

India Chartbook

Decoding Demonetization

Business Economics Banking
December 2016

Demonetization

- ✓ We expect demonetization to accrue significant benefits in the medium term through formalization of the economy. In the short-term however, we expect significant negative impact on growth as economic agents adjust to liquidity crunch.

Growth

- ✓ We revise down our FY17 GDP growth forecast to 6.7% from 7.6%.

Inflation

- ✓ We maintain our CPI inflation forecast at 4.8% in FY17 compared to 4.9% in FY16. We believe demonetization could impact a marginal downside bias to our estimates.

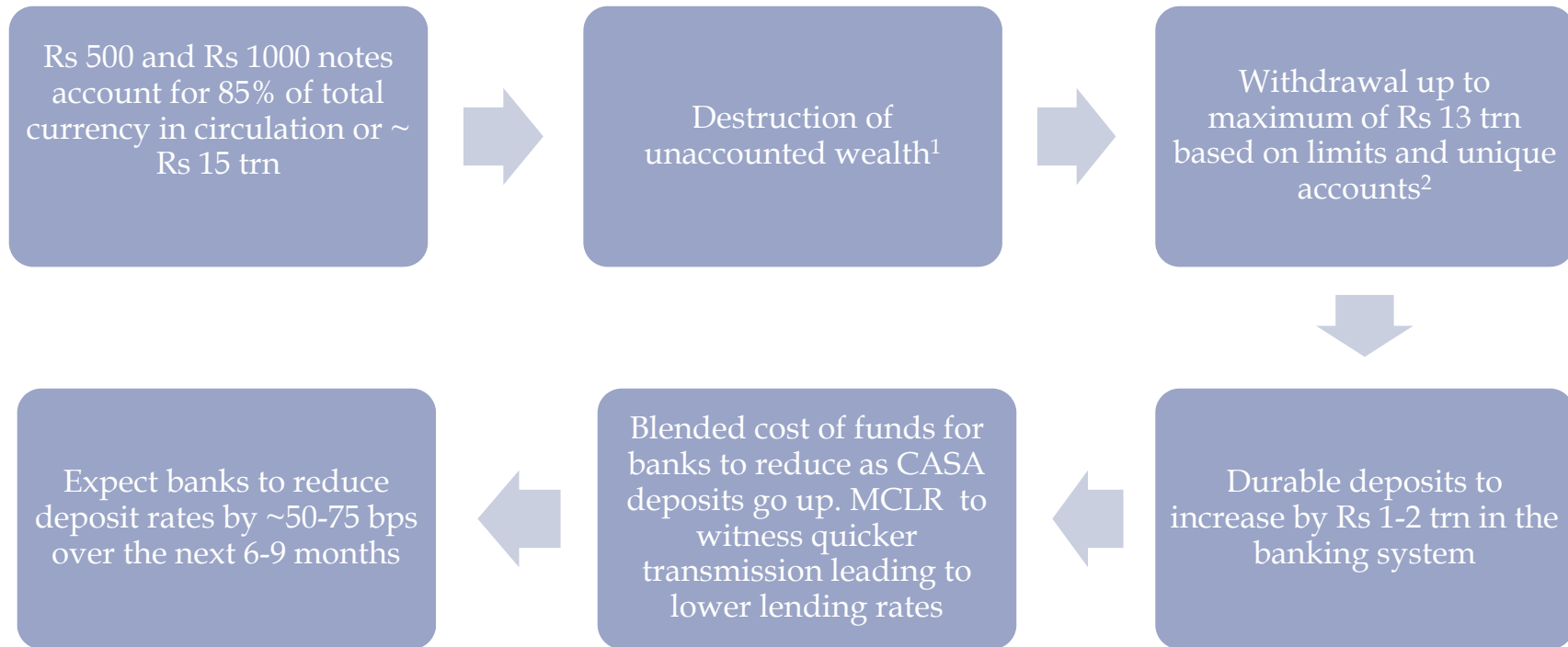
Monetary policy

- ✓ The undershooting of inflation vis-à-vis target and MPC's preference for reviving growth creates room for additional monetary easing. We expect a cumulative 50 bps rate cut by Apr-17. Meanwhile, liquidity fine tuning to continue via MSS/ Reverse Repo.

External

- ✓ We calibrate our INR forecasts, in line with unexpected US dollar strength following US elections and shift in sentiment against EMs but expect strong domestic fundamentals to cap the downside.
USDINR is expected to reach 68 by Mar-17, moving to 70 over the next 12-month horizon.

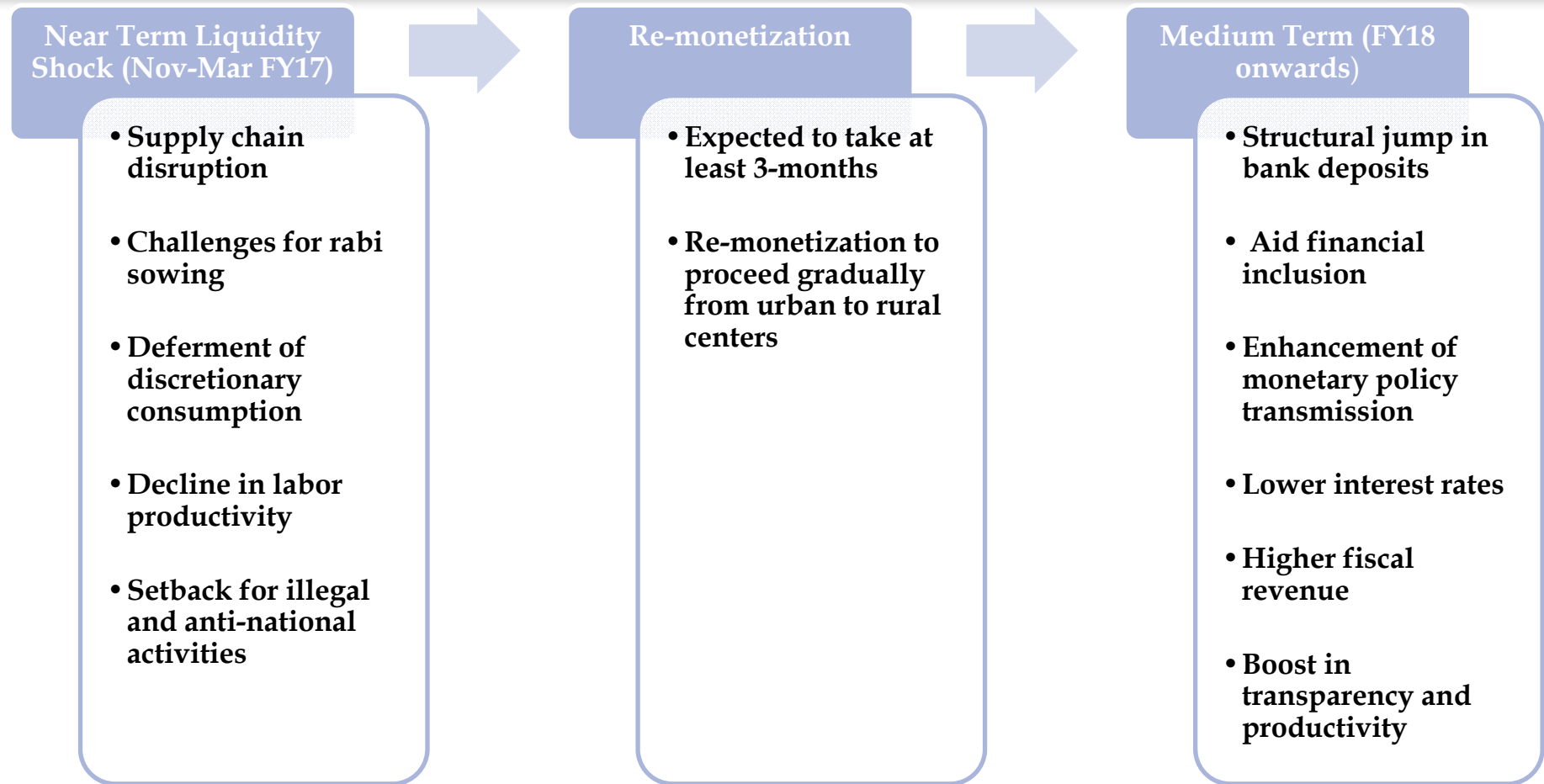
Demonetization



Assumptions:

1. Parallel economy estimated at 21% of total GDP as of 2007. Cash maintained at 13% of black wealth equivalent to Rs 4 trn. 50% of black wealth in form of cash to not be disclosed for fear of legal repercussion
2. No. of maximum unique accounts estimated at ~490 mn, of which 250 mn Jan Dhan accounts. Assuming entire outstanding balance of Jan Dhan accounts to be withdrawn (Rs 0.5 tn), adding withdrawal limits of Rs 24,000 per week on non Jan Dhan account, maximum withdrawals to be capped at Rs 10-11 tn over a period of time.

