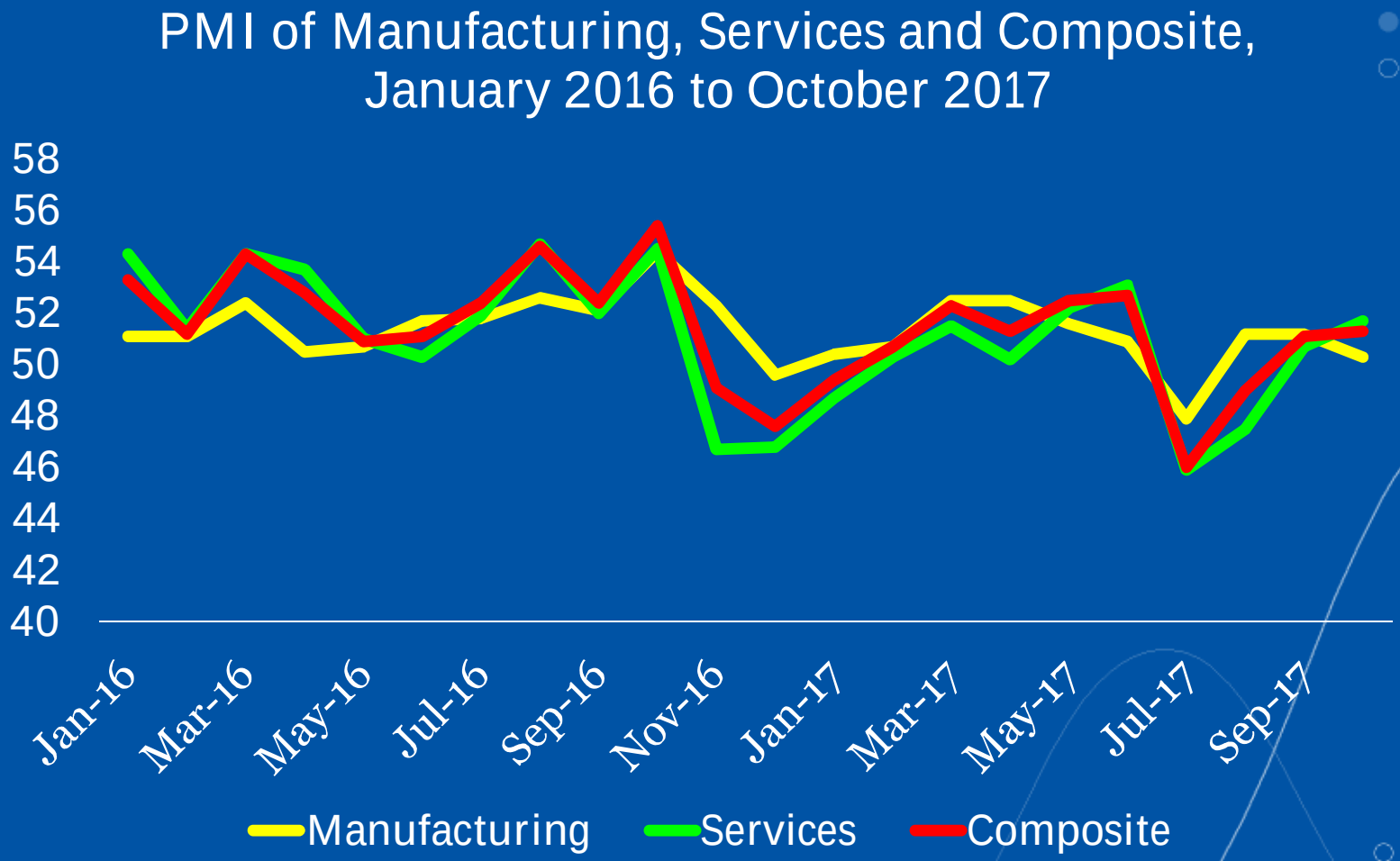
Sources : i) Foreign Tourist Arrivals - Press Information bureau, Ministry of Tourism; Railway traffic - Press Information bureau, Ministry of Railways; Port Cargos – Indian Port Association; http://ipa.nic.in/pcs/default.asp; and Aggregate Deposits and Bank Credit - RBI

Aviation continues to exhibit strong growth

Domestic and International Air Passenger and Cargo Traffic				
	Total Traffic (April-September)			
	Passenger Lakh	% chg	Cargo '000' tonnes	% chg
2016-17	1,060.1	18.9	1,207.6	7.3
2017-18	1,207	13.9	1,388.1	15.0

Source: Airports Authority of India

Shaky Recovery



Source: Nikkei

External Sector: Spillovers in domestic markets

Volatile merchandise exports growth but strong imports growth

Figure E.1a: Volatility, Merchandise Exports
(August 2016 to September 2017)

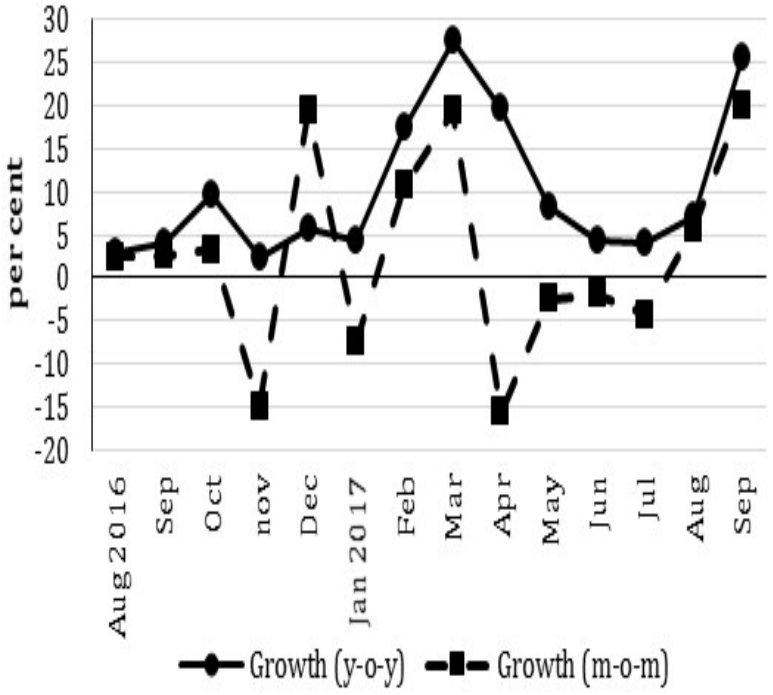
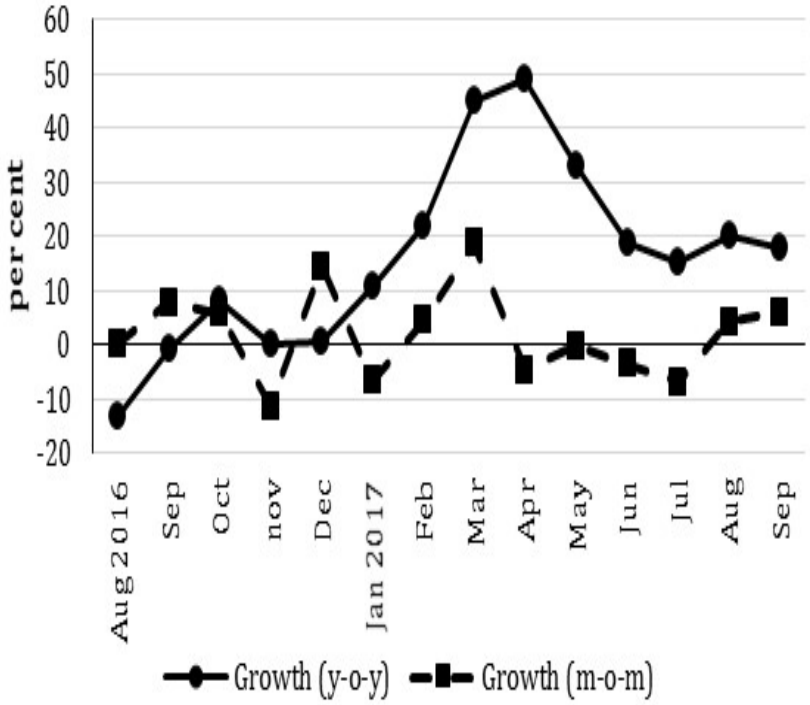
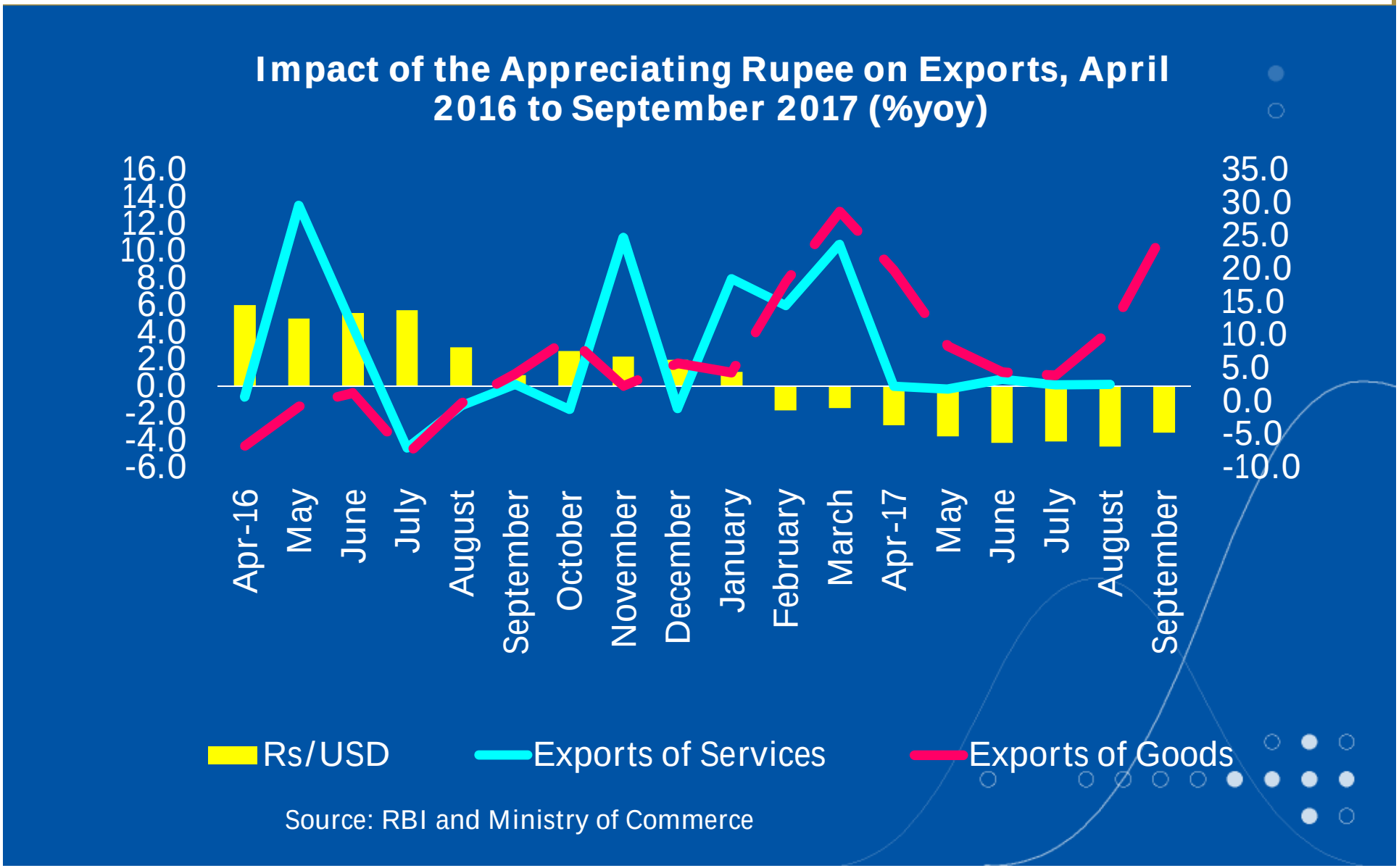


