SBI

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STATE BANK OF INDIA

Demystifying Hype & Reality of the Indian Macro

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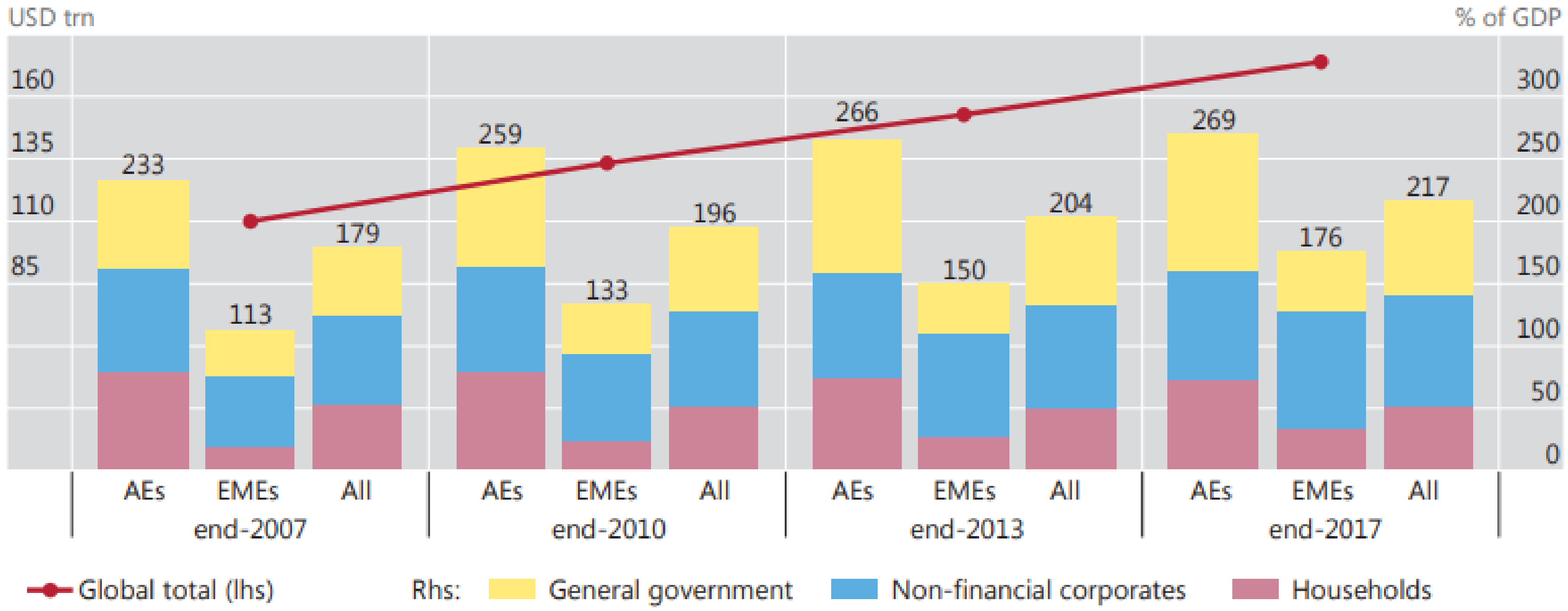
Global Economy

Global Economic Outlook

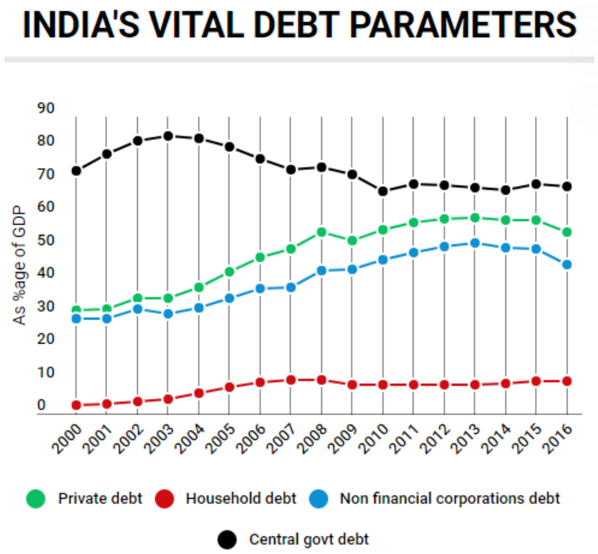
- Despite recent softening, global economic growth will remain robust at 3.1% in 2018 before slowing gradually over the next two years
- Activity in advanced economies is expected to grow 2.2% in 2018 before easing to a 2% rate of expansion next year, as central banks gradually remove monetary stimulus. Growth in emerging market and developing economies overall is projected to strengthen to 4.5% in 2018, before reaching 4.7% in 2019
- Federal Reserve officials raised interest rates for a third time this year and reaffirmed their outlook for further gradual hikes well into 2019. However it is to be noted that US is in the 109th month of expansion, very close to the longest 120 month streak from March 1991 to March 2001. With increasing cycle of expansion the probability of ensuing deceleration increases
- The possibility of disorderly financial market volatility has increased, and the vulnerability of some emerging market and developing economies to such disruption has risen
- Trade protectionist sentiments have mounted, and policy uncertainty and geopolitical risks remain elevated. Trade wars have somewhat clouded the outlook of growth in China and World at large

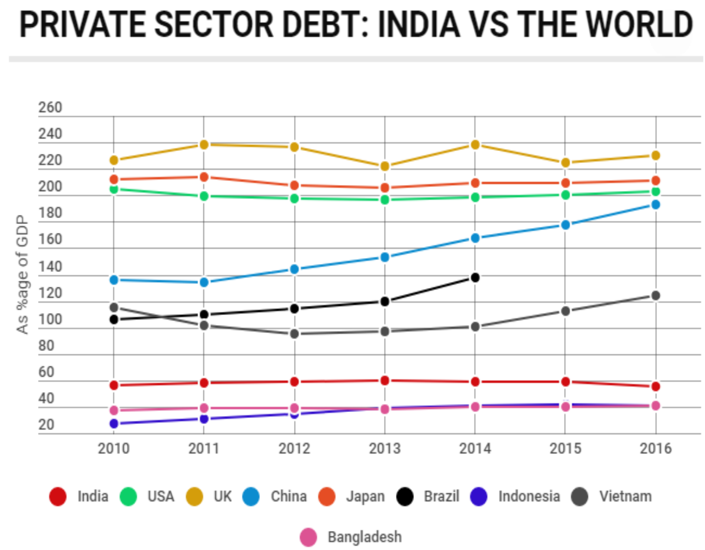
Rising Global Debt …

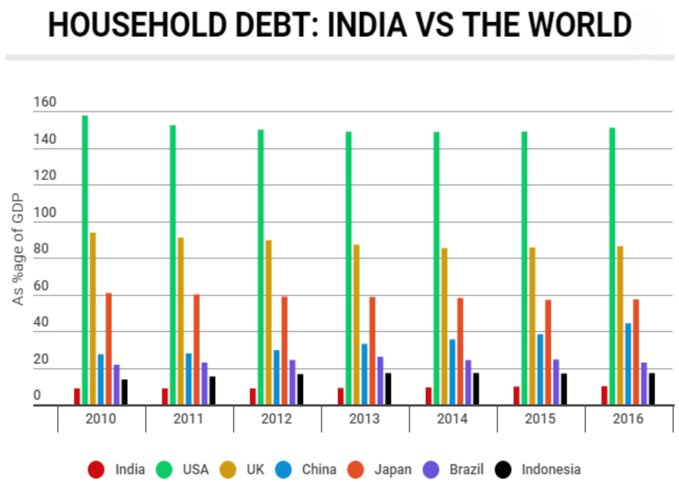


- Global debt has surpassed $164 trillion by 2017, which is more than twice the global Gross Domestic Product (GDP).
- The top three borrowers in the world United States, China, and Japan account for more than half of the global debt
- There has been no significant deleveraging since the 2009 global financial crisis.

India and Global Debt







- Growth in leverage in India since 2007 has been muted, with no change in the household debt-to-GDP ratio, a fall in government debt as a percentage of GDP and an increase of 11% in corporate debt to GDP.

Composition of India's Household Debt

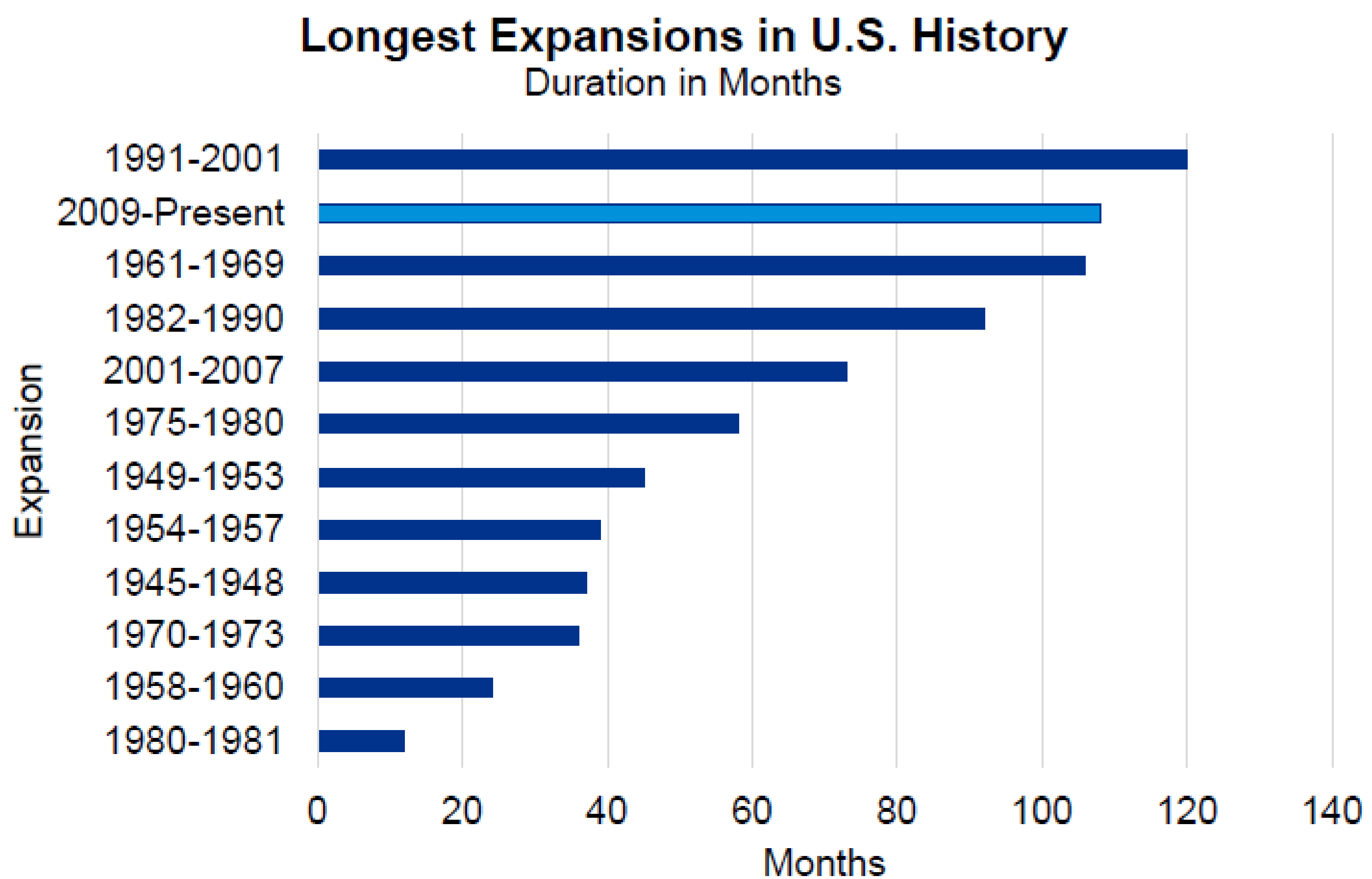
- India's Household Debt remained stagnant post crisis, but the non-institutional sources like landlord, professional money lender and friends and relatives still play an important role in financing household debt
- In 2016 out of total debt to GDP ratio of 9.89%, non-institutional sources contributed 6.17%
- Financial liability has increased in 2017-18, which could be due to better financial literacy and availability of institutional credit and opening of Jan-Dhan accounts in large scale

Composition of Household Debt

Year	Financial Lliabilities (Rs Bn)	GDP at basic price (Rs Bn)	Household Financial Debt to GDP Ratio (%)	Household Total Debt to GDP ratio (%)	Household Debt from Non-Institutional Sources (%)
2017-18	6739	119762	5.63	-	-
2016-17	3747	112476	3.33	-	-
2015-16	3911	105033	3.72	9.89	6.17
2014-15	3768	97121	3.88	9.66	5.78
2013-14	3587	90636	3.96	9.19	5.23
2012-13	3304	85463	3.87	8.89	5.03
2011-12	2901	81069	3.58	8.68	5.10

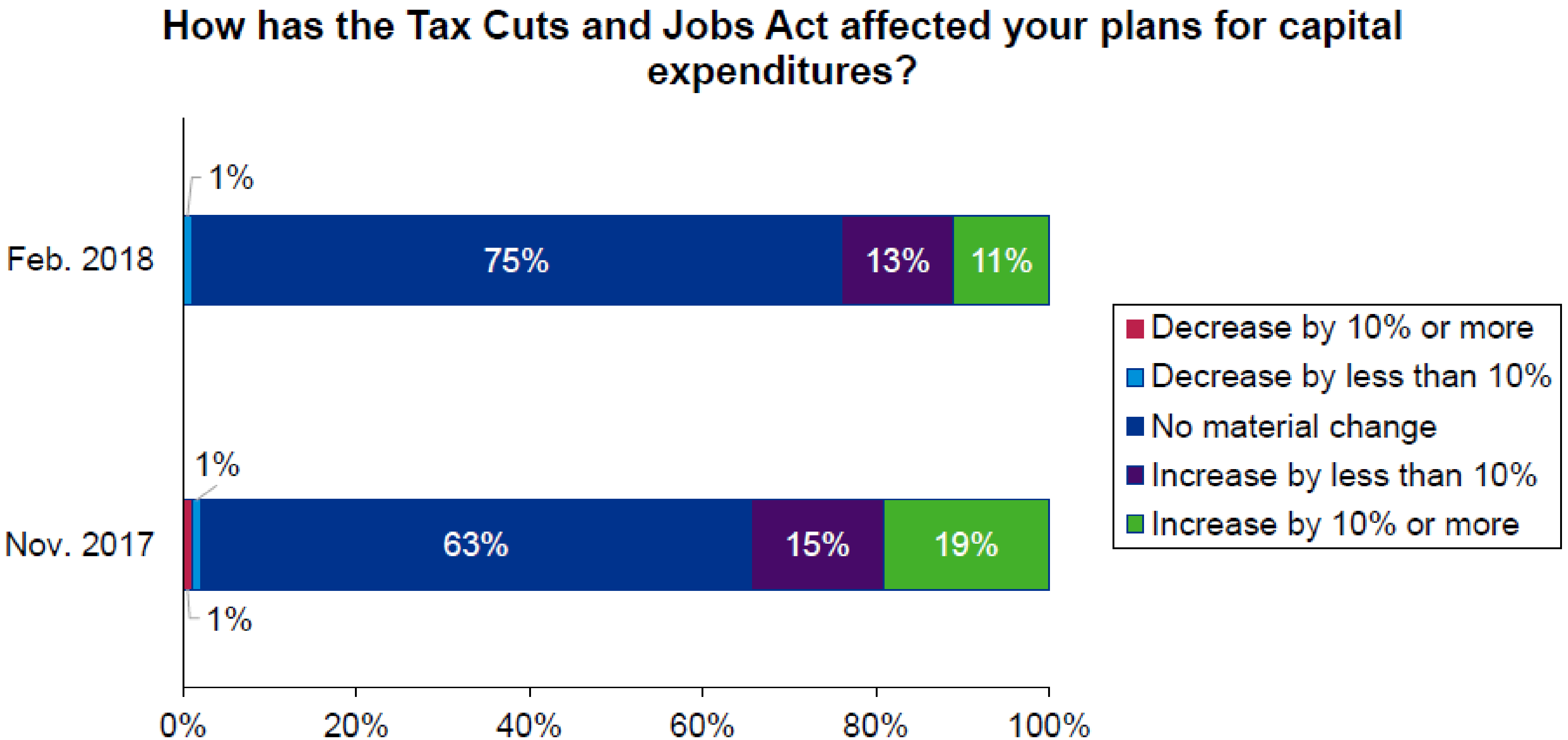
Source: RBI, IMF, SBI Research

Will slow and steady win the race?



Source: KPMG Economics, NBER, Haver Analytics

Can the tax law help encourage more greater investment?