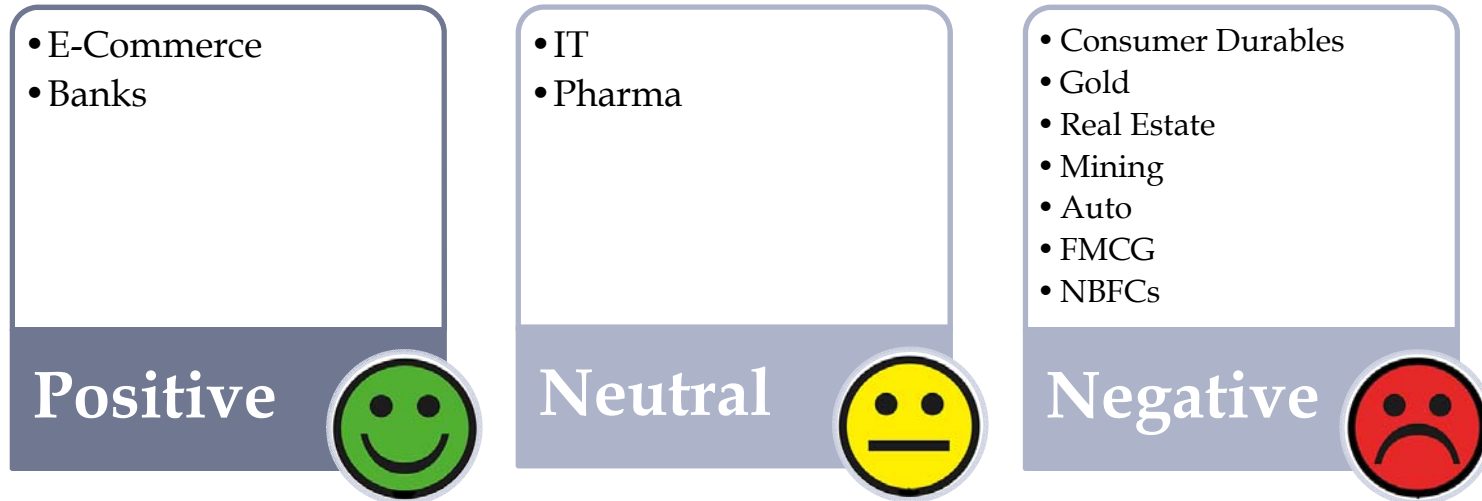
Demonetization: Flowchart of likely impact



The liquidity shock from demonetization is expected to be temporary and have transient negative impact on economic activity in cash intensive sectors

With re-monetization, the negative impact will taper, with economic activity expected to regain momentum from Q1 FY18 onwards

Short Term (Nov-Mar FY17)



Medium Term (FY18 onwards)



Trend in bank deposits and withdrawals

	Cumulative			Delta		
	Deposited	Exchanged	Withdrawn	Deposited	Exchanged	Withdrawn
18-Nov	5116	330	1033	5116	330	1033
27-Nov	8110	339	2166	2995	9	1133
5-Dec*	11554	339	3496	3444	0	1330

* YBL estimate

Note: Post Offices have collected INR 326 bn and exchanged old notes worth INR 37 bn as of 27-Nov

- ✓ **After the initial gush, the run rate for depositing old currency has started to moderate from a daily average of INR 600+ bn in Week 1 to a daily average of around INR 450-500 bn in Week 3**
- ✓ **If this trend continues, then the deposit figure could touch INR 1400 bn by mid Dec-16**
- ✓ **Pace of withdrawal is expected to have picked up momentum on account of salary withdrawal from accounts at the beginning of December month**
 - **From a daily average of INR 129 bn in Week 1 to a daily average of around INR 190 bn in Week 3**

Trend in money market liquidity

Liquidity Infusion (Nov 9 – Dec 5)

- Deposits (INR 11500 bn)
- Government Spending (INR 400 bn)

Liquidity Outflow (Nov 9 – Dec 2)

- Withdrawals (INR 3500 bn)
- CRR hike (INR 3200 bn)
- CMB issuance (INR 1650 bn)
- FCNR(B) maturity (INR 1000 bn)

Note: Amount in table is a rounded off approximation

✓ From a deficit position of INR 557 bn as on Nov 9, money market liquidity currently stands at a surplus level of INR 3.1 trillion

Economic data post demonetization

	Oct-16	Nov-16
PMI - Manufacturing (Index)	54.4	52.3
PMI - Services (Index)	54.5	46.7
PV Sales (% YoY)	4.5	1.8
2W Sales (% YoY)	8.7	-5.9
3W Sales (% YoY)	4.3	-25.9
CV Sales (% YoY)	11.9	-11.6

Note: PMI value below 50 indicates contraction in activity

	Nov-4	Nov-11	Nov-18	Nov-25	Dec-2
Area Sown (Rabi)	-8.3	15.9	-0.7	4.6	8.5

Note: Data for rabi sowing shows change in area sown vis-à-vis corresponding period last year

- ✓ **Services PMI has shown a greater impact vis-à-vis Manufacturing PMI**
- ✓ **Auto sector has seen a contraction in annualized sales**
 - **3W, CV, and 2W sales most impacted so far**
- ✓ **Rabi cultivation has not depicted any signs of pressure due to demonetization with healthy progress observed so far**

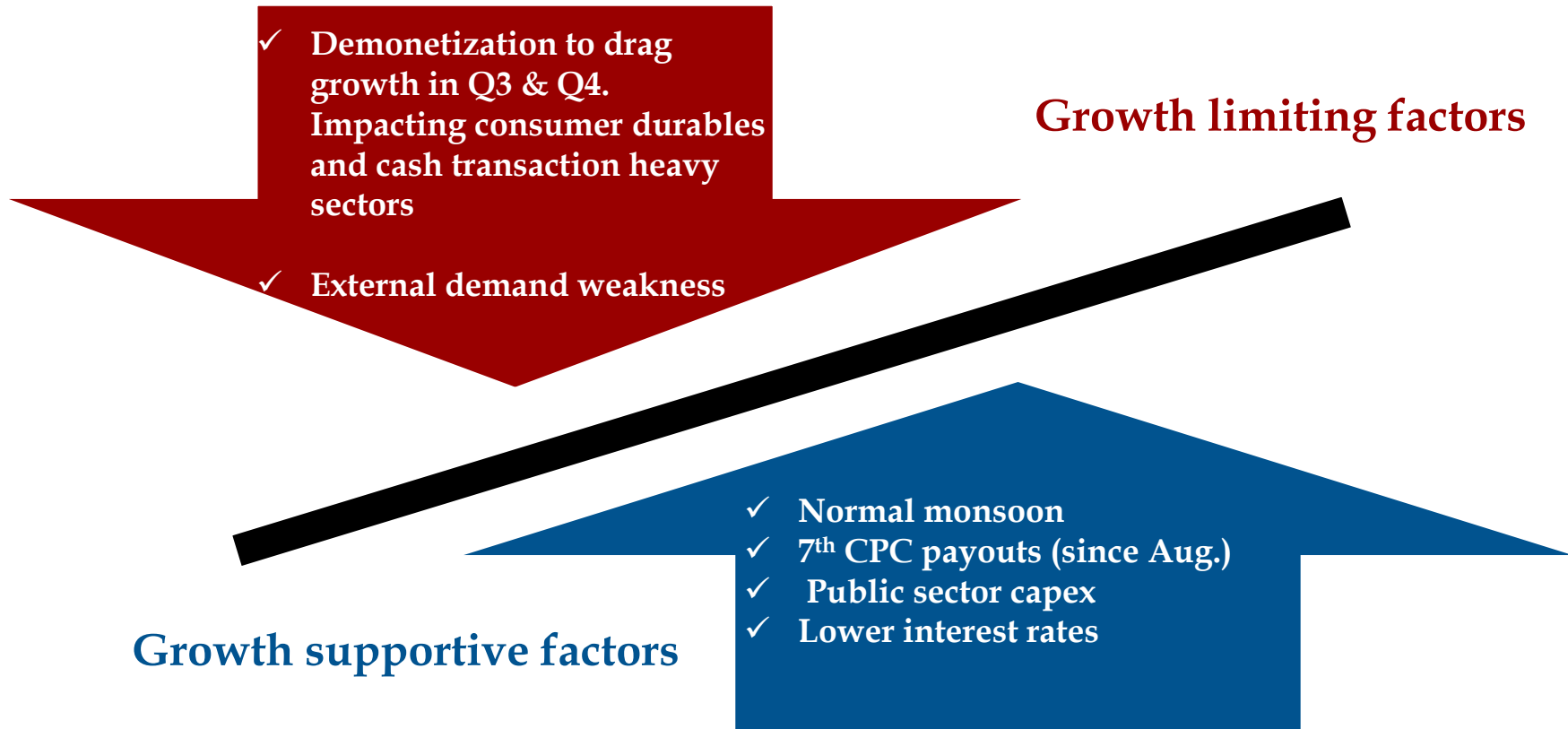
% MoM change in key food items

	Weight in CPI	Nov-15	Nov-16
Cereals	9.7	0.08	2.19
Pulses	2.4	2.30	-0.04
Vegetables	6.0	-0.10	-7.07
Fruits	2.9	-3.68	-1.80