Figure E.1b: Volatility, Merchandise Imports
(August 2016 to September 2017)



Source: Ministry of Commerce

Little discernible impact on exports?



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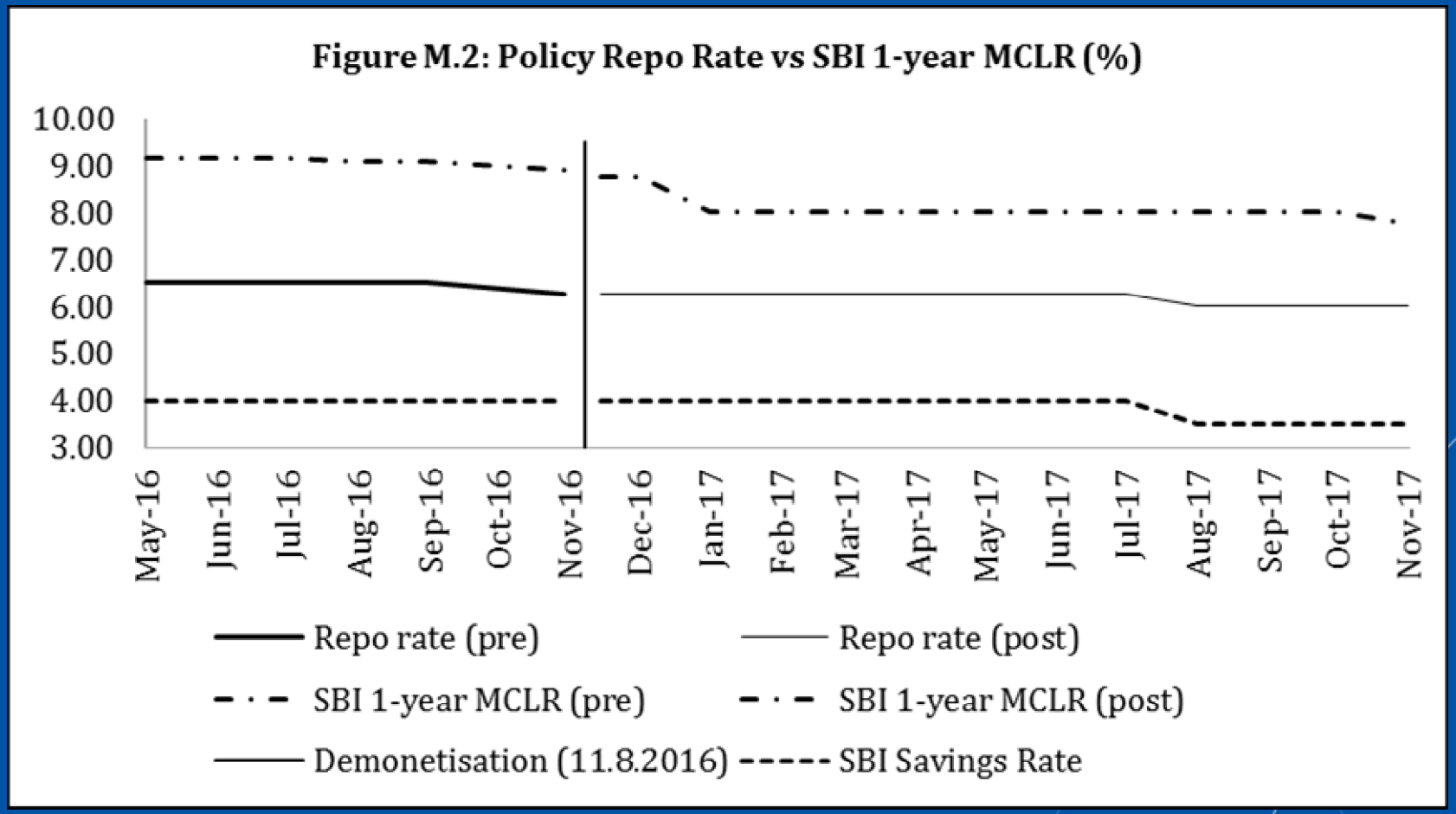
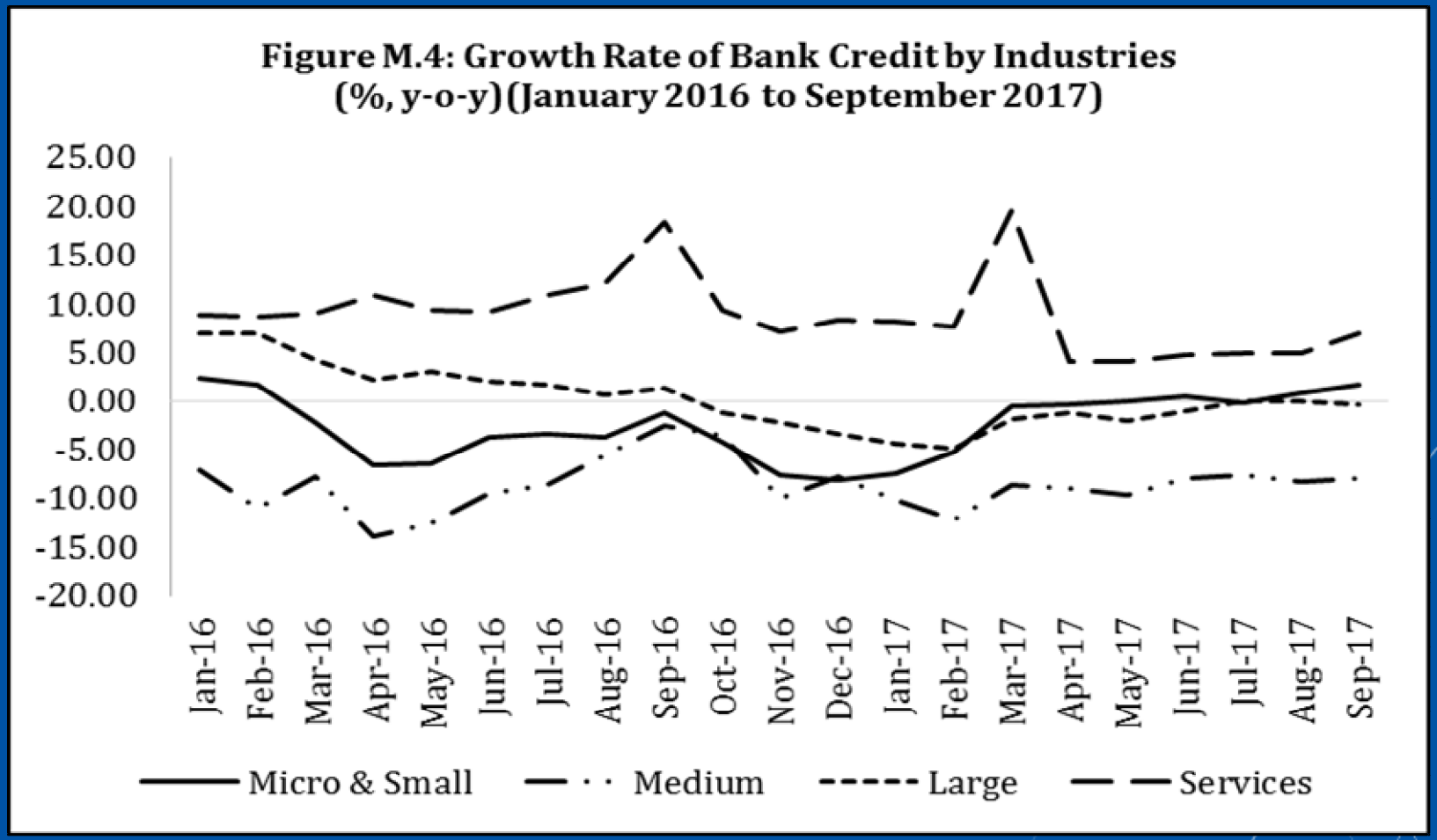
Money and Capital Markets

