

Demonetisation - The Game Changer

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Demonetisation was a bold and courageous step fraught with huge political and economic risks, but its benefits are only now beginning to show. It has beyond doubt increased tax compliance, and its adverse impact on economic growth, if any, seem to be over by now with economic parameters showing definite signs of improvement. But most importantly, it has immense potential to transform the economy into a highly digitised economy to realise which determination and resolve of the government are as important as the cooperation of citizens.

A Purge Long Overdue

Reams of newsprints, gigabytes of server space and countless contentious hours of TV time have been spent on the subject of demonetisation, with loud, heated, impassioned arguments both for and against it. Naysayers said that the whole cycle of consumption-production-employment-growth-tax revenue will go into a continuous downward spin, spelling inevitable doom for the economy. The optimists said that black money would be almost completely wiped out, leading to more tax revenue and a reverse bullish economic cycle. The jury is still out of the necessity and effectiveness of the measure, and the contending positions are irreconcilable. I have consistently maintained that it was a major reform of our monetary system, and reforms are always necessarily disruptive and painful, like the administration of a shock therapy. The pain is necessary to cleanse our body politic of the extremely harmful viruses that had been securely lodged in it ever since independence.

Indisputably, demonetisation was a bold and courageous step that was fraught with immense risks – political, social and economic. But its significance and benefits are only now beginning to show. The move was primarily aimed at the huge amount of black money circulating in the economy, and there was little doubt that growth of the informal sector which employs the majority of our workers would suffer in the short term, bringing down the growth rate of GDP as a whole at least during the current fiscal. Given the almost total absence reliable of data on the informal sector of our country and the general paucity of data on the private sector, any attempt at a quantitative estimation of the impact of demonetisation is likely to be an exercise in futility. But its significance cannot be lost upon the discerning mind.

The measure was not unexpected though, being the logical culmination of a series of relentless steps the Government had taken over the prior two years against black money –Jan-Dhan Yojna and opening of bank accounts for everyone, renegotiating the tax treaties and automatic information exchange agreements with other countries and tax havens, the Black Money Act, 2015 and Benami Property Act, 2016, nudging people to declare their undisclosed income through the Income Declaration Scheme, and other measures. Demonetisation was only to be expected as the next logical step.

As is often misunderstood, black money is not necessarily generated through corruption, neither all the black income necessarily accrue in terms of cash. Many normal business transactions legitimately generate large volumes of cash – for example, petrol pumps, textiles, jewelry, luxury goods, household appliances etc. Professionals like doctors and lawyers also trade mostly in cash. Demonetisation obviously disrupted these businesses – there are plenty of anecdotal evidence in support of this. While businesses and people dealing with legitimate cash had nothing to fear, the ban on higher denomination notes hit those who were hoarding large amounts of black money in cash.

Pre-demonetisation, the total amount of black money circulating in the economy was anybody's guess. But the size of India's black economy had expanded rapidly over the 1970s and 1980s, and since then was contracting. One study estimated it at 20% of GDP or about Rs 30 lakh crore.¹ Most of this black money was locked up in physical assets such as real estate and gold, hiking up their prices much beyond their intrinsic real asset-values. The withdrawal of higher denomination notes was expected to impact these, especially the real estate sector in the secondary market transactions where 60:40 ratio was the norm between legal and black money.

Until recently, India's economy has been an overwhelmingly cash-driven economy and probably remains so even now. In 2015, 78% of all consumer payments in India were made in cash, against 20% to 25% norm in developed economies. The total value of currency in circulation in India amounted to Rs 17 lakh crore, and 86% of that cash, amounting to Rs 14.6 lakh crore, were only in Rs 500 and Rs 1000 denomination notes. While the total number of bank notes in circulation rose by 40% between 2011 and 2016, the circulation of Rs 500 notes rose by 76%, and that of Rs 1,000 notes by a whopping 109%, during this period.

