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EFFECTS OF FORCED FORMALIZATION (DEMONETIZATION) IN THE INDIAN ECONOMY

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On November 8, 2016, the Indian government launched one of the world's most radical monetary experiments: demonetizing currency notes of INR 500 and INR 1,000. Demonetization refers to the act of eliminating currency from the monetary system, which can be done by either revoking its legal tender status, resulting in banks and businesses no longer being obligated to accept it, or by discontinuing its printing while still acknowledging its acceptance. Demonetization in India took place through the revocation and replacement of old INR 500 and INR 1,000 currency notes and the introduction of new notes in the form of the INR 500 and INR 2,000 (RBI 2017). Demonetization was part of a more significant effort to digitize and formalize the economy, bringing more people into the legitimate, tax-paying economic grid. The demonetization initiative sparked many questions about its legitimacy, justification, and effects in the months immediately following its announcement (Ghosh, Chandrasekhar, and Patnaik 2017).

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India's Economic Outlook

Doubts regarding the economic benefits of the demonetization policy over the long run have significantly increased. The Gross Domestic Product (GDP) growth rate slowed in the years following the implementation of demonetization. India's GDP growth rate increased steadily, from 5.2 percent in 2011 to 8.3 percent in 2016 (World Bank 2020). However, before the COVID-19 pandemic, India's economy experienced a decline after years of increase in the rate of GDP growth. GDP growth slowed to -5.8 percent in FY20, with problems in the financial sector being exacerbated by a slowdown in the expansion of private consumption (World Bank 2023). India experienced its highest GDP growth rate in 40 years, reaching 9.1 percent in FY21 (World Bank 2023). This exceptional growth can be attributed to the country's recovery from the pandemic, notable advancements in the agricultural sector, and the resilient performance of the manufacturing and services industries. Despite encountering substantial global challenges such as supply chain disruptions due to escalating geopolitical tensions, the concurrent tightening of global monetary policies, and inflationary pressures, India successfully positioned itself as one of the world's fastest growing economies in FY22 with a GDP growth rate of 7 percent (World Bank 2023). India's GDP growth in FY23/24 is anticipated to be hindered by persistent challenges, including increasing interest rates, stricter financial conditions,

and continuing inflationary pressures (World Bank 2023). It is expected that the real GDP growth rate will slow down to 6.3 percent in FY23/24, down from the estimated 6.9 percent in FY22/23 (World Bank 2023).

Currency in Circulation (CiC)

As of December 23, 2022, the value of the money in circulation (CiC or the amount of cash held by the general population) was \$3.94 billion (INR 324 billion) (RBI 2022).2 The amount of currency in circulation on November 4, 2016, just days before demonetization was declared, stood at \$215.6 million (INR 17.7 billion) (RBI 2022). The amount of money in circulation has increased by more than three times, or 260 percent, since January 6, 2017, and by nearly 83 percent since November 4, 2016 (The Hindu 2023). People had a short window after the decision to return the prohibited currency, and, according to the Reserve Bank of India (RBI), almost all of the removed currency was turned in (RBI 2017). The ratio of currency in circulation to nominal GDP is a good indicator to understand the effect of demonetization. Before demonetization, in 2015-16, India's currency in circulation accounted for 12.1 percent of nominal GDP. When the financial system struggled to reintroduce currency after demonetization, it fell to 8.7 percent in 2016–17. This ratio has gradually increased since then, reaching 12.2 percent

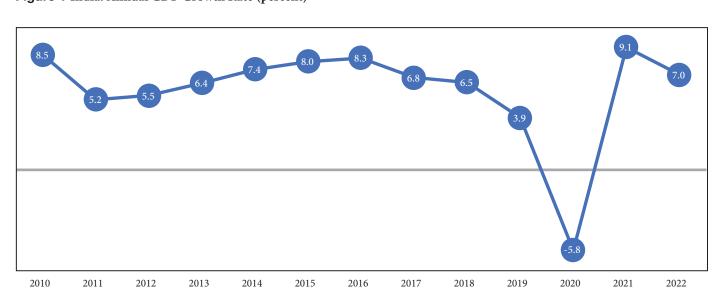
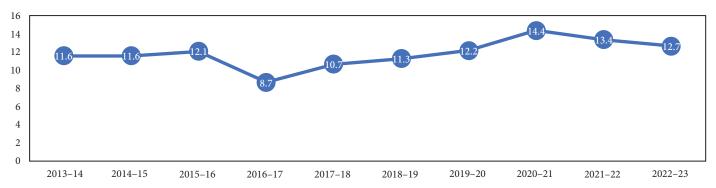