More movement on transmission



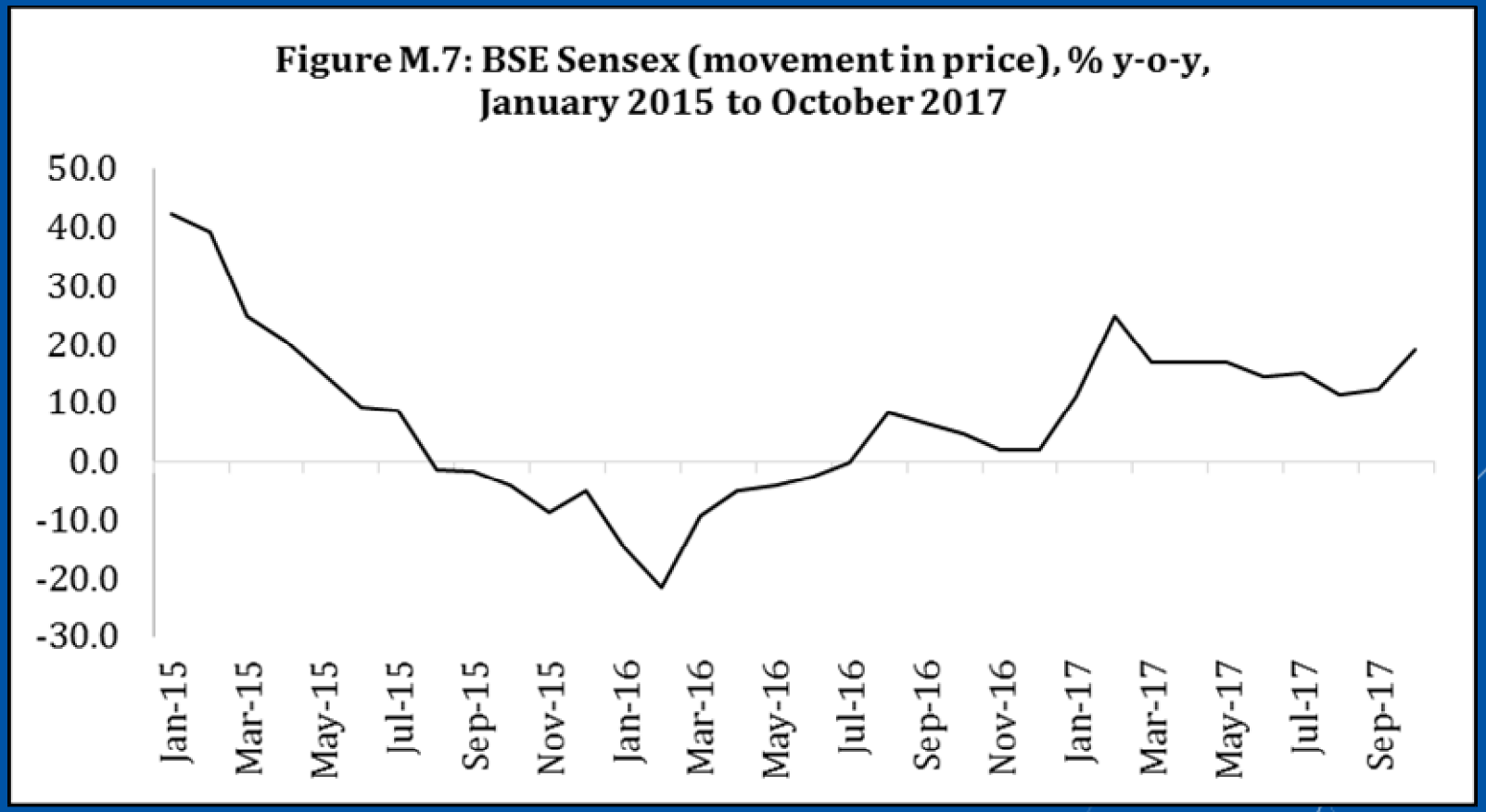
Source: Reserve Bank of India, State Bank of India