The most corrupt ones had the largest stocks of illegal cash, and they were the worst to suffer because they couldn't deposit all their money and risk going to jail. So some moneys did not surface at all, and since the notes are a liability on the account of RBI even though the liability may be notional, it was expected that the RBI's and hence the Government's liability on this account would stand automatically reduced. However, as per latest RBI estimates, nearly 99% of the total cash in circulation had come back into the banking system. Apart from testifying to the ingenuity of the corrupt hoarders of black money, it also means that most of the illegitimate cash has been sucked out of the black money market to enter the normal financial system, from where these will be easy to track and hence will contribute to future tax and growth if there is a proper follow up.

It also means that most of the black money lying in the form of cash has now entered the banking system reeling under a progressively worsening NPA crisis, especially for the public sector banks which dominate our financial sector. This excess liquidity is a godsend to them and is likely to increase investment in income-generating capital assets, and also in human capital, both adding to future growth and setting of a cascade of positive changes. However, it presupposes a spurt in the demand for credit which has not

¹ "New study pegs black money in India at Rs 30 lakh crore", June 6, 2016, <http://www.businesstoday.in/current/economy-politics/new-study-pegs-black-money-in-india-at-rs-30-lakh-crore/story/233395.html>

been seen so far, especially so soon after another disruptive but path-breaking reform like GST has been launched in July 2017.

Demonetisation was based on the premise that as the black money got sucked out of the market, several sectors like real estate would be forced to correct their current prices, leading to a fall in inflation. All the moneys that will now enter into the formal financial system will continue their contribution to future taxes, as their tracking by tax departments will become easier. As inflation falls and taxes increase, government finances will improve. If the Government uses this increased liquidity judiciously and do not squander it by indulging in populism, the fundamentals of economy will get stronger, and accelerated GDP growth will more than make up for the temporary loss of growth we are likely to witness in the short term. As inflation drops and liquidity improves phenomenally, interest rates will certainly drop giving a significant boost to economy, and the RBI will be forced to reduce its policy rates. There will of course be a transfer of investment from physical assets like real estate and gold to financial assets as people will shift their investment preferences - to dollars or equity where they can still save taxes. Coupled with lower interest rates, this will in turn boost the corporate sector, hopefully creating the badly-needed jobs. The excess liquidity with the bank will also help them manage their NPAs better.

Much of these have already occurred. The inflation rate has come down to their lowest levels ever – six months after demonetisation, the retail inflation stood at 1.54% in June 2017, while the wholesale inflation had touched an all-time low of 0.9%. Of course there are other factors, the mechanism of Monetary Policy Committee to determine monetary policy has been set up, and food prices were low, oil prices were subdued and many other factors as well. Inflation went up 2.36% in July, and to 3.28% in September, but the rise was possibly due to GST that was launched in July 2017, a normal outcome witnessed in every country after the launch of GST.²

Real estate prices, however, have not yet reflected the expectations of substantial drop after going on a tumble in the immediate aftermath of demonetisation; though real estate sector remains stressed and loaded with huge unsold inventories, the all-India House Price Index recorded a marginal increase (*i.e.*, Q4:2016-17 over Q3:2016-17) of 0.8 per cent in Q4:2016-17 with six of the ten cities recording a rise in sequential terms, as per RBI data released in July 2017. However, anecdotal evidence suggests a 20-30% fall in the real estate prices, in the metro cities at least. Gold prices have also reduced a little - and the suppressed markets in both real estate and gold indicate that black money is not shifting into gold or real estate so fast any longer. GDP growth in the short term has decreased to 7.1% from projected 7.6% - presumably as a result of the move, but will certainly surge after some time.

It also did not alienate the very people who were hit by it. In elections held in February-March 2017, when the memory of sufferings people had to go through during the 50-days window given for depositing the high denomination notes was still fresh in the minds of people, BJP won landslide victory in UP, a state where informal sector was much more prominent than the formal sector. It did not mean that the poor had not suffered, but only that the poor had thought – and perhaps rightly – that the rich suffered much more.