Figure 1 India: Annual GDP Growth Rate (percent)

Source: World Development Indicators, World Bank

Figure 2 Ratio of Indian Currency to Nominal GDP (percent)



Source: Reserve Bank of India (RBI) Annual Report, May 2023

in 2019–20. The sudden rise in the ratio of money in circulation to nominal GDP from 2016–17 indicates that demonetization had no substantial effects until 2020–21. Hence, preference for cash in the Indian economy remains strong (The Hindu 2023).

Despite the moderation in the ratio of CiC to nominal GDP, digital payments in India experienced a significant increase during the post-pandemic period. The value of digital payments in India grew from \$147 billion in 2019 to \$1 trillion in 2022, an increase of 640 percent (BCG and PhonePe Pulse 2022). The growth of digital payments in India can be assessed by comparing it to the growth of digital payments in China. For example, the value of digital payments in China grew from \$240 billion in 2019 to \$5.5 trillion in 2022, an increase of 2,250 percent (BCG and PhonePe Pulse 2022). This growth was even more rapid than the growth of digital payments in India. In 2022, the percentage of people in India who used digital payments was 60 percent (Press Information Bureau 2023). This is still lower than the percentage of people in China who used digital payments, which was 80 percent. However, the growth rate of digital payments in India is much faster than the growth rate of digital payments in China. This means that India is likely to catch up to China in the near future in terms of the percentage of the population that uses digital payments (Business of Apps 2023).

Digital payment growth was fueled by the rapid adoption of digital platforms by new users, facilitated by the Reserve Bank's initiatives such as the Payments Infrastructure Development Fund (PIDF) and the introduction of Central Bank Digital Currency (CBDC) in the year 2022–23 (RBI 2022, 130–31). This simultaneous growth of both digital payments and physical currency in a country may seem contradictory, leading to a currency demand paradox (Bailey 2009). The COVID-19

pandemic further intensified this paradox as uncertainties rose, resulting in increased demand for cash, despite the accelerated shift toward digital payment methods. In India, the Unified Payments Interface (UPI)-led retail digital payments witnessed a compound annual growth rate (CAGR) of 50 percent in terms of volume and 27 percent in terms of value from 2016-17 to 2021-22 (RBI 2022). India's nominal GDP in 2020-21 saw an annual drop of 3 percent, which increased the cash-GDP ratio. However, the ratio of CiC to GDP also rose, reaching its peak at 14.4 percent in the year 2020-21. The CiC to GDP ratio slightly decreased to 13.4 percent in 2021-22. In simpler terms, even though digital transactions are widely adopted, physical currency remains relevant, and its demand is growing, as evidenced by the cash-GDP ratio. The CiC to GDP ratio stands at 12.7 percent as of May 2023. Although the ratio has decreased compared to the previous year, it remains higher than the pre-demonetization levels. Despite the significant growth of online money transfers and digital payments over the past decade, the CiC has also increased in proportion to GDP. The average value of online transactions, such as RTGS, NEFT, and UPI, has decreased, indicating that people are opting for digital payment methods for smaller sums of money. This indicates that cash remains a prevalent form of transaction in India, despite ongoing efforts to promote a digital economy and reduce the reliance on physical currency.

