Duvvuri Subbarao: Some issues in currency management

Remarks by Dr Duvvuri Subbarao, Governor of the Reserve Bank of India, at the Foundation Stone laying function for the Bank Note Paper Mill, at Mysore, 22 March 2010.

* * *

- 1. It is my pleasure and privilege to participate in this function for laying the foundation stone for the Bank Note Paper Mill. A special and hearty welcome to the Hon'ble Finance Minister, Shri Pranab Mukherjee, but for whose active support, the launch of this vital and prestigious project would not have been possible.
- 2. I want to use this opportunity to speak on this occasion to highlight the significance of paper currency, touch on the history of production of currency notes in India and then address certain issues in currency management. Importantly, I would also like to outline the importance of this paper mill that we are launching today.
- 3. Currency notes in circulation have increased significantly since the time RBI was established 75 years ago. The value of notes in circulation in the country has increased from about Rs.172 crore in 1935 to more than Rs.7,00,000 crore in 2009. In terms of volume, the notes in circulation have increased from 124 million pieces in 1935 to more than 51 billion pieces in 2009. In fact, after China, India is the largest producer and consumer of currency notes.
- 4. As the economy grows, people need more currency and other payment instruments to settle their transactions. Notwithstanding several innovations in the field of payment and settlement, common people in our country, as indeed in many other developing countries, still use paper currency for their routine financial transactions. The ratio of currency with the public to GDP which was 12 per cent in 1951 is currently around 13 per cent demonstrating that currency still remains an important mode of payment in the country. It is the Reserve Bank's responsibility, as the sole issuer of notes, to make available good and clean notes in adequate quantity to the public.

History and evolution of production of notes in India

- 5. Currency/bank notes are among the most mass-produced commodities in the world. The genesis of paper money is generally attributed to the token money that evolved around the 10th century in China. In India, the enthusiastic experiment by Muhammed Bin Tughlaq in the 14th century to issue token money and replace silver taka with copper, though a genuine monetary experiment, ended in disaster.
- 6. Use of paper money started in the West in the 17th century. However, paper currency did not catch on in India because of the political turmoil following the collapse of Mughal Empire in the 17th century. Early currency in the form of "I owe you / promissory notes" issued by banks or royal courts made appearance in India only in late 18th century. Among the early issuer of bank notes in India were Bank of Hindostan (1770–1832), the General Bank of Bengal and Behar (1773–75), the Bengal Bank (1784–91), the Commercial Bank, etc. Use of bank notes, however, became widespread only after the semi-government Presidency Banks started issuing notes, notably the Bank of Bengal which was established in 1806. These banks were established under a Government Charter and were required to observe some prudential norms like cash reserve, maximum exposure limit, limit for note issue, etc.
- 7. Use of official Government of India paper currency commenced in 1861 with the enactment of the Paper Currency Act. The management of currency across the Indian sub-continent was evidently a huge task, requiring creation of currency circles. The Presidency banks were made agents for issue and redemption. In 1913, the Office of

BIS Review 35/2010 1

Controller of Currency was established replacing the Currency Department in the Government. In 1935, Reserve Bank of India was created which took over the function of note issue from the Controller of Currency.

8. Indian Currency notes were printed in England till late 1920s. Recognising that production of currency notes is a strategically important activity, the then Government of India set up a currency printing press at Nashik in Maharashtra in 1928. This was followed by the setting up of another press at Dewas in Madhya Pradesh nearly fifty years later in 1975. Meanwhile, in 1967, a security paper mill with a capacity of 1500 metric tonnes per year was established at Hoshangabad in MP. By the late 1980s, the demand for currency notes exceeded the capacity of the two Government note presses. To meet the demand-supply gap, at the instance of Government of India, the Reserve Bank established, in 1996, two currency presses – this one here in Mysore and the other at Salboni in West Bengal. These were set up through a wholly owned subsidiary of RBI viz. the Bharatiya Reserve Bank Note Mudran Pvt. Ltd. (BRBNMPL). By 1999, the BRBNMPL's two new presses started working to their full capacity making the country self reliant once again in currency note printing.

