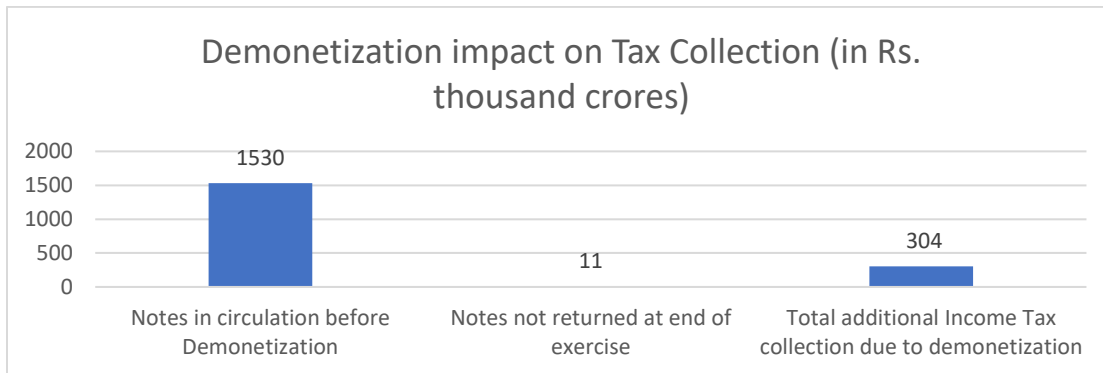


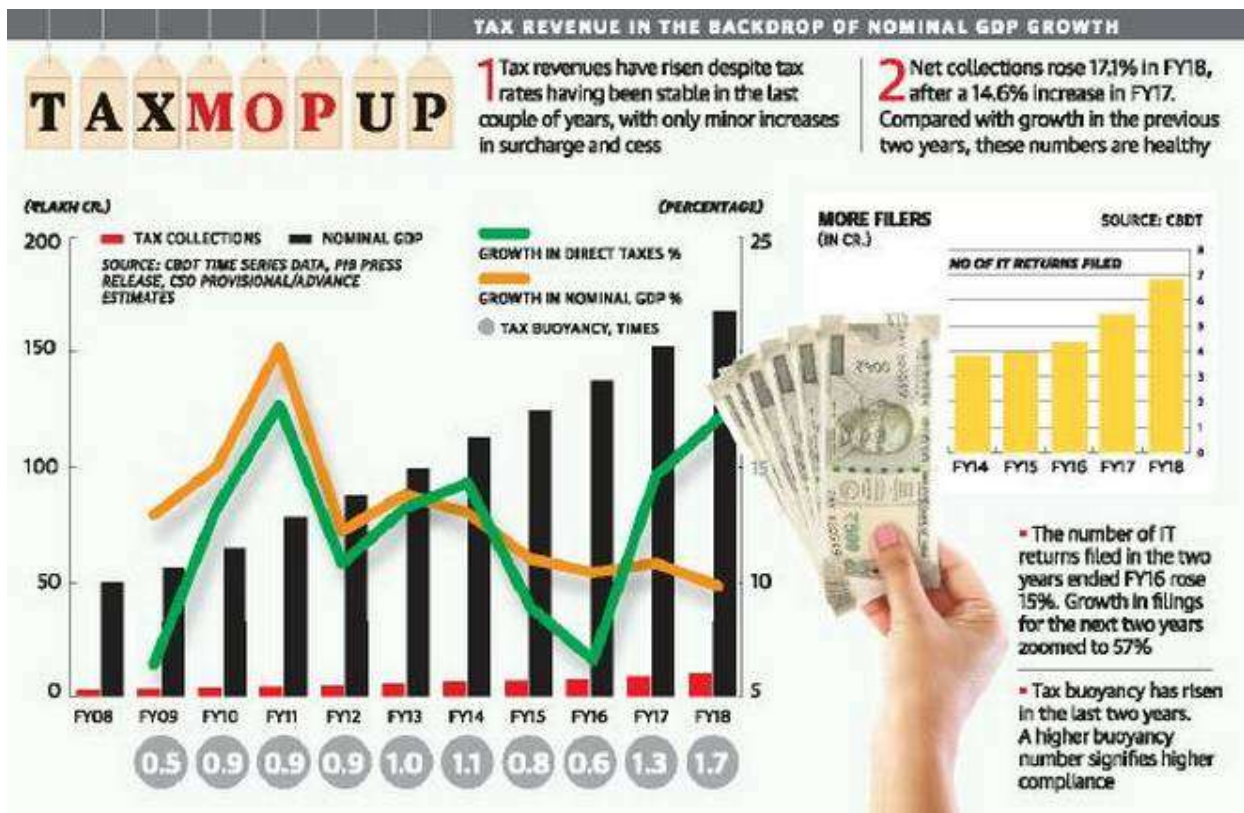
Impact of Demonetization

All opposition parties, economists & media have stated that demonetization hasn't worked and that was PM Modi's biggest mistake. Yes, a very small amount of cash, only 10720 crores, was not deposited back.