Source: KPMG Economics, Survey of Business Executives (SBE): Federal Reserve Bank of Atlanta, Stanford University, and the University of Chicago

Geopolitical Hot Spots

Indian markets will be impacted from following geopolitical events

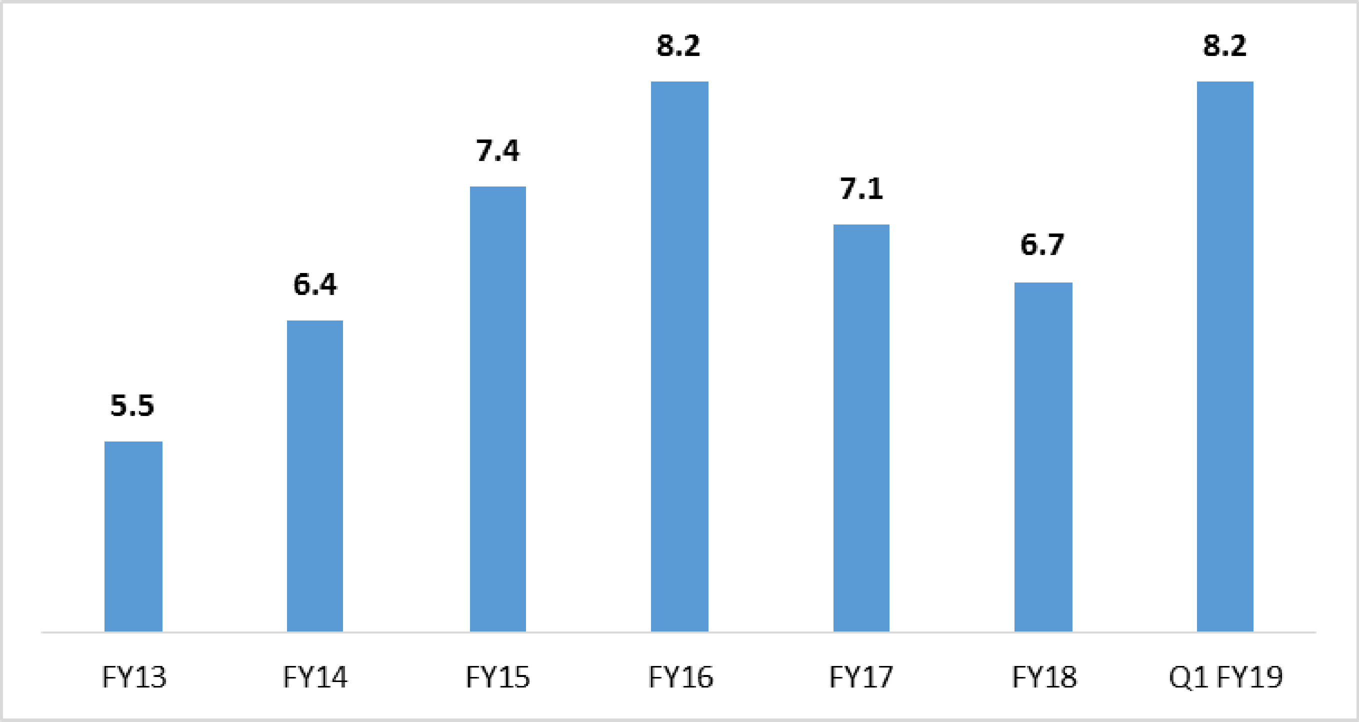
- **Iran crisis** – US sanctions have kicked in but Iran has made a last effort to challenge this in ICJ. Further Iran's navy is making aggressive postures in the Straits of Hormuz. If escalations occur, oil prices will move up. OPEC by itself can not replace Iranian oil. Bank business may be impacted.
- **Turkey crisis** – India has no direct exposure to Turkey with total trade at $4 billion. However through sentiments and possible contagion in European Banks, Indian banks and markets will be impacted.
- **US-China wars** **–** Trade wars will have both loss of business and opportunities. However, there is a need to carefully study the US policy on trade.
- **Europe & Brexit** **–** There has been considerable uncertainty on the terms of UKs exit from the EU. This exit is expected by 2019. Internal situation in Europe is also not conducive for growth.
- **Argentina** – In case of Argentina, which has history of currency crisis, domestic macro mismanagement, high inflation and other factors have created present crisis. The country had already approached IMF for an immediate loan of $50 billion. Again India has minimal exposure to Argentina with total trade at $2.7 billion. Hence there is no major impact

Indian Economy

Growth| Inflation & MP | Employment

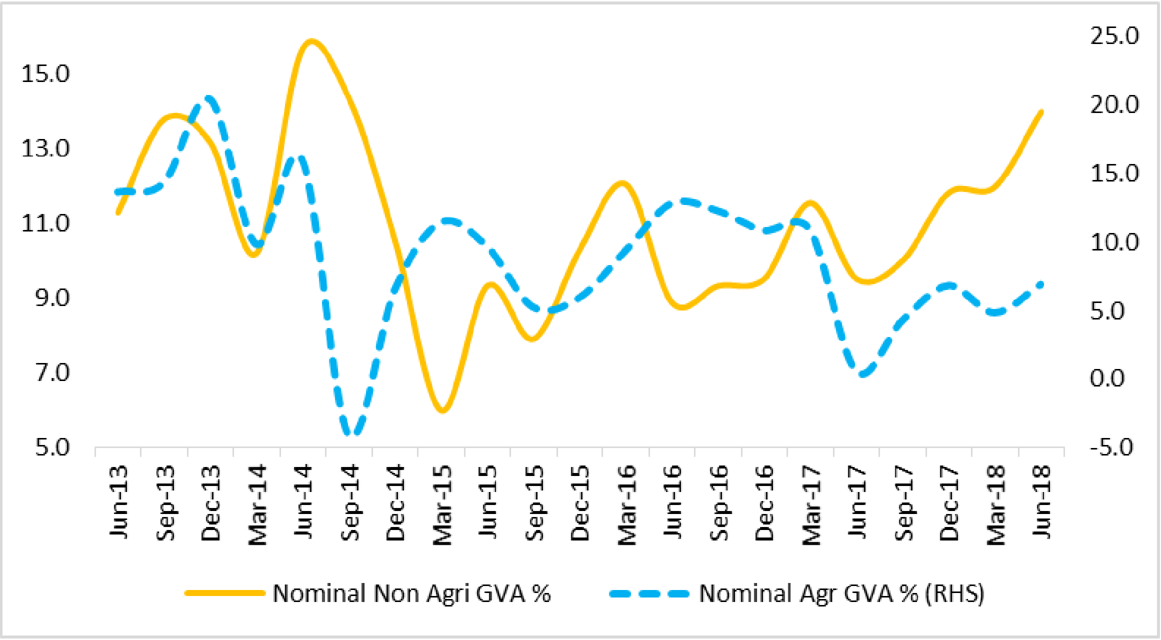
Growth is Accelerating, But……

- GDP grew at 8.2% in Q1 FY19 compared to 5.6% growth in Q1 FY18. FY19 growth is expected at 7.4%
- Economy has fared well despite the shocks such as demonetization, GST and RERA. However, twin objectives of doubling the farm income and increasing the share of manufacturing, a structural adjustment easy by no means, is progressing at a much slower pace



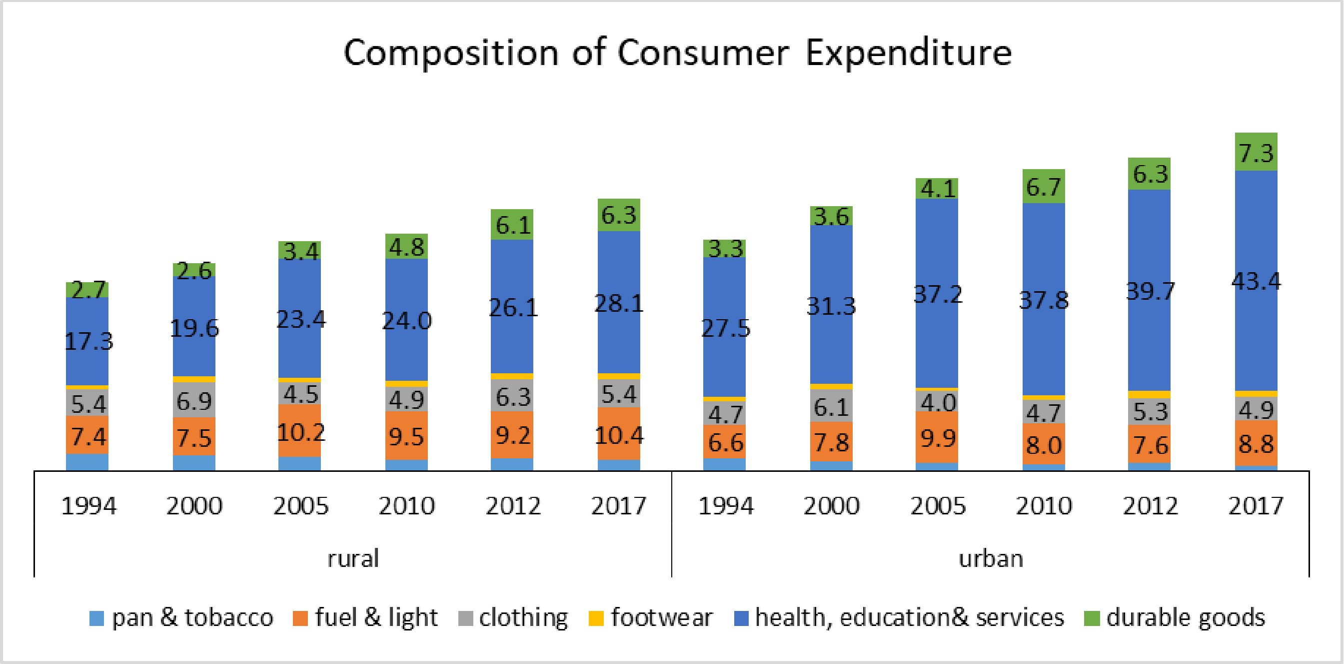
……Agriculture is Growing….BUT

- Though the agriculture GVA increased to 5-quarter high to 5.3%, this is a statistical artefact as the growth was primarily due to "non-agriculture" components.
- The nominal non-agri GVA has expanded from 11.5% in Q4 FY17 to 14.0% in Q1 FY19. During the same period, nominal Agri GVA, however declined from 10.9% to 7.0%. This indicates that the growth in overall GVA is primarily due to growth in industry and services segment and not the agriculture segment.



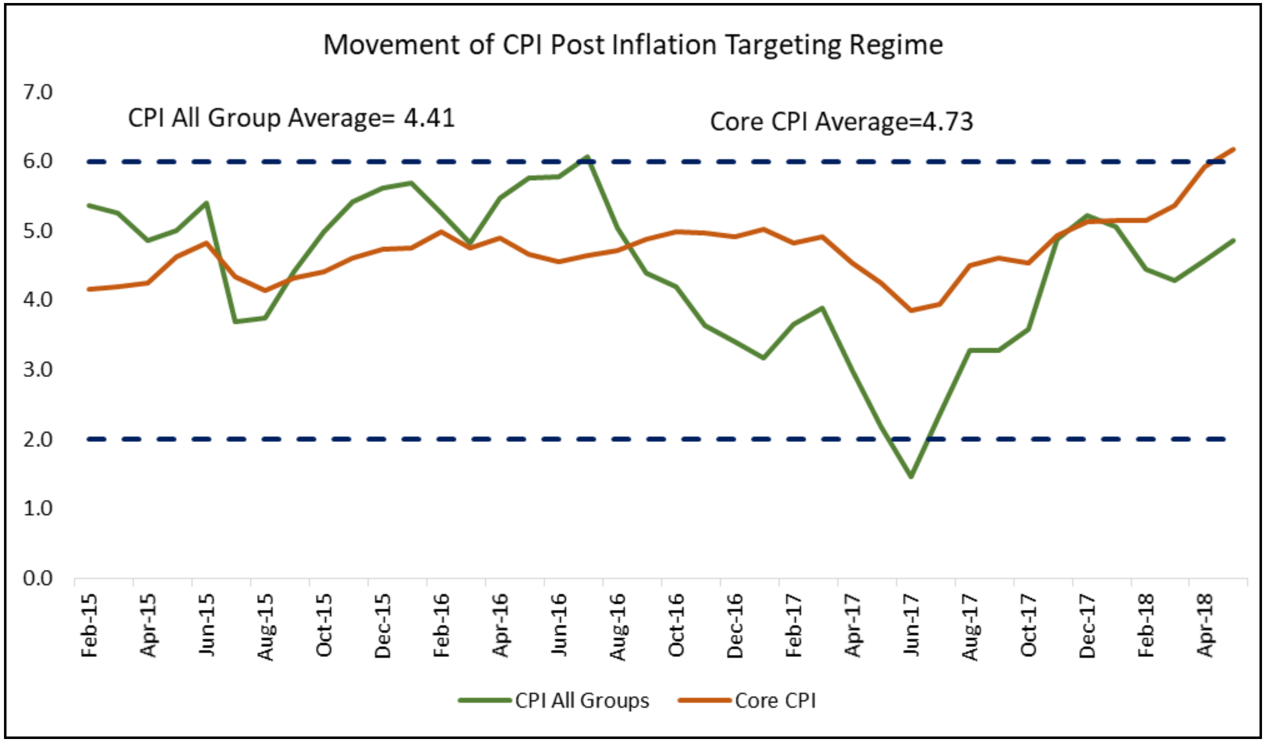
Core Inflation has structurally changed

- The change in consumption pattern of people both in rural and urban areas in India, put a question mark on the relevance of headline inflation in determining policy rate.
- The NSSO report on Level and Pattern of Consumer Expenditure since 1994 further support the argument that expenditure on core items particularly health and education have gained significant importance.
- This reflects that there is a change in behavioural pattern of household expenditure due to more awareness, access to formal banking, availability of better health care facility and preference for a better standard of living



India’s Position…. under Inflation Targeting Regime

- Core CPI and over all CPI are mostly within the prescribed bracket



Inflation Targeting - Central Banks Have Failed to Create Inflation

- Developed countries have adopted ultra-loose monetary policy after the global financial crisis. Despite the QE, the countries have not been able to keep inflation at their target level
- The huge increase in global liquidity has led to increase in capital flows into the emerging markets. Thus, essentially, exchange rate problems have exacerbated in emerging economies post QE
- India, too, has witnessed significant amount of portfolio inflows post the global financial crisis. Inflation in India at that time was also on the higher side averaging 10.6% during FY09-FY11. Against this backdrop, India formally adopted flexible inflation targeting in Jun’16 to achieve price stability as the primary objective of the monetary policy
- One way to make inflation targeting successful in the Indian context as time goes by is to reach the 4% target over a particular business cycle rather than for a particular date such as 2 year ahead. The monetary policy could have aimed for say 4.5% for 2 years. This would encourage a predictable inflation targeting in the face of persistent negative shocks. Such history dependent policy has been effectively implemented by Reserve Bank of Australia, with 2-3% target on average over the business cycle. The economic performance of such has been excellent. Average inflation in Australia since 1995 is 2.7%, very close to 2.5% mid-point with no record of recession in 25 years!