Factors such as the decrease in the opportunity costs of holding money (such as interest rates), the need for precautionary savings in times of uncertainty, and the existence of a sizable, informal economy have been identified as reasons for the enduring preference for cash. A decrease in the opportunity costs of holding money can influence consumer and investor behavior. It can lead to increased money demand as individuals may prefer to

hold onto their money rather than invest it in low-yielding assets. According to the Government of India, the main aim of demonetization was to eliminate unaccounted-for cash from the economy and compel people to deposit it into banks (Government of India 2016). The RBI revealed that most black money is not held as cash but rather in assets like gold or real estate.³ Therefore, demonetization would not significantly affect those assets. For these reasons, most people who have black money prefer to hold it in assets that are more secure and liquid. This is why demonetization had a limited impact on the overall amount of black money in India (Ghosh, Chandrasekhar, and Patnaik 2017).

Economic Hardship

As India transitions toward a cashless society, massive unemployment in the informal economy remains a persistent problem. Demonetization had a direct impact on the informal sector, which primarily operated in cash, and subsequently affected the peoples' lives and livelihoods. The nation's unemployment rate is currently at 8.1 percent, as of April 2023 (Roy 2023). Only 40 percent of people aged 15 years and above offered themselves for work and the remaining 60 percent were dependents. More than 80 percent of the workforce in India is engaged in the informal sector (Roy 2023). Based on available labor market statistics, 3.5 million jobs might have been lost during the three months following demonetization, and approximately 15 million people might have exited the labor force (Lahiri 2020). It was the informal sector that suffered the adverse effects of three major structural changes in the Indian economy: demonetization, introduction of the Goods and Services Tax, and the COVID-19-induced lockdown. Considering the cost of even the most basic necessities that the poor rely on, INR 500 is surely not a high-value note in India.5 While INR 500 is not a high-value note in terms of its actual value, it is still a highvalue note in terms of its importance to the informal sector. INR 500 and INR 1,000 notes are frequently used to pay workers' wages, even in the informal economy (Ghosh, Chandrasekhar, and Patnaik 2017). While the impact of this decision on GDP has been extensively discussed, this incident is unique in that it may have other significant consequences that disproportionately affect the poor (Ghosh, Chandrasekhar, and Patnaik 2017). The wealthy can easily access electronic payments, whereas the unbanked population still has to wait in line to obtain cash and may need to use their limited savings in case of income reduction. Fifteen percent of women in India are unbanked—meaning they do not have an account at a financial institution or mobile money provider (Demirgüç-Kunt 2021)—compared with 5 percent of men and 20 percent of all adults in India. Poor populations do not have substantial savings, and the effects on individuals can be severe if they experience an economic shock or are unable to receive medical care. In contrast, the impact on GDP may be minimal. These costs are of significantly greater importance than the effect on GDP when considering their welfare implications (Ghosh, Chandrasekhar, and Patnaik 2017).

The impact of demonetization also extended to neighboring countries like Nepal. India's fiscal and monetary developments impact almost all macroeconomic indicators in Nepal (ADB 2016). As Nepal is a landlocked country, it is dependent on India for trade. In 2022, almost 63 percent of all imports to Nepal came from India, and around 72 percent of all exports were made to India (Government of Nepal 2022). The cash crunch during demonetization had also resulted in a slowdown in trade between India and South Asian countries like Nepal and Bangladesh, with thousands of trucks stranded along the border. As a significant portion of economic activity was cashbased, the absence of new currency notes and an unwillingness to accept old notes had brought some export and import activities to a halt (EIU 2016). According to the Nepal Rastra Bank, the central bank of Nepal, banks and financial institutions (BFIs) currently hold demonetized bills worth \$409,369 (INR 33.6 million) (Ghimire 2023). Nepal is heavily reliant on India for trade and remittances, and the demonetization led to a shortage of cash in Nepal. The problem of fake currency is one of the main reasons India has been reluctant to replace the demonetized notes held by Nepalese. Despite several meetings between representatives of the two countries, no resolution has been reached. Based on the most recent ruling by the Supreme Court of India, it seems unlikely that the demonetized Indian currency would be exchanged (Khanal 2023). If possible, India could offer a one-time exchange rate for old INR in Nepal (Sharma 2018). If this option is not feasible, the Nepalese government should collaborate with the International Monetary Fund or World Bank to secure a loan that could be utilized to provide liquidity to the Nepalese economy, if necessary.

