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India since Demonetisation

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Abstract

In India, tax to GDP ratio, at around 18 percent, is amongst the lowest in the world, probably because India, as mentioned in the Union Budget of 2017-18, is a tax non-compliant country. Tax evasion and corruption are deterrent to economic growth. Given that India is an emerging country, there are extensive infrastructure requirements which need high development expenditure. There is an immediate and constant need for resources which are of non-debt in nature to ensure respite from the existing level of high interest burden. Demonetisation is a step in ensuring an honest tax regime, better tax collections, and lower dependence on borrowings.

Keywords: Demonetisation, unaccounted money, cashless transactions, corruption, fake currency

India since Demonetisation¹

The unique experiment with demonetisation, announced on November 8, 2016 by the Prime Minister has established that the Central Government is serious about tackling the menace of corruption. The relentless fight against corruption was further reflected in the Union Budget of February 1, 2017 through restrictions on funding of political parties and on cash transactions; and the current year's budget (2018) includes some extensive provisions to push infrastructure for digitalization as well. The experiment of demonetisation by the Government has largely been successful in educating the masses about the benefits of electronic payments and digitalization.

Initially, broadly, demonetisation of high currency notes had a two-fold objective – first, choking the funding channels of militancy and terrorism from across the border and to fight corruption. Since then, in continuing the focus on corruption, government has placed emphasis on digitizing India.

The amount of demonetised notes which subsequently returned to the Reserve Bank of India (RBI) between November 8 and December 31, 2016 strongly demonstrate that corruption is rampant in the economy. The eradication of corruption is not only a social necessity but also has strong economic rationale. The war against the malaise of corruption has to go beyond a series of surgical strikes and needs precise planning with scenario analysis, and then flawless execution. In that respect, demonetisation of November 2016 deserves a contextual review wherein the government may consider strengthening efforts to eradicate corruption from an exclusively tax-oriented approach to a broad-based approach. Prevention of corruption needs strong policy deterrence which requires effective administration, and technology-based data processing to generate actionable intelligence.

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Understanding demonetisation as a policy instrument requires analyzing its effect on performance of the major macroeconomic indicators. The trend from such analysis in the last one year since November 2016 indicate that economy is recovering. The immediate pain in terms of non-availability of high value currency notes could have got reflected in reduction of output in agriculture, which might have in turn spilled over to industry and services. Due to short-term nature of the liquidity constraint, it was expected that consumption might not get impacted, as also business investment which is largely based on overall climate and interest rates.

In the initial months, demonetisation was expected to lead to lower conspicuous consumption and real estate activity which could result in suffering of residential investment, impacting nearly 300 industries which provide inputs in housing sector. Therefore, India's growth rate in short run was a matter of concern. The microfinance institutions, in the absence of high denomination notes, could have suspended some of their operations for a short time. In the long run, implications were uncertain. On one hand, confidence in efficient management of the economy would have led to a positive effect while a shock strike at unaccounted economy could have led to shrinkage in production, especially in the informal sector including micro, medium and small enterprises.

This paper attempts to capture the course of the Indian economy since demonetisation of November 2016. An attempt is made to understand demonetisation in a continuum of other major policy reforms taken in the economy like GST, and Digital India. The paper attempts to evaluate major fiscal and monetary variables and their trends pre and post-demonetisation along with an analysis of sectoral performance of economy during the period.

To understand the developments in Indian economy since demonetisation of 2016 requires focusing on further specific objectives to develop a deeper understanding:

- To study the developments in fiscal and monetary variables since demonetisation; performance of macroeconomic indicators; and overall growth trend in the economy.
- To understand the progress in achievement of greater tax compliance, formalization and digitization through demonetisation.
- To analyze overall impact on corruption and unaccounted economy since the policy was announced.
- To understand progress made in transition of India from highly cash dependent economy to less cash economy.

To bring out the rationale of Demonetisation, the paper is organized in following sections. The next section focusses on how corruption is a deterrent to economic growth followed by Section 3 on the need for demonetisation. A brief review of literature is presented in Section 4. Section 5 takes detailed account of Indian Economy since Demonetisation wherein issues of tax non-compliance and overall outlook of economic activity in relation to the scheme is discussed. Section 6 exclusively discusses the issue of unaccounted income in India in the backdrop of challenges as a cash-based economy, the money laundering habit, India's appetite for gold and portfolio flows. Data analysis in Section 7 directs focus on capturing the trend of major macro-economic indicators and progress made in terms of the stated objectives of the scheme. Section 8 discusses the findings from various surveys conducted under separate studies and a short survey undertaken to capture the urban response towards demonetisation. The challenges still lying ahead for India in terms of getting closer to achieving the underlying objectives/agenda of the scheme are discussed in Section 9. Finally, conclusions and recommendations are presented in Section 10.

Section 2: Corruption and Economic Growth

Corruption, in socio-economic terms, has both direct and indirect costs. While the direct costs are well known in terms of scandals and loss of confidence in administration, the indirect costs are debilitating causing low growth and higher income inequality. It can also erode the ethical standard of citizens.

Corruption undermines government's ability to deliver economic growth and adversely affects a number of variables like macro financial stability, investment, human capital formation and productivity. It weakens government capacity to raise revenue and perform its core functions by diluting culture of complaints and increasing tax evasion. It inflates costs in public procurement process and undermines its quality. It can lead to distrust of government policy which if becomes pervasive can lead to violence and conflict with social and economic implications. It also impedes conduct of budgetary and monetary policy, weakens financial oversight and hurts inclusive growth. Thus, corruption has significant impact on macro-economic stability and sustainable economic growth (IMF, 2016 and Baum, 2017).

The general costs also rise in the economy as citizens, manufacturers, and industrialists factor corruption in the pricing model. The uncertainty for firms in turn hurts growth of economy. Social

and environmental concerns are relegated, and enforcement of environmental regulation suffers leading to more pollution and over extraction of natural resources which also has health implications. It can lead to political instability, conflict and policy paralysis as had happened in the case of mining sector in India.

In India, black money is estimated between 10 and 30 per cent of official national income (Singh, 2016). The important thing is to retain confidence in the country's institutions and currency as money is all about trust. Illustratively, in the island of Yap, in Pacific Ocean, the currency called *fei* was of large 12-foot diametric stone wheels. When a *fei* of a wealthy man got washed away into the ocean, the policy makers of Yap decided that as the loss was due to a natural calamity, the economy would continue functioning normally. Even today stone money is valued in Yap.² In another illustration, not too long ago, in the Kurdish dominated area of Iraq, Swiss Dinar, without any Government support or that of any central bank, continued to function normally for more than a decade from 1993 to 2004, simply based on trust and faith.³

Estimates of Black Money in India

There hasn't been much uniformity in methodological stance and certainty in estimation of black money in any economy. Shadow economy runs parallel and has numerous inevitable linkages with the white economy, so there exists a wide variation in the figures reported.

Some of the popular approaches to estimating black money are input/output method, monetarists' approach of National Accounting System (NAS), survey approach and fiscal approach. According to Government of India (2012), in India, various studies have indicated that only 6 percent or so of India's black market wealth is actually kept in cash. Some of other popular estimates given are:

- Kaldor's estimates followed a fiscal approach that focused on quantifying non-salary incomes - 3 to 10 percent of GDP from 1960-61 to 1976-77.
- Chopra's estimate focused on tax evasion from non- payment/underpayment of excise duty, sales tax, custom duties, substituting agricultural income for non-agricultural income- 1960-61 at 6.5 percent of GNP and for 1976-77 at 11.4 percent of GNP.

² Mankiw, 2016.

³ Disowned Currency: The odd case of Iraqi Swiss Dinar. The blog of J P Koning, Moneyiness, May 27, 2013.

- The Wanchoo Committee, 1971 popularly known as The Direct Taxes Enquiry Committee, estimated assessable non-salary income evaded from tax for 1961-62 at Rs. 811 crore. After required adjustments from Income Tax Act, revised estimates were at Rs. 700 crore for 1961-62 and Rs.1,000 crore for 1965-66.
- Gupta and Gupta followed transaction-income approach for their estimation from 1967-68 to 1978-79 and came up with a substantially higher value ranging from 25 to 50 percent of GDP.
- In Rangnekar's estimate, tax evaded income estimates were calculated to be around Rs.1,150 crore in 1961-62, and Rs.3,080 crore in 1969-70.
- Estimates provided under commissioned studies conducted by National Institute of Public Finance and Policy (NIPFP) came out to be 20 percent of GDP in 1980-81, and 42 percent of total GDP between 2008-09 to 2011-12.

Section 3: Need for Demonetisation

The total currency in circulation as on March 31, 2016 was Rs.16,415 billion of which notes of Rs.1,000 denomination account for 38.6 per cent (Rs. 6,326 billion) and Rs.500 account for 47.8 per cent (Rs. 7,854 billion). The importance of Rs.500 had been increasing over the years, from 4.1 per cent on March 31, 1990 to 47.8 per cent on March 31, 2016. Similarly, the share of Rs.1,000 note had increased from 1.7 per cent in 2001 to 38.6 per cent in 2016. The total amount of Rs.500 and Rs.1,000 notes amounted to Rs.14,180 billion as compared with India's GDP of Rs.1,35,761 billion in 2015-16 or about 11.5 per cent of GDP, increasing nearly threefold from 2.8 percent in 2001.

The history of Rs.1,000 note is interesting. It was first introduced in 1938 and then demonetised in January 1946. It was re-introduced in 1954 and again demonetised in 1978 only to be re-introduced in 2000. The Rs.500 note was introduced in October 1987-88.

Demonetisation of 1946

In 1946, the currency notes of Rs.1,000 and Rs.10,000 were demonetised. The higher denomination notes were not accessible to common people at that time. So, the currency ban did not have much impact on the common people and the Indian economy. Furthermore, it severely impacted functioning of State Bank of India as there were only 71 bank offices at that time. The bank's profits also took a hit and they were low as compared to that of previous years. The stock market rallied for two continuous years post the demonetisation reflecting impact on economic activity.

Demonetisation of 1978

In 1978, Government demonetised Rs.1000, Rs.5000 and Rs. 10,000 notes. Similar to the recent episode, this action was kept confidential and yet an ordinance was issued to carry out the exercise. However, that ordinance contained sufficient measures for the exchange of the old notes and clearly stated the power of central government in framing of the rules. There was a political angle involved in 1978 demonetisation as the then newly formed Janata government wanted to target some of the alleged corrupt elements in the government. The impact of currency ban on common people was limited as the demonetised notes formed only a small portion of the total money supply.