25 bps Rate Hike in October Policy (1)

- We expect a **25 bps hike in repo rate in October policy**. But more importantly, there is now a larger debate regarding modern monetary policy in so far as its dependence on unobservable variables such as neutral interest rate, output gap and inflation target in framing policy decisions! India is no exception to this

- Take the example of the **efficacy on the existing monetary policy framework** in the context of episodes of financial market instability.
  - The FOMC even 10 years after global financial crisis has reached no agreement to date to change the framework to handle financial instability or the heightened probability of effective lower bound (ELB) episodes

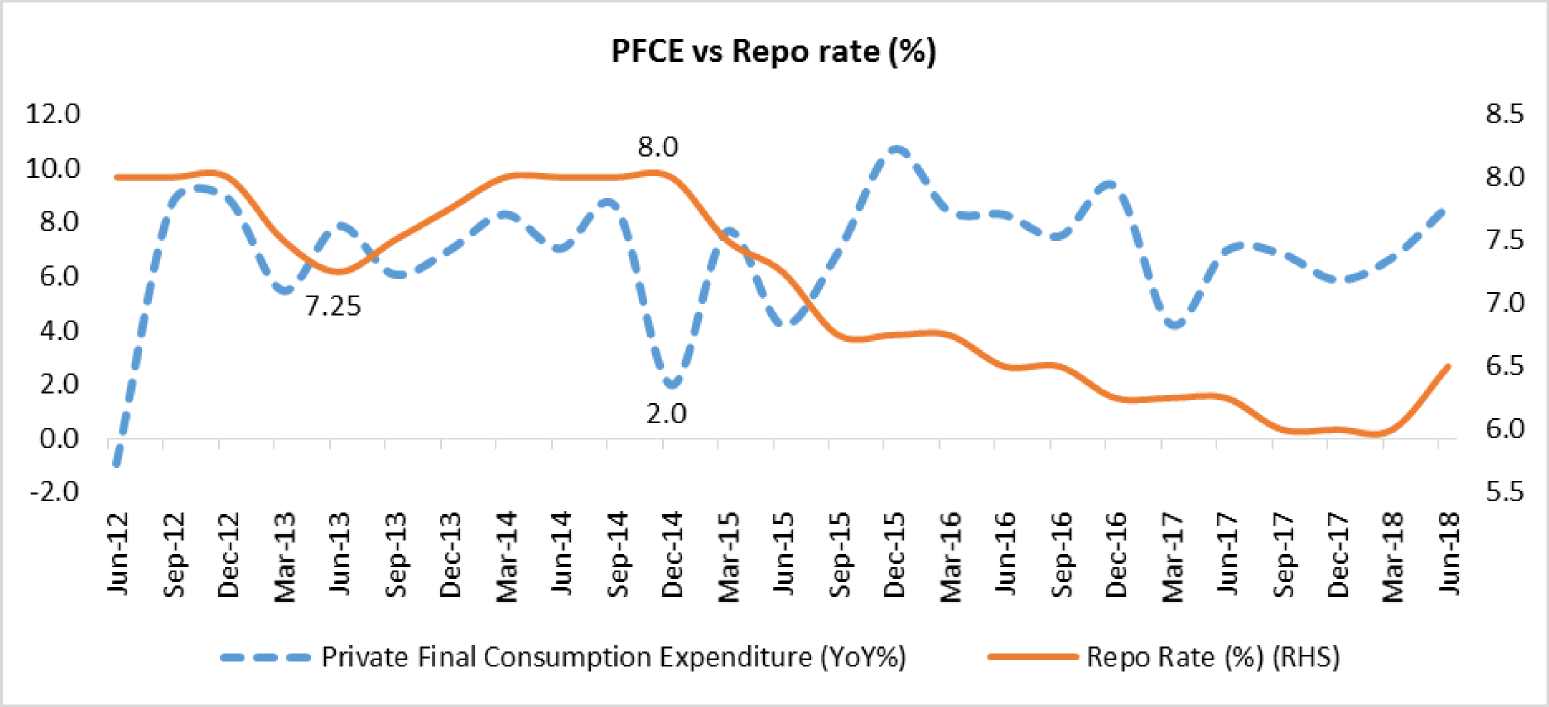
- Extending this parlance to India, markets now unambiguously expect a nuanced communication from RBI in restoring confidence in market following the recent upheavals. We welcome the LCR measure, as it will improve transient liquidity and further improve LCR, due to kick in from January, 2019 (100% requirement). However, this may also push up long end of the yield curve, as we estimate that excess holding of Government bonds (long end) by banks will go up by 2% as a consequence.

25 bps Rate Hike in October Policy (2)

- The need of the hour is thus to
  - **Improve permanent liquidity through OMO**. Since primary liquidity is currently in deficit mode, injection of liquidity through OMO would not create any negative implication for currency also unlike 2013, when the system was in liquidity surplus mode. The markets and the regulator need to clearly understand this dichotomy and thus do frequent OMOs to calm the nerves
  - **Improve confidence in market**. Interestingly, reverse repo outstanding has touched Rs1.4 lakh crore from Rs4600 crore in just 3 days. This clearly implies, that credit lines may have been disturbed to entities like mutual funds and the surplus money through redemptions is seeking avenues elsewhere

- Meanwhile, we believe the current uptick in core inflation is because of structural changes unleashed in lieu of changing household behaviour with more spending on health and education services. We also find that the continued increase in fuel prices is now having a larger impact on headline inflation (50 bps as per SBI estimates). With currency still under pressure, crude crossing $80, the rate hike cycle may just not be over yet. Also, the currency supportive measures though may perk up sentiments, still do not address the large scale Chinese imports (these components are only 5% of Chinese imports). We need a policy on exports quickly!

Rate Hike & Consumption Expenditure



- RBI's successive rate hikes will have a heavy toll on private consumption expenditure
- During FY14, 3 successive rate hikes led to collapse of private consumption expenditure to 2.0% in Q3 FY15
- Thus, continued rupee depreciation and given the significant costs of RBI intervention in forex market, could result in at least one more hike, possibly frontloaded. This will lead to sub-7.5% growth for FY19 despite more than 8% growth in Q1. This is going to be most important predicament going forward!

GST Collections under pressure

- GST collections have not picked up after the Rs 1.03 lakh crore collected in Apr’18 and has declined to Rs 0.94 lakh crore in Aug’18. Average collection of GST has been Rs 0.97 lakh crore
- However, this includes SGST which is totally a part of States’ revenue. Subtracting this amount, the average comes to Rs 0.74 lakh crore. The total data for IGST allocation is not available. Going by 50-50 distribution, the Centre’s average GST revenue collection comes down even further to Rs 0.49 lakh crore (budget estimates at Rs 0.62 lakh crore average)
- Thus GST collections have to increase in order for the Government to achieve their budget estimates for FY19
- Extra promises over and budget at Rs 38,000 crore (Price support for crops, MSP, Air India, Fuel and Pradhan Mantri Jan Arogya Yojana)

GST Collections (Rs crore)					
	Total	**CGST**	**SGST**	**IGST**	**Cess**
Apr’18	1,03,459	18652	25704	50548	8554
May'18	94,016	15866	21691	49120	7339
Jun'18	95,610	15968	22021	49498	8122
Jul’18	96,483	15877	22293	49951	8362
Aug'18	93960	15,303	21,154	49,876	7,628

Tax revenue of States were budgeted to go up post GST: Now staring a shortfall

- Out of 24 states, revenues of 16 States have increased over and above of 14% baseline/ mutually accepted minimum tax growth rate between Centre and States post GST.
- On an aggregate, states have gained by Rs 18,698 crore in revenue in FY18. States which have gained maximum due to GST are Gujarat, Haryana, Maharashtra, Chhattisgarh, Jharkhand and Punjab among others.

Tax Revenue (TR) in Rs Crore						
States	FY17	FY18 (RE)	FY19 (BE)	FY18/FY17 (%)	FY19/FY18 (%)	Gain/Loss in Revenue
Gujarat	83278	98750	113036	19	14	4521
Karnataka	111716	117340	128860	5	10	-10521
WB	45466	50070	55201	10	10	-1940
Haryana	40623	53062	58432	31	10	8818
Bihar	82623	97084	107174	18	10	3401
Odisha	51174	57792	65136	13	13	-617
UP	195394	216365	256248	11	18	-7069
Tamil Nadu	110479	125793	144324	14	15	-175
MP	90258	97191	114145	8	17	-6141
Rajasthan	77928	88845	101409	14	14	8
Telangana	63284	77789	92959	23	20	6939
Kerala	57401	65715	78521	14	19	318
Chhattisgarh	37754	45718	48985	21	7	3243
Jharkhand	32441	41112	46250	27	12	5233
AP	70445	81717	99465	16	22	1635
Maharashtra	170331	202182	231554	19	15	9501
Uttarakhand	17308	20535	23254	19	13	954
J&K	17308	21939	24178	27	10	2799
Goa	6560	7391	8257	13	12	-98
Delhi	31139	36600	42000	18	15	1295
HP	11383	8967	8185	-21	-9	-3159
Sikkim	2722	3171	3663	16	16	79
Punjab	37346	46107	53493	23	16	4361
Assam	32268	32069	43547	-1	36	-4687
Source: State Budget Documents, SBI Research						

Payroll in India (1)

- In April 2018, Government has released the first monthly payroll data from Sep'17 to Feb'18 as per the records of EPFO, NPS and ESIC. This was based on the recommendation given by Ghosh & Ghosh study titled, "Towards a Payroll Reporting in India". Continuing the trend, all the three agencies have now released the data for the 6th month in succession for July'18
  - **EPFO:** Data from EPFO records indicate that net payroll generated during Sep'17-Jul'18 was around 61.8 lakh. During July 2018, EPFO payroll registrations jumped by 9.5 lakh, the highest in any month since inception. EPFO has also published industry-wise break-up and state-wise break-up of payroll data. The top 10 industries are having around 85% share in total payroll of EPFO.
  - **NPS:** As per the NPS data around 6.7 lakh PRAN generated (or new payroll) during Sep'17 to Aug'18 period, with an average generation of 60,000 per month
  - **ESIC:** The ESIC data is difficult to interpret as it is still evolving and not fully Aadhaar linked

Payroll in India (2)

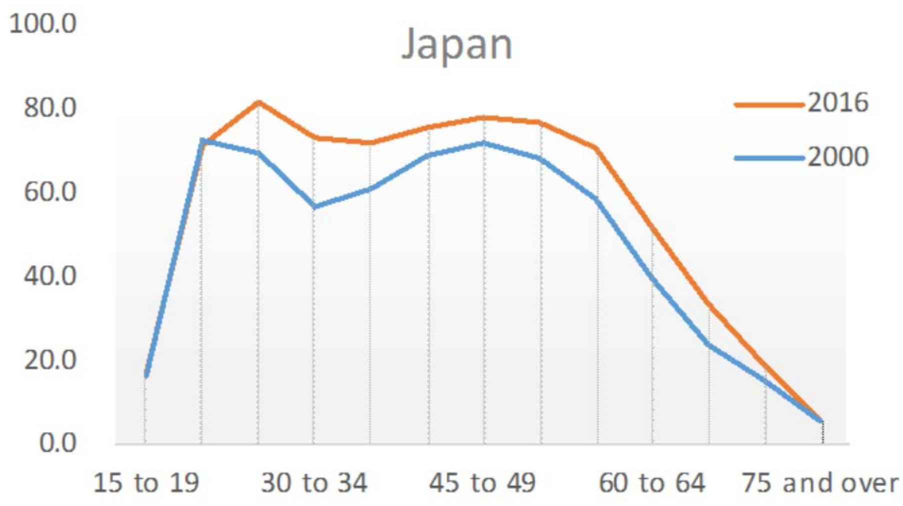
- As per EPFO records, net payroll generated during Sep’17-Jul’18 is around 61.8 lakh. The 61.8 lakh net payroll can be decomposed into 2 parts: Existing Payroll and New Payroll
  - We define **Existing Payroll** as the sum of re-joined and re-subscribed members and the extent of formalization within the economy in terms of payrolls being counted for existing organizations that migrated from less than 20 jobs. This comes out to be 25.1 lakh during Sep’17 to Jul’18 period (Formalization at 10.25 lakhs and Re-joined at 14.84 lakhs)
  - Net of Existing Payroll, 36.7 lakh is the count **for New Payroll** generated during Sep’17 to Jul’18 (total 11 months). Ideally, the number of people who have taken up new jobs after quitting existing one at 14.84 lakhs should also be counted as New Payroll. If this is the case, the annualized New Payroll is coming at 56.2 lakhs

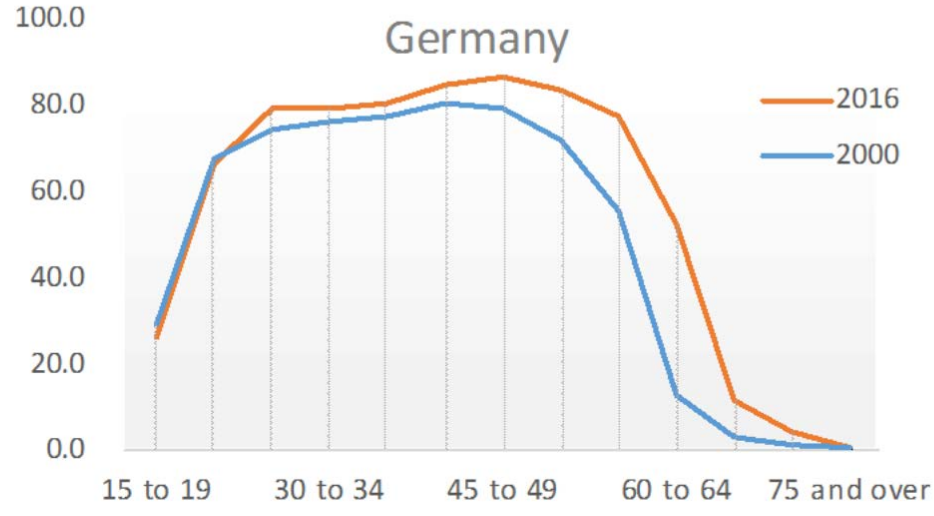
Payroll in India (3)

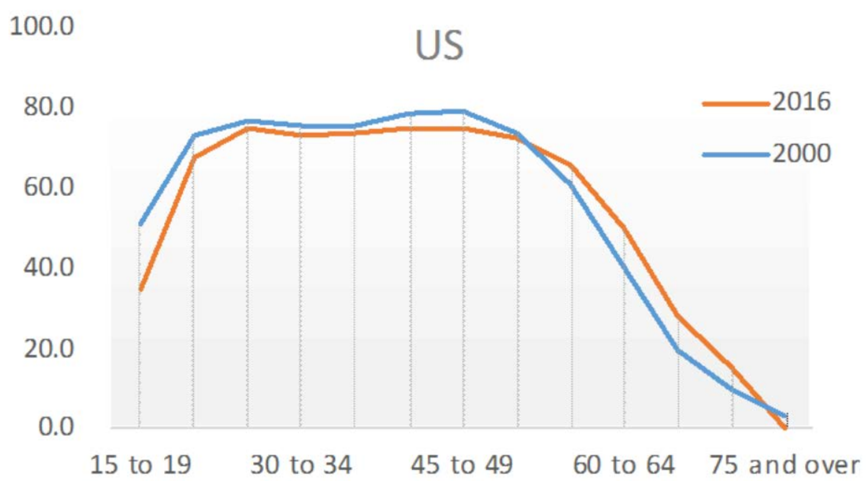
- We repeat employment surveys, unless properly and scientifically designed, will give wrong results. EPFO data may have still some limitations, but we must allow the database to evolve over time in terms of trials and tribulations rather than merely dismiss the data for pecuniary gains!

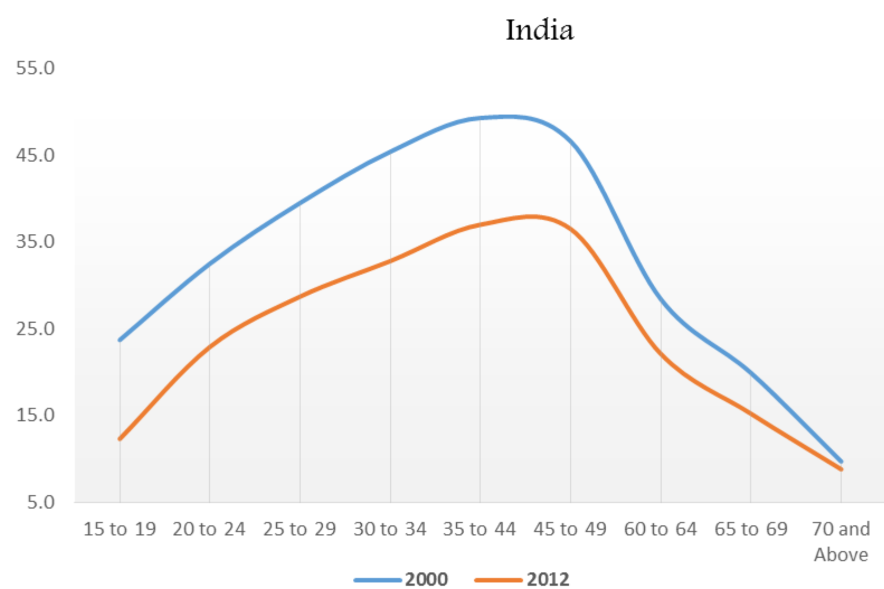
EPFO Payroll Data								
Month	New EPF subscribers	Number of members exited	Rejoined and resubscribed	Net Payroll	Establishments remitting first ECR	Formalisation	Exiating Payroll	New Payroll
A	B	C	D	E = B+D-C	F	G = F*20	H=D+G	I = E-D-G
Sep-17	1206197	747313	23558	482442	5663	113260	136818	345624
Oct-17	1012497	790239	67264	289522	4654	93080	160344	129178
Nov-17	1238418	779248	94744	553914	5913	118260	213004	340910
Dec-17	1099296	828209	104236	375323	4955	99100	203336	171987
Jan-18	1092461	703377	132772	521856	4754	95080	227852	294004
Feb-18	965313	651768	120370	433915	4759	95180	215550	218365
Mar-18	962818	800262	133852	296408	3876	77520	211372	85036
Apr-18	1140853	647814	234623	727662	4405	88100	322723	404939
May-18	1082529	574076	183091	691544	5307	106140	289231	402313
June-18	1141704	479587	195817	857934	4064	81280	277097	580837
July-18	1050561	293439	194301	951423	2934	58680	252981	698442
Total	**11992647**	**7295332**	**1484628**	**6181943**	**51284**	**1025680**	**2510308**	**3671635**
Source: EPFO; SBI Research								

Need to correct declining labour force participation of women









Source: OECD; SBI Research Y axis gives the women participation

Informal Job count- Some Exciting Facts

- The informal sector payroll numbers may be enlarged further if we include the data from professional bodies about their Professionals & their respective Practices
- According to ICAI (Institute of Chartered Accountants of India) data, there were 16,970 new Chartered Accountants added to the job force in 2017 with around 5,624 new practices setting up shop. The total jobs created by this segment of the population is a factor of additional human resources employed by the professional for setting up a new practice
- This applies to Doctors and Lawyers as well, with both adding approximately 80,000 to the labour force in 2017. Summing up ancillary staff members (clerks, paralegals, nurses, etc.) required to set up practices by these professions, we have surmised that over 6 lakh jobs were contributed through just these three professions in the Informal sector, with employment figures for other similar professions and consultancies not considered

Vehicle Sales by Category		FY2018	Jobs created per annum
Commercial Vehicles Sold (net of exports)		7,59,586	
Replacement Rate (25%)		-1,89,897	
		5,69,690	
Jobs generated (Employment Capacity averaged at 2 per vehicle)			11,39,379
Three Wheelers Sold (net of exports)		2,54,696	
Replacement Rate (10%)		-25,470	
		2,29,226	
Jobs generated (Employment Capacity averaged at 1.5 per vehicle)			3,43,840
Passenger Vehicles Sold (net of exports)		25,40,678	
Replacement Rate (20%)		-5,08,136	
		20,32,542	
Jobs generated (Employment Capacity averaged at 0.25 per vehicle)			5,08,136
Jobs generated in the Transport industry, 2017-18			**19,91,354**

Formal and Informal Job count

- Cumulatively, from the Formal and these Informal sectors, India generates over 1 crore jobs each year. This is an understatement as several informal sectors and MSMEs are not considered in this extrapolation
- We restrict ourselves to only a few organized chunks of professionals and to the transport sector to determine an objectively conservative flow of employment for the year.