However, a very large increase in tax collection since the decision has resulted in incremental receipt of Rs. 304,187 crores in last 2.5 years, which is a whopping 21% of 1,530,000 crores of currency in circulation at the time of the decision. In other words, if PM Modi had not announced demonetization, we would not have collected these 304K crores and therefore this large gain must be counted as a direct benefit of the decision to demonetize.



How did that happen? I will start with a reference to an article in The Hindu, a known BJP-baiter, and a graphic appearing in that article.



Impact of Demonetization

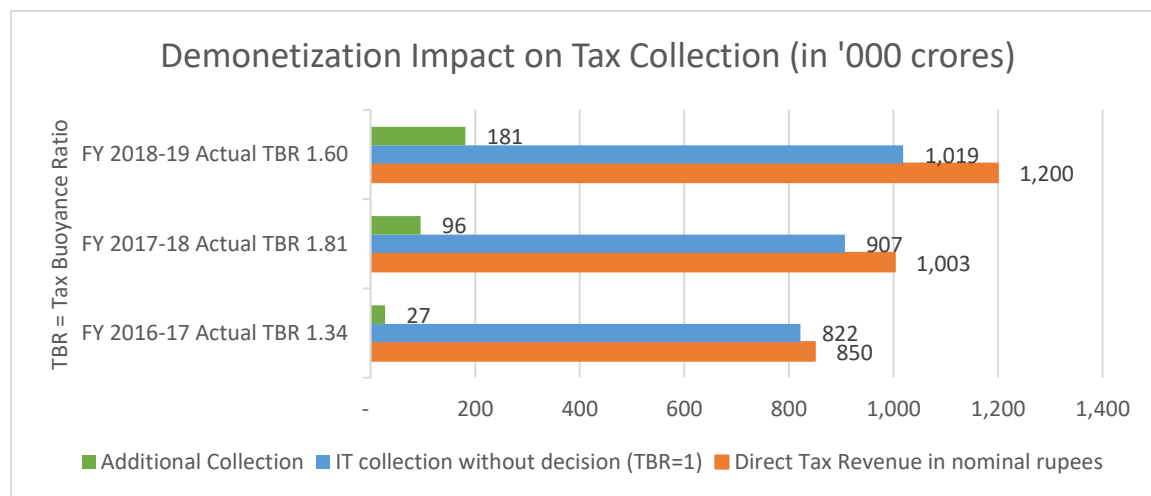
While most enterprising Indians found crooked ways to convert their black cash into white money, it also meant that they had to start accounting for this money and in most cases, they had to start paying much more taxes.

Usually, the tax collection of a country increases in the same rate as the growth in GDP. This ratio known as 'Tax Buoyancy Ratio' (growth of IT collection/growth of GDP) is usually 1.0 or less. When your tax collection grows at a TBR rate of >1.0, it signifies that the country is collecting more taxes on the same income. This can happen only if either the tax rates are increased or if more people pay more taxes.

What this graphic (on last page) tells you is the Tax Buoyancy was very high in FY 17 & FY 18 (Tax buoyancy of 1.3 in FY 16-17 & 1.7 in FY 17-18.) (see gray circles). In FY 18-19 (not covered in this graphic), the Tax Buoyancy Ratio (TBR) still remained high at 1.6.¹

In other words, without the demonetization decision, tax collection would have gone up at best by the same percentage as the GDP growth (see year FY08-09 through FY15-16), where, on an average, the tax collection grew at .86 times the growth of the GDP.² To be conservative, I assumed that the Buoyancy Ratio should be 0.90 for FY 16-17, FY 17-18 & FY 18-19 and calculated the expected tax collections in those years. Then, I compared to actual tax collections and found that the tax collection went up by 304K crore rupees!

Here is a graphic that explains the progress in each year.



¹ The TBR in 2016-17 would have been higher than average TBR since 2009, because the surcharge on income above 1 crore was hiked from 10% to 15%. This would have resulted in additional revenue of about 8000 crores. Similarly, a surcharge of 10% was levied in 2017-18 for income above 50 lakhs. Government expected to collect additional 2700 crores in 2017-18. These two hikes give an additional revenue of 11000 crores, which is removed from the calculation below for year 2017-18 & 2018-19.

² The TBR was high in 2013 & 2014 than previous year because of a tax hike announced by UPA, whereby 10% surcharge was levied on tax for incomes above Rs 1 crore.