² Bhattacharjee, Govind, "GST at Home & the World", *The Statesman*, Nov 09 & 10, 2017.

In August 2017, the Central Statistical Organisation had released the GDP data which showed the GDP growth at its lowest of 5.7% for the first quarter of the current fiscal, April- June 2017. Though many experts joined with the political opposition parties to blame both demonetization and GST for this fall in growth and predicted the imminent collapse of the Indian economy, the fall in GDP growth only confirmed a trend that had set long before demonetisation, though demonetisation also would have contributed to the fall, by having dried up consumer demands by mopping up cash temporarily from the market, and destocking by firms before the launch of GST would also have led to loss of production, even though consumer demand would temporarily rise as a result of destocking. Behind the economic downturn was a steady deterioration in the external sector combined with weakened domestic demand as well as many other factors. Export growth had declined from 10.3% in the last quarter of 2016-17 to a paltry 1.2% in the first quarter of 2017-18 while imports grew from 11.9% to 13.4% during the same period (Table 1). Consequently the share of net exports (exports minus imports) in GDP had declined from (–) 0.02% to (–) 3.27% during this period; the higher negative contribution of net exports undoubtedly played a large part in the fall in growth. A strong rupee surely contributed to the depressed exports growth, but since about 60% of the exports are finished goods, derived mostly from value addition on imported raw materials and inputs, devaluing the rupee would have hit the import bills and would serve no purpose. Banking sector, especially the Public Sector Banks (PSB) reeling under unmanageable NPAs and facing declining credit growth, was underperforming and this also contributed to the fall in GDP growth.

However, the growth forecasts negate the impression that is attempted to be created that demonetisation had spelled an unprecedented economic disaster for the country. The core GVA has already improved, signalling the revival of industrial activity. Services sector is also looking up and in the second quarter of 2017-18, the export sector had also shown improvement. GST will certainly give a boost after the initial hiccups are over, and the GST Council has already taken several steps towards that.

In October 2017, RBI has reduced its growth forecast for the fiscal year 2017-18 to 6.7% from its earlier estimate of 7.3%; this is in line with IMF's growth forecast, which has also cut its growth forecast for the Indian economy by 0.5% to 6.7% for 2017-18. But RBI thinks the worst is over. Government sources have cited RBI's estimates to argue that growth would significantly accelerate in the quarters ahead: to 6.4%, 7.1% and 7.7% during the 2nd, 3rd and 4th quarters. The growth during the entire year would be 7.3% as against 7.1% during 2016-17 and 8.0% during 2014-15.

Table 1: Movement of the growth rates of selected economic indicators: March 2016- June 2017