Sector			New jobs per year
Total new jobs created in the Formal sector (EPFO, NPS, ESIC)			71,00,000
	CA, Lawyers, & Medical Professionals	6,09,116	
	Other Professionals	3,00,000	
	Transport Sector	19,91,354	
Total new jobs created in the Informal sector			29,00,470
Total jobs created per annum			**1,00,00,470**

Way Forward: Incentivizing formal and informal data capture

- Cost of formal employment should be brought down
- ESI overcharges and has massive surplus of Rs 7100 crore
- ESI has Rs 38,743 crore as excess collection over years

- EPFO also collects in excess for administrative charges (in 2015-16, 2800 crore). Currently it has been reduced to 0,5%. Needs to be further reduced to 0.25%

- The formal sector payroll numbers may be enlarged further if we are able to include data from professional bodies (like ICAI, ICSI, National Bar Council, Medical Council of India, etc.) & Income Tax Payees in India
  - It should be mandatory for the professional bodies, hospitals, nursing homes etc. to submit the details of new joinees every 3 months to the local Government office

- Need to capture informal sector data also like jobs in transport sector, etc.

- The Skill Ministry should be requested to use this monthly data to assess skilling requirement by geography based on jobs category. We should also extensively use Machine learning and Deep learning methods to predict payroll count

External Sector

Rupee Depreciation | CAD | Trade Wars

Why Rupee is Declining???

- The rupee depreciated by 13% in 2018 and around 8% since Jun’18. In this month this is the performing worse than other Asian currencies
- The recent decline of rupee could be attributed to various internal and external factors and to stabilise the present volatility in currency, RBI intervenes in the forex market through sterilisation operation. This sterilisation is defined as a process whereby the liquidity injected in lieu of purchase or sale of dollars is neutralised through OMO. In the Indian context, this has been highly successful. However, this has offsetting costs that might derail sterilisation
- We believe RBI thus is following a relatively hands off approach in foreign exchange market. This means, rupee could further depreciate from current levels, if capital flows do not revive. We believe that Rupee will trade in the range of 70-73 vis-à-vis dollar in current fiscal with possibilities of a downside

Currency movement of Asian Economies (From Previous Month Close)	
Indian rupee	2.2
Malaysian Ringgit	0.8
China yuan	0.8
Thailand baht	-0.7
Indonesia rupiah	1.3
Korean won	0.6
Source: SBI Research, (+appreciation, -depreciation	

Period between Aug end and 26 Sep

Cost of Declining Rupee

- We believe, policy makers should be equally mindful of the costs of rupee depreciation. There are many.
  - **First,** India's short term debt obligations at $222 billion due on Mar'18 if rolled over could add a significant cost on the Government.
  - **Second,** oil import bill could go up manifold.
  - **Third,** With yields increasing, this could add up government fiscal costs too. On all these counts the costs could add up to 0.7% of GDP. It may be noted that the yields are already under pressure as unlike earlier years, the government borrowing programme has been evenly distributed between 2 halves in current fiscal.
  - **Fourth,** as per RBI estimates, assuming a 10% depreciation, this could add upto 50 bps on inflation number.

Currency Depreciation/Appreciation and Capital outflows/inflows post Global Financial Crisis								
Currency Depreciation					Currency Appreciation			
Sl. No.	Time Period	No. of Months rupee depreciated	Currency depreciation (Rs/$)	FPI outflow (in $ Million)	Time Period	No. of Months rupee appreciated	Currency appreciation (Rs/$)	FPI inflow (in $ Million)
1	Feb'08-Mar'09	14	39.8-51.3	9015	Apr'09-Apr'10	13	50.1-44.5	33035
2	Aug'11-Nov'11	4	45.3-50.9	2060	Dec'11-Feb-12	3	52.6-49.2	15769
3	May'13-Sep'13	5	55.1-63.8	6692	Oct'13-May'14	8	61.6-59.3	19352
4	May'15-Feb'16	10	63.8-68.2	8071	Mar'16-Sep'16	7	67.0-66.7	11041
5	Oct'16-Jan'17	4	66.7-68.1	11610	Feb'17-Jan'18	12	67.0-63.7	34772
6	Feb'18-Aug'18	7	64.4-69.4	8847	-			
Source: SBI Research								

- Our empirical analysis reveals an asymmetric behaviour on the part of portfolio investors in times of depreciation and appreciation. Thus, it is likely that once the rupee settles at a lower level, portfolio investors now conspicuous by their absence will return in hordes and the rupee will appreciate.

Rupee depreciation and RBI intervention

- RBI can aggressively intervene and supply the dollars in the market (both spot and forward) as it has huge FX reserves
- There is a question of how much can RBI use its foreign exchange coffer with reserves now below $400 billion?
- We believe in the present scenario, RBI could go up to its tolerance limit of 10% (a crude proxy of the average ratio over all periods) by selling at least an additional $25 billion in the forex market.

RBI Intervention at the time of Rupee Depreciation

Period	Depreciation in Rupee (in %)	RBI Intervention (Sale of Dollars) in $ Bn	Stock of FX reserves at the start of intervention in $ Bn	RBI Intervention as % of FX Reserves Stock
Apr-18 to Jul-18	5.0	16.3	420.5	3.9%
May-13 to Sep-13	16.0	14.3	287.8	5.0%
Sep-11 to Feb-13	11.0	23.6	311.4	7.6%
Jun-08 to May-09	13.0	43.3	312.1	13.9%
May-04 to Aug-04	2.5	2.6	119.3	2.2%
May-00 to Oct-00	5.0	3.6	37.2	9.7%
Oct-95 to Feb-96	6.0	1.68	22.2	7.6%

Source: RBI; SBI Research

Revenue generation by States through VAT on Petrol/Diesel

- 19 major States will receive Rs 22,700 crore additional revenue over and above the budget estimates of states revenue in FY19.
- $1/barrel increase in oil prices, translates into Rs 1513 crore to all the major 19 states. The largest gain would be in Maharashtra (Rs 3389 crore) followed by Gujarat (Rs 2842 crore).
- This windfall gain will have positive impact on State finances, which might push the States fiscal deficit by 15-20 bps downward
- As the states are getting surplus revenue, so they can cut the petrol prices by Rs 3.20 /litre and diesel by Rs 2.30/ litre, without affecting their revenue arithmetic

Arithmatic of States Revenue from Oil			
	Diesel	Petrol	Total
Current revenue Gain (Rs crore)	15780	6922	22702
Gained by 1$ increase in Crude Oil Price (Rs crore) from last year average price	1052	461	1513
Maximum permissible average cut in prices across states to exactly nuetralise the additional Rs 22702 crore revenue	Rs 2.30	Rs 3.20	-
If States impose VAT on Base price (Crude oil + Commission+Transport Cost), Consumer will gain by:	Rs 3.75	Rs 5.75	-
Memoranda: 1. If states impose VAT on Base Prices only instead of Tax on Tax, states tend to lose Rs 34,627 crores on both petrol and diesel / 0.2% of fiscal deficit			
Source: SBI Research			

Talk UP the Rupee

- In the hope of a better export growth, talking down the rupee as was done recently when the markets were volatile might have been counterproductive and thus the pace of depreciation picked up frantic pace in the last week or so.
- In this context, the statement by Hon'ble Prime Minister and Finance Minister are most welcome and timely one as it has provided an immediate succour to battered market sentiments. The RBI could also chip in with a message that could be most comforting under the current circumstances
- It may be noted that RBI intervention in the foreign exchange market recently have been limited given the costs associated with such.
- Former RBI Governor YV Reddy in a recent conversation with BloombergQuint also cautioned against letting the market believe that depreciation is due.
- In June 2013, we have done a research on how news affected the rupee movement. The results found that favourable news strengthen the rupee, not so favourable news weaken the rupee. The dependent variable was rupee volatility/depreciation in exchange rate. In terms of the regression results, favourable news indeed had a much stronger impact (generally, the rupee recovered with a lag whenever there was a positive statement) on rupee movements

History of Trade Wars

- The current trade war between the US and China is not the first instance when countries have been involved in trade kerfuffle. World history is riddled with instances of prolonged trade wars. Historically, trade wars which started bilaterally have not turned into full fledged multilateral trade wars, though were prolonged

History of Trade Wars			
Countries	**Time period**	**Commodity**	**Remarks**
Italy Vs. France	1886-95	Multiple Commodities	Italy denounced its commercial treaty with France in 1886
France Vs. Switzerland	1892-95	Multiple Commodities	France denouced its treaty with Swtizerland
Russia Vs. Germany	1893-94	Multiple Commodities	High Russian tariffs inhibited German industrial exports and Russian agricutural products unfavorably treated in Germany
US Vs. Italy, Canada, Switzerland, France, Britain, Spain	1930-34	Multiple Commodities	US responded to agriculture price decline with Smoot Hawley tariff which was followed by retaliation throughout Europe
US Vs. France, Germany	1962	Chicken, potato starch, dextrin, brandy and light trucks	France imposed tariff on US chicken and Germany, Europe joined. US retaliated increasing tariffs on a number of products
US Vs. EU	1993-2001	Bananas	EU imposed tariffs on bananas from Latin America which were produced by US multinationals. US retaliated with tariffs on number of products

Ongoing US & China Trade War

- Overall, the tariffs now cover nearly half the goods and services China sells America and nearly 60% of what the United States sells China
- China has imposed tariffs on US imports on a number of goods including cotton, rice, wheat, plastic products, dairy produce, meat, vegetables (onion, potatoes), tobacco where India could tap the market
- Historically, trade wars which started bilaterally have not turned into full fledged multilateral trade wars, though were prolonged. However, according to the IMF, an escalation of the tit-for-tat tariffs could shave 0.5% off global growth by 2020

Timeline of US and China actions		
22-Jan	Trump imposed steep tariffs on imported washing machines and solar panels, most of which are manufactured in China	
06-Jul	U.S. specifically targeted China by imposed 25% tariffs on $34 billion of imported Chinese goods	China responded with similarly sized tariffs on U.S. products
22-Aug	A 25% tariff on additional $16 billion of Chinese imports (chemical products, motorcycles, speedometers and antennas)	China responded immediately with 25% tariffs on an equal amount of American goods, such as chemical products and diesel fuel
24-Sep	A further tariff on $200 billion of Chinese goods ranging from fire alarms to Christmas-tree lights	China responded with tariffs on $60 billion of US goods ranging from honey to industrial chemicals

Trade War: Steel tariffs might not impact India much

- Steel and Aluminium tariffs by the US are not going to impact Indian trade much

- But increase in the duty on some imports from the US recently, for instance phosphoric acid to 20% as part of the retaliatory measure against the US, may push up their prices and might lead to problems for domestic users for these products

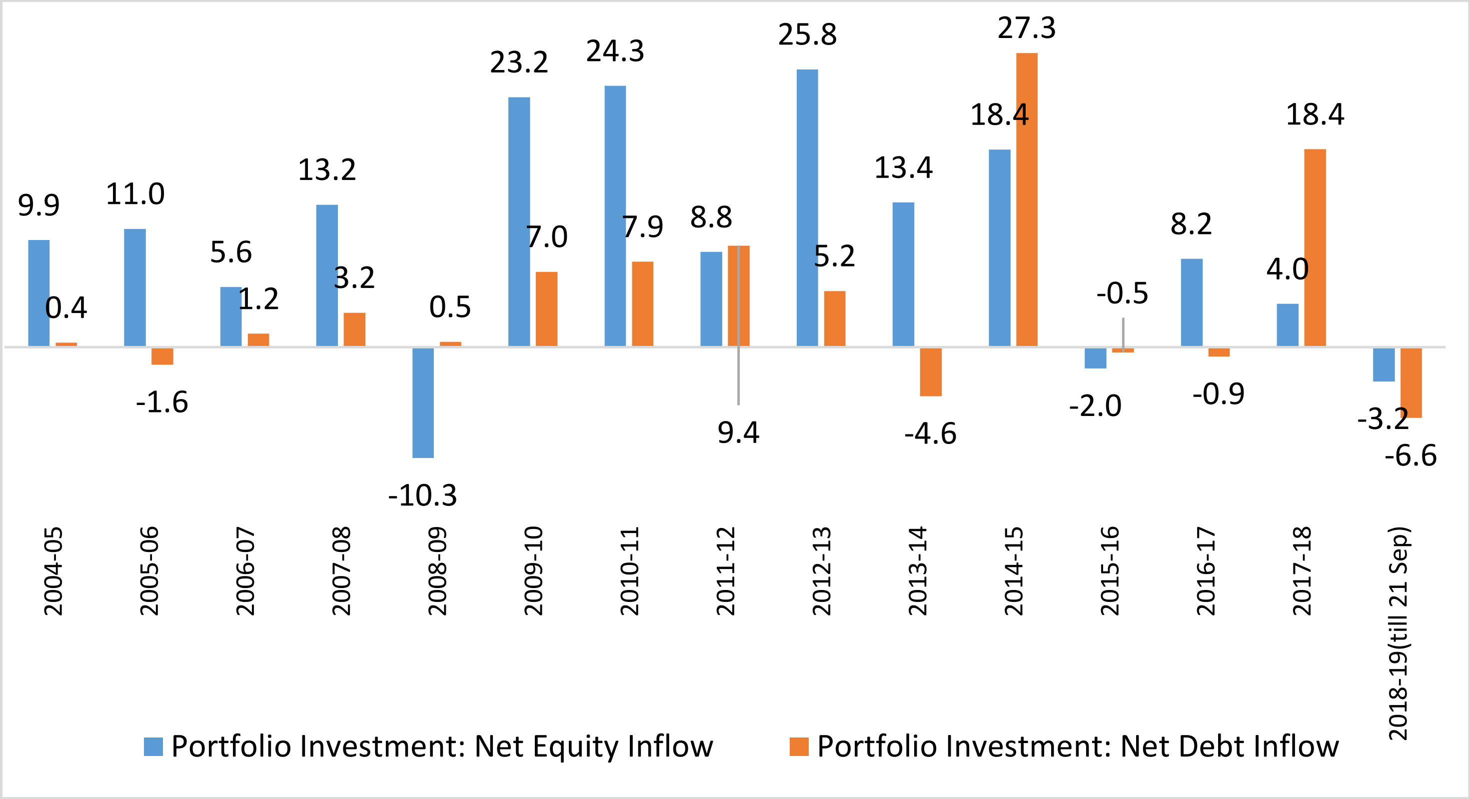
India's Exports of Iron and Steel ($ Billion)					
	FY13	FY14	FY15	FY16	FY17
Export to US	2.2	1.9	2.4	1.6	1.6
India's export	15.5	16.0	16.3	11.6	14.6
Share of US in India's iron & steel exports	14.2	11.9	14.8	14.1	10.9
India's exports of all commodities to US	72.3	78.3	84.9	80.7	84.4
Share of iron & steel's exports in total exports to US	3.1	2.4	2.8	2.0	1.9

Source: Ministry of Commerce

- Furthermore, India has witnessed financial volatility amidst increased fear of trade war owing to higher tariffs by the US and China. However, history shows that though some volatility was observed during the past periods of trade disputes, the markets eventually recovered in all cases of trade wars