Uptake of Bank Credit by MSMEs limited



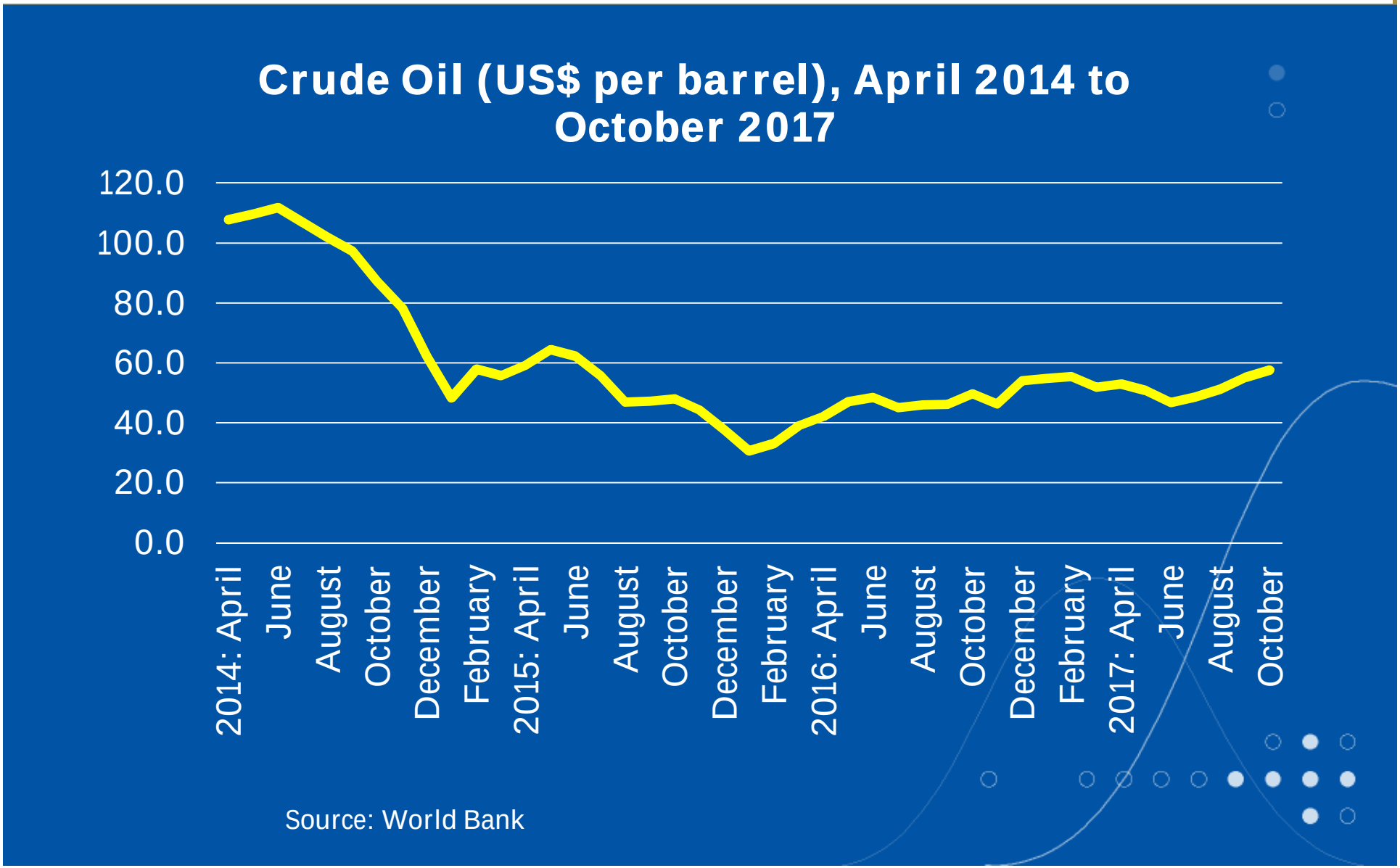
Source: Reserve Bank of India

Sensex has been booming in India after last year



Source: BSE.

Crude Oil Prices increasing



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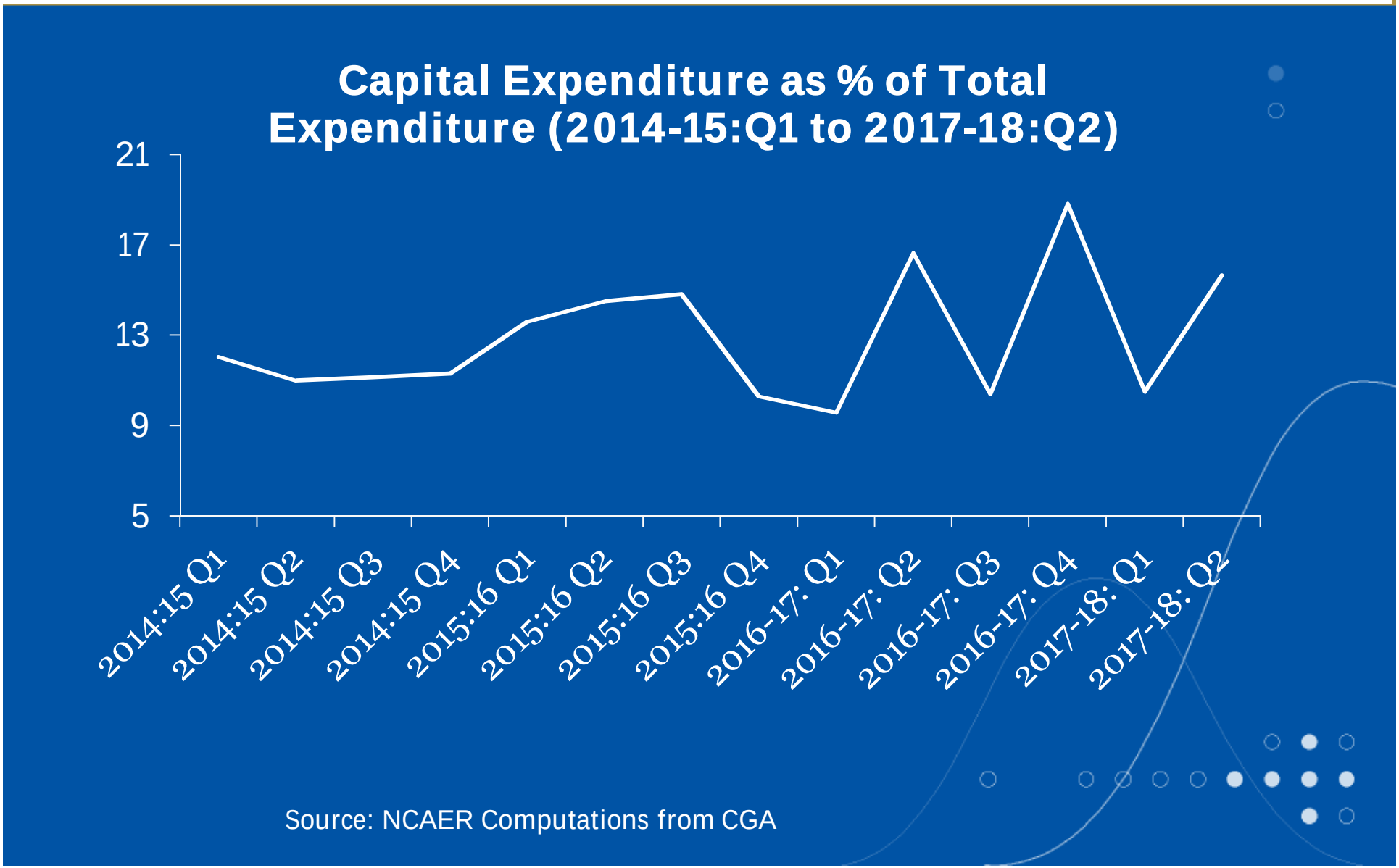
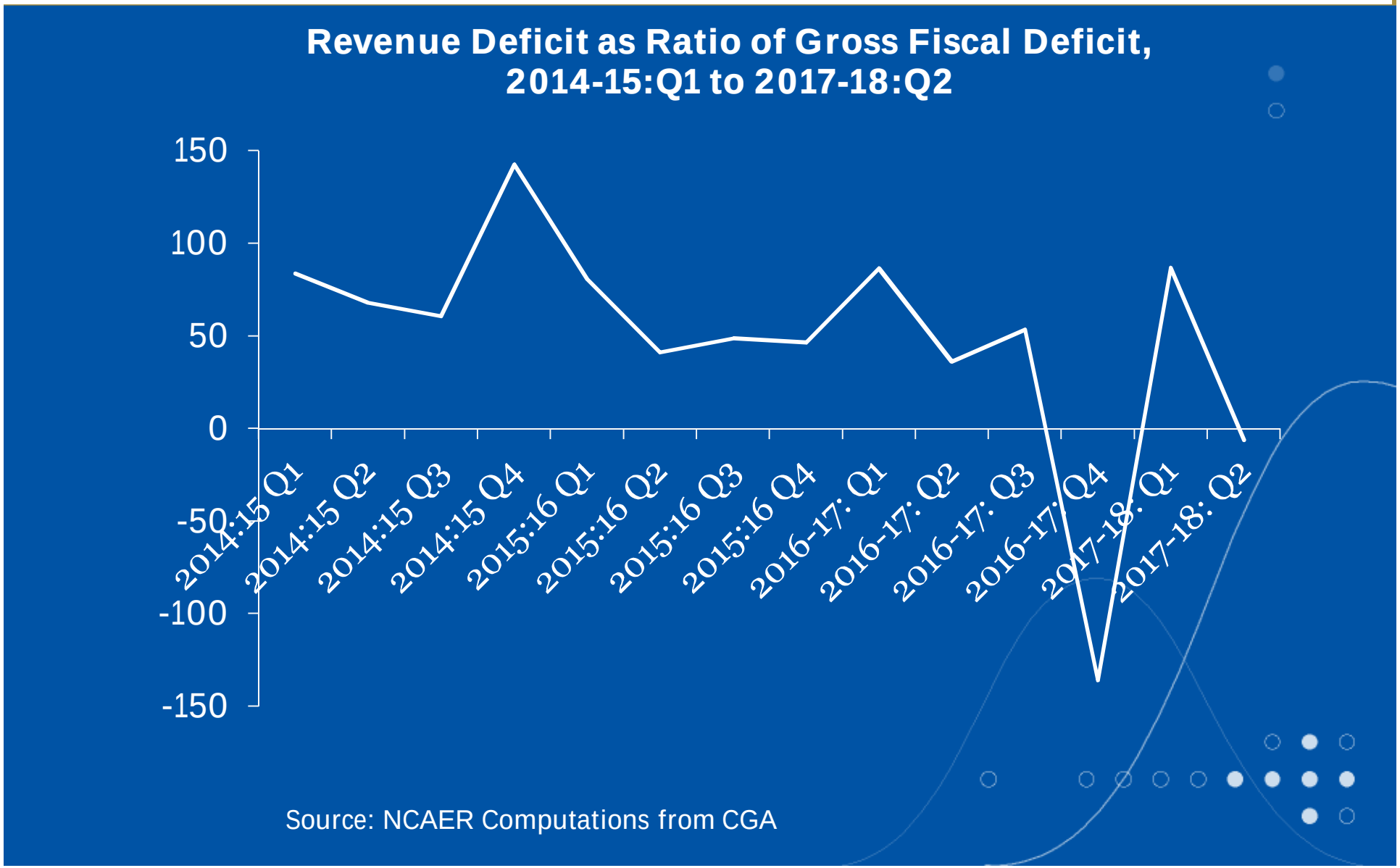
Public Finance