Demonetisation of 2016

The exercise of demonetisation was carefully crafted as observed by the Prime Minister in his televised talk on November 8, 2016 where he mentioned about completion of festive season and need for strong measures to defend India from menace of counterfeit notes and corruption. The government, given the constitutional provision of right to life, permitted use of old notes in government hospital for medical treatment and buying medicine with doctor's prescription, and making payments for milk and utility bills. To ensure convenience and freedom of travel within the country, purchase of tickets for railway, bus and air travel were permitted with old notes, and toll on highways was exempted. Similarly, grace period was offered on purchase of petrol, diesel, and gas and LPG gas cylinders for cooking. To ensure comfortable international travel, use/exchange of old notes at international airports was also permitted. In view of sowing season, old notes were permitted to be used for purchase of seeds. For general convenience payment of

school fees as well as provisions for marriage functions were also made. The Post Offices which have a significantly larger presence in rural areas than commercial banks were also permitted to exchange old notes. To address the emerging issues, given that 86 percent of the currency was demonetised, 126 amendments were introduced in the course of 51 days.

Section 4: Review of Literature – Select Studies

In the context of India, several quick studies were conducted on demonetisation. A brief review of literature of a few selected studies is presented in the following analysis-

- Reddy (2017) attempts to understand the larger picture of the situation and its way ahead through three major strands; explanations and analysis of demonetisation, discussion on the possible alternative that could have been implemented, and examination of new objective of digitalization.
- Providing valuable reference on cross-sectoral prevalence of corruption, Desai (2017) tried to put forward an action agenda devised in terms of a consistent fact-based diagnostic and analytical approach, on the cumulative and cascading impact of corruption (coming from a legacy of electoral finances) on common citizen.
- Kapila (2017) investigated impact of demonetisation in terms of rationale, the aftermath, the short and the long term economic impact, and the social and political fallout.
- Sharma (2017) addressed various consequences, benefits and drawbacks and issues relating to demonetisation in terms of its impact on black money, fake currency issues, industry, business, service class and different segment of the society.
- Jain (2017) suggested that the move had definitely brought a war on cash and pushing the objective of digitalization and cashless economy will reap long term benefits.
- Dhingra (2017) argued that demonetisation is a powerful instrument of state policy that works like a divine ‘Brahmastra’ and has to be used with utmost care and caution.
- Vaidyanathan (2017) provided a vivid perspective on estimation of black money and historical analysis of unaccounted money in India.
- Singh (2017) highlighted the seriousness of black economy situation in India.

- Singh and Roy (2017) argued that demonetisation increased bank deposits, which if sustained, could have favourable impact on financial savings and their channelization to capital markets.
- Maiti (2017) argued that demonetisation could help usher use of technology in transactions.

Section 5: Indian economy since Demonetisation

India, a Tax Non-Compliant Society

In India, tax to GDP ratio at 18 percent is nearly half that of advanced countries (Chart 1). The low tax to GDP ratio is mainly because India remains a tax-non-compliant society as the number of income tax payers has been generally low over the years. In a population of 1.2 billion, there are just about 37 million people filing individual tax returns. Of these, only 7.6 million people declare income above Rs.5 lakh, with salaried class accounting for 5.6 million people. In India, only 20 lakh people claim income above Rs.50 lakh. Still interestingly, of the 56 million informal sector individual enterprises, only 18 million file returns. And, of the 1.4 million registered companies only 0.6 million file returns, and companies showing profit of more than Rs. 1 crore are just about 36,448.⁴ This trend continues in spite of the country having a large market for luxury villas and cars; ever rising gold demand; booming stock market; and a large number of high net worth individuals.

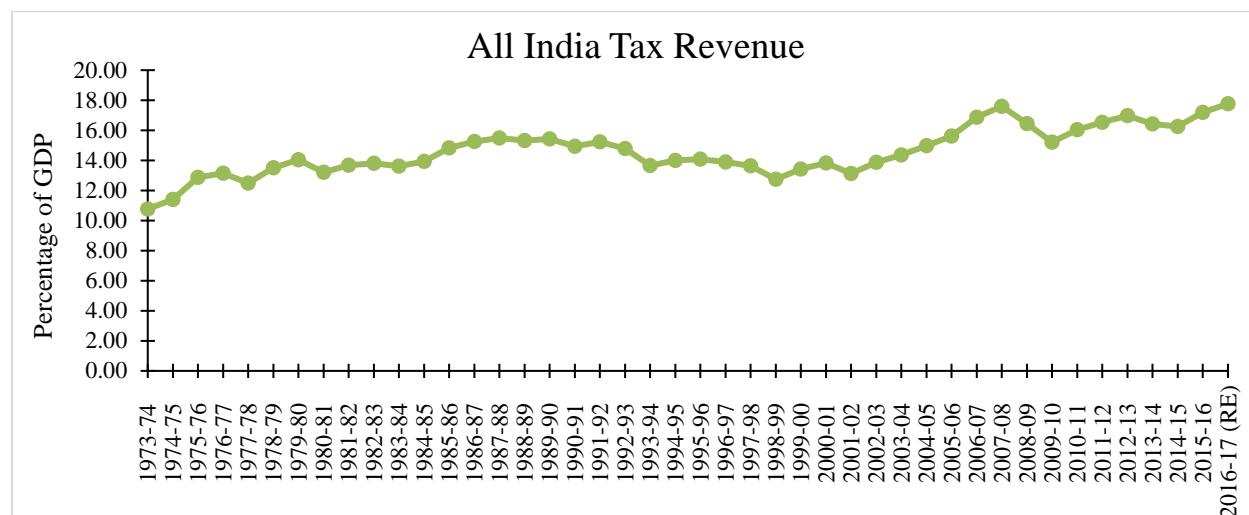
However, after demonetisation, the number of returns filed as on August 5, 2017 were 24.7 percent higher compared to previous year. Advance tax collections of Personal Income Tax grew by 41.79 percent over the last year. Personal income tax under Self-Assessment Tax grew at 34.25 percent over the last year. Hence, demonetisation seems to have worked in making India more tax compliant and giving our fiscal policy more bandwidth.

The jolt of demonetisation to push this ratio up probably proved out to be a big boon. Yet, the Economic Survey (February, 2018) highlighted two macroeconomic vulnerabilities of India- fiscal and current account frugality/prudency- which requires breaking the inertia of tax to GDP ratio. Sadly, India's tax to GDP ratio hasn't been growing fast enough given that in last 45 years it has

⁴ Government of India (2017).

seen an increase of just 7 percent. There is certainly something wrong in tax collection, both direct and indirect.⁵

Chart 1: Tax-to-GDP



Source: RBI, Database on Indian Economy.

So, the crucial issue is how to increase tax compliance? Should it be through reward or punishment? Since the seminal research on “Crime and Punishment” in 1968 by Professor Gary Becker, Nobel laureate and influential work titled “Income Tax Evasion” by Allingham and Sandmo in 1972, there has been substantial research in this area. In the US, compliance is high because audits have a strong deterrent effect on general population. But the literature is divided and a number of studies conclude that punishment leads to anger, resentment, hostility, avoidance and minimum compliance. On the other hand, rewards could be more effective than punishments for eliminating undesired behavior or for motivating desired behavior because it is perceived as supporting. In fact, empirical literature, including extensive work by Professors Feld and Frey (2002), and Torgler (2003), unanimously support the view that rewards lead to higher tax compliance. The reward system could vary in different economies and situations. Professor Rosenberg, University of San Francisco’s School of Law suggested lower tax rates while Professor Kornhauser, Arizona State University proposes special schemes like faster access to special phone

⁵ Government of India (2018).

lines with a shorter wait. Additionally, to ensure higher tax compliance, there is need to incentivize tax collectors and tax intelligence agencies too.

Progress after Demonetisation

Theoretically, economic implications of demonetisation on macroeconomic variables are difficult to predict and quantify in absence of qualitative and quantitative data. However, a general trend can be discussed. The agriculture sector generally works on credit, and is mainly cash-rich during harvest, when financial accounts are settled in rural areas. Therefore, sowing may not be expected to be impacted by a short-term cash crunch. Similarly, large industry is dependent on banking sector so benefits from progress in digitalization hold greater value than level of transient disruptions caused from cash-crunch. In long run, banks are expected to hold large amount of funds and be able to lend to market at lower rates of interest, encouraging growth. The MSME sector which is generally constrained due to financial resources could benefit with increased funds from banking sector.

Impact on total output of the country can also be gauged by understanding consumption, investment, government expenditure and net exports. As consumption is mainly dependent on income, current and from existing wealth, and income didn't change much with demonetisation, consumption expenditure was not likely to change though it might get postponed temporarily. Similarly, investment is mainly a function of interest rates and since demonetisation was expected to result in lower interest rates, eventually there should be a boost in investment.

Government expenditure was expected to increase with higher dividends from banks and the RBI. The output in the country is a function of available labor, capital and technology and it generally does not fluctuate widely in short run. Further, with larger amount of liquidity in the system, relative to output, inflationary pressures could increase, leading to currency depreciation and higher exports while discouraging imports. Thus, according to economic logic, theoretically demonetisation should not have led to any significant deterioration in growth in medium to long-run, though in very short run there could have been some disruptions (Table 1).

Table 1: Outlook for Economic Activity as a Result of Demonetisation

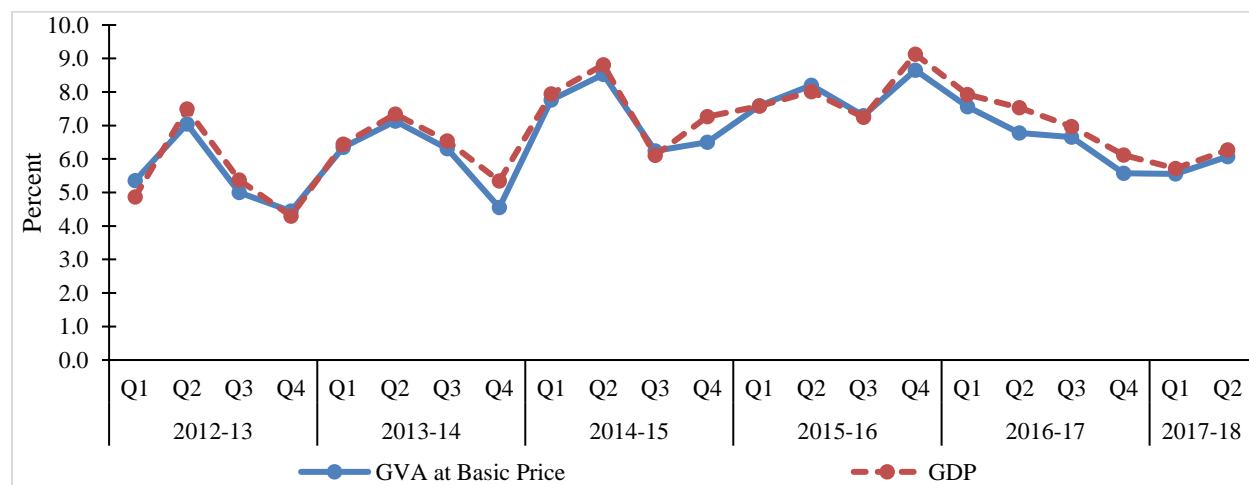
Components of GDP	Primarily a function of	Short-term	Medium-term	Long-term	Remarks
Consumption (C)	Y	Partially postponed	Recover	Recover	Income should not get impacted. Fall in conspicuous and discretionary consumption in short run.
Investments (I)	r	Stable	Increase	Increase	Interest rate would be lower, boosting Investment.
Government Spending (G)	T	Stable	Increase	Increase	Higher compliance and fear of law will improve tax collection.
Net Exports (XM)	Exchange rate (E)	Stable	Increase	Increase	But increase in MS and resultant increase in inflation, could lead to depreciated currency.
Income/Output (Y)	Labour (L)	Unskilled labour impacted, and employment rate rises	Increase	Increase	Higher investment should lead to higher employment
	Capital (K)	<ul style="list-style-type: none"> • Loss in production due to liquidity crunch • Impact on working capital 	Increase	Increase	With increase in liquidity in banks, availability of capital will increase for firms
	Technology	Stable	Increase	Increase	With prospects of increased production, technology should improve.
Interest Rate (r)		Stable	Lower	Lower	Increased deposits with the banks will lead to lower interest rates.
Exchange Rate (E)	Inflation	Stable	Depreciate	Depreciate	Related to increase in inflation
	Productivity	Stable	Increase	Increase	Improved technology would lead to higher productivity.
Inflation (π)	MS	Stable	Increase	Increase	Higher MS would lead to higher inflation rate.
Money Supply (MS)	Y, r	Increase	Increase	Increase	Higher deposits leading to higher MS