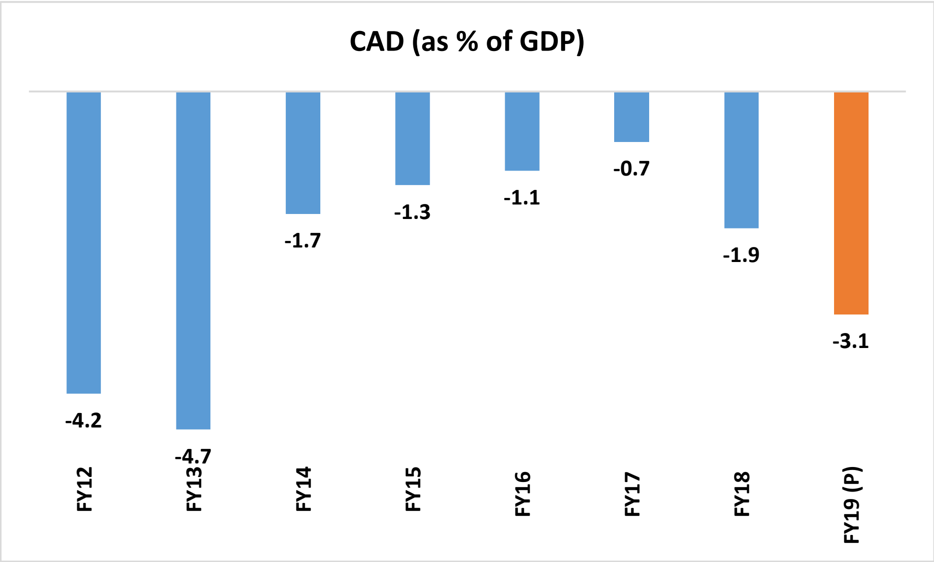
However, increased capital outflows amidst trade war

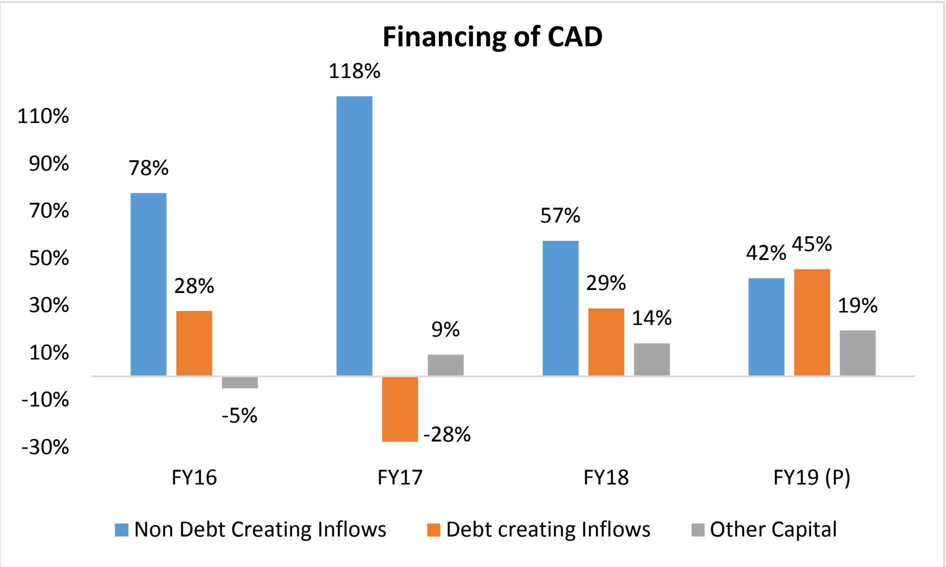
- India registered capital outflows whenever trade war between the US and China escalated
- Total FII outflows in 2018 amount to $9.8 billion*
- Further escalation of US-China trade war could spill over to India and other emerging markets in the form of higher financial volatility



Amount in $ billion,* data till 25 Sep

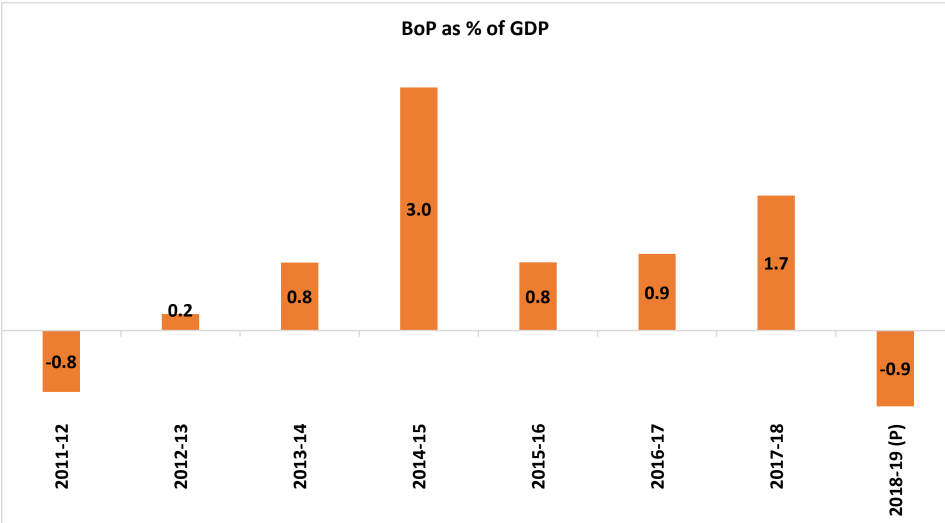
External Sector

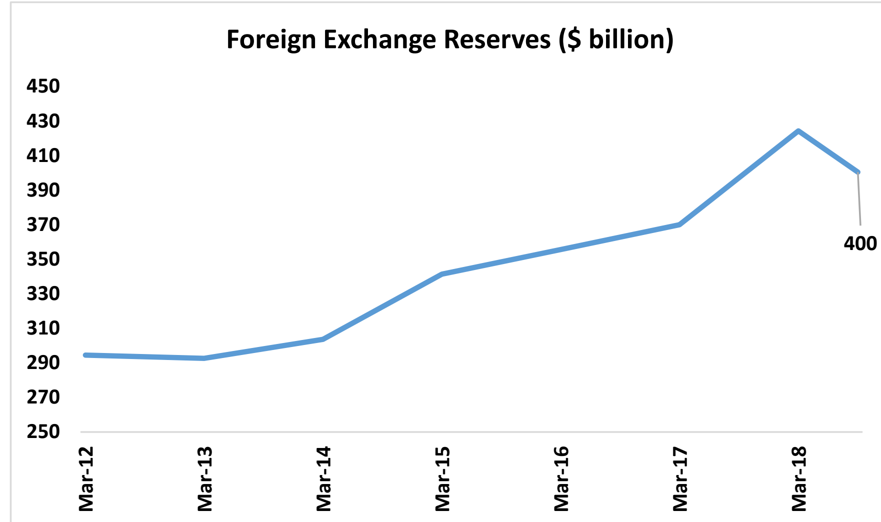




- The CAD is expected to be 3.1 % of GDP in FY19 ($80 billion), however it can go up to 3.3% of GDP if conditions remain unfavorable. Higher energy prices coupled with weaker rupee will add to CAD problem.
- External debt servicing can get difficult due to higher interest rate and weaker rupee. CAD is expected to be majorly financed by debt creating capital inflows, around 45% of the total capital flows.

Overall Balance of Payments





- This will the first time after FY12 when the overall BoP is expected to turn negative as foreign portfolio investors have been withdrawing capital from the country
- RBI has lost reserves worth $24 billion so far this fiscal after steadily building up its corpus on the back of positive inflows till FY18

Turkey crisis- Impact on India

- Turkish Lira collapsed recently after imposition of tariffs by the US. The relations between the two countries are not at their best against the backdrop of an American pastor held in Turkey for almost 2-years on account of espionage and terrorism related charges
- The currency has lost around 40% this year. However, it firmed up a bit after the announcement of expected meeting between the officials of the two countries
- The country runs a current account deficit and the external debt position is also deteriorating. The banking sector has also come under stress owing to excessive reliance on short-term foreign currency debt
- As Turkey is import dependent (both food and fuel) falling currency has led to significant inflationary pressures, with inflation hitting 18% in August. Meanwhile, the central bank has increased the key interest rate significantly this year (to 24% in September 2018) to support the ailing currency
- India has no direct exposure to Turkey with total trade at $7.2 billion. However through sentiments and possible contagion in European Banks, Indian banks and markets will be impacted

India's Export Composition

- Top 10 exports constitute 83% of our total exports. Our traditional exports Gems & Jewellery and Ready Made Garments of all Textiles have witnessed a decline in growth in the last fiscal. Focus should be on increasing their exports.

India's top 10 commodity Exports Growth						
Year/ Commodity	FY13	FY14	FY15	FY16	FY17	FY18
Total Exports	-1.8	4.7	-1.3	-15.5	5.2	10.0
Engineering Goods	-1.2	8.0	14.4	-15.2	8.5	17.1
Gems & Jewellery	-7.2	-3.7	-0.3	-4.8	10.5	-4.3
Petroleum Products	8.6	3.8	-10.1	-46.2	3.1	18.7
Other Commodities	-17.6	-10.8	-23.3	-10.3	-3.1	8.3
Drugs & Pharmaceuticals	9.7	3.7	3.2	9.6	-0.7	3.0
RMG of all Textiles	-5.6	15.8	12.3	0.8	2.4	-3.8
Organic & Inorganic Chemicals	0.7	7.0	1.5	-6.0	5.2	29.2
Cotton Yarn/Fabs./made-ups, Handloom Products etc.	6.8	14.8	-2.2	-6.1	-2.5	4.0
Rice	23.6	25.3	0.8	-25.6	-1.9	34.9
Marine Products	0.1	44.8	9.8	-13.5	23.8	25.1
Source: SBI Research						

India’s Import Composition

- In India’s import basket petroleum, crude and products, electronic goods, electrical and non-electrical machinery and gold are the major components which occupy more than 50% share. Amongst these, share of electronic goods has increased from 8% in FY15 to 12.3% currently. The share of gold has remained almost constant at around 8%
- Machinery, electrical and non-electrical also form a major share in India’s import basket (7% in FY18 from 6% in FY15). This fiscal their growth has exceeded 30% every month

Growth of Imports (% YoY)									
	FY15	FY16	FY17	FY18	Apr-18	May-18	Jun-18	Jul-18	Aug-18
Total Imports	**-0.7**	**-15.2**	**1.1**	**19.8**	**4.6**	**14.9**	**21.3**	**28.8**	**25.4**
Petroleum, Crude & products	-15.9	-40.3	4.8	25.8	41.5	49.5	56.6	57.4	51.6
Electronic goods	15.5	9.3	5.1	23.5	-6.4	19.9	14.3	26.4	22.5
Machinery, electrical & non-electrical	1.9	4.0	-3.6	19.0	9.1	30.9	32.8	30.6	46.2
Gold	19.5	-7.7	-13.4	21.9	-33.1	-29.8	-2.8	40.9	92.6
% Share of above 4 in total imports	**53.2**	**48.5**	**48.2**	**49.7**	**50.6**	**53.3**	**52.5**	**53.9**	**55.0**
Petroleum, Crude & products	31.0	21.8	22.6	23.7	26.3	26.4	28.7	28.2	26.2
Electronic goods	8.4	10.8	11.2	11.5	10.5	11.5	11.0	11.7	12.3
Machinery, electrical & non-electrical	6.2	7.6	7.2	7.2	7.3	7.4	7.4	7.2	8.5
Gold	7.7	8.4	7.2	7.3	6.5	8.0	5.4	6.8	8.0
Source: SBI Research									

Current Measures To Curb CAD

- As previously announced, Government has now imposed higher tariff on 19 items with immediate effect to contain the import of certain non-essential goods. The higher import duty was imposed on premium consumer durables such as air conditioners, refrigerators, washing machines as well as on radial car tyres, aviation turbine fuel, cut and polished diamonds, jewellery and footwear among others
- The total value of imports of these items in the FY18 was about Rs 86000 Crore (3% of Merchandise Imports) and the higher tariffs could help the domestic industry. However, it depends on the price elasticity of demand and domestic capacity
- The impact of these measures is miniscule on the imports so it will not help a lot in reducing CAD. As rupee movement is influenced by the CAD, these might not help a lot in propping up the Rupee. When we look at imports from China (16% of Total imports in FY18), the components add up to roughly around 5% from China's imports. So Chinese imports may not be impacted much directly
- However, these measures send a signal that the Government is ready to defend its external metrics

Measures Required To Curb CAD & Stabilize Rupee

- ***First***, in the interregnum, RBI could sell at least an additional $25 billion from its reserves to support the rupee

- ***Second***, issuing an NRI bond could be a less preferred option

- ***Third***, as an immediate measure, oil companies must be asked to purchase all their USD requirements directly from RBI through a single bank as in 2013

- ***Fourth***, and most importantly, announce export incentivisation measures. For example, we must bring back the policy of promoting SEZs. We must ensure a dedicated window specifically for exporters refunds within a defined TAT. We must also quickly announce a holistic Agri Export Policy

Banking & Finance

Major policy actions in banking sector

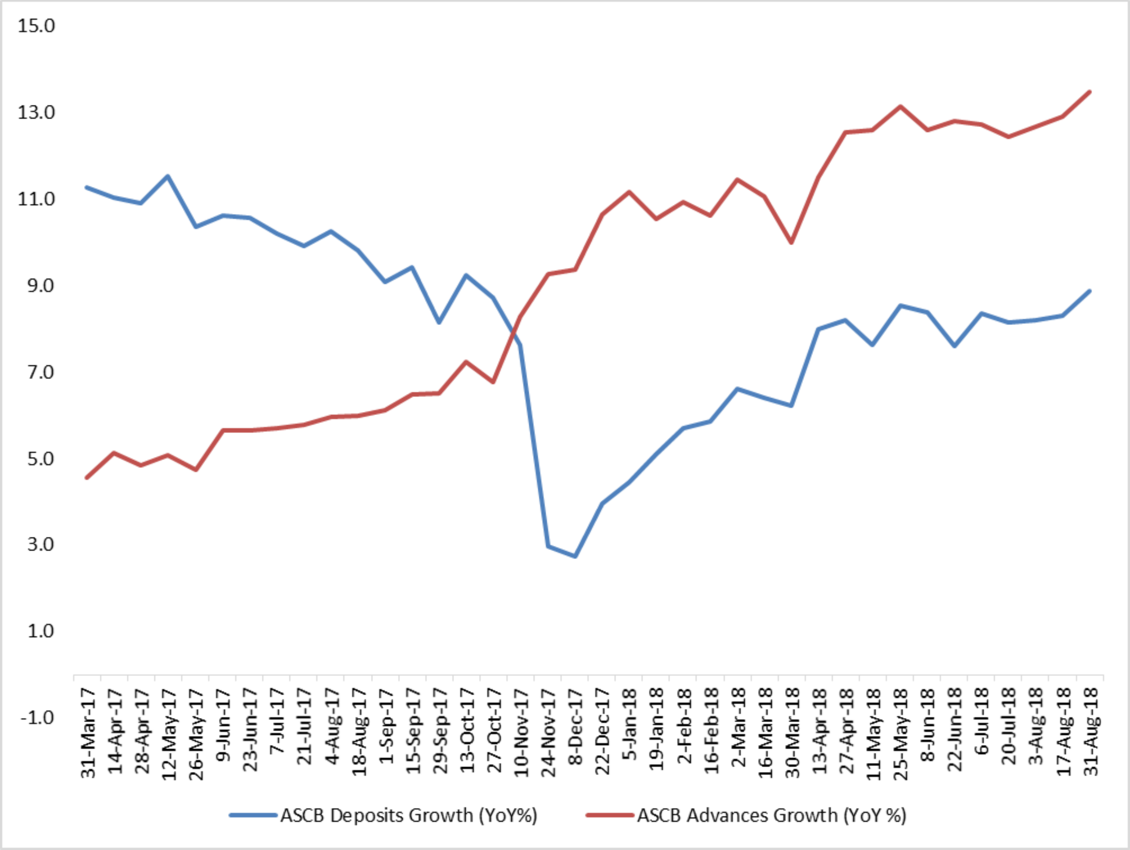
- **Prompt corrective action and frontloading provisioning under AQR**

- **Insolvency and Bankruptcy Code**
  - The Code designates NCLT as the Adjudicating Authority for corporates
  - The Code separates commercial aspects of insolvency and bankruptcy proceedings from judicial aspects
  - Code bars any person from resolution process if there is misconduct contributed to defaults of companies

- **Debt Recovery Tribunals**
  - Reforms under way to make the process more effective and time efficient
  - Address manpower shortage and other infrastructure needs

- **Commercial division of high courts**
  - Proposal to provide for speedy disposal of high value commercial disputes
  - Early resolution of commercial disputes shall create a positive image for the investor world about the independent and responsive Indian legal system
  - Commercial Courts have reportedly begun functioning in Delhi, Mumbai, Himachal Pradesh and Gujarat

ASCBs Deposits & Advances Growth



- In the current year so far (31 Aug 2018), on YTD basis ASCBs deposits grew by 1.9% or Rs 2198 billion (-0.6% or –Rs 615 bn) and advances by 1.9% or Rs 1638 billion (-1.2% or - Rs 972 billion). Based on the trend growth, we believe deposits will grow in the range of 7.5-8.0% (incremental Rs 8.5 lakh crore) and advances by 10.0-11.0% (Rs 9.0 lakh crore) in FY19, leaving a gap of Rs 500 billion.