Improvement in share of Capital to Total Expenditure



Improvement in Revenue to Gross Fiscal Deficit



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Forecast: For an Economy in Transition

Summary Real GDP Forecasts for India

	RBI (October 2017)	Ministry of Finance (August 2017)	ADB September 2017	IMF October 2017	World Bank October 2017
GDP	6.7 (GVABP)	6.75-7.5% downside	7.0	6.7	7.0
Consumer Inflation	4.6	Below 4%	4.0	3.8	4.0

Notes: *GVA at basic prices (2011-12) is GVA at Basic Prices and GDPMP is GDP at Market Prices (2011-12)

Sources: Asian Development Bank, Reserve Bank of India, World Bank, Budget 2015 and International Monetary Fund

NCAER Outlook for 2017-18

	Quarterly Model GVA Basic Prices (%yoy)
Q1	5.6
Q2	5.7
Q3	6.4
Q4	6.5
2017-18	6.0

Notes: *GVA at basic prices (2011-12) is GVA at Basic Prices and GDPMP is GDP at Market Prices (2011-12)

Sources: Asian Development Bank, Reserve Bank of India, World Bank, Budget 2015, International Monetary Fund and NCAER

NCAER Outlook for 2017-18

	Annual Model (%)
GVA Basic Prices	6.2
GDP Market Prices	6.2
Agriculture	3.0
Industry	4.5
Services	7.6
Exports (US$)	10.7
Imports (US$)	24.4
Current Account (% of GDP)	-2.5
Fiscal Deficit (% of GDP)	3.4

Notes: *GVA at basic prices (2011-12) is GVA at Basic Prices and GDPMP is GDP at Market Prices (2011-12)

Sources: Asian Development Bank, Reserve Bank of India, World Bank, Budget 2015, International Monetary Fund and NCAER

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GDP Nowcasting : A New Approach to Know the Now-GDP

What's Now-casting?

"Now-casting is defined as the prediction of the present, the very near future and the very recent past. More broadly we can define it as the exercise of reading, through the lenses of a model, the flow of data releases in real time. The term is a contraction for now and forecasting and has been used for a long-time in meteorology."- Giannone, Reichlin and Small, 2008

Why Now-casting?

Benefits of Now-casting	Details
Get up to Speed quickly	Now-Casting identifies data series that matter in each economy, and shows quickly how key indicators - including GDP - are moving
Read the News-flow	Now-Casting provides a transparent, quantified way to interpret all of the key data releases - including surveys
Most Up to Date Assessment	Now-Casting delivers assessment of the current state of the economy which is automatically updated whenever relevant data releases are published, exploiting the incremental information
Best Near-term Forecast	Now-Casting is proven to be at least as accurate as the best judgmental forecasters, but much more timely.
Dispassionate view of the Economy	Now-Casting publishes the output from its statistical model automatically, without any judgmental intervention.

Sectors

Agriculture, Forestry and Fishing
Mining & Quarrying
Manufacturing
Electricity, Gas, Water Supply, Other Utilities , and Construction
Trade, Hotels, Transport, Communication and services related to broadcasting
Financial, real estate and professional services
Public Administration , Defense and other services

Indicators used for Quarterly estimates of Non-agricultural GVA growth

Sectors	Indicators
Mining and Quarrying	Mining and Quarrying Index, Monthly production of ~~C~~rude Oil and Coal
Manufacturing	Manufacturing Index, monthly production of Steel and Fertilizers, PMI-Manufacturing, Commercial vehicles production, Passenger car production, BCI (OCED, Composite leading indicator (OECD), merchandise non-oil imports, Two wheeler (CMIE), FDI investment
Electricity, Gas and Water Supply, and Construction	Electricity Index, Monthly production of Cement, Monthly production of Crude Oil Production, Oil Imports
Trade, Hotels, Transport, Communication and services related to broadcasting	Railway freight traffic of major commodities, Cargo traffic- Ports, Cargo Traffic (air) Foreign tourist arrivals in India, Telecommunication subscriber base, PMI-Services, Merchandise Trade (exports + imports)
Financial, real estate and professional services	Bank credit to Commercial sectors, National stock exchange trading volume, Personal loan housing (including priority sector housing), PMI-Services, National Stock Exchange Index, FII investment, FOREX
Public Administration & Defense, Other services	Expenditure of the Central government net of interest payments, RBI net credit to government, Receipts of Central Government

Sectoral Factors

Sectors	Indicators
Mining and Quarrying	f_t^{Mining}
Manufacturing	$f_t^{Manufacturing}$
Electricity, Gas and Water Supply, and Construction	$f_t^{Electricity}$
Trade, Hotels, Transport, Communication and services related to broadcasting	$f_t^{Services}$
Financial, real estate and professional services	$f_t^{Banking}$
Public Administration & Defense, Other services	$f_t^{Other\ Services}$

Dynamic Factor Analysis

- Logarithmic transformation: The time series data are in monthly frequency and natural logarithms are taken for all
- Stationarity: The ADF test performed to check for non-stationarity and stationarity obtained by appropriately differencing the time series data
- Seasonal Adjustment: X-11 with automatic ARIMA selection performed using X-11- Auto, and SEATS based with automatic ARIMA selection performed using TRAMO.
- Scale Adjustment: each time series is standardized by first subtracting its mean and then dividing by its standard deviation (i.e., create a z - score $y * t$ with mean = 0 and SD = 1)

Projections

Sectors	Q2 Forecast (2017-18) Per cent
Agriculture, Forestry and Fishing	2.29
Mining & Quarrying	4.69
Manufacturing	6.30
Electricity, Gas, Water Supply, Other Utilities , and Construction	3.41
Trade, Hotels, Transport, Communication and services related to broadcasting	6.86
Financial, real estate and professional services	7.31
Public Administration , Defence and other services	6.33
Gross Value added at Constant Prices (Base: 2011-12)	5.77
Projection of Gross Value added at Constant Prices (Base: 2011-12) for Quarter 3: 5.65 percent	

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Thank You

Some Select Issues in Financial Markets

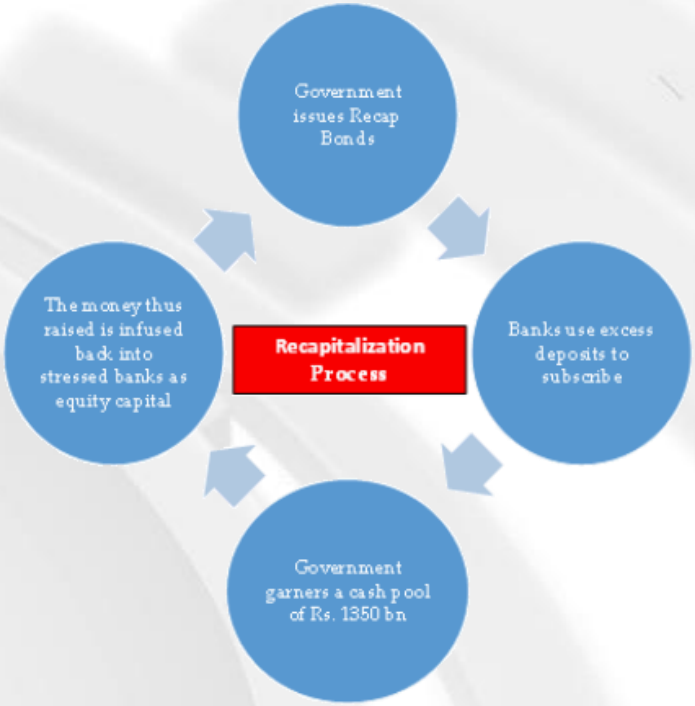
Abheek Barua, Tushar Arora & Sakshi Gupta
HDFC Bank

Recapitalization of PSU Banks

Recapitalization of PSU Banks

- A Rs.2.11 trillion bank recapitalization plan for PSUs
- Rs. 1.35 trillion to come from recapitalization bonds, Rs 180 bn from budgetary allocation and 580 bn will be raised by banks from the markets.
- **How will recap bonds work? Likely to happen through financial engineering.**
- It is unclear for now whether these bonds will be tradable or qualify for SLR.
- It is likely that they will involve transfers between the government and banks or between banks - liquidity neutral.