- ✓ **Barring cereals, all major food items have softened in the month of Nov-16 as per high frequency data collected from various government sources**
 - Information for first 4-days of Dec-16 confirms further correction in food prices
- ✓ **We expect CPI Food Index to contract by 0.2% MoM in Nov-16 vis-à-vis an expansion of 0.5% observed in Nov-15**
 - Headline CPI inflation for Nov-16 is expected at 3.95% YoY, down from 4.20% YoY in Oct-16

With CPI inflation expected to undershoot RBI's 5% target for Mar-17 by 50-60 bps, thereby creating room for incremental 50 bps rate cut by Apr-17

FY17 real GDP growth expected at 6.7%

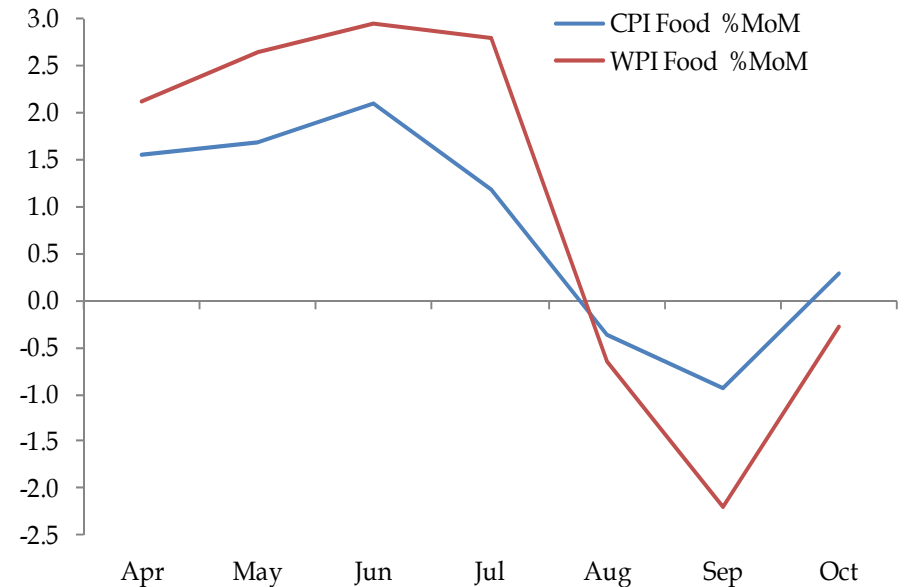
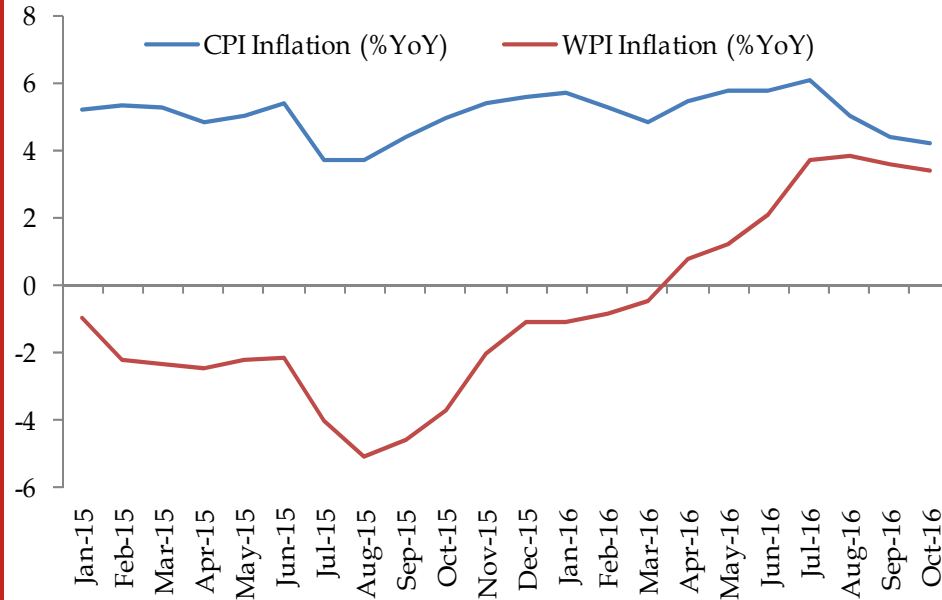


Bottom line: We revise down our FY17 GDP growth forecast to 6.7% from 7.6% previously
The demonetization is expected to impact growth in the short-term with the cash crunch impacting discretionary consumption and cash transaction heavy sectors. We expect growth momentum to normalize from Q1FY18 onwards. Growth in FY17 is expected to be supported by normal monsoon, 7th CPC payouts, public sector led capex and lower interest rates.

Inflation

October Recap: Food driven disinflation continues

CPI and WPI inflation eased further in October... ..as food prices continue to see tepid momentum



- ✓ **CPI and WPI inflation eased to 14-month and 4-month low respectively in Oct-16, driven by continued moderation in food inflation**
- ✓ **On monthly momentum basis, while food prices continued to ease on wholesale side, retail prices saw a marginal uptick in the month**
- ✓ **The festivity related uptick in prices usually seen in pre-Diwali month in items of discretionary consumption remained muted this time**

MSP Hikes marginally higher across the board, bonus incentive for pulses continues

Rabi Crop	2015-16			2016-17		
	Price (in Rs)	Bonus	%YoY	Price (in Rs)	Bonus	%YoY
Wheat	1525		5.2	1625		6.6
Barley	1225		6.5	1325	200	8.2
Gram	3425	75	7.9	3800	200	10.9
Masur (lentil)	3325	75	8.1	3800	150	14.3
Rapeseed/Mustard	3350		8.1	3600	100	7.5
Safflower	3300		8.2	3600	100	9.1

Price momentum for key food items mixed, so far in Nov-16

	Monthly price increments (%)		
	Sep-16	Oct-16	Nov-16
Fruits	-3.7	-4.8	-1.2
Vegetables	-7.8	1.0	-4.9
Cereals	0.2	0.1	1.6
Pulses	-5.8	1.8	2.3
Milk	0.4	-0.1	-0.2
Sugar	-0.3	0.5	0.2

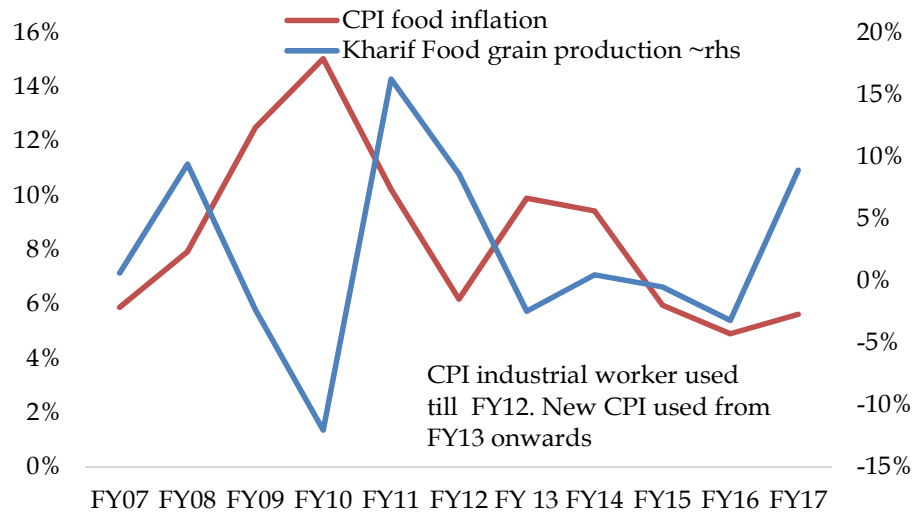
Opposed to media news, we find that vegetable arrivals has not been dented since demonetization announcement

Vegetable Arrivals in Mandi																
Time	Bitter Gourd	Brinjal Long	Brinjal Round	Cabbage	Cauliflower	Garlic	Ginger	Chilly	Okra	Onion	Peas	Potato Fresh	Potato stored	Tomato Hybrid	Tomato local	Total
Upto 8th Nov	258	249	582	1393	1245	573	1425	1189	365	15651	183	4653	4555	2948	1095	36364
8-17th Nov-16	237	309	702	1504	1503	648	1538	1266	370	14818	183	4990	6132	3044	1122	38366
% Change	-8	24	21	8	21	13	8	6	1	-5	0	7	35	3	3	6