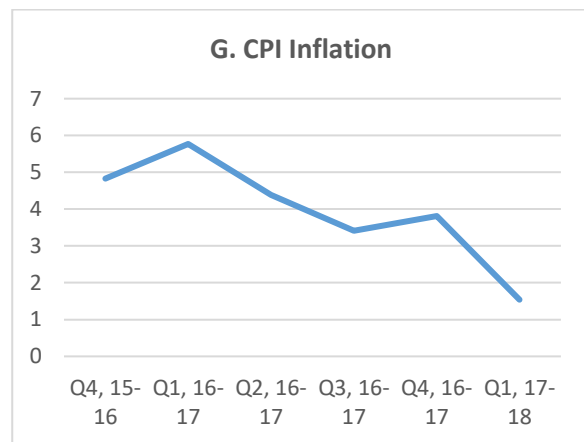
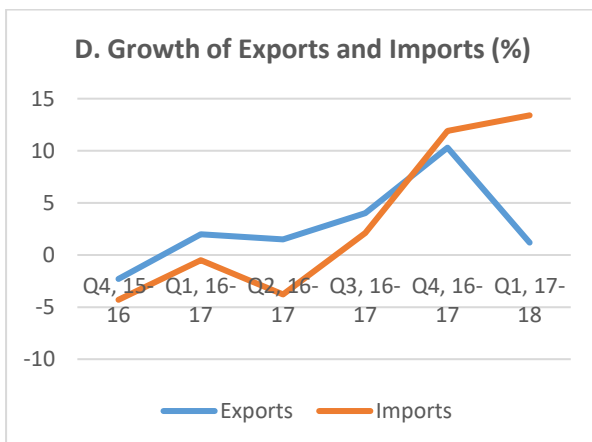
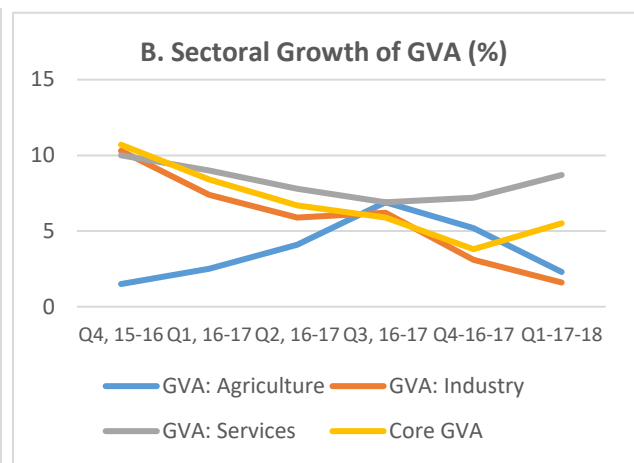
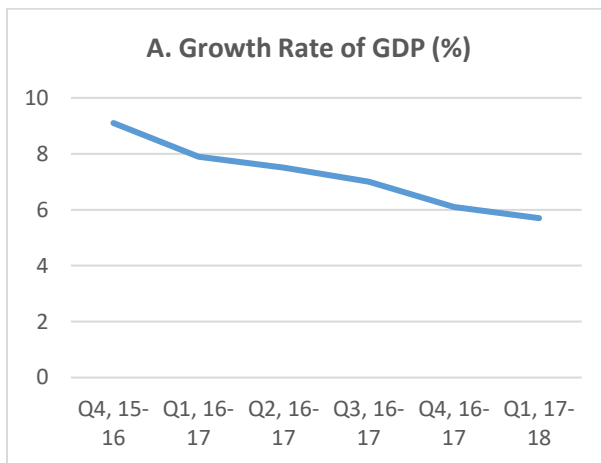
Indicators	Growth (Y-0-Y %) for Quarter Ending (At constant 2011-12 prices)					
	Mar 2016	June 2016	Sept 2016	Dec 2016	Mar 2017	June 2017
GDP	9.1	7.9	7.5	7.0	6.1	5.7
Gross Value Added (GVA) ³	8.7	7.6	6.8	6.7	5.6	5.6
GVA: Agriculture	1.5	2.5	4.1	6.9	5.2	2.3
GVA: Industry	10.3	7.4	5.9	6.2	3.1	1.6
GVA: Services	10.0	9.0	7.8	6.9	7.2	8.7

³ GDP is the sum of private consumption, gross investment in the economy, government investment, government spending and net foreign trade (difference between exports and imports), and has traditionally been used to measure the output of an economy. However, economists now prefer to use the concept of GVA, or the Gross Value Added, as a useful measure of output. It provides the rupee value for the amount of goods and services produced in an economy after deducting the cost of inputs and raw materials that have gone into the production of those goods and services. The two are related by $GDP = GVA + Taxes - Subsidies$ (on those goods and services).

Core GVA ⁴	10.7	8.4	6.7	5.9	3.8	5.5
Exports	-2.3	2.0	1.5	4.0	10.3	1.2
Imports	-4.3	-0.5	-3.8	2.1	11.9	13.4
Net Exports as % of GDP	0	-0.9	-0.8	-0.7	-0.3	-3.2
Index of Industrial Production (%)	5.5	8.9	5.7	2.6	2.7	-0.2
CPI Inflation	4.83	5.77	4.39	3.41	3.81	1.54

Sources: National accounts data: Quarterly estimates of GDP at constant prices, 2011-12 series, MoSPI (<http://mospi.nic.in/data>); FDI data: Department of Industrial Policy and Promotion (<http://dipp.nic.in>); IIP Data: http://www.mospi.gov.in/sites/default/files/press_release/iip_PR_12may17.pdf; External balances data: <https://rbi.org.in>.