Intermediate Recapitalization: Banks are essentially giving the promoter (the government) money to buy their own shares



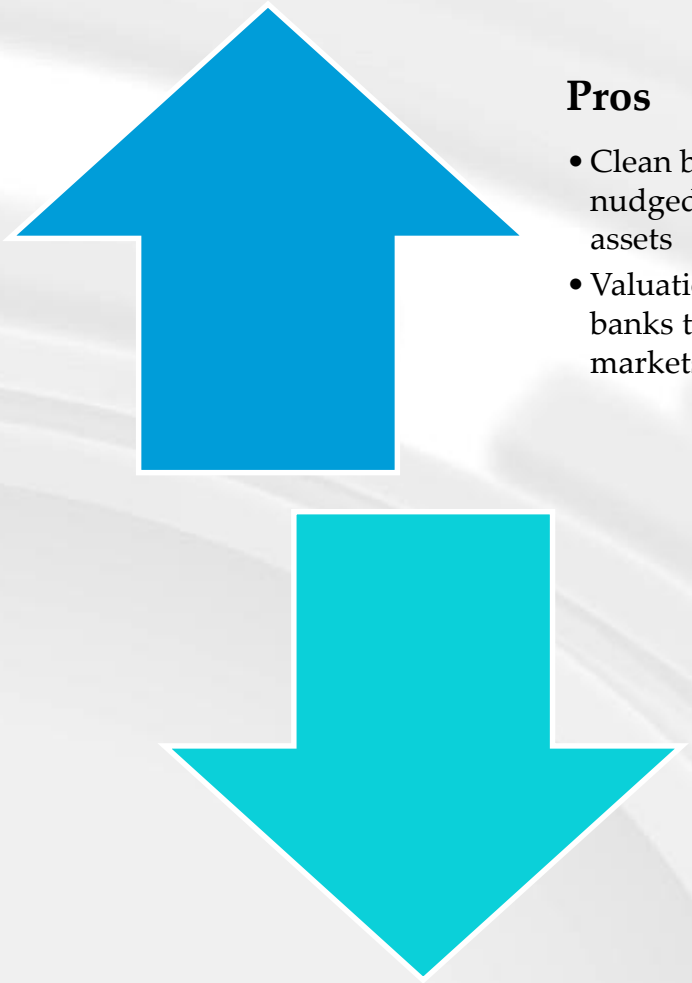
Recapitalization to meet capital requirements leaving room for growth

Capital requirements of banks are estimated by different agencies to be between Rs. 1.5 to Rs. 1.8 trillion. This means that the current infusion not only covers the current provisioning requirement but leaves some room aside for growth as well.

Under the BASEL III norms, all banks are expected to meet the minimum required Common Equity Tier I (CET-1) ratio of 8% and capital adequacy ratio of 11.5% by March 2019. Almost half of these banks have their CET Ratio below 8% while the other half have a ratio that is above 8%.

	CET Teir 1 Ratio		CET Teir 1 Ratio
IDBI Bank	5.83	United Bank of India	8.05
Bank of Maharashtra	7.00	Punjab National Bank	8.17
UCO Bank	7.05	Vijaya Bank	8.47
Oriental Bank of Commerce	7.24	Allahabad Bank	8.50
Dena Bank	7.28	Central Bank of India	8.62
Syndicate Bank	7.45	Canara Bank	8.85
Andhra Bank	7.52	Punj and Sind	9.05
Indian Overseas Bank	7.58	Jammu & Kashmir Bank Limited	9.16
Corporation Bank	7.65	Bank of Baroda	9.42
Union Bank of India	7.73	State Bank of India	10.19
Bank of India	7.84	Indian Bank	12.01

Pros and Cons of Recapitalization



Pros

- Clean balance sheet and revive lending: Banks would be nudged to recognize losses and take haircuts on stressed assets
- Valuation gains for banks which might help when these banks try to raise resources themselves through equity markets

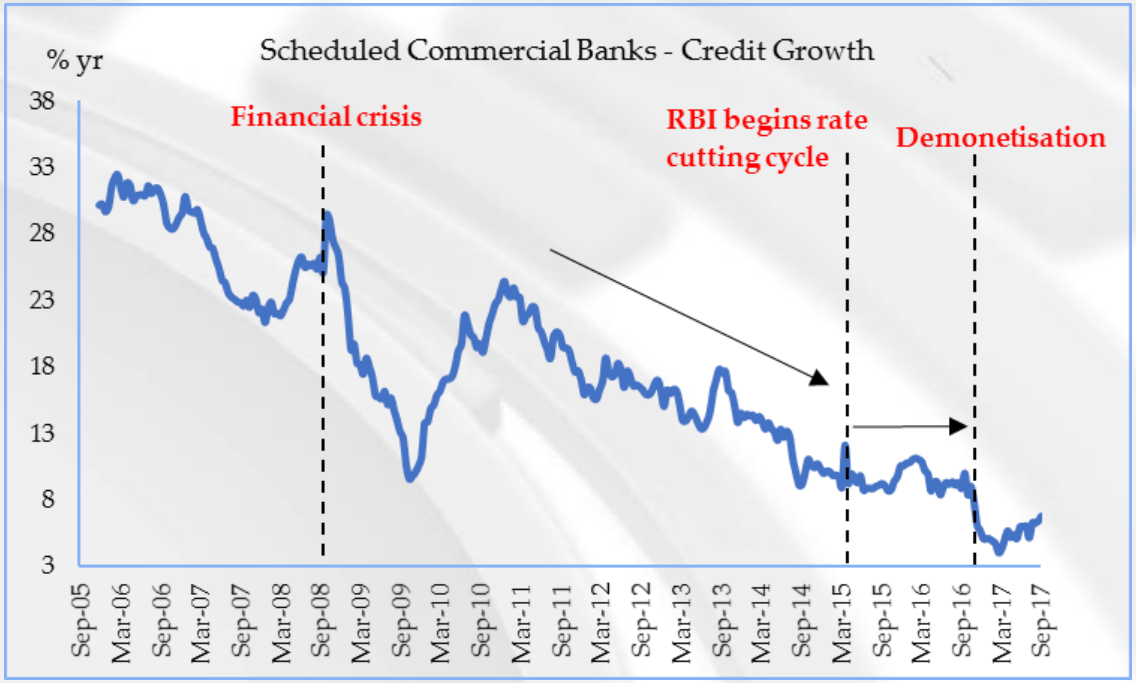
Cons

- Pressure on fiscal debt due to recap bonds
- Interest payments on these bonds to raise fiscal deficit over time
- This sort of recapitalization to increase share of gov. holdings in PSUs
- Short term solution as future bad lending behavior of banks not prevented. Need for more structural reforms.