- ✓ **MSP average increase announced was 9.4% compared to 7.3% in FY16**
- ✓ **Impact of MSP hike on CPI & WPI is estimated at 26 bps & 15 bps respectively.**
- ✓ **Price momentum for key food items for Nov-16 has so far been mixed, with fruits and vegetables showing disinflation**
- ✓ **Vegetable arrivals continue to maintain momentum, as opposed to media reports stating a decline post 8th Nov demonetization announcement**

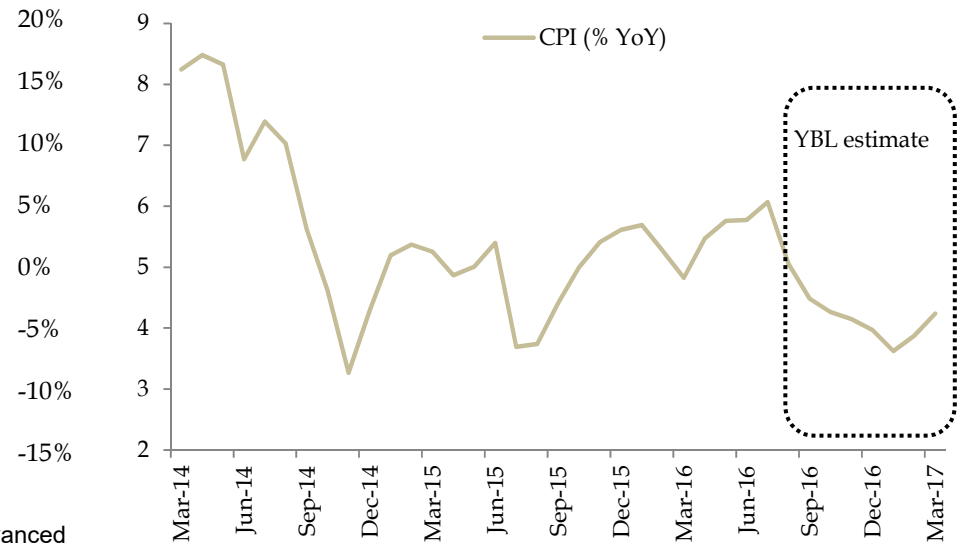
CPI Inflation to moderate further to below 4% from Nov onwards

Rise in kharif food grain output...



* CPI in FY17 is over Apr-Aug period and kharif food grain production is first advanced estimate

...To support moderation in CPI inflation

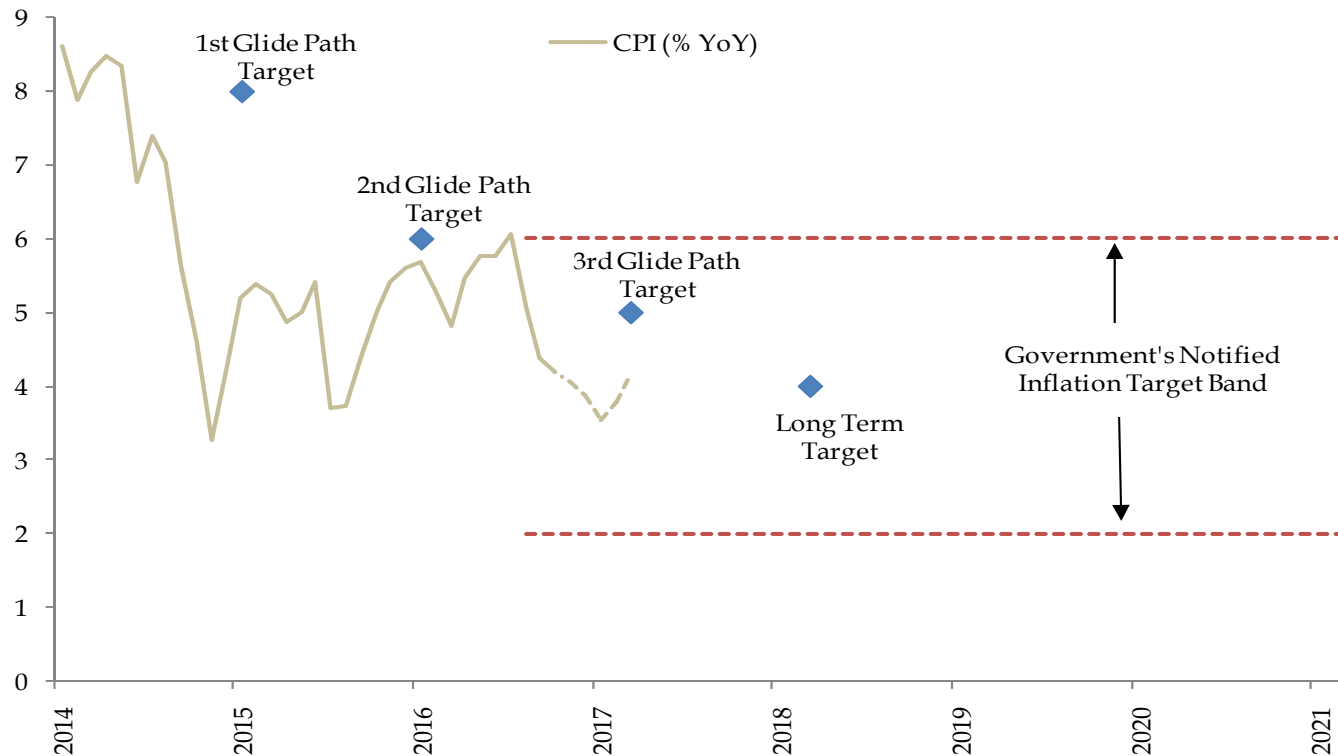


✓ **CPI inflation expected to moderate further to below 4%YoY from Nov onwards aided by -**

- Improved Kharif output and reservoir water levels supporting Rabi output
- Rabi sowing currently stands at 214.73 lakh hectares, ~1% lower than same period last year
- Demand-push factors remaining benign with the recent demonetization adding to the downside

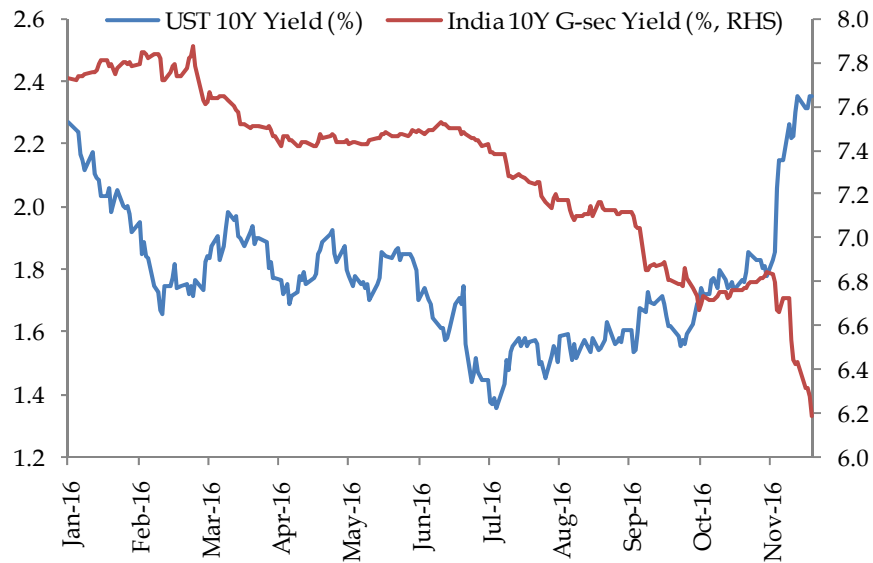
✓ **We expect FY17 CPI inflation to broadly track 4.8% vs. 4.9%YoY in FY16**

Rates View



- ✓ The RBI has been overachieving its inflation glide path target so far
 - Government notified its inflation target of 4% with a band of +/-2%, applicable till end FY21
 - Undershooting of Mar-17 inflation target by as much as 50 bps provides room for another incremental monetary easing

Rates outlook



Downside Risk Factors

- Delay in anticipated growth recovery post demonetization
- Higher than expected structural improvement in bank