(Quarter ended Dec 2017 includes the demonetisation period.)



The black money market will of course spring up again, it definitely will, and high denomination cash will continue to be used as conduits for corruption and hoarding of black money. But there are two aspects to it. The first is psychological – having suffered loss due to demonetisation, people now will think twice before hoarding cash. This psychological aspect can be a very important determinant of behaviour. The

⁴ Core GVA as defined here is the aggregate of mining, manufacturing, utilities, construction, domestic trade and transport, and finance, real estate and related services.

second is based on pure economic logic. The accumulation of black money can reach dangerous levels only over a period of time, and is triggered by retrograde economic relationships established through political machinations – retrograde because that they hinder the normal operations of market forces. Left to itself, the invisible hand of the market has a way of wiping out anything that affects its normal operation. The current built up of black money can perhaps be traced to those days when the marginal tax rates were as high as 97% and there were various other distortions arising from the faulty command and control economic model that we followed. The Janata Party's 1978 demonetisation of Rs 1000, Rs 5000 and Rs 10000 notes did not help because those days, these notes constituted only a tiny fraction, about 1.6%, of the total value of currency; even in 2001, their value was only 25%, against 86% now. Besides, the tax system today is much simpler, rational and taxpayer-friendly; it is poised to become even simpler in future, thus creating an in-built disincentive against black money. Governments today can also be expected to display more maturity not to interfere in the market unnecessarily. When the cost of tax compliance becomes lower than the cost of tax evasion, generation of black money becomes uneconomical. Thus in future it may take much longer to build up the stock of black money to a level where it will start distorting the normal economic processes.

Impact on Tax Collection

It is time to reckon some hard facts: of the 52 crore strong workforce of India, 29 crore are engaged in primary sector outside the tax net (using 2011 census percentages). The rest 23 crore employed in the secondary and tertiary sectors constitute our potential direct taxpayers base. Of this 23 crore, as per the latest CAG report, in 2015-16, only 3.98 crore individuals had filed returns. There were 6.9 lakh corporate assesses in addition. To be sure, the number of those who filed returns does not necessarily indicate the number of actual taxpayers, since many of them would be below the threshold. Only 24.69 lakh, or less than 4% of the assesseees had reported taxable income more than Rs 10 lakh, and paid taxes at highest rate of 30%. 52.94 lakh paid taxes @20% while 2.64 crore paid taxes @ 10%. Of those who filed the returns, 55.93 lakh paid no taxes, their income being less than Rs 2 lakh. Of the 76 lakh individual assesses who declared income above Rs 5 lakh, 56 lakh were in the salaried class. Only 172,000 people declared income exceeding Rs 50 lakh in the entire country.⁵

So in a country of population exceeding 130 crore people, only 3.42 crore individuals (2.6% of population) paid any taxes, and only 25 lakh paid tax at the highest rate; about 90% of them from the organised sector where taxes are deducted at source. In comparison, in the last five years, more than 12.5 million cars have been sold and, in 2015, 20 million Indians travelled overseas, either for business or pleasure.⁶

It is still an improvement compared to three years ago, when less than 1% of people used to pay any taxes. Compare these figures with that of USA where 39% of people pay federal income taxes. It is estimated

⁵ CAG Report No 2 of 2017 (Direct Taxes), Page 2,

http://www.saiindia.gov.in/sites/default/files/audit_report_files/Chapter_1_Direct_Taxes_Administration.pdf.