NCLT Marching ahead for a better tomorrow

Corporate Insolvency Resolution Processs						
Quarter	No. of CIRPs at the beginning of the Quarter	Admitted	Closure by			No. of Corporates undergoing Resolution at the end of the
			Appeal / Review	Approval of Resolution Plan	Commencement of Liquidation	
Jan-Mar, 2017	-	37	1	-	-	36
Apr-Jun, 2017	36	129	8	-	-	157
July-Sept, 2017	157	231	16	2	8	362
Oct-Dec, 2017	362	145	34	8	24	441
Jan-Mar, 2018	441	194	14	13	57	551
Apr-June, 2018	551	241	18	11	47	716
Total	**NA**	**977**	**90**	**34**	**136**	**716**

Source: IBBI, Data compiled from details available on NCLT Website

Realization rate ~ 55% as on June 2018 - In terms of CIRP yielding resolutions 34 cases yielded around Rs 478 billion out of around Rs 861 billion total admitted claims of Financial Creditors

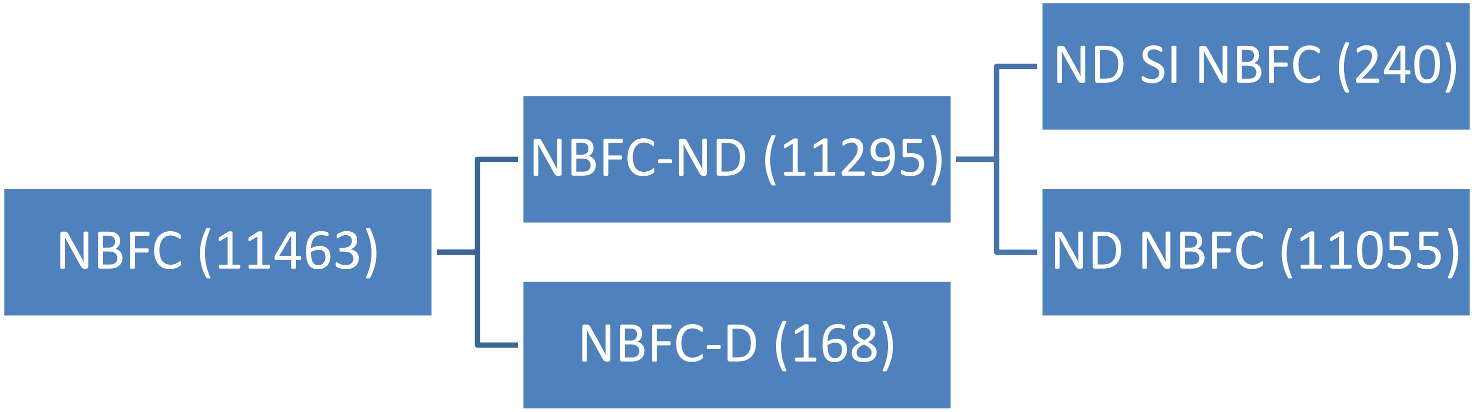
Status of CIRPs	
Status of CIRPs	Number of Liquidation
Admitted	**977**
Closed on Appeal/ Review	91
Closed by Resolution	34
Closed by Liquidation	136
Ongoing CIRP	**716**
> 270 days	186
> 180 days ≤ 270 days	116
> 90 days ≤ 180 days	183
≤ 90 days	231

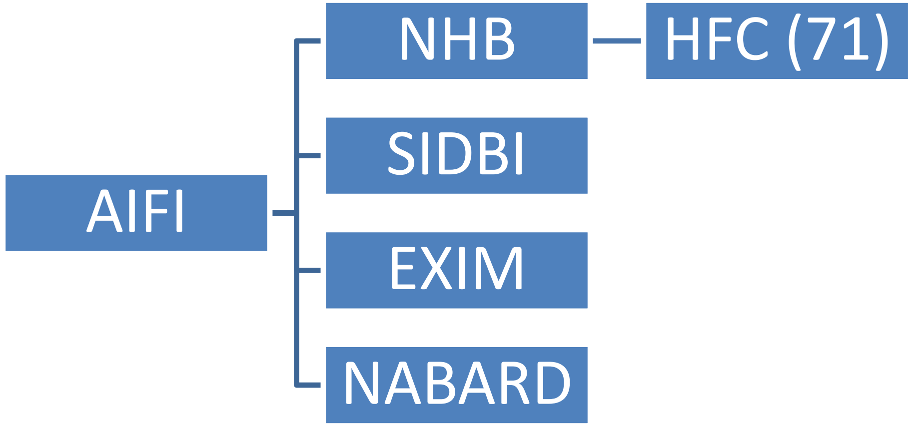
Source: IBBI: SBI Research

Initiation of Corporate Insolvency Resolution Processs				
Quarter	No. of Resolutions Processes Initiated By			
	Financial Creditor	Operational Creditor	Corporate Debtor	Total
Jan-Mar, 2017	8	7	22	37
Apr-Jun, 2017	37	58	34	129
July-Sept, 2017	92	100	39	231
Oct-Dec, 2017	62	69	14	145
Jan-Mar, 2018	84	88	22	194
Apr-June, 2018	98	125	18	241
Total	**381**	**447**	**149**	**977**
Share	**39%**	**46%**	**15%**	**100%**

Source: IBBI; SBI Research

NBFCs - Background





Top 10 NBFCs (including HFCs) account for around 50% of the share of overall NBFC advances

Liquidity Situation

- System liquidity is in the deficit mode. However, outstanding total reverse Repo has been increasing in the past few days. It has risen from Rs 47 billion as on 19 Sep'18 to Rs 1465 billion as on 27 Sep'18. Owing to the significant increase in reverse repo, outstanding net repo has declined to Rs 457 billion as on 27 Sep'18 compared to Rs 1294.6 billion as on 19 Sep'18.
- It seems that liquidity is currently not much of a problem, however, it is the uncertainty in the market which is contributing to credit crisis. The recent increase in mutual funds redemptions is resulting in increase in bank deposits and due to uncertainty in the market banks are parking their funds with RBI.

Outstanding Repo Operations (Rs bn)

	Total Repo	Total Reverse Repo	Net Repo (-Injection/ + absorption)
27-Sep-18	1922	1465	-457
26-Sep-18	1921	1205	-716
25-Sep-18	1923	786	-1137
24-Sep-18	1735	297	-1438
21-Sep-18	1510	152	-1359
19-Sep-18	1341	47	-1295

Source: SBI Research, RBI

- With the recent assurance by Government and RBI on liquidity fronts, there is some amount of reduction in anxiety in the market but people are still jittery. In July 2018, the Mutual Fund industry has seen outflow of Rs 32,628 crore (redemption of liquid funds Rs 31,141 crore and Rs 7950 crore from liquid and income funds, inflows of Rs 10,585 crore in ELSS) and the industry expects Rs 50,000 crore from the debt market in September 2018.

RBI LCR measures to ease transient liquidity

- To ease the apparent liquidity pressure, RBI has now given additional relaxation of 2% under Facility to Avail Liquidity for Liquidity Coverage Ratio (FALLCR) (presently 13% of the bank's NDTL). The total carve-out from SLR available to banks would be 15% of their NDTL. This is expected to impact Indian banking system positively as it will additionally release funds from HQLA requirement and improve the LCR position. However, this may lead to a negative incremental demand for bonds
- This will lead to injection of around Rs 2,00,000 crore of assured liquidity at the repo rate and this will ensure weighted average call money rate to be around policy rate
- Under the new arrangement medium to long end of the curve which is more driven by demand and supply is likely to go up. Hence, supported shorter end and higher longer end yield will result in steep yield curve going forward

Impact of Change in LCR: Demand for bonds to decline

	% of NDTL	
	Existing Scenario	New Scenario
SLR requirement	19.50%	19.50%
LCR requirement in terms of NDTL equivalence	19.50%	19.50%
Total gross requirement of Government Bonds (SLR+LCR)	39%	39%
Permitted SLR and LCR overlap till today's announcement	13%	15%
Net mandated requirement of Government Bonds	(39-13)% = 26%	(39-15)% = 24%
Existing holding of Government Bonds by banking system	30%	30%
Hence excess holding of Government Bonds by banking system to go up	(30-26)% = 4%	(30-24)% = 6%

Source: SBI Research

Regulatory Norms: NBFCs are better placed vis-a-vis Banks

		NBFC	Banks (As per BASEL III)
Prudential Norms (Capital Requirements)		NBFCs-ND (asset size of Rs. 500 crore and above) and NBFCs-D shall maintain minimum Tier 1 Capital of 10%	Tier 1 capital must be at least 7% of RWAs
		NBFCs-ND (asset size of Rs.500 crore and above) and NBFCs-D are required to have minimum CRAR of 15%	Minimum CRAR of 9%
		-	Capital conservation buffer of 2.5% of RWAs
Asset Classification Norms		Account to be classified as NPA after 90 days	Account to be classified as NPA after 90 days
Provisioning Norms	Standard Assets	0.40% for NBFCs-ND-SI and for all NBFCs-D	0.25%-1.00%
	Doubtful Assets	25% to 100% of the secured portion depending upon the period for which the asset has remained doubtful	20% to 50% of the secured portion depending upon the period for which the asset has remained doubtful
	Sub-standard assets	10% of total outstanding	15% on total outstanding without making any allowance for ECGC guarantee cover and securities available.
SLR/CRR		15% SLR for NBFC-D	19.5% SLR+ 4% CRR

Source: RBI

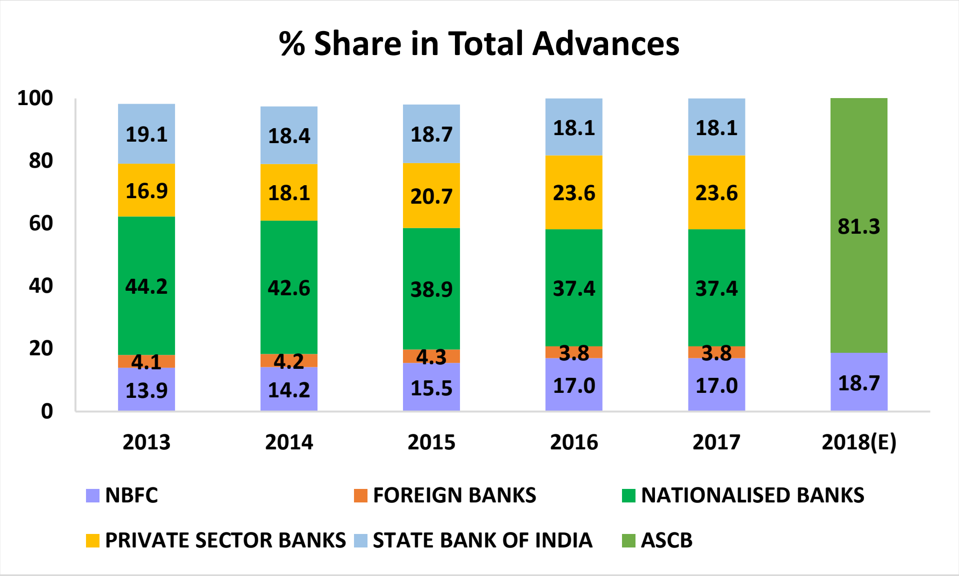
✓ **Less provisioning and SLR/CRR requirements gives NBFCs much better cost advantage**

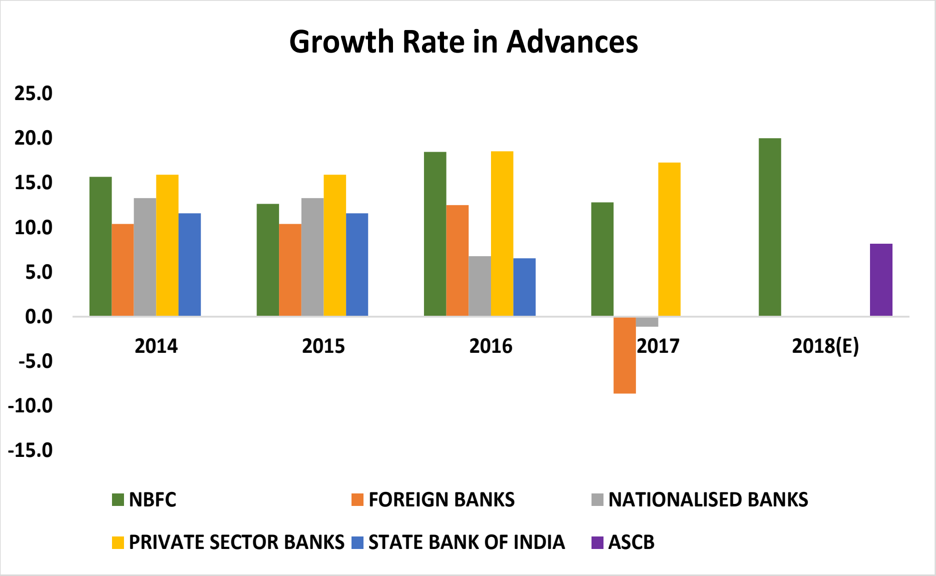
NBFC share in total advances increasing at a rapid pace

SBI

- % share of NBFC in total Advances may have increased by close to 1.7% in FY18, highest since 2013

- NBFC advances growth rate in healthy double digits. With FY19 NBFC growth estimated at 15%, share in overall advances is expected to beyond 20%





Some NBFCs Leveraged beyond control

NBFC Key indicators as on March 18 (Rs in cr)							
Industry	Shareholders Funds	Secured Loans	Unsecured Loans	Total Loan Funds	Total Liabilities	Debt/ Equity	Total Liabilities/ Equity
Finance - Equipment - Leasing & Maintenance	2275	7454	1802	9256	11830	4.07	5.20
Finance - Housing - Large	106870	477945	230069	708014	828115	6.62	7.75
Finance - Housing - Medium / Small	19237	106567	35721	142288	163527	7.40	8.50
Finance - Investment / Others	230764	304628	120910	425539	919245	1.84	3.98
Finance - Large	36122	102390	31242	133632	178409	3.70	4.94
Finance - Leasing And Diversified	5782	14228	6216	20444	28141	3.54	4.87
Finance - Medium	24140	65360	25935	91295	117262	3.78	4.86
Finance - Small	17394	22678	6656	29335	47270	1.69	2.72
Finance - Term-Lending Institutions	79551	81160	369184	450344	544448	5.66	6.84
Total	**522136**	**1182410**	**827736**	**2010146**	**2838248**	**3.85**	**5.44**
Source: Cline; SBI Research; 581 listed NBFCs numbers as of March 2018							

- NBFCs in Housing, Leasing & Maintenance and Term Lending Institutions are leveraged beyond control
- Housing Finance NBFCs debt equity as high has 7.40 and TL/Equity is beyond 8
- DHFL Debt equity as on Mar 18 - 10.52 and TL/Equity was 11.64 and for IL&FS Financial Services Ltd the same is 7.33 and 8.78 respectively
- Bajaj Finance Ltd DE is 3.72 and TL/Equity is 4.82 and for HDFC it is 5.2 and 6.33 respectively

NBFCs – upgrades to downgrade and Market issuances

- Rating Upgrades and Downgrades

Period	Upgrades No. of Companies	Downgrades No. of Companies	Ratio
April 2018 to 24th Sept 2018	69	19	3.6x
April 2017 to March 2018	75	26	2.8x
Source: Crisil, SBI Research			

- Rising Coupon rates in recent Primary Issues has been one of the concerns causing uneasiness amongst investor participants
- The spreads on a recent issue (Dewan Housing Finance Corporation Ltd dated 6th September 2018) widened in September 2018 as compared to G-Sec

NBFC Issuances from 01st April 2018 to 24th Sept 2018 (NSDL) - Top 5				
Issuer	**Total Issue Size Rs. Cr**	**No. of Issues**	**Coupon Range (%)**	**Rating**
Muthoot Finance Limited	35625	12	8.25 ~ 9.75	AA
Shriram Transport Finance Company Limited	25789	8	8.93 ~ 9.40	AA+
Bajaj Finance Limited	17200	5	8.10 ~ 8.85	AAA
ECL Finance Limited	16915	14	9.18 ~ 9.85	AA
Aditya Birla Finance Limited	12328	11	8.52 ~ 8.90	AAA

Instrument	Tenor (Yr)	Yield (10 09 2018)	Yield (27 09 2018)	Move ment
Dewan Housing Finance Corporation	3	9.71	10.10	
G-Sec	3	8.07	8.02	
Yield Spread (bps)		164	208	44