Clean note policy and its implementation

- 9. In 1999, after sufficient printing capacity has been firmly established, the Reserve Bank adopted the "Clean Note Policy" for circulation of fairly good quality banknotes and withdrawal of unfit/soiled banknotes from circulation and their destruction. In pursuit of this clean note policy, RBI did several things. We mechanized the process of note sorting/processing and destruction of unfit notes starting in 2000-01. Recognizing that the practice of stapling of notes was resulting in disfiguration of notes, impeding machine processing and reducing their longevity, RBI issued a directive to banks under Section 35A of the Banking Regulation Act to stop stapling of currency notes and instead secure them with paper bands. RBI advised banks to sort notes into re-issuable and non issuable categories and reissue only clean notes to the public. Finally, RBI launched an awareness campaign exhorting public to desist from writing on the watermark window of the notes or folding or stapling the notes.
- 10. As part of the mechanization and systems improvement drive, we have installed as many as 54 high speed currency verification and processing machines and 27 shredding and briquetting machines in 19 offices across the country. We have advised bank branches with currency chests to equip all their chests with Note Sorting Machines and to ensure that only clean notes are reissued to the public over the counter and through ATMs. Currently, there are over 4300 currency chests well equipped with Note Sorting Machines. We also did a systems overhaul to improve productivity, reinforce safeguards and minimize errors.
- 11. The above efforts resulted in credible improvements. In the two year period between September 2007 and September 2009, the accumulation of soiled notes at currency chests and issue offices has been brought down from 190 days of processing capacity to 68 days. The disposal of soiled notes increased from 7.3 billion pieces to 11.9 billion pieces. Fresh notes issued to currency chests and the public increased from 10.7 billion pieces in 2006/07 to 13.8 billion pieces in 2008/09.

Fake currency/counterfeit notes

12. Counterfeiting of money is almost as old as printing of currency. At some period in history, it was considered treasonous enough to warrant punishment by death. It was in 1650 AD that paper money was developed and counterfeiting flourished, especially within America where counterfeit money was more common than genuine money. Counterfeiters had become so skilled that when the first federal coins were issued by the US Government in the 1780s, they had the dies cut by an ex-counterfeiter. However, it was the advent of colour copiers and other electronic devices in late twentieth century that made counterfeiting easier.

2 BIS Review 35/2010

Around the world, governments are locked in a fierce race with counterfeiters to keep that one crucial step ahead in terms of technology and security features. Governments are also tightening measures to check counterfeiting, apprehend counterfeiters and impose deterrent and harsher punishments.

- 13. Data available in the public domain suggests that the incidence of counterfeiting varies across different countries. While in Australia, counterfeit notes detected were around seven pieces per million notes in circulation (2008-09), in Canada it was 76 (2008). In New Zealand, the number was a low of 0.71 counterfeits per million notes in circulation (2008-09), whereas in Switzerland it was ten. As for the euro, there was roughly about one counterfeit per 14,600 bank notes in circulation (2008). At home here in India, fake notes reported as detected by banks and fake notes found in remittances received by RBI during 2008-09 amounted to eight per one million notes in circulation. The data however does not include the counterfeits that are seized by police. The above data shows that, by an international metric, the incidence of counterfeit notes in India is not alarming. Nevertheless, counterfeiting *per se* is a matter of serious concern for the Government and the Reserve Bank.
- 14. While on the subject of estimate of fake notes, I want to make a clarification. Last year, some newspapers had erroneously quoted a figure from the Nayak Committee Report for estimates of forged currency notes in circulation. The Nayak Committee, which was set up in 1988 to go into the dynamics of currency management, did not make any estimate of fake currency. What it estimated was the projected value of notes in circulation in the year 2000 which has Rs. 1,69,000 crore. The media incorrectly reported this as the number of fake notes in circulation.
- 15. The Reserve Bank's role in addressing the problem of counterfeiting lies in improving the security features of the currency notes, putting in place a system where all fake notes making entry into the banking channel are promptly detected, and raising public awareness levels. For the sake of completeness, let me list the measures initiated by Reserve Bank for addressing the menace of counterfeiting:
- Awareness and publicity campaigns.
- Augmenting the security features. Non disruptive withdrawal of notes in old series by replacement with notes in new series.
- Use of note sorting machines in all large cash handling branches in a phased manner so that all notes are sorted before reissuing to customers. To start with, all branches, where the daily average cash receipts are more than Rs. 1 crore, will have to do this by March 2010, and those where the daily average cash receipts are between Rs. 50 lakh and Rs. 1 crore, by March 2011.
- Installation of note sorting machines at select non-chest bank branches (210) by RBI on a mix of criteria viz. volume of cash handling, counterfeit detection and proximity to international border.
- ATMs to be equipped with sensors for detecting counterfeit notes. Till then, banks are to ensure that the ATMs are filled only with notes that have been sorted through Sorting Machines.
- Creation of Forged Notes Vigilance Cells in banks.
- Formation of security committees in each state including representatives of police, banks, etc. to deal with the problem of counterfeiting.
- Strengthening security systems at currency chests and more intensive supervision of chests by RBI.
- 16. RBI's efforts at checking counterfeiting will be effective only if there are equally effective efforts by banks. Banks should ensure that counterfeit notes are promptly detected once they enter the banking system, and that there is prompt and accurate reporting. They