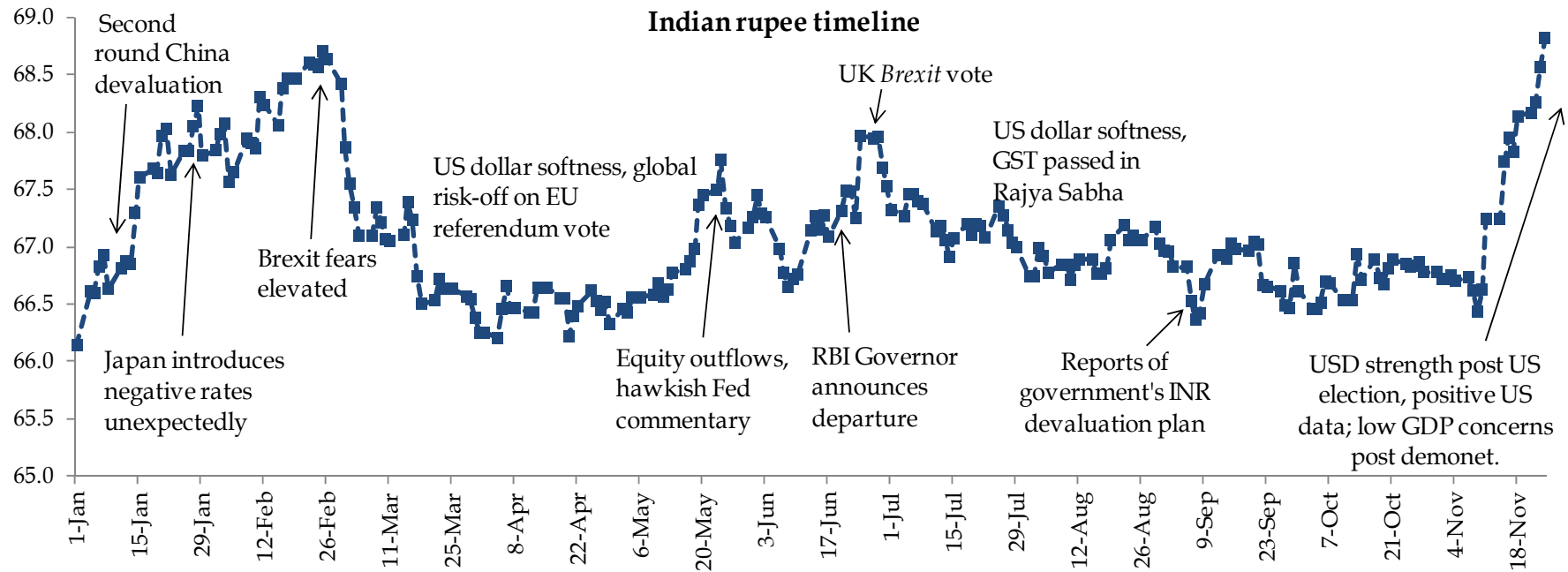
Upside Risk Factors

- Geopolitical risks
- Fed tightening in 2017
- Firming up of commodity prices, esp. oil
- Supply of UDAY bonds in Q4 FY17

- ✓ **Despite a surge in US yields post Trump's election win, local market yields have defied global pressures**
- ✓ **With expectation of 50 bps rate cut from the RBI by Apr-17 and approx INR 1-2 tn improvement in banks deposits on a structural basis (post demonetization), we expect 10Y g-sec yield to soften to 6.25% by Mar-17**

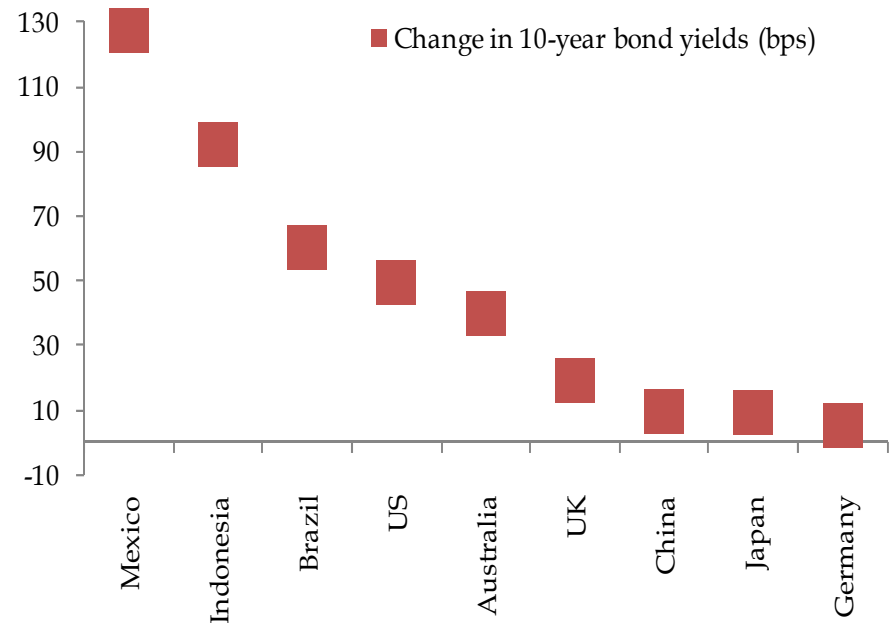
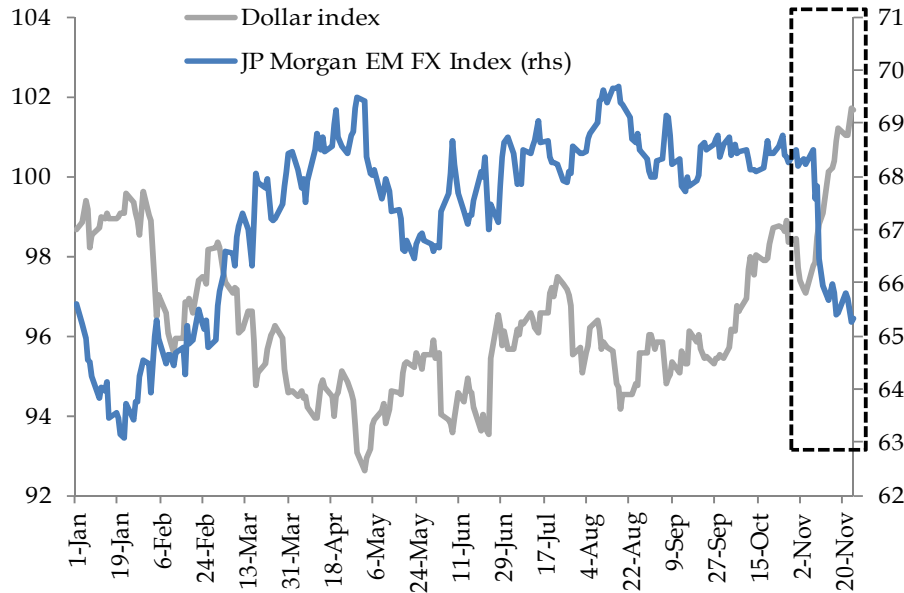
INR view

INR weakness: More global than domestic

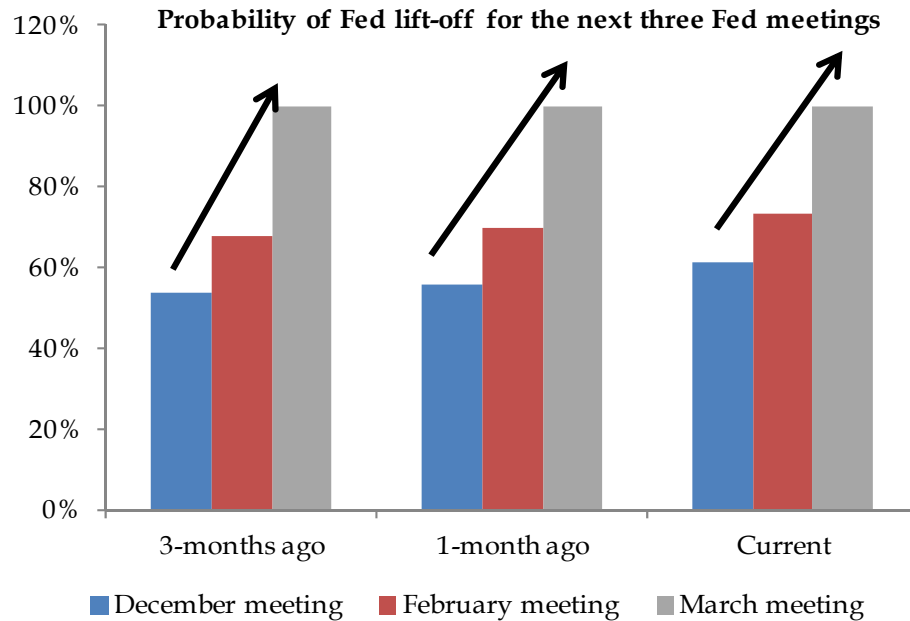


Key global FX themes

- ✓ **Aftermath of the US Presidential elections: Dollar strength and EM outflows**
- ✓ **Monetary policy path of major global central banks (US Fed, BoJ, ECB, BoE, PBoC)**
- ✓ **Unfolding of the *Brexit* process**
- ✓ **Economic rebalancing in China**
- ✓ ***Others*: Commodity price volatility, shift from monetary policy to fiscal policy and structural reforms**



- ✓ **Global financial markets have been roiled by a fresh phase of volatility since the election of republican candidate Donald Trump as US President-elect**
- ✓ **As markets were caught off-guard, the response has been abrupt, with an initial phase of risk-off followed by an equally rapid shift to risk-on sentiment.**
- ✓ **Markets perceive Trump's victory as positive for US fiscal policy reforms and likely inflationary, which in turn would allow the Fed to stick to its rate hike trajectory of 50 bps in 2017**
- ✓ **USD has risen ~4.9% from pre-election trough to trade near 14-year highs, with market perceived probability of a December rate hike having surged to 100%**