⁶ Finance Minister's Budget Speech in Parliament, 1st February 2017, "Demonetisation effect: 9.1 million new taxpayers", May 12, 2017, <http://www.livemint.com/Politics/WRTgYztM2cSiT0deLmMWjN/Demonetisation-effect-91-million-new-taxpayers.html>, accessed 30/11/2017.

that more than 85% of our net national income lies outside the tax net and hence our tax-to-GDP ratio remains among the lowest even among the emerging economies. The low taxpayer base has been a perennial drag on our public finances. India's tax revenue, including indirect taxes, as a percentage of its gross domestic product (GDP) was 16.7% in 2016, compared with 25.4% in the US and 30.3% in Japan. Add to this the substantial evasion in indirect taxes – excise, service tax and sales tax (VAT) – the evasion unearthed by the Government only in the last two years amounted to Rs 50000 crore and the undetected evasion is anybody's guess. The evasion is enabled by the use of cash – the anonymous, fluid unit of transaction that leaves no trail and cannot be tracked. With such endemic evasion of indirect taxes, GST which subsumes most indirect taxes does not stand an iota of chance to succeed, unless the informal sector is brought into the tax net. Besides, GST being a technology driven tax, the primary prerequisite is a substantial digitization of most transactions. Demonetisation was expected to push the country towards such digitization, without which objectives of GST cannot be achieved.

As the Finance Minister during the Budget speech had correctly observed, India is a non-tax compliant society. We love to evade taxes and flaunt it as a sign of our intelligence and ingenuity to our friends and associates when we evade taxes. The adverse impact of tax evasion on the national growth does not enter our collective conscience. Despite numerous attempts to expand the tax net and increase the tax base, by taking legal steps and by improving tax administration, India's tax collections as a share of GDP have risen by only 10 percentage points over the past six decades (1950-51 to 2013-14). Widening of the tax base has been slow and it did not contribute to the augmentation of revenue to the desired extent. As per the 3rd report of the Tax Administration Reform Commission (TARC, 2014), direct tax collection in the last 10 years has increased by more than 700 per cent, but the number of taxpayers has grown by only about 35 per cent. TARC report estimates that at least 7 per cent of the population should come under the tax net. In India, 37 million out of the 220 million PAN holders currently file tax returns. Consequently the Direct Tax: GDP ratio remains one of the lowest in the world, at around 6%. In the OECD countries it is as high as 34%. Just think what the country would be like if our tax compliance could be improved to even half of that of the OECD countries. We could possibly pave our rural roads with gold and turn our primary schools into magnificent edifices of learning.

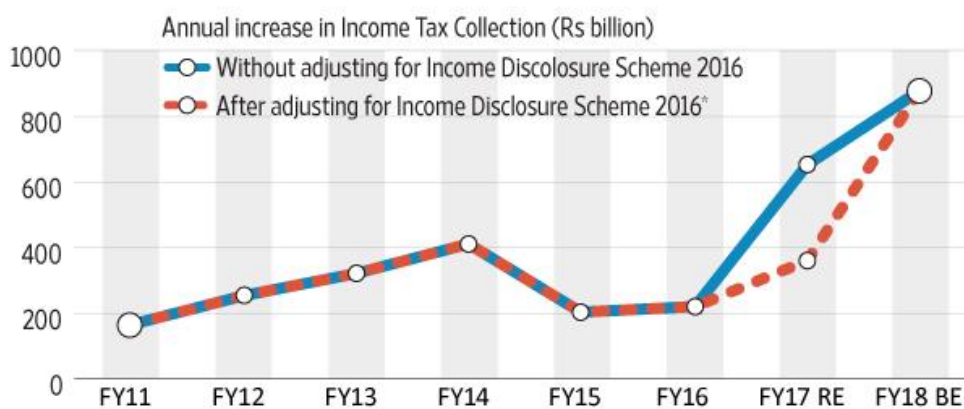
What these figures imply is that the domestic tax evasion is the biggest concern for us and it is clearly linked with black money, money on which no tax is paid. These data are testimony to our failure to broaden the tax net even though two decades have passed after the economic liberalization. Corporate assesses paid Rs 4.5 lakh crore as income tax while non-corporates paid only 2.8 lakh crore of income tax. Unless we increase the number of the latter, our Tax: GDP ratio cannot improve. Most of the tax evasion is on account of the non-salaried classes, salaries individuals have their taxes deducted at source.