Policy Prescription for India: Organic Formalization

Forced formalization—such as demonetization efforts—is implemented as a part of key initiatives to bring informal economic activities into the formal sector. The formalization of the economy has both benefits and drawbacks. It may not be feasible to sustain formalization that occurs solely due to external pressure or causes significant hardship in the informal sector. On the other hand, a more sustainable approach involves policy changes that support the gradual transformation of small and more loosely organized businesses into medium- or largesized formal sector enterprises. Firstly, it is crucial to bring the unbanked population into the banking system. Motivating the unbanked population would require an effective, structuralstabilizer fiscal policy that promotes an employment guarantee program such as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). This program would provide a job with a basic wage and benefits package to anyone willing and ready to work. However, in this year's budget, the funding allotted for the MGNREGA was significantly reduced to \$731 million (INR 60 billion) (Bhatnagar 2023). This funding is the lowest in the past four budgets, accounting for only around 1.3 percent of the total budget in FY23 (Bhatnagar 2023). By contrast, the highest proportion of funding was 3.4 percent of the FY 2019 budget (Bhatnagar 2023). According to a study by Azim Premji University, this program, initiated by the United Progressive Alliance (UPA) government under Manmohan Singh, helped compensate for 80 percent of the income lost due to the pandemic (Azim Premji University 2022). However, the same research reveals that not all demands were met, as 39 percent of households could not secure even a single day of MGNREGA employment in the examined blocks.6

The Ministry of Rural Development (MoRD) has informed state governments that "all payments to the MGNREGA beneficiaries must be mandatorily made through the Aadhar Based Payment System (ABPS) effective from February 1, 2023" (Kasliwal 2023–24). However, due to privacy and authentication issues surrounding the Aadhar card—a secure ID number used to access various government and business services—several participants in India's work-guarantee program for the rural poor have been unable to find employment. Nearly 50 percent of MGNREGA workers will be affected by the new Aadhar Based Payment System (ABPS), as these workers are still not eligible for wages through ABPS (Drèze 2023). As of February 20, 2023, only 44 percent of the total workers in India were eligible for

ABPS, and more than 50 percent of workers in 14 states are not eligible (Drèze 2023). While linking an Aadhar card to a bank account is a step in the right direction, the focus should not be diverted from creating decent job opportunities to uplift the living standards of the people.

Demonetization, such as the case in India in 2016, disrupted the cash-dependent economy and impacted daily wage labor and informal businesses. Demonetization eroded the trust and confidence people had in the currency and the financial system. The formalization of the economy should be pursued gradually to avoid causing hardship in the informal sector. To promote organic formalization, it is important to bring the unbanked population, particularly women, into the banking system. An effective way to motivate the unbanked population is through employment guarantee programs like the MGNREGA, which provides jobs with wages and benefits. However, the funding for the MGNREGA has been significantly reduced in recent budgets, impacting its effectiveness in compensating for income loss. Additionally, the implementation of the ABPS for MGNREGA payments has faced challenges, with many workers still not eligible for wages through ABPS. By striking a balance between financial inclusion and job creation, a comprehensive approach can be achieved to uplift the living standards of the people. A more efficient and transparent tax administration is necessary to facilitate a comprehensive and organic formalization process.

Notes

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- 2. As of July 16, 2023, \$1 is equivalent to 82.08 INR
- Central Board of Directors of the Reserve Bank of India's (RBI) 561st Meeting minutes in Para 4.3 (vi) https://www.humanrightsinitiative.org/download/ DeMon%201stattachment.pdf
- The Centre for Monitoring Indian Economy (CMIE) measures unemployment in the informal sector on a quarterly basis. The CMIE conducts its Quarterly Employment

- Survey (QES) every quarter, and the unemployment rate is calculated based on the data collected in the QES.
- The term "high-value note" refers to the amount of money that is typically used in cash transactions, rather than the actual value of the note.
- This study examined the performance of MGNREGA during the COVID-19 pandemic in eight blocks across four states of India, viz. Bihar, Karnataka, Maharashtra, and Madhya Pradesh.

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