Source: Bloomberg

NBFCs - Issuances rated AAA for 10 Yr tenor – Coupon Range

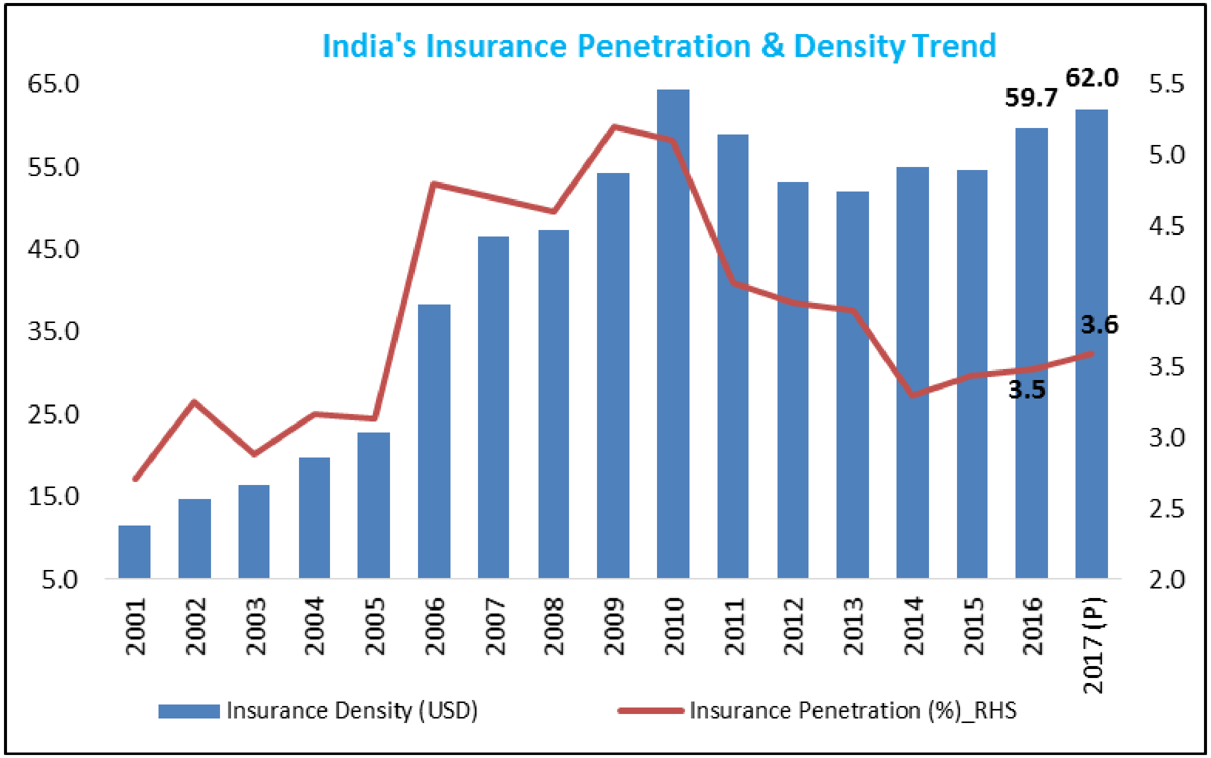
NBFC Issuances from April 18 to Aug 18	Size Rs. Cr	Coupon
Rural Electrification Corporation Limited	2500	8.55%
Rural Electrification Corporation Limited	2500	8.63%
Power Finance Corporation Ltd.	3855	8.00%
Fullerton India Credit Company Ltd	190	9.30%
Fullerton India Credit Company Ltd	50	9.45%
Fullerton India Credit Company Ltd	200	9.25%
HDB Financial Services Limited	250	9.05%
ICICI Securities Primary Dealership Ltd	50	8.75%
MAX		**9.45%**
MIN		**8.00%**
Weighted Average Coupon		8.40%
10 Yr G-Sec Yield (24.09.2018)		8.07%

- Within AAA corporate the coupon range, for 10 yr paper, vary from 8.00% to 9.45%
- Power finance Corporation could issue at a coupon of 8%, Fullerton India Credit Company paper issued as high as 9.45%
- Entity backed by worthy promoter is in a better bargain position as compare to others within same rating

NBFC – Battling Perception

- Recent instance of default spread to equity markets too
- Regulators and policy makers are aware of the matter and efforts are on to resolve the issue
- Meeting of SEBI with rating agencies asking rating agencies to factor in movement of bond spreads with G-Sec yield movements. Glaring differences between bond spreads to weigh in rating action.
- MF sold debt instruments leading to hike in yields
- In equity markets share price of DHFL plunged by 40~50%. Indiabulls Housing was also affected
- IL&FS Group undergoing revamp and planning to exit some of its businesses. The regulator has cleared acquisition of securities business by IndusInd for Rs 400 cr.
- The road assets ITNL is planning to sell its assets to Italy major Atlantia (controlled by Benetton family) for US$1.20 billion.The deal is expected to lighten debt by about Rs 25000 crore
- NBFCs with low debt equity and better ALM management will likely be in a better position

Insurance Penetration & Density in India



- Recently, Government has launched a national protection scheme, namely Ayushman Bharat - Pradhan Mantri Jan Aarogya Yojana (AB-PMJAY), which will cover over 10.74 crore vulnerable entitled families (approximately 50 crore beneficiaries) providing coverage up to Rs 5 lakh per family per year, for secondary and tertiary care hospitalization.
- Apart from this, Government has launched cheap accidental and life insurance policy for all. This may push the density and penetration further

Financial Markets - Outlook

Interest rates

- Rising interest rates is a certainty in near future. Emerging market Central banks will shift monetary policy to tightening in response to dollar appreciation. RBI own policy stance may be dictated by global factors despite a domestic neutral stance
- US Fed is expected to continue its policy normalization in 2019. Three to four hikes are expected depending upon the data
- The rate of interest in India will stay on the higher side. This will have negative impact on consumption expenditure

Asset Markets

- Equity markets have moved steeply mostly due to sharp movement in commodity related stocks such as oil. Current valuations look stretched and sudden sharp correction is possible as one approaches the election cycle

Future outlook

- In FY19, GDP is expected to grow at 7.4% and GVA at 7.3%. The impending general election will further limit any improvement in outlook
- India's gross domestic savings (GDS) rate has climbed to the historic high level of 36.8% in FY08 but thereafter declined gradually to 30.0% in FY17. The decline in GDS rate is mainly due to the decline in household savings
- Implementation of GST has been below expectation
- Rupee may touch Rs 73 per dollar in 2018, as RBI has not been intervening in the forex market. This will impact the debt servicing of dollar denominated debt
- Based on the trend growth, we believe deposits will grow in the range of 7.5-8.0% (incremental Rs 8.5 lakh crore) and advances by 10.0-11.0% (Rs 9.0 lakh crore) in FY19, leaving a gap of Rs 500 billion.
- RBI's Macro-stress tests indicate that ASCBs' GNPA ratio may increase further to 12.2% by Mar'19 from 11.6% in Mar'18

Banking the Unbanked

How PMJDY Changed Banking Behaviour & Inflation

Overview

- The Pradhan Mantri Jan Dhan Yojna (JDY from now) launched in India on August 14, 2014, is the world's largest financial inclusion program with the aim to provide universal access to banking services

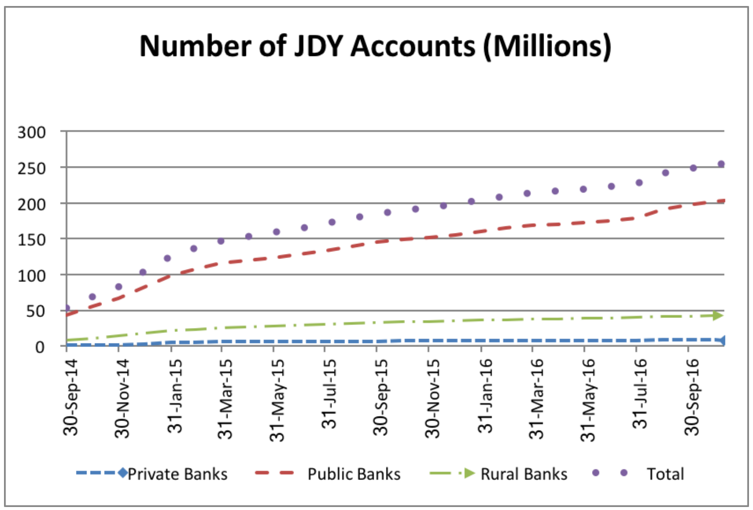
- As of 19 Sep'18, approximately 32.75 crore of Jan Dhan accounts have been opened under this program attracting total deposits approximately Rs 84,908 crore, substantially expanding access to banking services

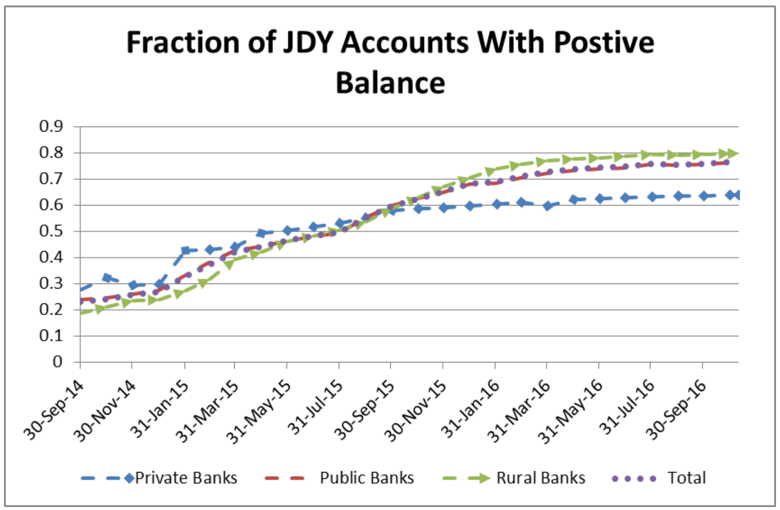
- Our empirical setting serves as a useful laboratory to study importance of access to basic financial products for the poor

- Our research throw light on some interesting findings

More Accounts with Positive Balance in Rural Areas

- Though State-owned banks have opened a large fraction of the new accounts opened, the fraction of users with positive balance seems to be highest for rural banks followed by state-owned banks. The fraction is lowest for the private sector banks
- The unbanked living in urban areas may have easier access to banks but given their low income and saving may not have found it optimal to open a bank account

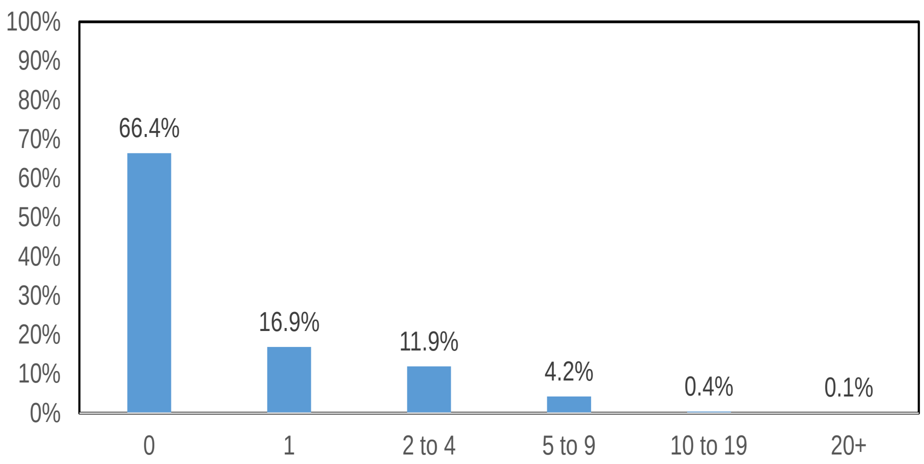




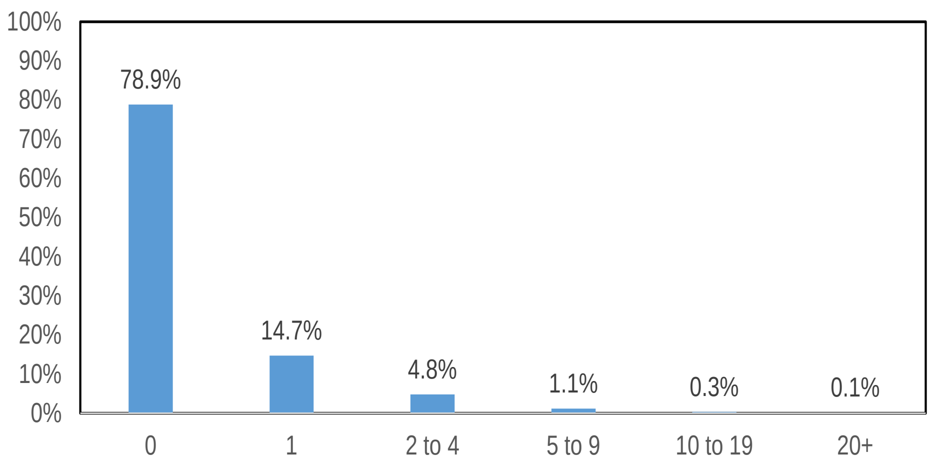
Big Push for Remittances

- Remittance seems to be the most common transaction performed by the individuals. This suggests that remittances are important for low-income individuals in India. This is not surprising given that many workers in India migrate to other states away from their family for employment. Thus, the increase in ease and reduced transaction costs of remittances through JDY bank account may be an important benefit of the program
- Approx. 34% of individuals receive money in their account via inward remittance, similarly, about 21% of account holders send remittance at least once