Credit growth: Issues with demand and supply

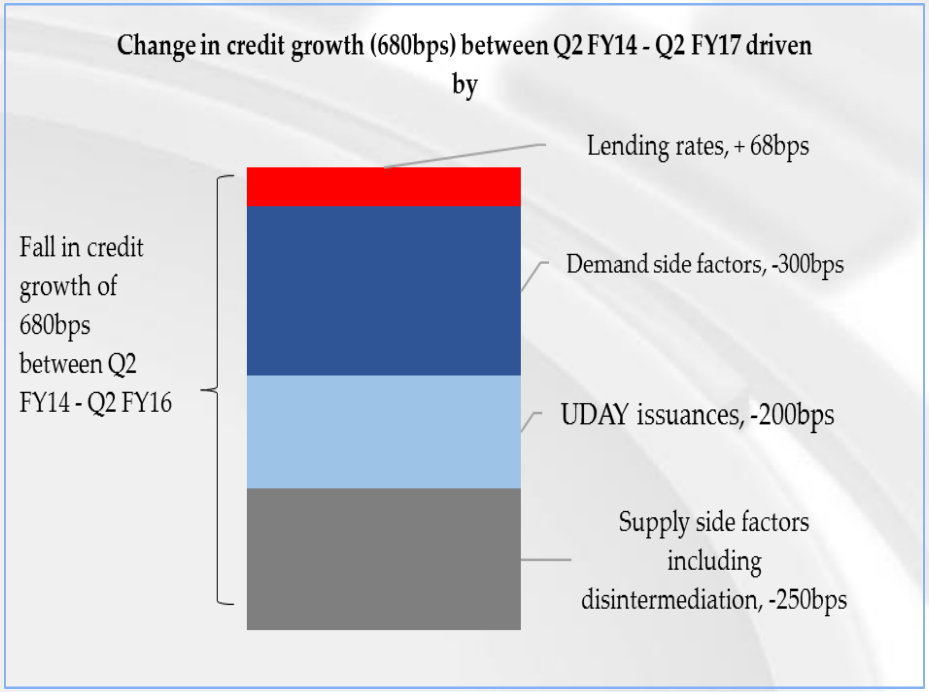
Credit growth has been falling for last 6 years

- **Credit growth has remained low at 7.7%** (as of October 2017), although picking up slightly from its 60-year lows of sub-5% readings in March 2017.
- During November 2016 and March 2017, credit growth fell by as much as 4 percentage points.
- After the remonetisation process started picking up pace, the improvement in credit growth was limited by the GST effect.
- **Now with the effects of demonetisation and supply disruptions due to GST fading, credit growth has started to pick up, albeit the uptick remains gradual.**
- **The fall in credit growth began before demonetisation: Credit growth has recorded a sustained downward trend for the last six years**



Segregating demand and supply issues

Correlation with Credit Growth				
Variable	Used as proxy for	Correlation		
		Coefficient	Relation	Lag
Real GDP Non-Agri growth	Sales growth	0.50	Positive	2 quarters
Capacity Utilisation	Room for Fresh Investments	0.65	Positive	4 quarters
Lending rate	Price of credit	0.39	Negative	2 quarters
Corporate bond issuances	Shift to other funding sources	0.66	Negative	1 quarter
Commodity price growth	Reflects input costs and hence need for working capital	0.63	Positive	1quarter



- We segregate the decline in credit growth into supply side, demand side, lending rates and other exogenous factors.
- **Our model suggests that of the 680bps decline in credit growth during this period, conversion of loans to UDAY bonds accounted for a 200bps decline, demand side factors led to 300bps decline and supply side factors including disintermediation were responsible for close to 250bps fall in credit growth.**
- Corporate bonds have become a cheaper alternative for funds. We estimate that the switch to corporate bonds with rising disintermediation has also resulted in a decline in credit growth in FY17. The rise in corporate bonds have in part been driven by issuances by NABARD, NHAI and other public sector financial issuances growing by 20% y-o-y in the past three years.
- On the other hand, the decline in lending rates during this period supported credit growth, pushing it up by 70bps.

Demonetization and Digitization

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Three key things to know…

Has cash usage declined permanently?	Usage of digital platforms gone up substantially?	What is the right measure of measuring success?
• Conventional definitions could be misleading.	• Some smaller merchants are reverting to cash.	• Important to focus on B2B Transactions.

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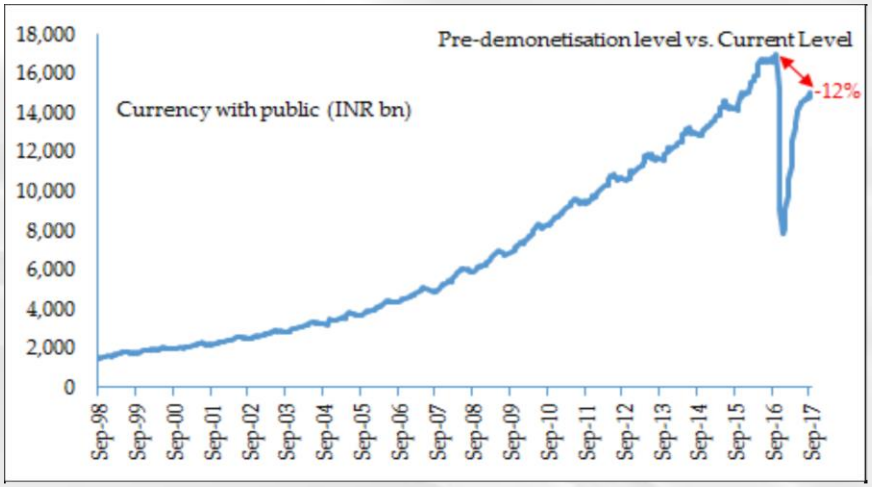
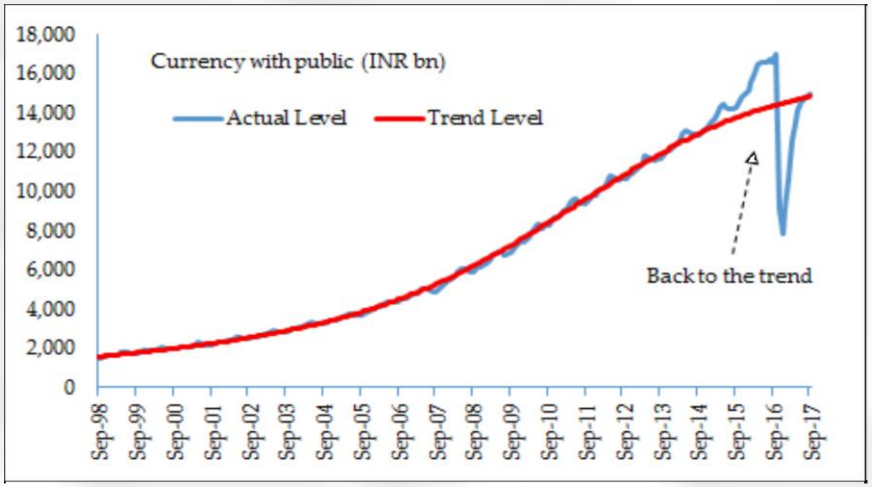
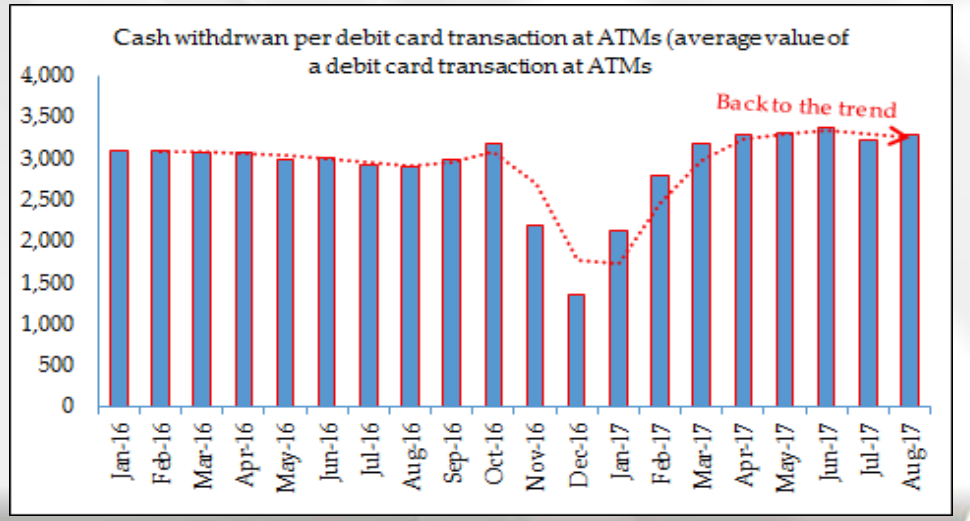
Has cash usage declined permanently?

A recap of the sudden spike in currency in circulation, which became a big cause of concern in early 2016 is important. Between January and October 2016, currency with public increased at a monthly average rate of 15% YoY compared to average growth of 11% in 2015 and 10% in 2014.