Source: Author's Analysis

Outlook of Economic Activity

Interestingly, demonetisation happened at a time when global economy was suffering from overall subdued demand. India, despite the slowdown in growth following demonetisation, still managed to maintain above average global growth rate level (Chart 2). The growth in Indian economy has recovered in the latest quarter to above 6 percent GDP growth which has been led by a rebound in manufacturing and agricultural output.

Chart 2: India's Nominal and Real GDP Growth rate



Source: Database on Indian Economy, RBI.

In sectoral performance, share of manufacturing to GDP has improved. Given the share of informal workforce absorbed in industry, infrastructure/construction goods, consumer durables, intermediate goods and manufacturing were amongst the worst hit sectors from demonetisation inflicted cash crunch, with a significant decline in November 2016 but recovered by May 2017 (Table 3).

India's monetary condition decoupled, inflicted by the demonetisation and new monetary policy regime, as average real interest rates rose by 2.5 percentage points in 2017. Not only this tightening of monetary conditions contributed in depressing consumption and investment compared to that in other countries, but also, it attracted capital inflows thereby strengthening the rupee and dampening both net services exports and the manufacturing trade balance.⁶

⁶ Government of India (2018).

Especially in the informal sector, demonetisation temporarily reduced demand and hampered production as it directly impacted the cash transactions. The impact of demonetisation on informal sector was seen in the form of increased demand for MGNREGA employment (Table 2).⁷

Table 2: Expenditure on MGNREGA

(Rs. Crore)

Year	Budget	Expenditure (Including State Share)
2011-12	31,000	37,072
2012-13	30,287	39,778
2013-14	33,000	38,511
2014-15	33,000	36,025
2015-16	37,345	44,002
2016-17	48,220	58,531
2017-18*	48,000	40,725

Note: *Figures as on 27.10.2017.

2017-18 RE and 2018-19 BE as announced in the Union Budget 2018-19 is Rs 55,000 crore.

Source: Ministry of Rural Development.

Section 6: Unaccounted Income in India

India, a Cash-based Economy

The ratio of currency to GDP in India at 12.2 percent is higher than many other similar countries like South Africa (3.9 percent), Brazil (4.1 percent) and Mexico (5.7 percent). India has been the second largest producer and consumer of currency notes with circulation increasing nearly by 40 percent, from 64.58 billion to 90.27 billion pieces over last five years between 2011-16.⁸

Economic research indicates a positive correlation existing between high volume of cash transactions and percentage of shadow economy to GDP. The sharp and disproportionate growth in circulation of high denomination banknotes results in infusion of Fake Indian Currency Notes (FICN) and generation of black money.⁹ Cash transactions don't leave any audit trail and hence act as channel for black money. The trend of recovery and seizures of FICN indicated a distinct upswing since 2008.¹⁰

⁷ Government of India, Ministry of Rural Development, Lok Sabha Question No: 124 Answered on February 2, 2017.

⁸ Annual Report 2016-17, Department of Economic Affairs, GOI.

⁹ Annual Report 2016-17, Department of Economic Affairs, GOI.

¹⁰ Annual Report 2016-17, Department of Economic Affairs, GOI.

FCIN can be used towards terrorist financing and subversive activities which have a hugely disproportionate impact on the real economy, human lives, public tranquility and property. Hence, it is a necessity to initiate immediate action against FCIN.¹¹

Similarly, more than 785 intrusive actions that include surveys, searches and requisitions under various provisions of Income Tax Act were undertaken immediately after announcement of demonetisation. Total undisclosed income detected in these actions till 22nd December 2016 was nearly 3651 crore.¹²

Presently, in India income tax rates for the higher income segments earners are amongst the lowest taxed in major economies of the world. Yet, the record of compliance with tax law remains dismal.

With present wave of scrutiny against unaccounted wealth and black money, as a result of systematic investigations under the Income Declaration Scheme (IDS) in Budget 2016, about 71,726 declarations disclosing undisclosed income of Rs 67,382 crore were made.¹³

Gold as an asset to park unaccounted money

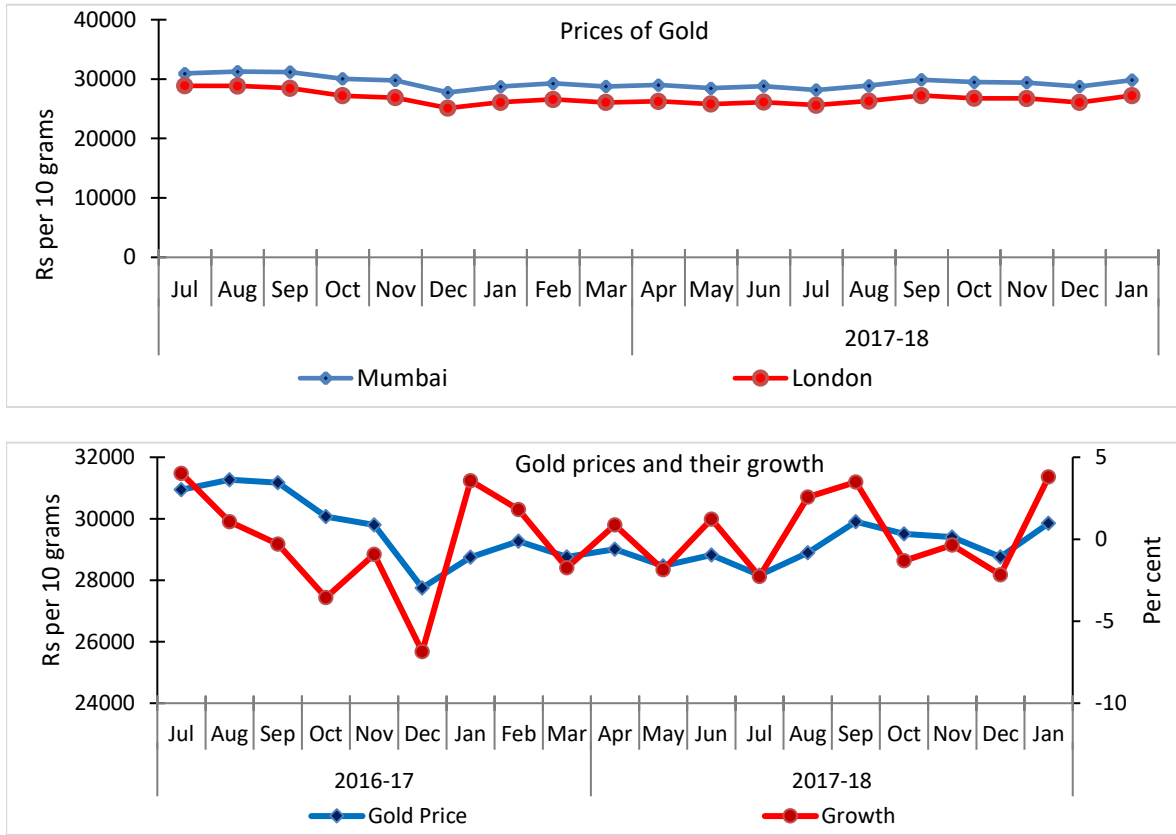
Given India's appetite for the yellow metal there is no doubt it is counted amongst the lead importing countries of gold in the world. 70 percent of India's gold is in rural areas, and almost every household holds some gold. Remarkably, a major blow to black and unaccounted income from demonetisation came to the bullion market especially the gold as an asset when the price of gold plummeted by December 2016 (Chart 3.a and b). Initial rush to buy gold gave way to a subsequent collapse in the business.

¹¹ Annual Report 2016-17, Department of Economic Affairs, GOI.

¹² Annual Report 2016-17, Department of Economic Affairs, GOI.

¹³ Annual Report 2016-17, Department of Economic Affairs, GOI.

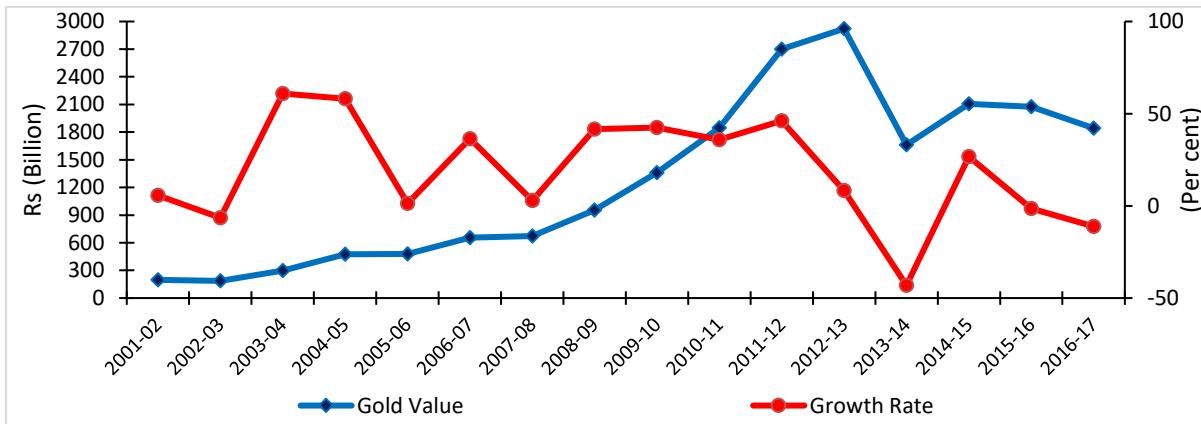
Chart 3: Gold price trends since demonetisation



Source: RBI, Database on Indian Economy.