This was precisely what the demonetisation tried to address. And it has yielded some concrete dividends, though falling far short of expectations. As the Finance Minister had said in his budget speech for the current fiscal, "During the period 8 November to 30 December 2016, deposits between Rs 2 lakh and Rs 80 lakh were made in about 10.9 million accounts with an average deposit size of Rs 5.03 lakh. Deposits of more than Rs 80 lakh were made in 1.48 lakh accounts with average deposit size of Rs 3.31 crore."

RE figures for 2016-17 showed an increase of 23.3% over 2015-16 actual estimates, the highest in this decade, suggesting significant improvement in India's income tax base. Union Budget 2017-18 has predicted an annual increase of 25.4% in income tax collections 2016-17 (RE). Of course, the Income Disclosure Scheme 2016 with a disclosure of Rs 65,250 crore of undisclosed income also played a significant part in it, bringing a one-time extra income tax of around Rs 30,000 crore. The government added 9.1 million new taxpayers in 2016-17, an 80% increase over average annual increase. This is what demonetization has achieved. Annually, 60 lakh taxpayers enter the tax-net, and 10 lakh move out of it on account of death, retirement, etc. Thus about 41 lakh additional taxpayers have been identified and brought into the tax-net in 2016-17 because of demonetisation. The Income Tax Department is already in the process of scrutinising cash deposits and income profiles post-demonetisation through a partial rollout of the data analysis project named Project Insight.⁷

However, the benefits of addition of new taxpayers has not yet translated into any appreciable rise in tax payments. As the second volume of the Economic Survey released in August 2017 stated, the growth of taxpayers' base post-demonetisation was significantly greater, but the average income reported of the new taxpayers — Rs 2.7 lakh — was not far above the tax threshold of Rs. 2.5 lakh. But this is only to be expected when a large number of people who never used to pay tax are now being forced to pay tax. The point is often missed that the cost of demonetisation had to be paid upfront while the benefits accrue over time.

EXTRAORDINARY INCREASE IN 2016-17 INCOME TAX COLLECTIONS IS DUE TO INCOME DISCLOSURE SCHEME 2016



*Income Disclosure Scheme 2016 saw declarations of Rs 652.5 billion. Given a tax rate of 45%, this would entail one-off income tax collections of Rs 293.6 billion. Adjusted value subtracts that amount from 2016-17 income tax collections.

Source: CMIE, PIB

Towards A Cashless Future

⁷ "One year of demonetisation: Tax compliance better, more funds for banks", *Indian Express*, Nov 07 2017.

The demonetisation was indeed a surgical strike on the black money that has the potential of changing our economic landscape and correct the distortions significantly. An important impact of demonetisation was nudging the economy towards a less cash and more digitised economy. As per the RBI bulletin, the total amount of cash in circulation was Rs 14.96 lakh crore as on September 29 2017, as compared to Rs 17 lakh crore before demonetisation. As such, the current Cash: GDP ratio has come down from 12% to about 9%. Bank deposits have swelled as a result adding new lending capacity to the banks, bank deposits have increased by somewhere between Rs 2.8-4.3 lakh crore, which according to some estimates had amounted to Rs 18 lakh crore (using the usual multiplier of 6). There are now 7.6 crore new monthly digital transactions using BHIM, UPI etc. Demonetisation has exploded the number of digital payments on UPI/Bhim from 1 lakh in October 2016 to 7.7 crore in October 2017. It has also generated Rs 3 lakh crore of new financial savings by shifting investments away from gold - imports are already down by 20 per cent over the last year - and real estate into financial instruments, insurance, equity and mutual fund markets. Greater financialisation of savings will obviously create its own positive impact on the creation of jobs in the formal sector.⁸ In other words, demonetisation has given an irreversible push to the process of formalisation of an inefficient informal economy without which the country will always be counted among the poor countries of the world.