An increase in rates could “become appropriate relatively soon if incoming data provide some further evidence of continued progress toward the Committee's objectives”

“holding the federal funds rate at its current level for too long could also encourage excessive risk-taking”

US Federal Reserve Chair Janet Yellen, November 2016

- ✓ **Trump’s election agenda aside, the case for an imminent rate hike in the US has already been building-up amid strengthening domestic macros**
- ✓ **As per the US Fed’s own admission, “job gains have been solid” and the “economy is operating reasonably close to maximum employment”. US central bank’s preferred measure (core PCE inflation) has climbed to 1.7%, the highest since May 2015**
- ✓ **Latest Fed commentary suggests that Fed officials could be in consensus with regard to a December rate hike**
- ✓ **Our base case is for a December rate hike, followed by a 50 bps rate hike in 2017**

Exports may have bottomed across categories



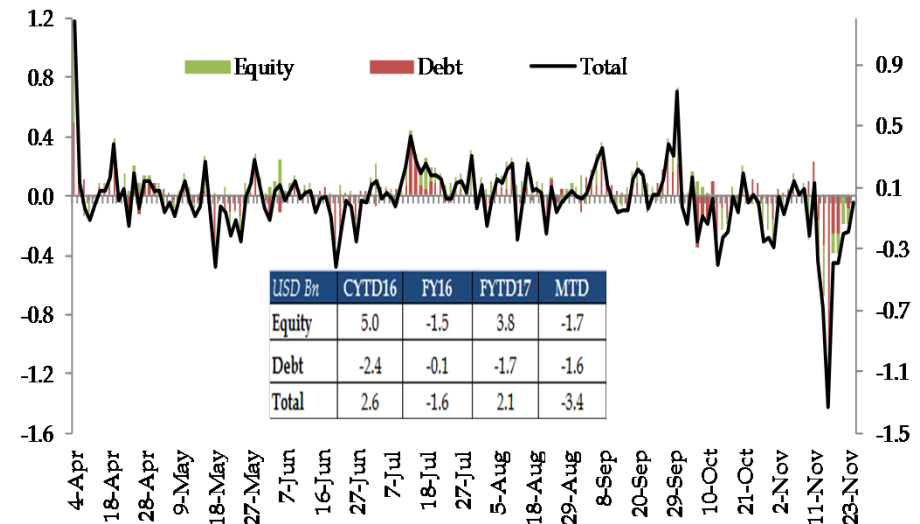
Export volumes are holding-up well

Year-to-date volume growth (%YoY) of major exports	
Salt, sulphur, lime and cement (22%)	Edible oils (8%)
Misc. mfd articles (17%)	Fish and crustaceans (6%)
Sugars and confectionary (29%)	Paper and articles (7%)
Footwear (16%)	Tanning products and dyes (17%)
Plastic and articles (27%)	Leather and products (10%)
Inorganic chemicals, compounds of precious metals (11%)	Tobacco and products (15%)
Edible vegetables and roots (25%)	Project goods, some special uses
Apparel and clothing articles (6%)	Tin and articles (76%)
Electrical machinery and equipment (7%)	Optical instruments (14%)
Articles of stone, plaster, cement etc (10%)	Aluminium and articles (10%)
Misc. chemical products (8%)	Other veg. textile fibres (22%)

Demonetization to shave-off non-oil imports further

India Trade Dynamics*						
	Jul-16	Aug-16	Sep-16	Oct-16	Apr-Oct FY16	Apr-Oct FY17
USD Bn						
Exports (1)	21.7	21.5	22.9	23.5	155.2	155.6
%yoy	-6.8	-0.3	4.6	9.6	-16.9	0.4
Imports (2) = (3) + (4)	29.5	29.1	31.2	33.7	233.4	208.7
%yoy	-19.0	-14.2	-2.5	8.1	-14.4	-10.3
Oil imports (3)	6.8	6.8	6.9	7.1	55.1	46.6
Non-oil non-gold imports	21.6	21.2	22.5	23.0	159.1	150.6
Gold imports	1.1	1.2	1.8	3.5	19.2	11.5
Trade Balance = (1) - (2)	-7.8	-7.6	-8.3	-10.2	-78.2	-53.1

FII outflows a concern



USDINR to reach 68 by Mar-2017, with an eventual move to 70 over the next 12 months

USDINR	Current	Dec-16	Mar-17
New forecast	68.7	68.5	68.0
Old forecast	-	67.5	67.0

Upside in the INR amid unexpected domestic and global events:

- ✓ Unanticipated USD strength post US election
- ✓ Domestic market volatility following demonetization

Macro-fundamentals remain unchanged:

- ✓ Strong domestic macros, policy credibility, comfortable domestic and external sector ratios and policy credibility to continue to cushion INR from sharp depreciation
- ✓ INR to continue to outperform peers

Key future events to watch:

- ✓ Global: US Federal Reserve monetary policy meeting on December 13-14, 2016
- ✓ Global: US President-elect Trump's policy announcements in 1Q2017
- ✓ Domestic: India Union Budget in 1Q2017

Key YBL Forecasts

	FY13	FY14	FY15	FY16	FY17 (YBL)	Balance of Risk	Last Change in Forecast
Annual Forecasts							
Nominal GDP (%)	13.9	13.3	10.8	8.7	10.5	Neutral	Down (Nov-16)
Real GDP (%)	5.6	6.6	7.2	7.6	6.7	Neutral	Down (Nov-16)
CPI (% , Average)	9.9	9.4	6.0	4.9	4.8	Downside	No Change
WPI (% , Average)	7.4	6.0	2.0	-2.5	3.5	Downside	No Change
Fiscal Balance (% of GDP)	-4.9	-4.4	-4.0	-3.9	-3.5	Neutral	No Change
Current Account (% of GDP)	-4.7	-1.7	-1.3	-1.1	-0.5	Neutral	Up (Nov-15)
BoP (USD bn)	4	16	61	18	12	Downside	Down (Nov-16)

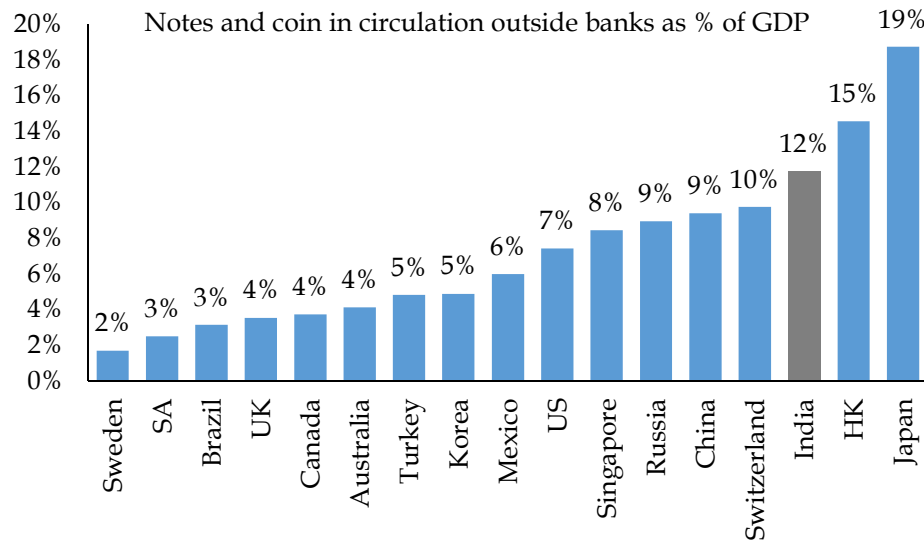
	Q4 FY16	Q1 FY17	Q2 FY17	Q3 FY17	Q4 FY17 (YBL)	Balance of Risk	Last Change in Forecast
Quarter End Forecasts							
Repo Rate (%)	6.75	6.5	6.5	6.00	5.75	Neutral	Down (Nov-16)
CRR (%)	4.00	4.00	4.00	4.00	4.00	Upside	No Change
SLR (%)	21.5	21.25	21	20.75	20.50	Neutral	No Change
10Y G-Sec Yield (%) (eop)	7.71	7.46	7.13	7.12	6.25	Neutral	Down (Nov-16)
USDINR	67.5	66.9	67.0	68.5	68.0	Upside	Up (Nov-16)

Thank You!