An annual trend observed from the import data from RBI on gold reveals a fall in overall import (Chart 4).

Chart 4: Annual Gold import value and growth rate



Source: RBI, Database on Indian Economy.

Use of Participatory notes in Stock Market

Concerns have been expressed over anonymity attached with Participatory Note (P-note) investments that make those in possession of it beyond the reach of Indian regulators and taxation. According to the ‘White Paper’ on black money (2012) prepared by the central government, a considerable portion of P-notes were used by wealthy individuals who used it as a mechanism to channelize black money kept in foreign countries to India. These collapsed after demonetisation until January 2017. The quantum of Foreign Portfolio Investment (FPI) flow in form of P-notes have taken a blow since SEBI’s stricter impositions on flow of money through this channel. Oddly, net investment by FPIs have witnessed a downturn only during 1998-99, 2008-09 and 2015-16.¹⁴ Constituting from a usual 6-7 percentage of assets under custody, P-notes share fell to 5.6 percent and further to 3.7 percent, respectively, in October 2016 and December 2017. The drop-in value of P-notes transaction has seen the lowest levels in period since demonetisation. The notional value of Offshore Derivative Instruments (ODIs) declined from Rs. 56,752 crore in October 2016 to Rs.2,990 crore in December 2017.

Section 7: Data Analysis

Progress in Fiscal developments and Taxation

There has been an increase in personal income tax collection (excluding the securities transactions tax) due to the measures undertaken to curb black money and encourage tax formalization. In fact, its increase from about 2 percent of GDP between 2013-14 and 2015-16 to 2.3 percent of GDP in 2017-18 can be considered a historic high.¹⁵

Comparison of the difference in actual tax buoyancy in 2016-17 and 2017-18 over the previous seven-year’ average buoyancy, yields an estimate of about Rs. 65,000 crores (both exclude the 25,000 crores collected under the Income Disclosure Scheme and Pradhan Mantri Garib Kalyaan Yojana). Thus, hitherto the sum of all government efforts increased income tax collections between Rs. 65,000 and Rs. 90,000 crores implying a substantial increase in reported incomes (and hence in formalization) of about 1.5 percent to 2.3 percent of GDP.¹⁶ Estimation of the impact of

¹⁴ Annual Report-2016-17, SEBI.

¹⁵ Government of India (2018).

¹⁶ Government of India (2018).

demonetisation is about Rs. 2.8 lakh crore less cash (1.8 percent of GDP) and about Rs. 3.8 lakh crore less high denomination notes (2.5 percent of GDP).¹⁷

Progress in Economic Activity

The economy recovered by May 2017 after initial shock in November 2016 (Table 3).

Table 3: Trend in Sectoral Activity

(Growth Rate over previous Month)

	Trend Comparison	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
IIP- Sectoral	Currency with Public	0.8	-46.3	-14.1	16.4	16.6	14.1	9.5	6.3	2.8	1.2	1.4	0.5	3.5	2.1	2.2
	Mining	15.2	5.1	7.4	0.3	-3.4	15.6	-22.6	2.9	-3.1	-6.2	0.2	1.9	6.9	6.4	7.5
	Manufacturing	0.2	-4.6	4.9	1.4	-2.8	10.9	-11.6	7.1	-4.2	-0.8	4.0	1.2	-1.3	3.3	2.7
	Electricity	-0.3	-7.0	2.1	0.8	-6.3	13.6	1.8	5.0	-6.8	3.1	2.3	-3.2	-0.5	-6.5	2.7
	General	1.8	-3.7	5.0	1.2	-3.2	11.7	-11.9	6.4	-4.4	-1.1	3.5	0.8	-0.3	2.8	3.3
IIP- Use-based	Primary Goods	8.6	-1.8	5.4	-1.1	-5.6	15.0	-12.1	4.7	-4.6	-0.6	1.8	-0.7	4.4	-1.1	5.9
	Capital Goods	-4.7	4.7	-1.4	1.5	3.1	32.2	-34.0	12.1	0.1	-3.3	5.4	5.8	-6.6	8.1	4.3
	Intermediate Goods	0.9	-3.8	3.6	1.6	-2.6	11.1	-10.8	3.1	-2.7	-0.2	2.7	0.7	-1.0	2.2	3.4
	Infrastructure/ Construction Goods	0.1	-8.9	10.6	2.3	-4.7	10.6	-7.7	4.5	-0.5	-4.3	3.0	-2.3	5.1	-1.7	3.6
	Consumer Durables	-3.5	-9.5	-1.3	-0.1	-1.1	11.1	-6.6	4.5	-6.0	-0.5	9.5	1.4	-8.0	2.2	-3.5
	Consumer non-durables	-1.5	-1.3	9.0	5.5	-1.4	-0.8	-8.8	14.1	-9.0	0.1	2.4	4.2	-3.7	12.8	2.8

Source: RBI Bulletin and MOSPI, GOI.

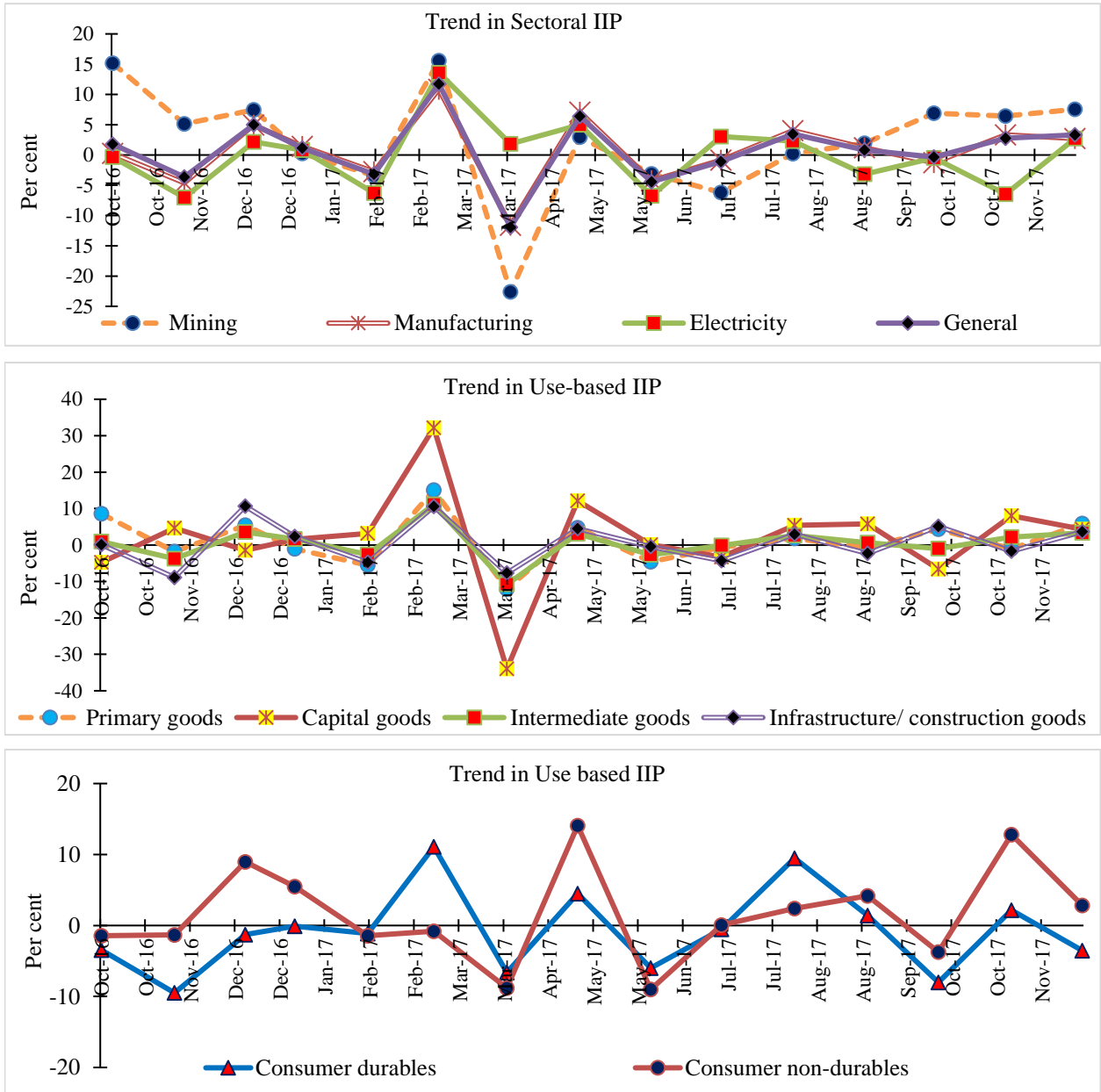
Sectoral Index of Industrial Production (IIP) comprising mining, manufacturing and electricity witnessed a lower growth in industrial production during the last few months of 2016-17 before recovering (Chart 5).

The impact on the informal segment is something worth noting. As per Centre for Monitoring Indian Economy (CMIE), 1.5 million jobs in the unorganized sector were lost during Jan-April 2017. The excess deposits with the banks proved no respite for immediate credit and cash needs from informal segments as those extra deposits cloaked the decline in currency in circulation (CIC) during the period and were left unutilized with the banks.¹⁸

¹⁷ Government of India (2018).

¹⁸ The authors have benefitted from discussions with B L Chandak, Ex-DGM, SIDBI.