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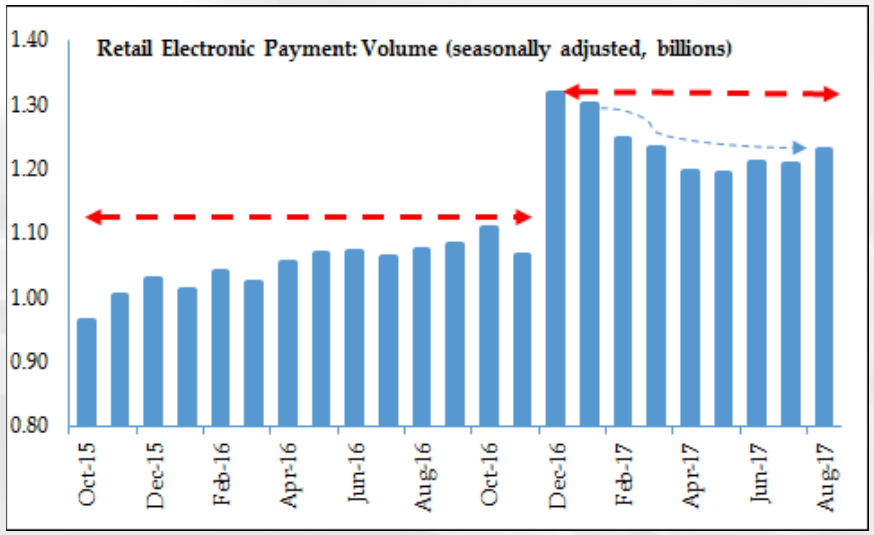
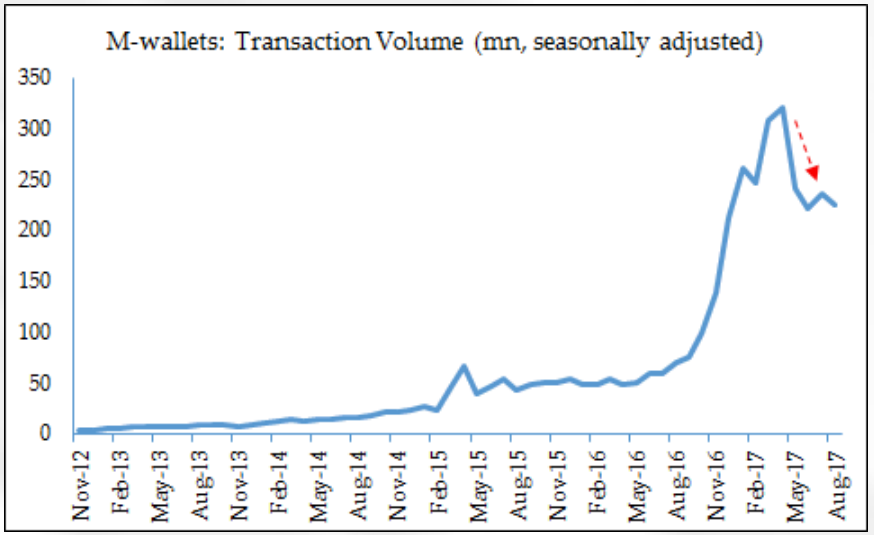
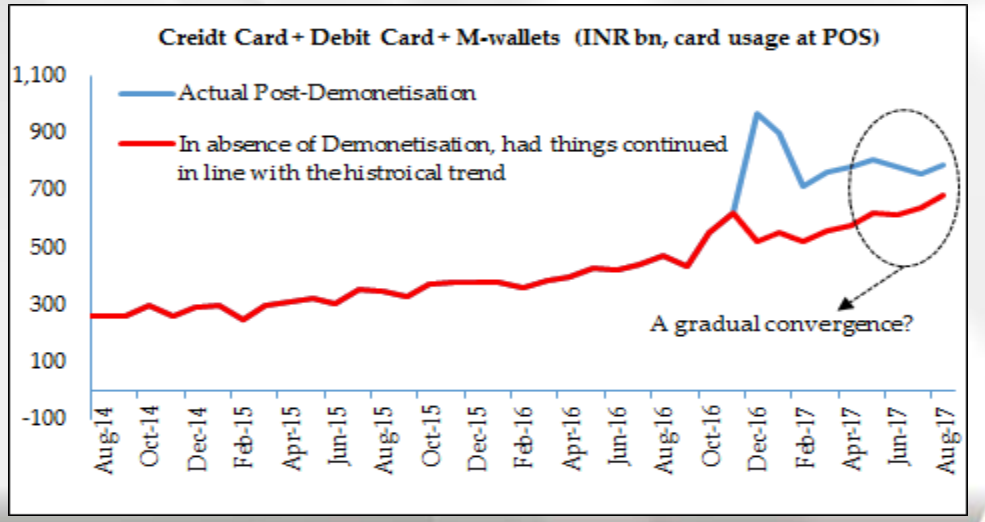
Has the usage of digital platforms gone up substantially?

With easing of the liquidity crunch, transaction volumes for overall retail electronic payments have seen a marginal dip. For M-wallets too, there has been a gradual tapering after the initial bounce.







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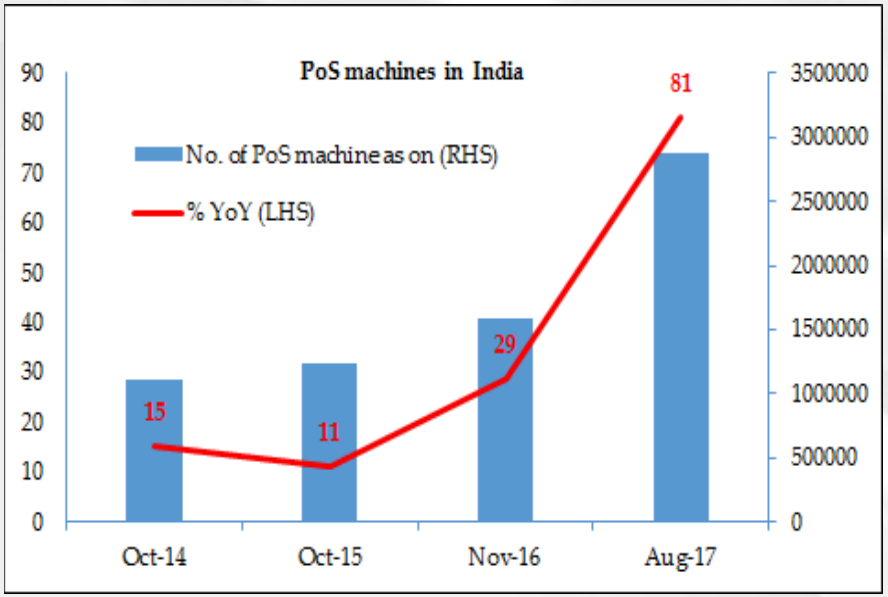
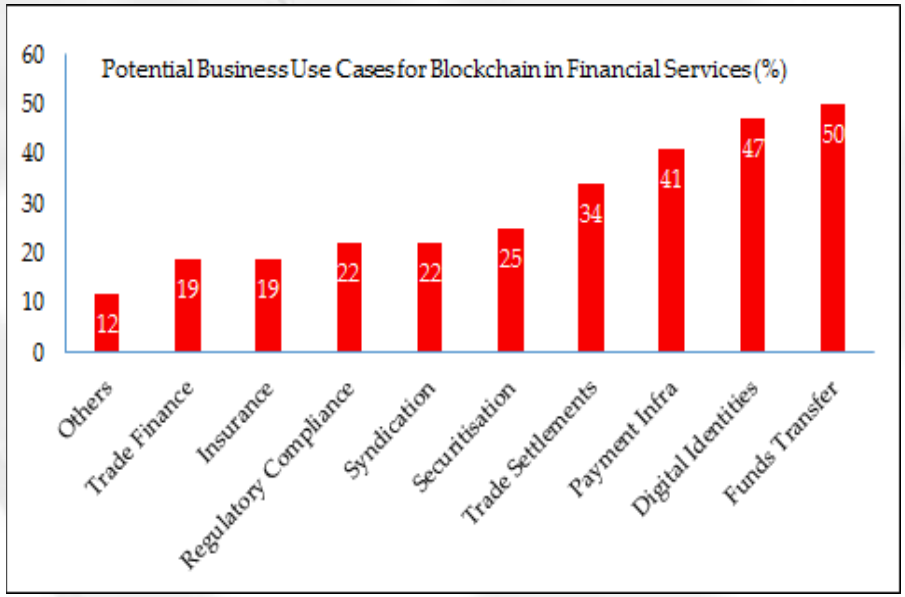
What then is the right measure?

- According to a Ernst and Young report (Accelerating financial inclusion, Jan-2013), there were only 693 machines per million of India's population, compared to 32,995 terminals per million people in Brazil and 4000 terminals per million people in China.
- Thus, before the extensive penetration of digital platforms and change in spending pattern in the country, it is important that digital infrastructure exists in first place. It is in this regard that demonetization has been a success.
- Lastly, distribution and product expansion in the field of B2B Digital transactions is likely to gain more traction than B2C Digital transactions. This is because even as change in basic consumer behavior takes time, the 51 million SMEs in the country (accounting for nearly 40% of GDP) are catching up fast.





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