Inward Remittances

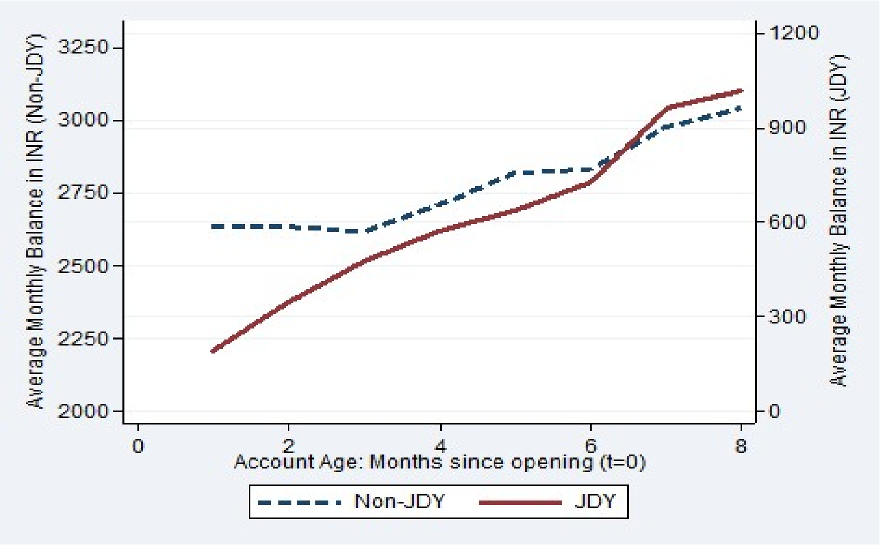


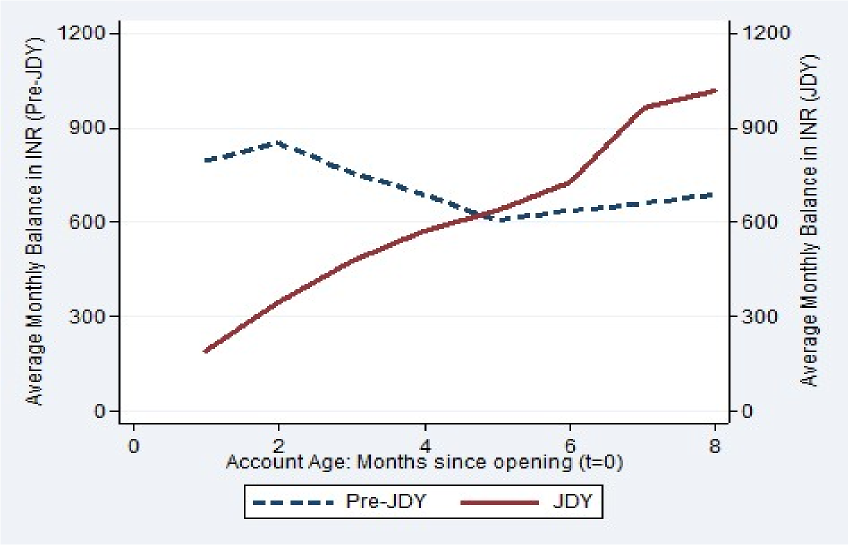
Outward Remittances

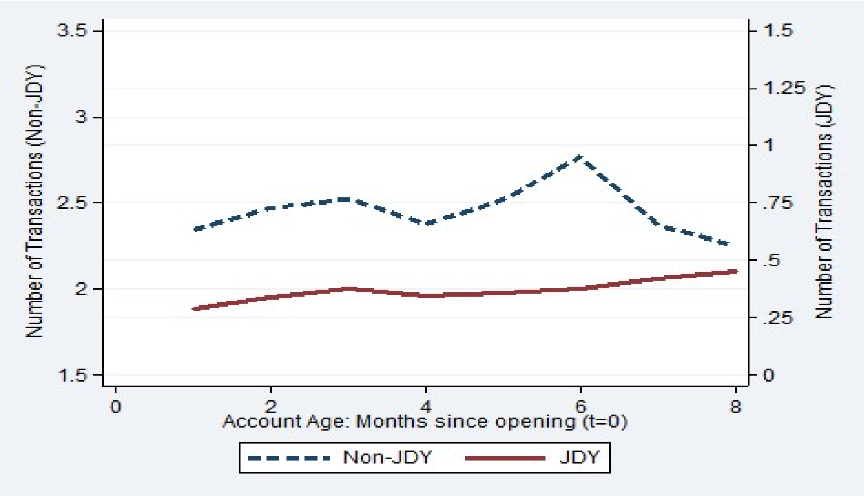


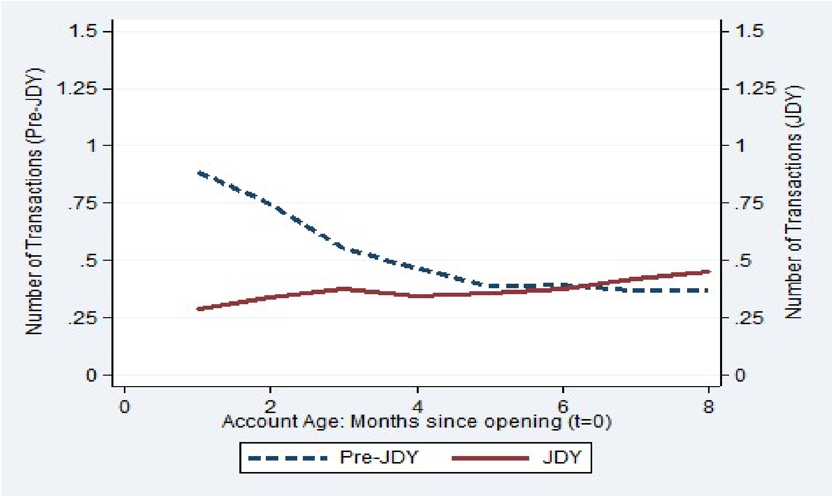
Account Usage increases over time

- Usage initially infrequent but gradually converge with time to those of similar

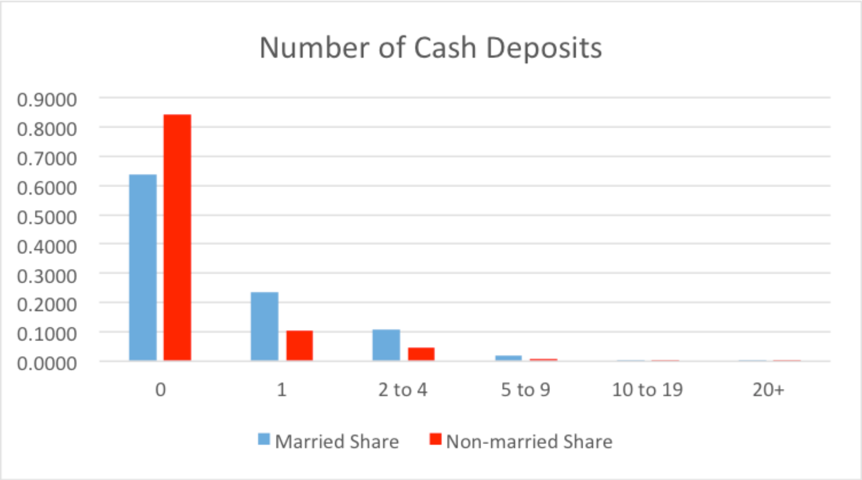


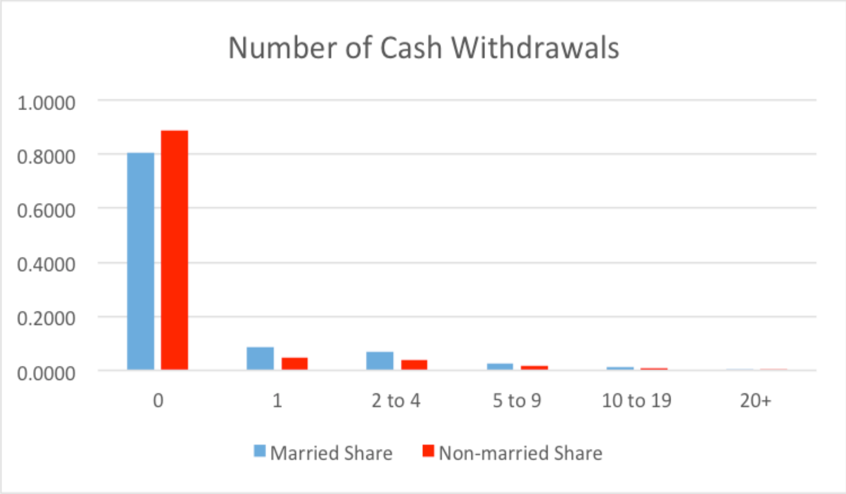


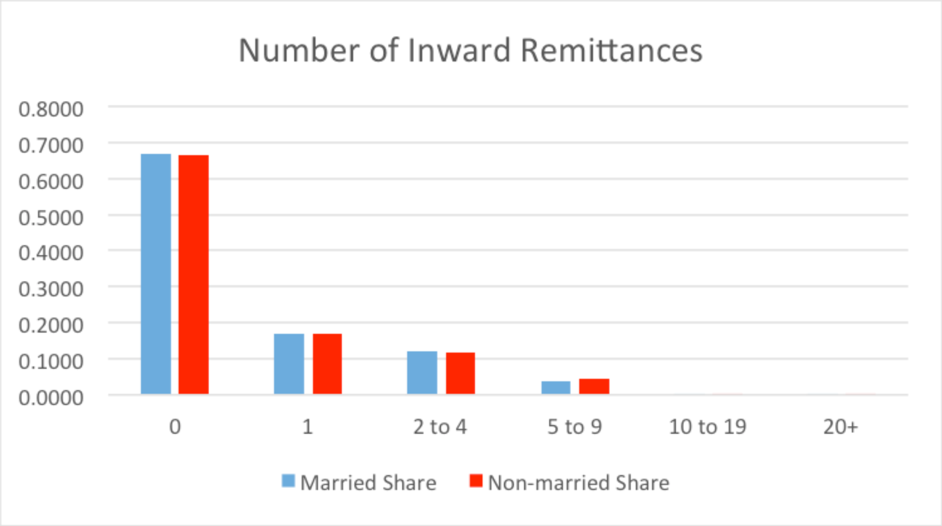


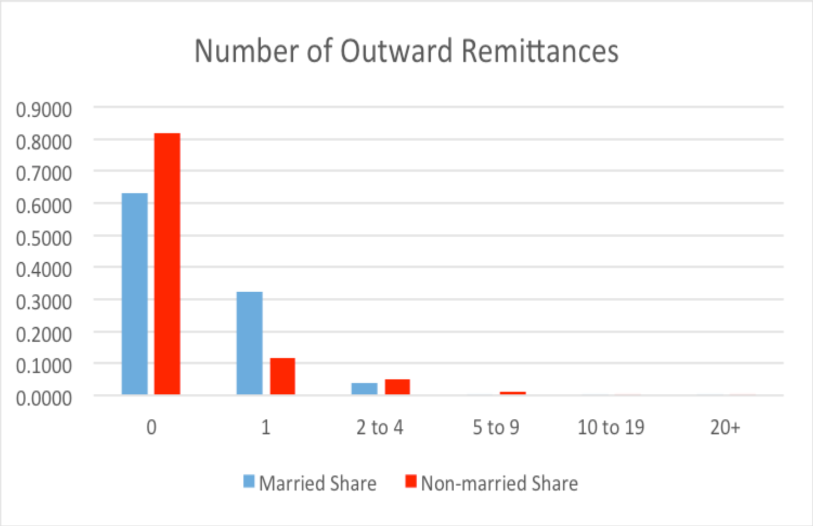


Program Reach: Frequency higher for married individuals





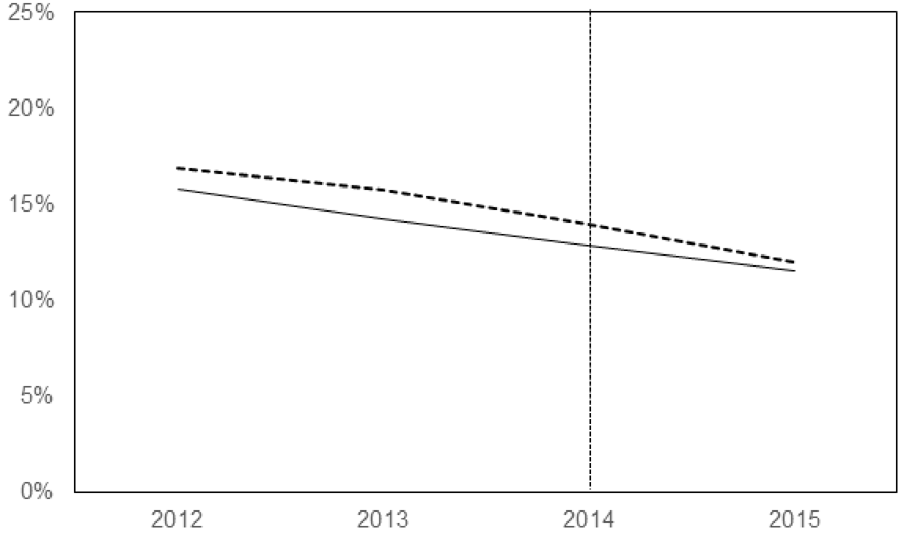




More Lending in areas where JDY accounts were opened

- The figure shows the bank deposit percentage growth rates (panel (a)) and bank lending growth rates (panel (b)) in the more and less JDY exposed regions (based on the % of Households without Bank Accounts). The more exposed group is represented by the solid line, and the less exposed group is represented by the dashed line

Panel a



Panel b

1. Average Balance & Usage relative to Non-JDY

$$Balance_{it} = \beta_0 + \beta_1\, JDY_{it} + \beta_2\, Age_{it} + \beta_3\, JDY \times Age + X_{i,t} + \text{Account Opening Date}_t + \varepsilon_{it}$$

	Average Monthly Balance	Positive Balance Dummy	Positive Usage Dummy
	(1)	(2)	(3)
JDY	-2370.967***	-0.724***	-0.441***
	(91.073)	(0.002)	(0.002)
Age of Account	46.776**	0.005***	-0.008***
	(18.858)	0.000	(0.001)
Age of Account X JDY	57.791***	0.044***	0.011***
	(18.773)	0.000	(0.001)
N	6698136	6698136	6698136
R^2	0.007	0.079	0.046

- Relative to non-JDY sample, average monthly balance increases by INR 58 /12% mon

JDY Account Level Analysis (2)

2. Cash Deposits and Withdrawals relative to Non-JDY

$$Transaction_{it} = \beta 0 + \beta 1\ JDY_{it} + \beta 2\ Age_{it} + \beta 3\ JDY \times Age + X_{i,t} + \text{Account Opening Date}_t + \varepsilon_{it}$$

	Cash Deposit	# Cash Deposit	Cash Deposit	Cash Withdrawal	# Cash Withdrawal	Cash Withdrawal
	Amount	Transactions	Dummy	Amount	Transactions	Dummy
	(1)	(2)	(3)	(4)	(5)	(6)
JDY	-1667.757***	-0.186***	-0.115***	-4819.868***	-1.214***	-0.375***
	(72.667)	(0.004)	(0.002)	(135.149)	(0.015)	(0.003)
Age of Account	-32.856**	-0.013***	-0.010***	-77.230***	-0.005*	-0.005***
	(14.295)	(0.001)	0.000	(29.457)	(0.003)	(0.001)
Age of Account X JDY	38.371***	0.008***	0.005***	103.159***	0.018***	0.012***
	(14.411)	(0.001)	0.000	(29.452)	(0.003)	(0.001)
N	6698136	6698136	6698136	6698136	6698136	6698136
R^2	0.008	0.016	0.015	0.025	0.097	0.109

More spending on health expenditure

This table reports the OLS coefficient estimates from the regression model where the dependent variable is the difference in the monthly growth in household health expenditure during the JDY period and the pre-JDY period. The exposure measure is one of the following: *Adults per Unit Bank Branch, % State-Owned Branches, %age Households With Bank Accounts* and a comprehensive *Financial Inclusion Index*

Panel A : Expense on Health				
	(1)	(2)	(3)	(4)
Adults Per unit Bank Branch	0.034***			
	(0.007)			
% State-Owned Branches		0.024***		
		(0.007)		
% Households Without Bank Accounts			0.018***	
			(0.007)	
Financial Inclusion Index				0.030***
				(0.007)
N	419	419	419	419
R^2	0.060	0.031	0.017	0.044

Less spending on intoxicants

This table reports the OLS coefficient estimates from the regression model where the dependent variable is the difference in the monthly growth in household expenditure on intoxicants during the JDY period and the pre-JDY period

Panel A : Expense on Intoxicants				
	(1)	(2)	(3)	(4)
Adults Per unit Bank Branch	-0.018**			
	(0.008)			
% State-Owned Branches		-0.032***		
		(0.008)		
% Households Without Bank Accounts			-0.020**	
			(0.008)	
Financial Inclusion Index				-0.030***
				(0.008)
N	419	419	419	419
R^2	0.012	0.039	0.015	0.031

More borrowing from banks / formal sector

This table reports the OLS coefficient estimates from the regression model where the dependent variable is the difference in the quarterly growth in the fraction of households borrowing from banks (Panel A) and other sources (Panel B) during the JDY period and the pre-JDY period

Panel A : Growth in Fraction of Households Borrowing From Banks				
	(1)	(2)	(3)	(4)
Adults Per unit Bank Branch	0.00160*			
	(0.00090)			
% State-Owned Branches		0.00150*		
		(0.00088)		
% Households Without Bank Accounts			0.00260***	
			(0.00088)	
Financial Inclusion Index				0.00197**
				(0.00090)
N	416	416	416	416
R^2	0.008	0.007	0.021	0.011

PMJDY is silently making economic & social progress

- Our findings suggest that JDY may have allowed banks to meet the unmet demand for credit for some households that did not have prior access to formal banking products.
- We observe an increase in the fraction of households borrowing from banks in regions with greater ex-ante JDY exposure relative to regions with lower exposure
- We observe a contemporaneous decrease in the fraction of households borrowing from non-bank sources
- We observe a significant decrease in the monthly volatility of consumption expenditure
- We find some evidence suggesting that the program was associated with an increase in investments

Impact of Jan Dhan on Inflation

- We also analysed the impact of state-wise PMJDY accounts on rural and urban CPI inflation. The data shows that the **States where more number of Jan Dhan accounts were opened, there is a meaningful drop in rural inflation**

- This suggests that one of the common concerns - that the PMJDY program may have led to substantially higher price level due to a higher circulation of money and creation of additional demand - may be unwarranted

- We also observed an increase in household medical expenditure in more exposed states like Bihar, West Bengal, Maharashtra, Rajasthan, etc. since Oct’16 due to changing lifestyles and increased demand for medical services

- Pradhan Mantri MUDRA Yojana (PMMY) is a scheme launched by the Hon'ble Prime Minister on April 8, 2015 for providing loans up to $0.15 million to the non-corporate, non-farm small/micro enterprises. These loans are given by Commercial Banks, RRBs, Small Finance Banks, Cooperative Banks, MFIs and NBFCs
- The PMMY loans disbursed with 80% of these loans have been sanctioned to women entrepreneurs

Loans under Pradhan Mantri Mudra Yojana (PMMY)					
	FY16	FY17	FY18	FY19	Total
No. of PMMY Loans Sanctioned (Cr)	3.49	3.97	4.81	1.82	14.09
Amount Sanctioned (Rs lakh crore)	1.37	1.81	2.54	0.96	6.68
Amount Disbursed (Rs lakh crore)	1.33	1.75	2.46	0.91	6.46
Source: SBI Research, MUDRA *21/09/18					

Traction between Jan Dhan accounts and Mudra

- In an in-house study within SBI we have found that there is a traction across Jan Dhan and Mudra accounts
  - 23% of Mudra loan account holders are women with an average ticket size of around Rs 55,000 ($845)
  - Distribution of the women entrepreneurs across India, with 36% of the accounts coming from southern India (Andhra Pradesh, Tamil Nadu and Telengana) and 16% from eastern India (West Bengal, Odisha and Assam) – laggard states witnessing more traction

Thank you