Chart 5: Trends in Index of Industrial Production- Sectoral



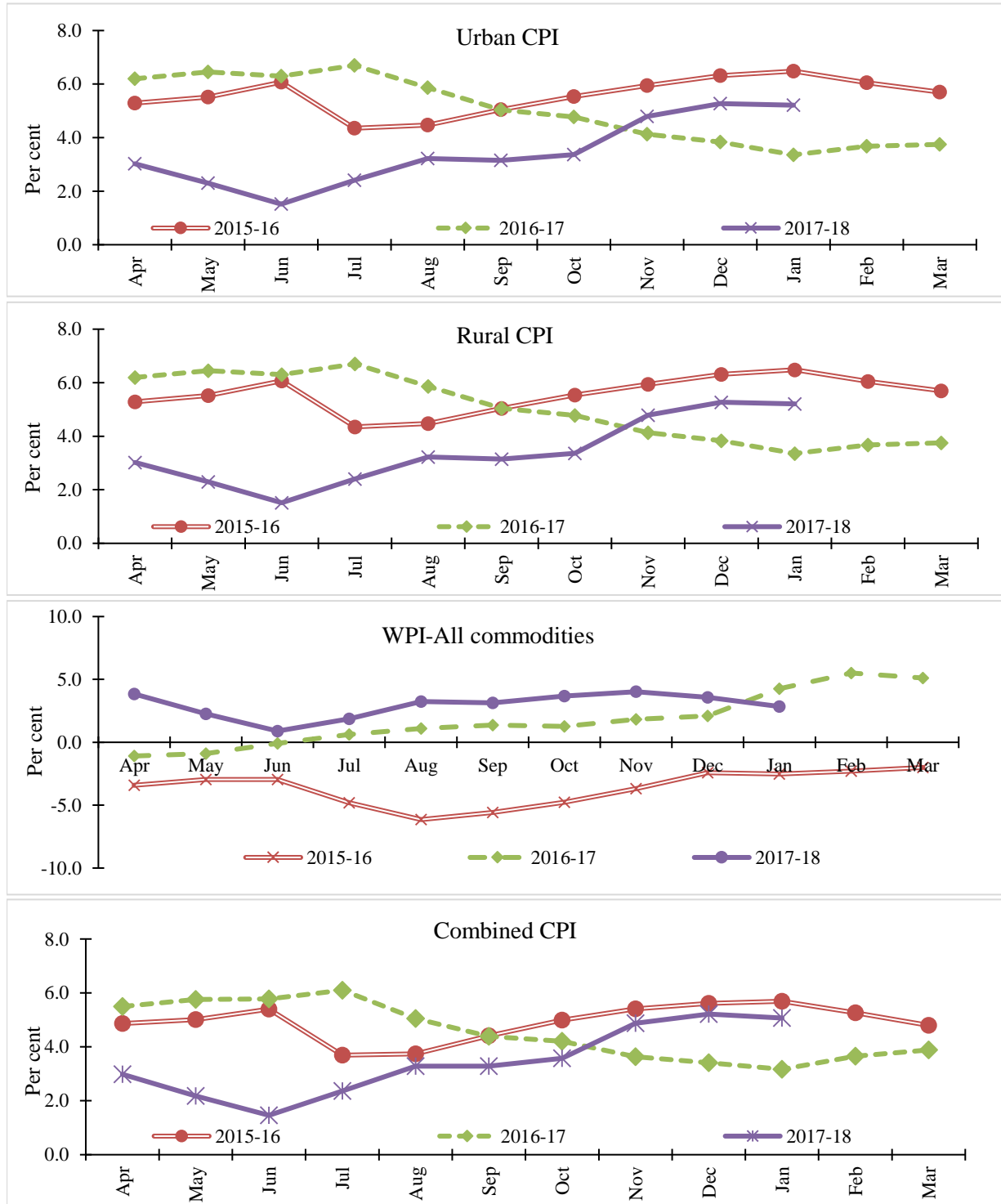
Source: RBI, Database on Indian Economy.

Demonetisation brought cash to GDP ratio down to 9 percent from 12.4 percent. There has been high dependency on cash in the Indian economy where in terms of composition, 91.9 percent of the total employment remains in form of the informal sector. Hence, following quarters since demonetisation witnessed a dip in inflation which has too picked up recently. The second half of FY 2017-18 saw a spurt in growth as sectoral economic activity started reviving alongside a recovering inflation. Headline inflation for the first time crossed the RBI's 4 percent target at a rate of 5.2 percent in December 2017 (Chart 6). While not yet back to its pre-demonetisation trend, rural demand, proxied by motor cycle sales, and auto sales, also started recovering.¹⁹

While the immediate effect of demonetisation on real estate economy has been significant, signs of the sector diverting back to high costs have been observed lately as construction sector picked up leading to overall rise in input cost (Chart 7).

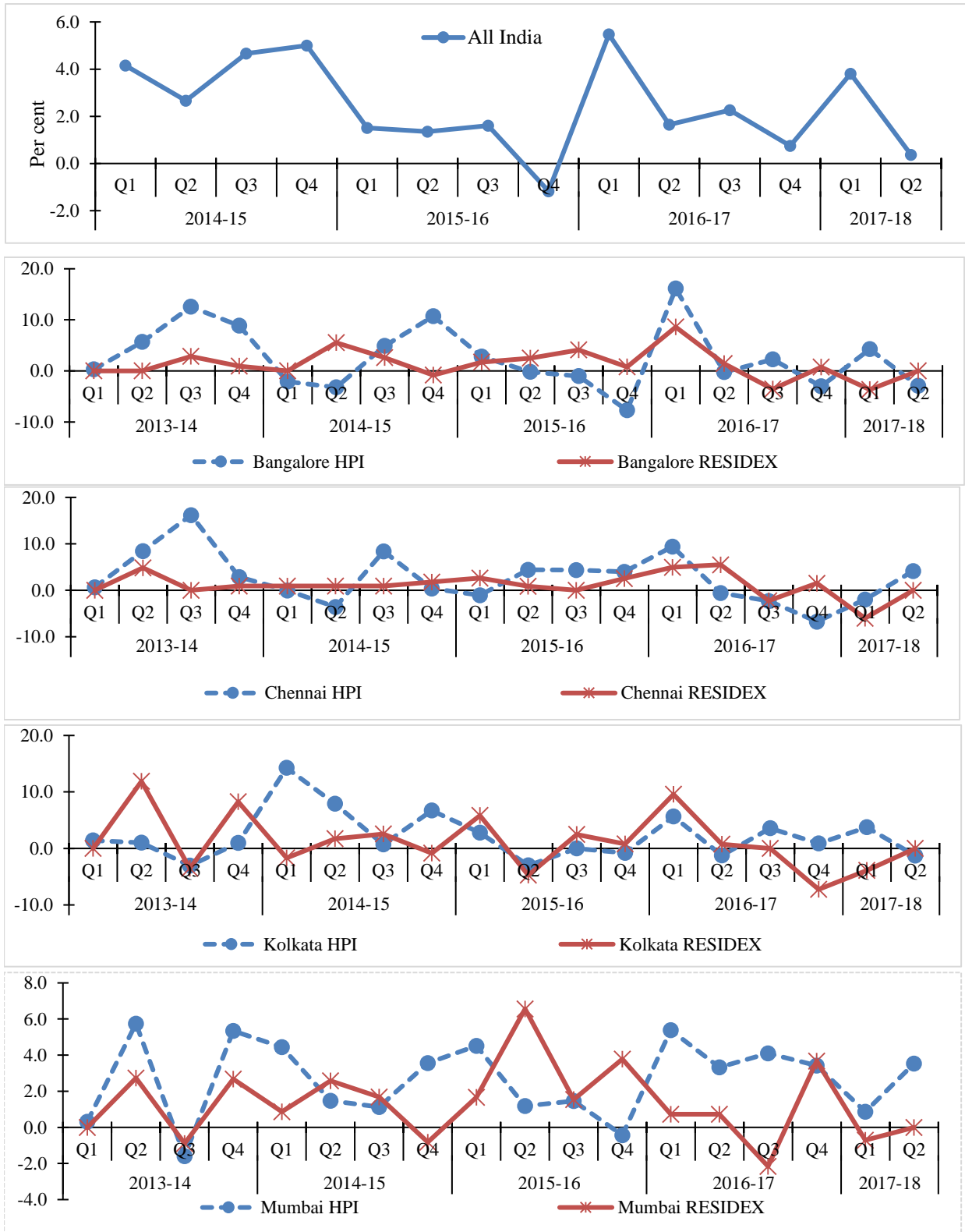
¹⁹ Government of India (2018).

Chart 6: Trends in Inflation



Source: RBI, Database on Indian Economy.

Chart 7: Housing Price Trends



Source: RBI, Database on Indian Economy and National Housing Bank (NHB).

In fact, after a stagnant growth for two consecutive quarters since demonetisation, the GVA has started showing improvement at 6.7 percent for the third quarter of financial year 2017-18 (Table 4). The economy back on track. Consumption did decline but recovered by Q3 of 2017.

Developments in the agriculture sector bear monitoring as the overall sowing was lower in both kharif and rabi, reducing the demand for labour. The acreage for kharif and rabi for 2017-18 is estimated to have declined by 6.1 percent and 0.5 percent, respectively.²⁰

Net exports still continue to be a concern though (Table 4). Foreign exchange reserves have reached well above \$ 432 billion at end-December 2017.

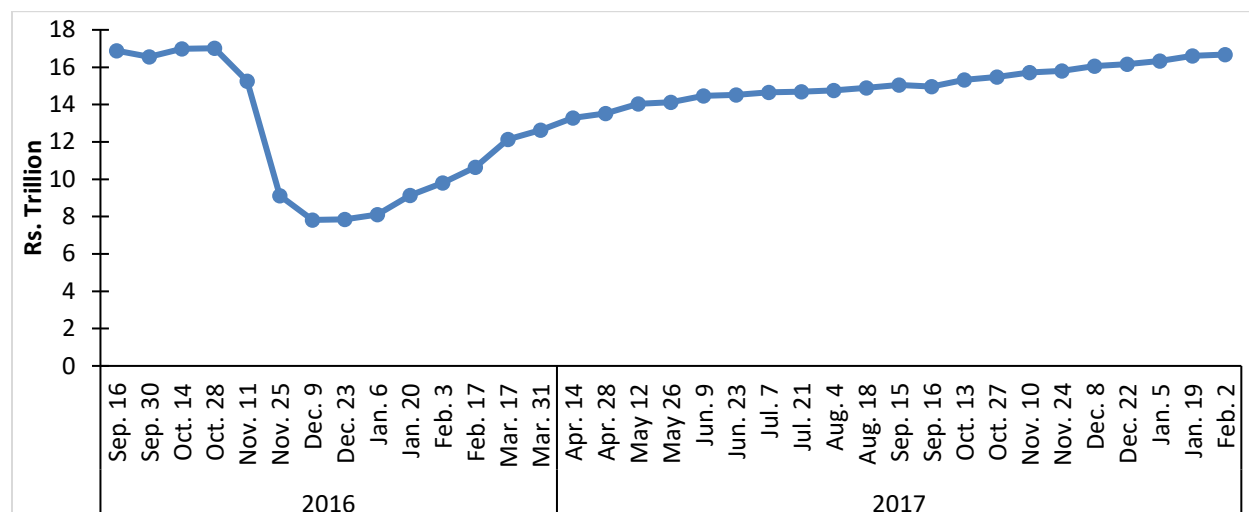
Table 4: Trend in Economic Activity

Trend Comparison – Macro Variables	2016-17				2017-18		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Currency with the Public- Quarterly Growth Rate	6.4	1.0	-32.3	-6.1	31.5	6.2	6.5
Rates of GDP (%)							
GVA at basic Price	8.3	7.2	6.9	5.6	5.6	6.2	6.7
Consumption (Private Final Consumption Expenditure)	54.0	54.3	59.9	57.3	54.5	54.3	59.1
Investment (Gross Fixed Capital Formation)	32.5	30.9	31.0	28.5	31.3	31.0	32.4
Government (Government Final Consumption Expenditure)	10.6	12.1	10.0	9.4	11.8	11.7	9.9
Net Exports (E-I)	-0.8	-1.4	-1.9	-0.3	-2.8	-1.2	-3.1
Change in Stock (CIS)	0.8	0.7	0.7	2.4	0.7	0.7	0.7
Percentage change over previous year							
Agriculture	4.3	5.5	7.5	5.2	2.7	2.7	4.1
Manufacturing	9.9	7.7	8.1	5.3	-1.8	6.9	8.1
Electricity, gas, water supply & other utility services	12.4	7.1	9.5	6.1	7.1	7.7	6.1
Construction	3.0	3.8	2.8	-3.7	1.5	2.8	6.8
Trade, hotels, transport, communication and services related to broadcasting	8.9	7.2	7.5	6.5	8.4	9.3	9.0
Financial, insurance, real estate & professional services	10.5	8.3	2.8	2.2	8.9	6.4	6.7
Public administration, defense and Other Services	7.7	8.0	10.6	17.0	13.2	5.6	6.2

Source: RBI and GOI.