Bank notes were first introduced in Sweden way back in 1661. Three and a half centuries later, today most cities in Sweden don't accept any cash anymore. Public transport, small businesses, museums and even churches now accept only electronic payments through card readers or digital wallets. Even newspapers can be bought from street vendors using a card. Three out of four of Sweden's largest banks are phasing out the manual handling of cash in their branches. As per the statistics of the Bank for International Settlements, an umbrella organization for the world's central banks, the cash-GDP ratio in Sweden is down to only 3 percent, compared to an average of 9 percent in Eurozone, 7 percent in the US and 12 percent in India.⁹ The number of bank robberies in Sweden had plunged from 110 in 2008 to only 5 in 2012, because most Swedish banks simply don't handle cash anymore.

Other Scandinavian countries are also not far behind. Most stores in Denmark had dumped their cash registers from January this year; only essential services, hospitals, pharmacies and post offices, still accept cash until the time cashless transaction becomes a law. Norway is also making a similar transition. Scandinavians today rely on cash for less than 6% of all their payments, as against an estimated 47% in US. They are discovering and benefiting from the advantages of reduced handling and transport costs, increased security and a drop in cash-robbery cases. Card frauds have increased though, the total card frauds in Europe to hit a record value of \$1.4 billion in 2013, 8% more than in 2012.¹⁰

Many other countries are also making a move towards a cashless society across all continents. Canada, where electronic payments constitute 70% of total payments as against the world average of 40%,¹¹ has

⁸ Sabharwal, Manish, "Aiming High, Looking Far", *Indian Express*, Nov 07 2017.

⁹ Database of the Bank of International Settlements, <https://www.bis.org/statistics/index.htm>

¹⁰ "Card fraud rises across Europe – ECB", 22 July, 2015, <https://www.finextra.com/news/fullstory.aspx?newsitemid=27626>

¹¹ Canadian Payment Methods and Trends: 2016", Payments Canada Discussion Paper No. 7 – November 2016, Michael Tompkins & Viktoria Galociova, https://www.payments.ca/sites/default/files/cpmt_report_english_0.pdf ;

stopped printing new currency notes. By introducing a preferential VAT treatment for consumers who pay with cards, South Korea has significantly reduced the share of cash from 40% to only 20% in 10 years.¹² Their central bank, Bank of Korea, is issuing less and less currency every year, and is moving towards a planned 'cashless society' by 2020. Australia, Singapore and even Nigeria are thinking of a cashless future.

These are but a few examples of countries across the world which are moving resolutely towards cashless regimes and whose number is increasing because of the potential benefits. According to a McKinsey report, a cashless society has the potential to cut costs equivalent up to 1.1 percent of GDP. The report further states that in countries where total cash payments constitute below 50 percent of total payments, the shadow economy can grow only up to 12 percent of GDP, but where cash component exceeds 80 percent of total payments, the shadow economy can surge up to 32 percent of GDP. Apart from restricting the growth of underground economy, becoming cashless may also help in the monetary policy domain. To stimulate the economy by encouraging spending, some countries may adopt minus interest rates, but it will not work in a cash economy. When cash becomes electronic, people will have to spend it to avoid losses from minus interest rates.

A recent joint report by Google and the Boston Consulting Group¹³ highlighted that the rise in smartphone penetration and adoption of mobile wallets by small offline merchants will increase the size of the digital payments market in India nearly tenfold to \$500 billion, or 15% of the country's GDP by 2020, when India's internet user base will reach 500 million. JAM (Jan Dhan-Aadhaar-Mobile) and United Payments Interface, Digital India and mobile wallets have already laid the foundations, and the demonetization can further speed up the movement towards a cashless India. With a little resolve, we can even become the first cashless country in the world.

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