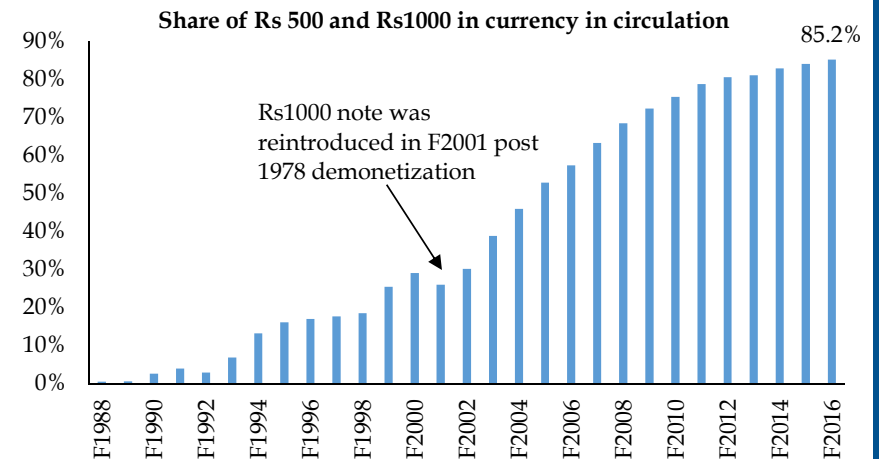
Appendix

Useful facts and figures

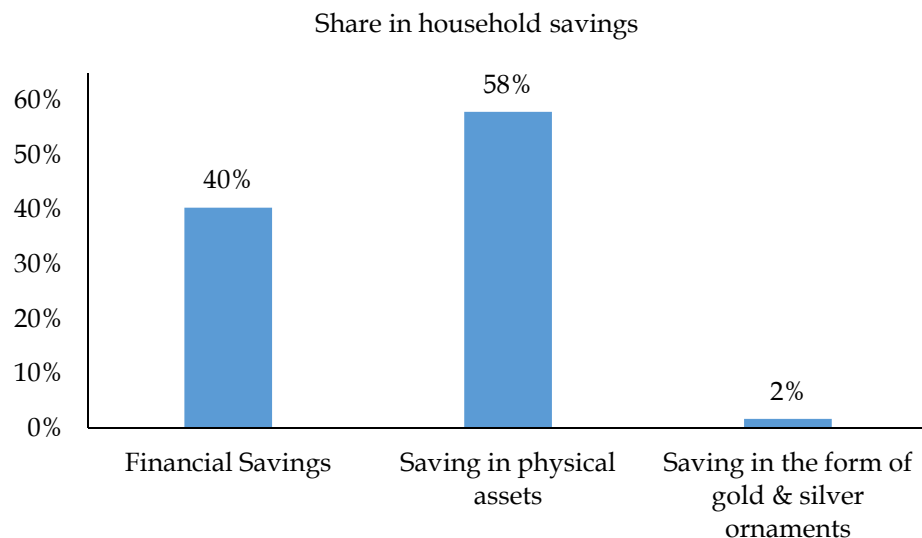
Cash dominates the Indian economy



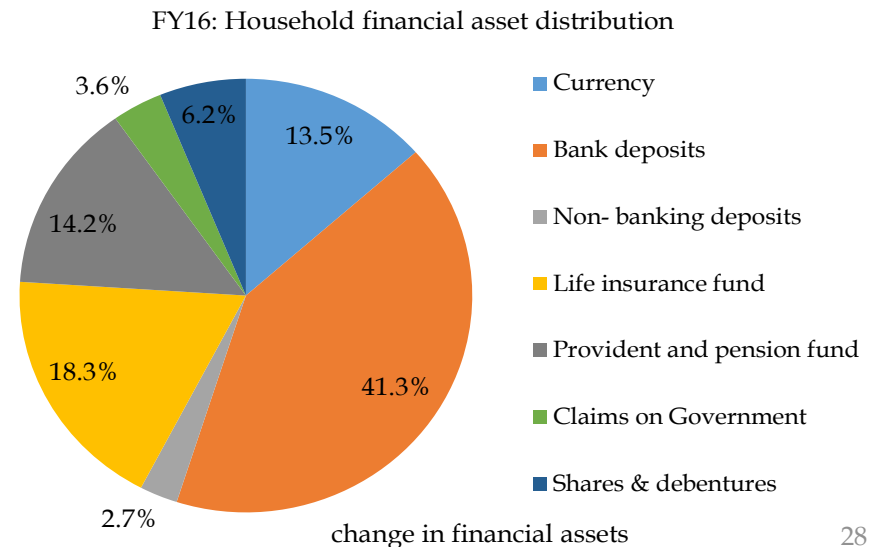
85% of currency in circulation in Rs500 & Rs1000



Majority household savings in physical assets

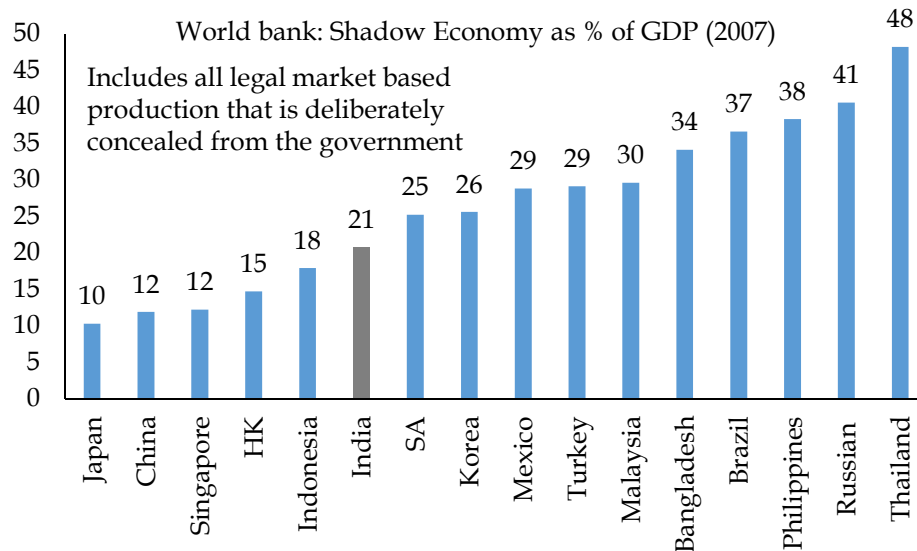


Household hold 13.5% of financial assets in cash

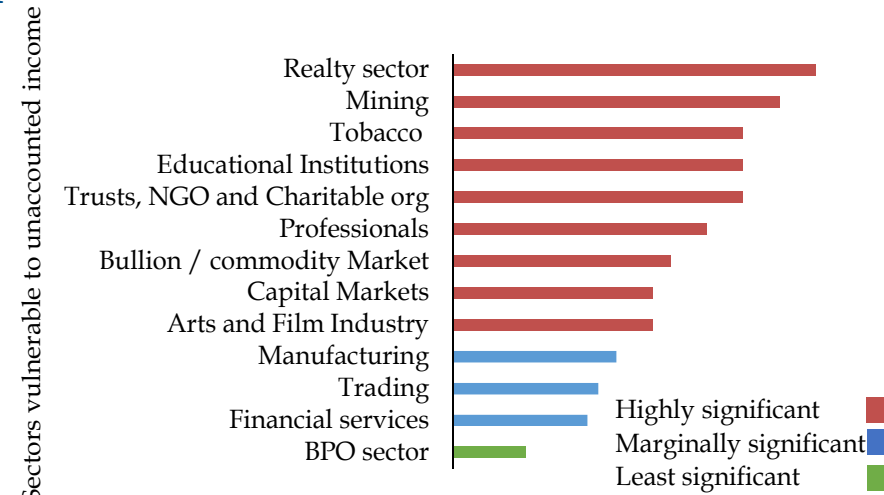


Black money statistics

India's shadow economy estimated at 21% of GDP



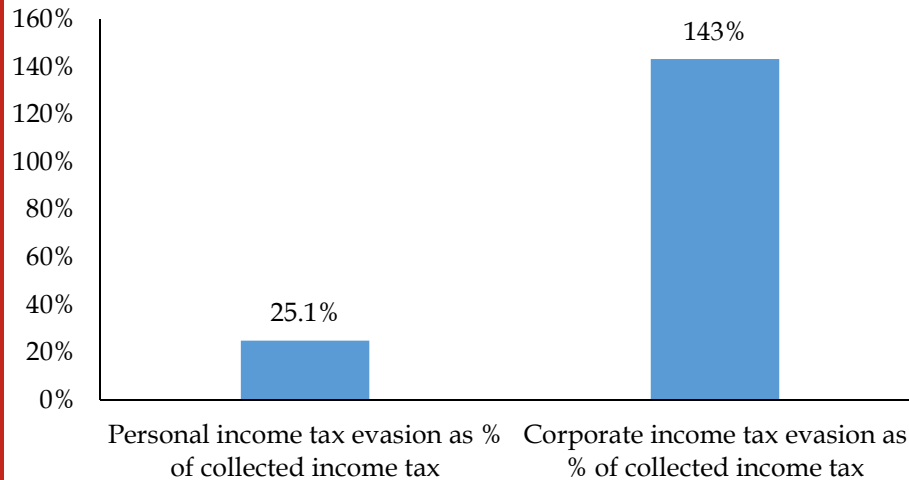
Sectors vulnerable to unaccounted income