The surplus of the RBI transferred to the Government declined from Rs. 658.76 billion in 2015-16 to Rs.306.59 billion in 2016-17. The resulting situation of excess liquidity in the banking system invoked increased intervention through Market Stabilization Scheme (MSS) which implied higher costs. Further, increased deposits with the commercial banks resulted in increased burden of interest payment while there was a slower increase in credit offtake. However, amount of currency with the public has yet not recovered to pre-November position (Chart 8).

²⁰ Government of India (2018).

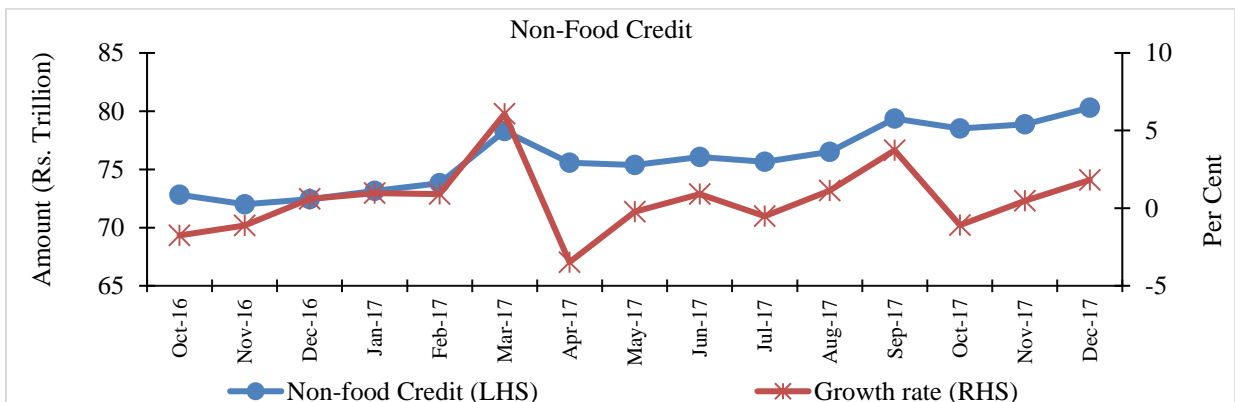
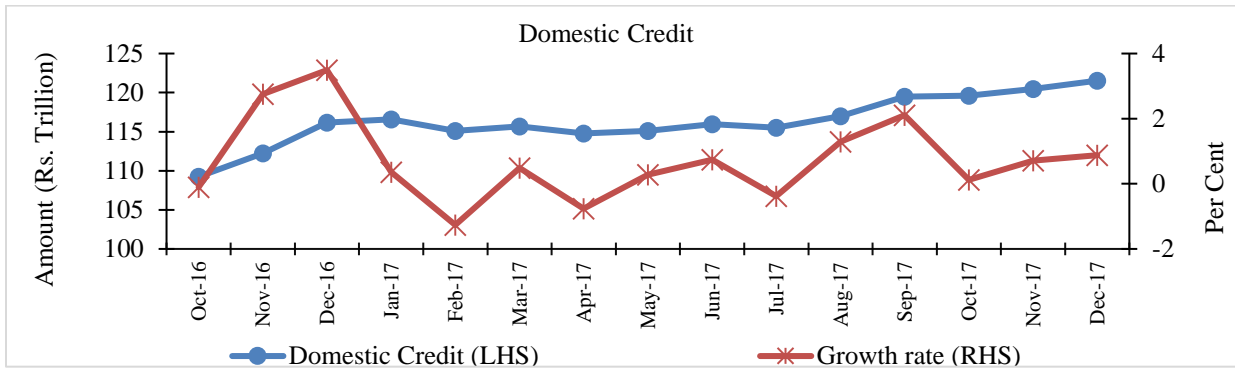
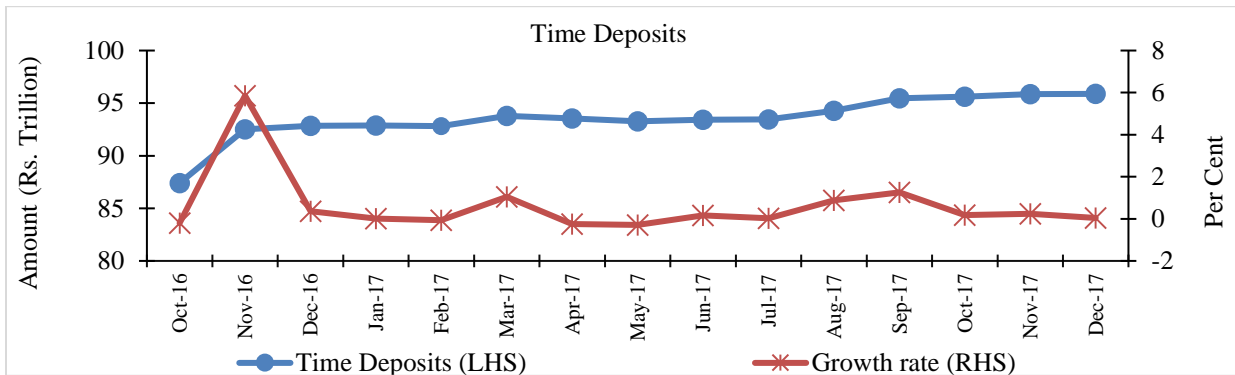
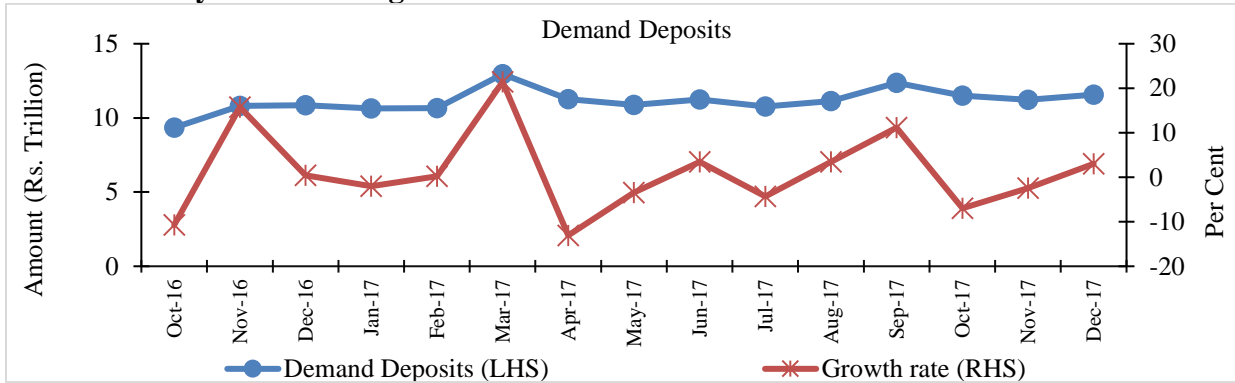
Chart 8: Currency with the public has still not come back to its pre-November level.

Source: RBI, Monthly Bulletin and Weekly Statistical Supplement.

There has been a significant impact on banking variables due to demonetisation (Chart 9)-

- The sudden surge in liquidity brought down the interest rate affecting asset quality.
- Domestic credit rose steeply between October-December 2016. It started to ease out recording a slight dent in February 2017 but picked up to a new high since July 2017.
- Similarly, Non-Food credit has also recorded an upward trend since November-2016 while witnessing an 8.7 percent growth till February 2017.
- Demand and Time deposits have been increasing since demonetisation. Demand deposits particularly reached a staggering high of Rs. 12.95 trillion and after easing out for a short duration have rebounded to the same level in September 2017.

Chart 9: Analysis of Banking Transactions



Source: RBI, Monthly Bulletin.

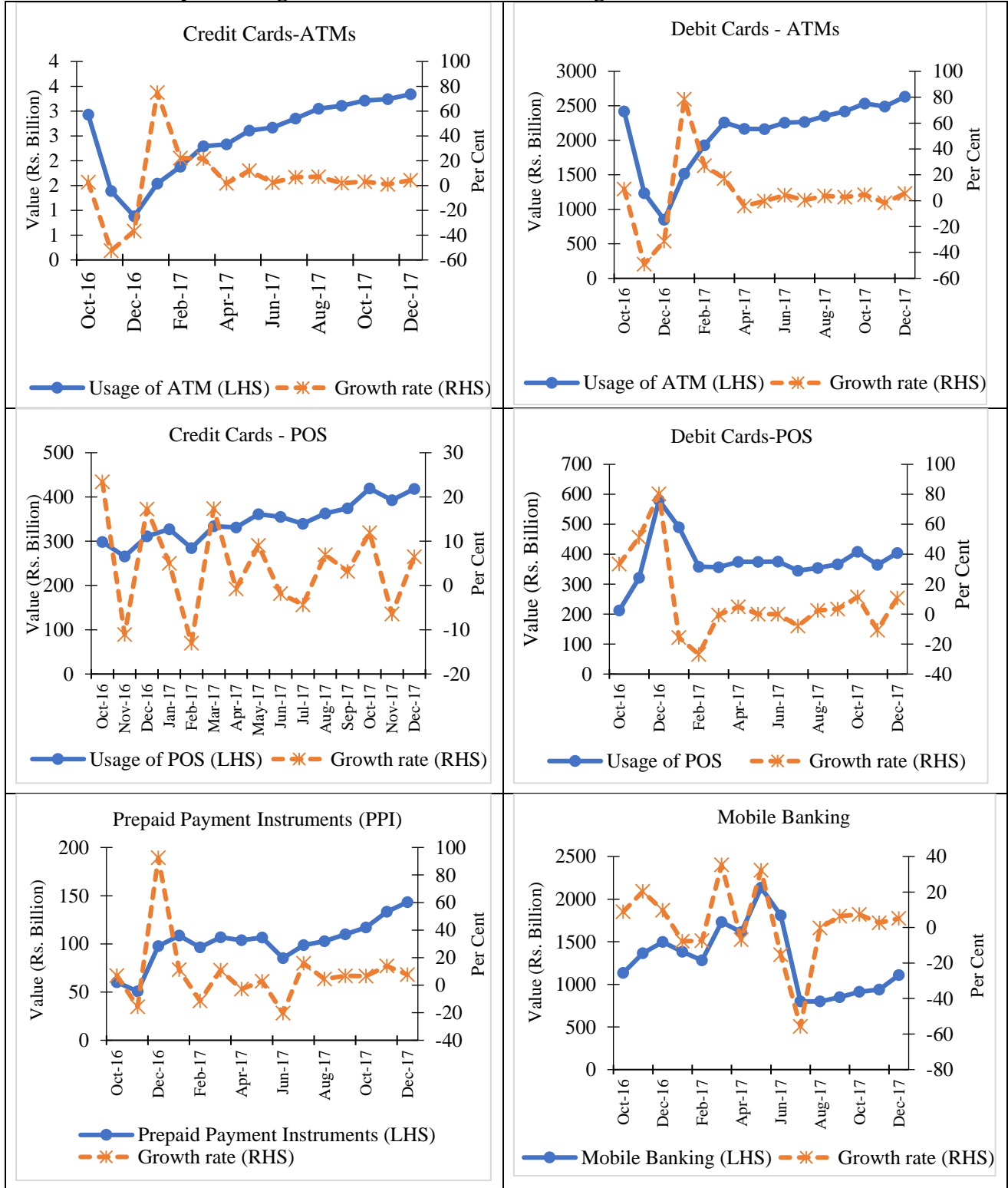
There has been a significant progress in digital transactions. The trend in use of e-money is mixed. The usage of prepaid instruments and cards has increased while transactions through mobile banking have declined recently (Chart 10).