Impact of Demonetization

DETAILED ANALYSIS

Let us first see the spreadsheet with detailed data:

Year	Direct Tax Revenue in nominal rupees	DT Revenue growth in nominal terms	GDP in nominal prices	GDP growth in nominal prices	Tax Buoyancy Ratio (B/D)	IT collection without decision (using TBR of 0.9)	Excess Collection (A - J)
	A	B	C	D	E	F	G
FY 2010-11	445,995		7,634,472			445,995	
FY 2011-12	493,987	11%	8,736,330	14.4%	0.75	493,987	
FY 2012-13	558,989	13%	9,944,013	13.8%	0.95	558,989	
FY 2013-14	638,596	14%	11,233,522	13.0%	1.10	638,596	
FY 2014-15	695,792	9%	12,467,959	11.0%	0.82	695,792	
FY 2015-16	741,945	7%	13,764,037	10.4%	0.64	741,945	
FY 2016-17	849,713	15%	15,253,714	10.8%	1.34	822,215	27,498
FY 2017-18	1,002,741	18%	16,773,145	10.0%	1.81	907,117	95,624
FY 2018-19	1,200,000	20%	18,840,731	12.3%	1.60	1,018,935	181,065
TBR (Tax Buoyancy Ratio) = %age increase in Tax Collection over GDP growth %age			Total Excess Collection				304,187
			Notes not returned				10,720
Added 8K for 16-17 & 3K for 17-18 to account for tax hikes by NDA			Total additional collection due to demonetization				314,907
			Notes in circulation before Demonetization				1,530,000
All figures in Crore Rupees			Money that has come back				20.6%

Note - Information taken from [Indian Budgets](#)

1. High Growth Rate of IT Collection - The collection of direct taxes went up by 15% in 2016-17, 18% in 2017-18 & 20% in 18-19. This growth came during years when inflation was very low (3 to 4%). This makes a very high growth in real terms.

2. Incremental Collection Due to Demonetization - Usually, growth of Indian income tax collection does not even match the nominal growth of GDP (i.e. including inflation). In fact, during the last 3 UPA years, the TBR has been less than 1.0 for first 2 and increased to 1.1 on back of a large tax hike (see column E).

Therefore, without demonetization, one can assume that the average income tax growth (column B) would have matched the GDP growth (column D) by a factor of about 0.86 (as that is the average of TBR since 2010-11).

However, to be conservative, I took the average TBR to be 0.9.

I took the IT collection of 2015-16 of Rs. 741,945 crores and incremented it every year by the nominal GDP growth (column F – 10.8% in 2016-17, 10.0% in 2017-18 & 12.3% in 2018-19) multiplied by a factor of 0.9. I also added additional 8000 crores in 2016-17 & 3000 crores for 2017-18 to account for tax hikes proposed by NDA.

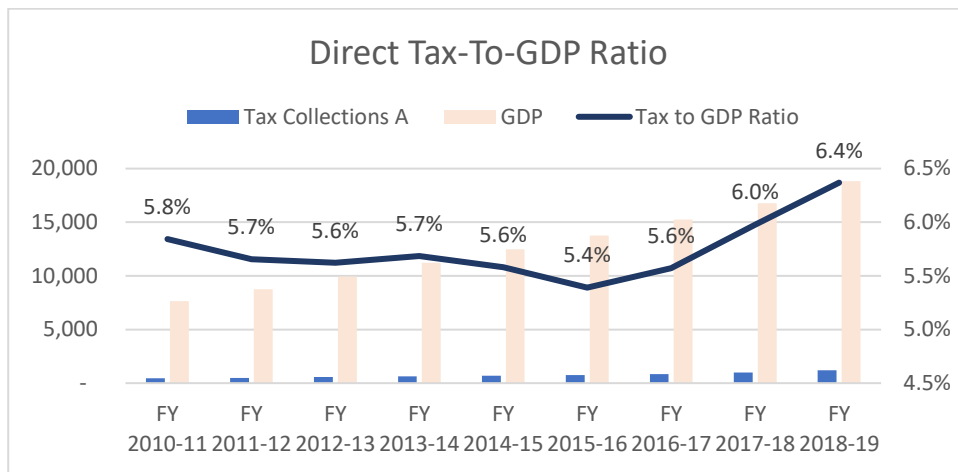
This is represented in column F, which is IT collection assuming no decision of demonetization.

Impact of Demonetization

As you can see, these numbers are lower than the actual income tax collection (column A) by a large margin for each of the 3 years.

I believe that this incremental collection should be considered as a direct result of decision of demonetization. Looking at column G, one can see that Indian government has already collected an **additional 310,457 crores** in last 2.5 years. That, in addition to 10720 crores collected during demonetization means that the government has collected a total of 314,907 crores as a result of the decision and that represents 21% of 1,530,000 crores of currency in circulation at the time of the decision.

4. Big Jump in Tax to GDP Ratio – One can clearly see how the Direct Tax-to-GDP ratio is increasing substantially. Note that most developed nations have Direct Tax to GDP ratio of about 8 to 10%.



5. Tax Filers - Since Demonetization announcement, the number of tax filers have increased by 39%.

6. Future Gain - The gains don't stop here. This money has now become part of the system and will continue to generate further tax revenue for the government, as it's now in the system.

Conclusion - Demonetization has been EXTREMELY successful, except that it didn't work as what the government originally expected it to. It didn't result in lot of income for RBI as most of the notes came back. But, it truly generated bonanza for Finance ministry.