Source: Field survey of senior revenue officials (CBDT)

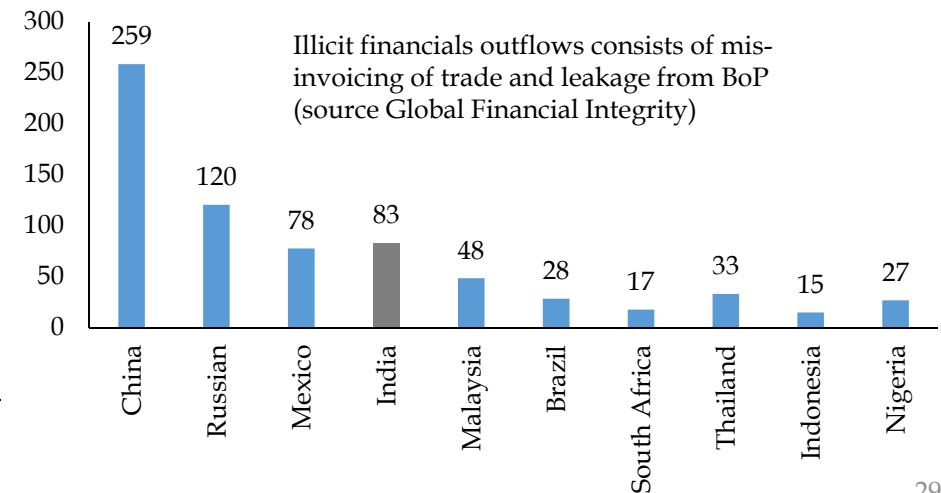
Extent of direct tax evasion

F2010: Direct tax evasion (estimated by CBDT)



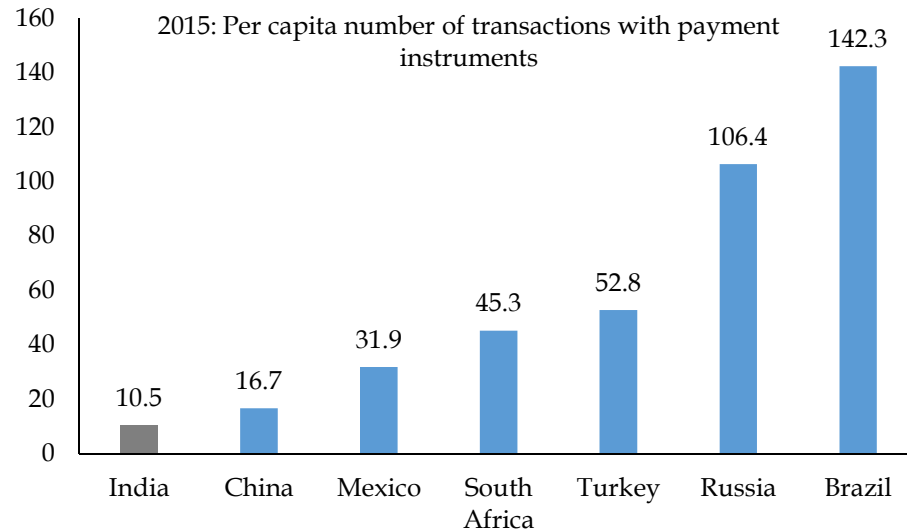
Top 10 economies: Illicit Financial Outflows

USDbn

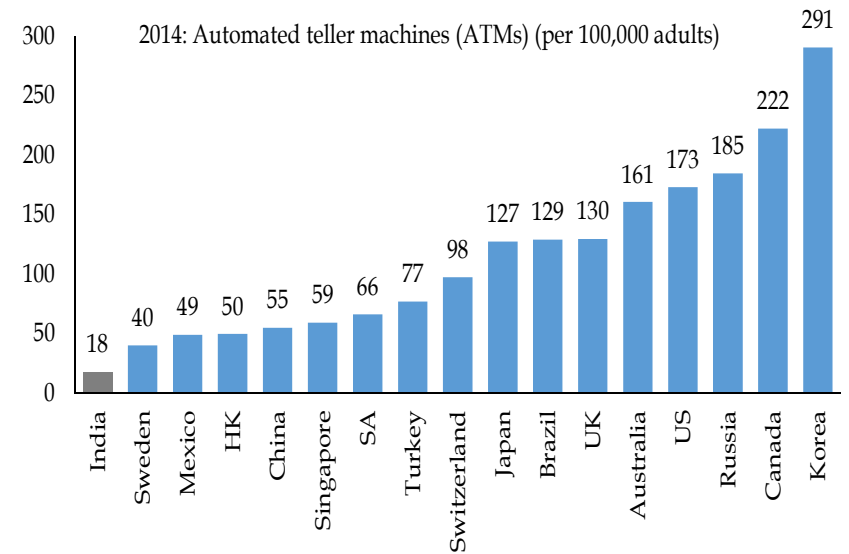


Electronic payments infrastructure

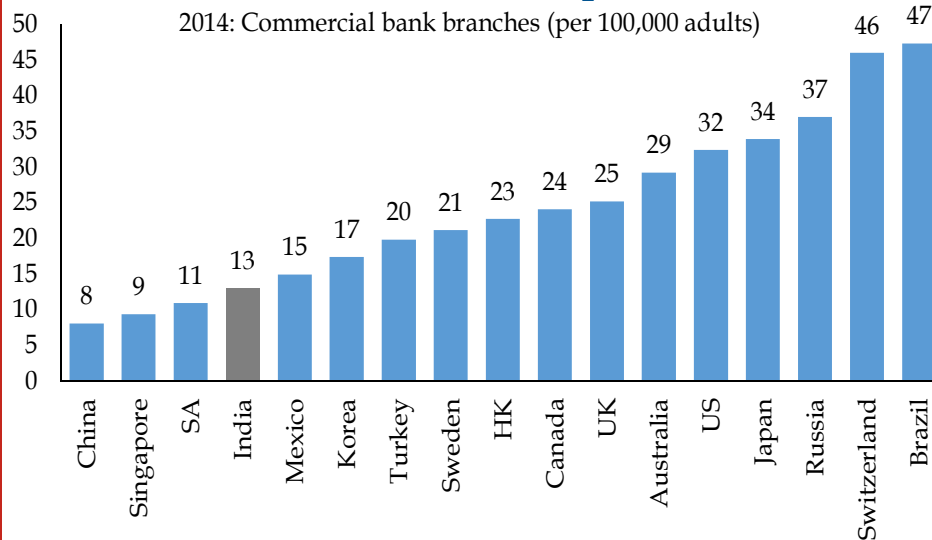
India lags in cashless transactions



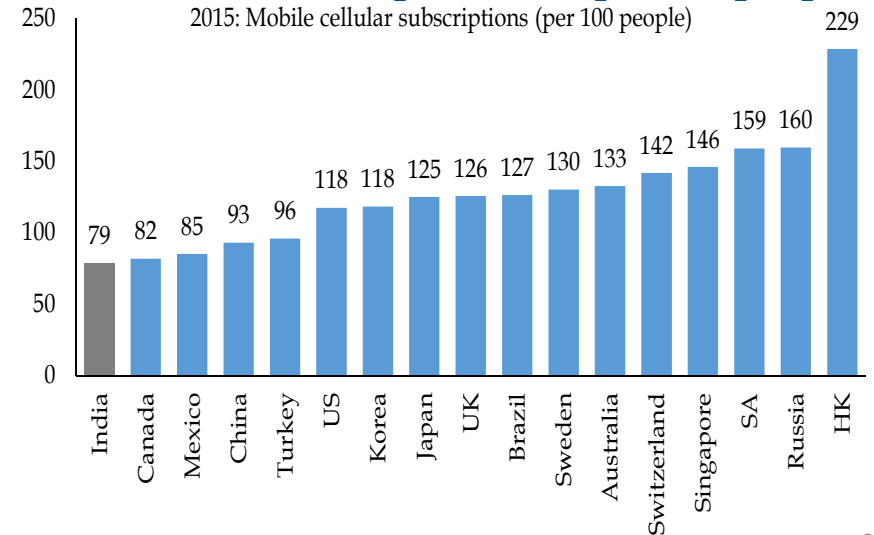
Limited reach of ATMs machines



India has 13 bank branches per 100K adults



India mobile subscription at 79 per 100 people



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Note: Data in this report has been sourced from CEIC, Bloomberg, GoI Budget Documents & Economic Survey, CGA, Ministry of Petroleum & Natural Gas, IMD, RBI, IMF, and YES BANK Limited

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YES BANK has adopted international best practices, the highest standards of service quality and operational excellence, and offers comprehensive banking and financial solutions to all its valued customers.

YES BANK has a knowledge driven approach to banking, and offers a superior customer experience for its retail, corporate and emerging corporate banking clients. YES BANK is steadily evolving as the Professionals' Bank of India with the long term mission of "Building the Best Quality Bank of the World in India" by 2020.