- Since early 2016 Credit cards usage at ATMs has stayed below Rs. 4 billion value, but witnessed a steep decline of nearly 70 percent between October-December, 2016. Contrarily, though its usage of POS fell slightly in November 2016, it has been on a slow paced rising trend since December 2016.
- Debit cards usage of ATMs also fell drastically by 65 percent in value between October-December 2016 and reached back to its initial level only by March 2017. Contrarily, its usage of POS shot up between October-December 2016 but fell rapidly till February 2017 and has remained stable since then.
- Prepaid Payment Instruments also witnessed a surge post demonetisation but have eventually declined since May 2017.

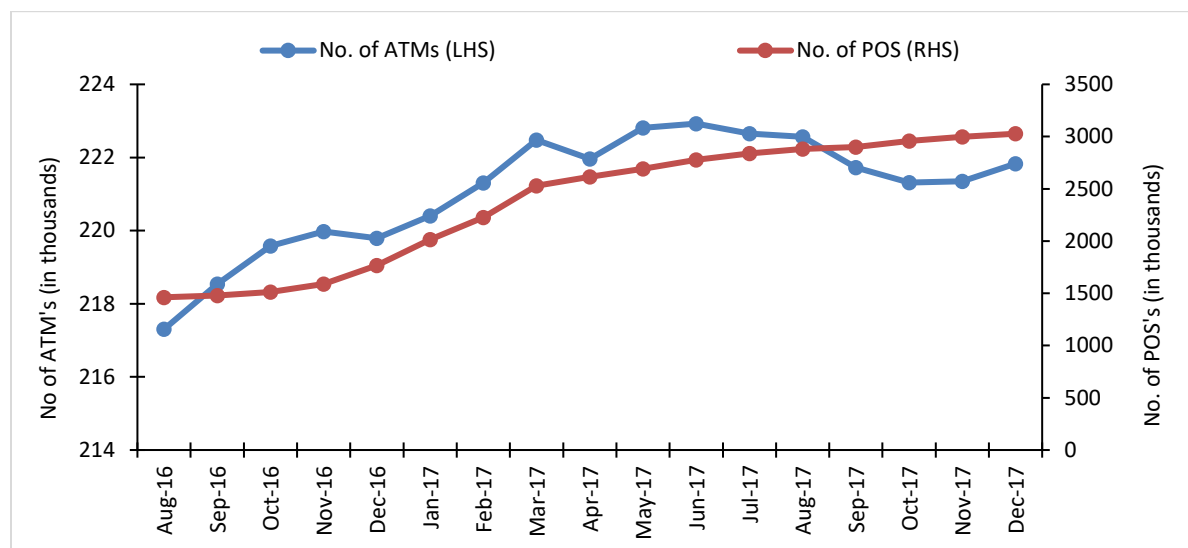
A highly encouraging statistic is the rapid growth of cashless infrastructure in India – both in number of ATMs and POS machines. India now has modern financial setup independent of hard cash. The use of credit and debit cards in ATMs has increased, while POS machines and mobile banking have not followed a similar pattern.

Overall, taking reference from Charts 8 and 10.a and b the trend on cash prevalence and digital transactions show that the sudden cash crunch brought in the economy that lead to temporary disruptions has been rebounding since January and remains below the initial level from last year, which is a good sign indicating India's efforts towards a less cash economy are on the mark. This is coupled with the fact that electronic banking transactions and digital modes of payment have been gaining momentum since demonetisation.

Chart 10.a: Analysis of Digital Transactions- Value and growth rates



Source: RBI, Monthly Bulletin.

Chart 10.b: Analysis of Digital Transactions - ATM & POS Machine usage increasing

Source: RBI, Monthly Bulletin

Section 8: Results from Rural and Urban Surveys

In order to review the impact of demonetisation closely during the fifty days of its implementation on the general public and business the results were drawn from various surveys conducted during 2016 and 2017. A short survey was specially conducted among urban poor in Bangalore to observe the status of implementation period and the overall impression from general public about the scheme. The survey was administered through personal interviews and the data obtained was analyzed to understand the impact of the scheme among urban poor and business classes (Tables 5 and 6).

Impact on Rural regions

The survey was conducted in six villages of Gubbi Taluk, Tumkur District in Karnataka to study “Financial Inclusion since PMJDY”.²¹ Responses from rural people specifically related to demonetisation were mixed. The role of money lenders strengthened post-demonetisation, as only they possessed the new notes while the villagers did not face too much of a problem because of low incomes and only few notes to exchange, giving in view the pattern of rural lifestyle. Some respondents were approached by richer members of the village and asked to deposit notes in their

²¹ Study conducted along with Prof. Gopal Naik, IIMB.

account after which it would be withdrawn and returned. Most villagers who went to exchange or deposits notes stood in a queue for an average of 2-3 days and yet the general consensus was that demonetisation served its purpose and that “both the rich and the poor stood together in queues” to get the new notes. There was positive support to demonetisation.

Impact on Gold business

The survey was conducted in Karnataka, Andhra Pradesh and Telangana to study the impact on gold.²² The only retailers who could make brisk business immediately after demonetisation were those who had an inventory of gold and the ones who accepted old denomination notes. In Hyderabad, premium for 10 grams of gold in old denominations notes was for Rs. 52,000. However, initial rush to buy gold gave way to a subsequent collapse in the market and the impact was particularly hard on medium and small jewelers. In Vijayawada the business had declined by about 50 per cent since most of their customers usually paid for purchases in cash. Small retailers’ business was almost completely paralyzed due to their inability to mobilize cash. Thus, demonetisation clearly shook the gold business to the extent that it even impacted the social realm affecting philanthropy.

Impact on Urban poor and Business class

A survey was conducted among various sections of society (bankers, jewellers, labourers and general public) in Bangalore, to study the scheme’s impact on urban poor and business class. According to some findings, as far as business was concerned, local retailers responded positively to the overall effect on the scheme even though consumption of non-durable goods was affected slightly and stayed low for long. Subsequently, demonetisation had led to extended credit periods for borrowers in informal sector. The increase in digitalisation had come mainly from formal sector and not from informal sector. There were instances of loss of jobs in informal sector due to demonetisation. Labourers were laid-off generally for short periods for couple of months till sufficient cash was available for business. For the bankers, the cash management and ATM calibration at branches remained main issues which they couldn’t control. Despite this, several banks managed inter-branch cash transfers. Out of fifty people interviewed, significant number of urban poor thought that there had not been much increase in bank use after demonetisation. As

²² Study undertaken along with S. Ananth for World Gold Council.

expected, salaried class respondents observed no change since they were already using banks for transactions even before demonetisation. Small vendors were anyway dealing in petty transaction so they too felt no change. But overall, there was support for demonetisation (Tables 5 and 6).²³

Table 5: Overall Perception of Demonetisation (In percent)

Group of People Interviewed*	Good	Bad	Total	Total Numbers
Bankers	66.67	33.33	100.00	6
Jewelers	50.00	50.00	100.00	8
Retailers: Non-Durable Goods	25.00	75.00	100.00	8
Retailers: Durable Goods	100.00	-	100.00	8
Weavers	71.43	28.57	100.00	7
Consumers	51.11	48.89	100.00	45
Real Estate Builders	-	100.00	100.00	5
Overall Population				80

Note: *Multiple responses, therefore, total may not add to 100 percent.

Source: Survey

Table 6: Response during implementation period of Demonetisation (In percent)

	Response
Perceived Objectives of Demonetisation	
Curb Black money and avoid corruption	83.0
Check counterfeit money and push for Digitalization	52.0
Political motive	2.2
Exchange of Old Demonetised Notes	
No Cash in ATMs	70.0
Exchanged old notes from Petrol pumps	44.0
Exchanged old notes through agent, family or friends	35.0
Opted for Investment	11.0
Consumption Pattern	
Consumption turned Normal by August 2017	94.0
Change in consumption pattern is permanent?	54.0
Digital transactions	
Increased use of digital transaction	83.0
Use of Debit cards	63.0
Use of Digital Wallets	68.0
Preference for online banking	40.0
Would continuing transacting using digit medium of exchange?	100.0
Total Number	45

Source: Survey

²³ Results from CCS Projects by D. Zanzrukia and D. Katakdaunde; Ankit Jain; A. Alawadhi; Kartik Mittal and Manas Khanna.

Section 9: Challenges Ahead

Corruption continues to be a challenge. On July 1, 2017 the Prime Minister called upon Chartered Accountants (CA) to introspect and weed out corrupt practices and persons from their fraternity. Addressing the issue of money laundering, existence of shell companies and tax non-compliance attitude in India, he urged the community to stay vigilant against the dishonest taxpayers and business units. He emphasized on catalyzing India's economic integration through 'One Nation, One tax, One market' where the role of the CAs has to remain of utmost importance given that they act as an interface between the government and tax-paying individuals. Revisiting the impact of demonetisation policy, the PM stated how according to the reports by the Swiss Bank Authorities has shown a reduction of 45 percent in deposits made by Indians. However, his concern remained for the 3 lakh registered companies that have come under suspicion from government's massive system of data mining and have also raised doubts on the credibility of the fact that only 32 lakh people in the country are above the ten lakh income bracket.

There are still a few issues that need to be considered by policy makers. First, is the Indian population ready for corruption-free economic and financial transactions? To illustrate, how many Indians would be comfortable in using cashless transactions while doing business with jewelers, especially during wedding seasons and festivals. Therefore, there is a need to spread financial literacy on the virtue of cashless transactions and its implications for accounted money unlike the demerits of unaccounted money. In this context, socio-economic factors would need to be considered.