BIS Review 35/2010 3

should ensure that only clean and genuine notes are issued through their ATMs and over the counters. As currency notes are an integral part of our daily life, we, as users, should understand the various security features of the notes. These features are prominent, and can be easily identified. Enhanced public awareness will by far be the most effective deterrent to counterfeiting.

Polymer notes

17. Cost and longevity are important issues in currency management. After due consideration, and in consultation with the Government, the Reserve Bank has decided to introduce one billion pieces of Rs 10 banknotes on polymer substrate on a field trial basis in a limited launch in five cities. While cleanliness and durability are seen as the major advantages of polymer, the carbon footprint associated with production, use and disposal of polymer notes is an important issue. Available information indicates that polymer banknotes (and the waste from production) can be granulated and recycled into useful plastic products such as compost bins, plumbing fittings and other household and industrial products. Considering the relatively longer life of polymer notes and their amenability to re-cycling, the "carbon footprint" of polymer notes vis-à-vis paper banknotes is likely to be on the plus side. Regardless, this is one of the issues that we will study during the pilot phase, and will embark on polymer notes on a long term basis only if the cost-benefit calculus is decidedly positive in all dimensions.

Why we need this paper mill

- 18. It should be a matter of pride for all of us that the entire requirement of the country's currency needs this year's estimate is of 17 billion pieces is printed within the country. However, for the main raw material required for this the banknote paper we are heavily dependent on imports. The existing facility at Hoshangabad meets just 5 per cent of our requirement. We need to significantly increase our self-sufficiency in this regard for a number of operational, economic and strategic reasons. Producing our own paper is decidedly cheaper, and importantly a check against counterfeiting. The banknote paper market is a strong oligarchy. India's demand for banknote paper 18000 MT per year is huge in international terms, and on the supply side there are just 3/4 large producers. This situation exposes us to vulnerabilities of a suppliers market in terms of price, quantity and timelines, something that we should avoid or at any rate minimize.
- 19. It would be pertinent to note that major countries viz. USA, Japan, China, Brazil, Russia and countries in the euro area and even smaller countries like South Korea, Indonesia, Iran and Pakistan make their own bank note paper.
- 20. It was in this background that the Government and the Reserve Bank of India decided to set up a banknote paper mill with an annual production capacity of 12,000 MT as a backward linkage in the process of note printing. The proposed paper mill is a joint venture between the Bharatiya Reserve Bank Note Mudran Private Ltd. (BRBNMPL) and the Security Printing and Minting Corporation of India Ltd. (SPMCIL), the two agencies which are collectively responsible for printing of all currency notes in the country.
- 21. This plant in Mysore for which the Finance Minister is laying the foundation stone today will be a state of the art production unit that will showcase to the world India's capacity to produce banknote paper conforming to the best international quality and security standards.
- 22. I wish the project and the people behind its implementation all success. Once again, a very warm welcome all of you to this foundation stone laying function.

4 BIS Review 35/2010