India, having a population of nearly 80 crore people below the age of 34 years, has to focus on conducive environment for ease of doing business for next 50 years in order to tap the advantages of demographic dividend. The exercise of demonetisation needs to be examined in the context of young India of job creators chasing a dream of becoming a global super power in next few decades.

India is a very diverse country in terms of languages and scripts. Also, the country has low level of literacy of about 70 per cent, with English literacy of not more than 10 per cent of the population. Given the fact that all electronic devices have English numerals and all communication on digital banking is also in English, there is natural barrier to completely digitalize Indian economy during immediate period. India continues to have 30 per cent of its population or nearly 40 crore people

below the poverty line. These people could also be slow in embracing digital economy. Ninety per cent of the Indian population operates in the informal sector. Illustratively, the transport sector including taxis, auto /cycle rickshaws, horse carriages and bullock carts work on cash payment as also most of local markets/shops/dhabas and similar business outlets, especially in rural areas. In addition, low volume of business in rural shops, shopping sheds, rural makeshift kiosks may not justify the cost of installing equipment to read and safely secure the data on plastic money. Similarly, practical implementation of digitalizing the economy for women, when only about 31 per cent are in work force would need to be considered. The cost of providing equipment in remote parts of the country and ensuring seamless connectivity at affordable cost would be another challenge that would need to be addressed. Therefore, it may be helpful if a long term plan with cost implications and a stipulated time line is prepared to decide on various aspects of building a cashless economy.

The problems for digitalization are much like those for expanding financial inclusion: the last mile access. The problems are mostly supply side issues rather than demand side factors. The costs incurred by the banks have received much attention while the problems of merchants have received scant attention.²⁴ Random interactions with merchants in urban areas indicates that major obstacle to growth of digital payments is increasing costs for merchants, while in rural areas it is lack of availability of payments infrastructure. Merchants in urban areas complained that the recurring monthly cost of maintaining technology infrastructure is growing rapidly and the increase in business volumes is not sufficient to support ever-increasing costs of maintaining such infrastructure. A major component of recurring costs are telephone bills which have more than trebled. A cause for these rising phone bills is because merchants are often charged an STD rate to city where the banks' servers are located. This is ironic at a time when other categories of telecom subscribers are reaping the benefits of telecom revolution and crashing data costs. The completion of remonetization means that merchants are not keen on customers paying through wallet services due to high transaction costs. The only reason merchants are not yet turning away customers paying in digital forms is the general weakness in the business environment in the aftermath of demonetisation.

²⁴ The author has benefitted from discussion with S. Ananth.

In the case of rural areas, it is observed that though there is an interest and a steady increase in customer enquiries, the actual card usage has been low due to the lack of digital payments infrastructure, fears related to cyber security, and lack of knowledge about electronic payments. RBI statistics indicates that the total number of PoS machines in the country increased from 15,12,064 at the end of October 2016 to 22,24,977 at the end of February 2017. Invariably, an overwhelming number of these are in urban areas. The government departments and agencies in many small towns and rural areas are not equipped to receive NEFT, RTGS or IMPS transactions. The use of e-money is largely restricted to more educated youth in rural areas and small towns.

Section 10: Conclusion and Recommendations

India is the fastest growing economy of the world with a small current account deficit, sufficient fiscal space, low inflation, and rising foreign exchange reserves. In fact, India with nearly 60 per cent of population below 35 years will be unchallenged for next half a century. Hence, despite short-term pain, the country is unified in this rare opportunity, to cleanse the economy from cancer of corruption, while on its way to becoming a superpower.

The scheme has ever since been considered a major policy reform in relation to the economic performance and growth. In India, a lot of expectations were raised with implementation of demonetisation. First, it would inspire confidence of international community that India is serious about its commitment to fight corruption. Secondly, this will enhance India's ranking in ease of doing business as well as in various global indices of corruption. Later, India was ranked 79 on Corruption Perception Index and 100 on the Ease of Doing Business while countries like Cyprus, Greece and Rwanda ranked better than India. Clearly, there is still a long way to go to overcome the bottlenecks.

Demonetisation has only hit the stock of unaccounted wealth kept exclusively in form of currency. To curb regular accumulation of more unaccounted money, Government could institute a mechanism of incentivizing tax compliance and punitive and demonstrative deterrents for those caught while generating black money. Amendments to Benami Transactions Act is one step in that direction but there are several other areas where the Central and State governments have to take initiative including careful assessment of income from agriculture, property valuation for stamp duty, health care pricing and business of private education. Extensive financial literacy on the

harmful impact of unaccounted money – ranging from personal health to national loss — will help. The agenda for higher tax compliance should become part of school and college curriculum. There is also an important role for social media, entertainment industry and religious institutions to help inculcate habits for tax compliance. To draw long term benefits, probably, introduction of courses on ethics and morality need to be considered in higher education, including business schools, and institutions of national importance like IITs, IISc, and IIMs.

The prime focus on corruption which started from demonetisation eventually moved to a closely related issue of digitalizing India and achieving a cashless or less cash economy which will leave an electronic trace of transactions. Not surprisingly, digitalization can have an impact on financial inclusion. The objective of financial inclusion is to provide financial resources to the consumers at affordable rates. To achieve high level of efficiency and reduce the rates of intermediation, digitalized banking is the best way to supplement and probably even offer an alternative to brick and mortar branch, if not immediately, in the near future.

There are two ways of adopting digitalization in banking transaction. In internet banking model there is essentially a need for an internet, and a robust landline connection. In mobile banking, having a smart phone is necessary. To rapidly digitalize India, probably both methods would be required. Therefore, there is a need for a committee to understand the problem, become aware of the challenge, and then prepare a road map which would identify geographical areas where one or both the strategies would be required to achieve success. Therefore, there is also a need to have a road-map on digitalization because there are various factors and challenges that need to be addressed. Some of these challenges, though seemingly mundane, would need concerted effort to address. These are like numerals in English on all electronic devices which very few people understand, given that only 10 per cent of the population is conversant in English. Similarly, the penetration of smart phones is also limited, especially in rural areas. Even if there are smart phones in the rural areas, these are restricted to only one member in the family which implies that banking activities, private in nature, would be restricted.

Digital transactions can be made attractive but successful transactions have to be guaranteed at all times. This implies that better connectivity for seamless transfer of funds is essential for every transaction. With the increase in digitized payment system, the incidence of frauds etc. would go up which require a strong preventive mechanism in place to resolve and help innocent users from

losing their money. This will increase even low value transaction through digitized channels leading to mass adoption of technology like Bharat Interface for Money (BHIM), Unified Payments Interface (UPI) etc.

As the government has addressed the issue of smart cities by announcing a list of select 100 cities where technological amenities would be provided in a phased manner, similar strategy could be adopted for digitalization. To begin with, on a pilot basis, the government can identify a few cities which have the potential for complete digitalization. Initially the experiment can be conducted in a phased manner in different but small and homogenous areas within the city. Illustratively, a pilot experiment can be initiated in a campus of an educational institution and once fully digitalized can then be expanded to areas outside but around the campus. On having gained the experience of how digitalization would work, the government could then extend digitalization to other parts in the select city, and later expand to other cities. Such small pilots will be useful since our research indicates that an overwhelming number of rural residents tend to spend money on purchase of various goods and services within a radius of 5-8 kilometers of residence.

The general approach towards a corruption-free India in all walks of life can simultaneously lead to freedom from corruption in financial matters. In contrast, tolerant and permissible approach towards general corrupt attitude and pursuing strict approach to isolated financial corruption may not yield long lasting results. Hence, the Prime Minister's offensive on financial corruption should be strengthened to be multi-pronged and inclusive, to include all forms of corrupt practices. To achieve a less cash economy, India would need to develop a medium to long term plan for a seamless transition from the high cash economy that it is now, to extensive adaption and use of technology in conducting business and commerce in the country. In this period of transition, three phases need to be recognized. There are certain measures that can show immediate impact. Then there are some fundamental factors that need a longer time frame and can only change with persistent and concerted efforts. And finally, there are deep rooted culture and psychological factors that require fundamental changes in thinking and have inter-generational implications. The fight against corruption and the aim of a less cash economy would need to be addressed in the context of these three segments. There are certain things that can be implemented in immediate period given the success of Jan Dhan accounts. In the second category would be those initiatives which require technological support, equipment and programming as well as cooperation from

respective Institutes of chartered accountants and cost accountants as well as practicing legal experts on taxation. Finally, to change the deep rooted cultural and psychological factors, support of social, educational, and religious leaders would be required to effectively eradicate the menace of corruption.

The accounting standards in the country are established by the chartered accountants and auditors. As is the practice in medical profession, those CAs/auditors and lawyers found in certifying accounts which camouflage correct picture and lead to generation of unaccounted money should be delicensed.

Regarding ways to curb unaccounted money and encourage digital transaction following suggestions can also be considered:²⁵

- Replacing higher denomination notes of Rs. 2000 and Rs.500 with Rs.100 and Rs. 50 in a phased manner. This would make storage and carrying of cash uncomfortable, thereby nudging people to adopt digital modes.
- To prevent people from withdrawing cash and encouraging them to prefer a digital transaction, government could consider levying a service charge on cash withdrawal.
- Making digital transactions through banking free for all.

Similarly, one alternative is to have smart wallet which holds cash, and can be used for transactions without disclosing the name or account details of the buyer. It is an electronic version of gift coupons or vouchers that can be used electronically in the market place.²⁶

Money serves the purpose of conducting transactions and meeting emerging situations. The main purpose of holding money is liquidity for transaction purposes and returns. In most cases, banking products are designed for middle income salaried class in the formal sector. In contrast, the flow of income of people in informal sector is different. In India, especially in rural areas and informal sector, because of lack of appropriate instruments, people prefer to keep reserves in cash over and above required for transaction purpose. Therefore, the Government has to consider providing suitable financial instruments to cater to the need of small investors. Otherwise, such money would find outlet in gold, land, other property, chit funds and even hoarding of cash.

To help people hold cash to meet emergency requirements, banks could consider instruments like travelers cheque with high denomination to individuals, with provision of endorsement of transfer

²⁵ Contribution from Subrata Gupta, MD, NABFINS.

²⁶ Contribution from Anshuman Saha who has a detailed paper on the topic-sahaanshu@yahoo.co.in

only once, after which it comes back to the issuing commercial bank. There can be many other ways to consider restraining creation and hoarding of unaccounted money. Illustratively, to discourage hoarding of cash, high denomination notes should implicitly have automatic expiry date after shelf life of, say, two years, monitored by the Reserve Bank of India.

To conclude, in Act 1 of the fight against corruption – Demonetisation - the PM's initiative has led to emergence of an army of citizens against corruption. Now the need is to meticulously plan and intensify the battle of corruption and take it to victory, once for all. India is standing at an important cusp of history because it has a choice to make a dividend or a disaster of its young demographic population of 79 crore below the age of 34 years. An honest ecosystem will be helpful to increase growth and employment in the country.

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