The paper examines how the operating performance of the Indian firms changed after their initial public offerings (IPOs). The study is based on data on non-financial firms, which floated IPOs during April 1, 2000 to March 31, 2011. The study focuses on their long-term operating performance, for which it uses minimum three years post-issue data. Thus the data up to end of March 2011 allows assessment of performance up to 2015. The data are extracted from Prowess database maintained by the Centre for Monitoring Indian Economy (CMIE).

The study employs return on assets (ROA), ratio of net operating cash flows to total assets (RCFA), return on sales (ROS), asset turnover ratio (TOR) and sales growth as indicators of operating performance. In the study, a multiple variables approach was preferred, as a single variable gives only partial information about performance. ROA was calculated as ratio of profit before interest, taxes, depreciation and amortisation (PBDITA) to total assets. Change in operating performance is calculated as the median change in performance in post-issue years over the year immediately before issue. The authors have used both univariate and multivariate approaches to test the change in performance of IPO firms. The former indicates that IPO firms are not able to maintain high ROA post-issuance; however, it remains above the industry median. RCFA declines sharply in the year of issuance but recovers thereafter and converges to industry median indicating a tendency of convergence in IPO firms’ performance with the industry average. IPO firms witness a sharp expansion in assets size and capital expenditure in the post-issue period. In comparison with matched firms, IPO firms report higher ROA throughout the sample period but somewhat lower RCFA. Median turnover ratio of IPO firms is almost similar to matched firms in the year prior to issuance; however, it declines post issuance and difference widens in post-issue years.

Operating performance measured by RCFA also declined during the post-issue period. The decline, however, became muted in the first and the second year post issuance and turned positive in the third year. Industry median adjusted and Mahalanobis distance matched firm adjusted RCFA also showed the same trend in a statistically significant manner indicating that IPO firms do not face post-issue cash flow problems. Interestingly, though change in ROS was negative for IPO firms, adjusted ROS - for industry median as well as matched firms - did not show any decline, in fact it increased marginally in the third year post issuance. IPO firms continue to maintain higher sales growth post-issue vis-à-vis industry median and also higher growth in capital expenditure. Nevertheless, IPO firms witness decline in the asset turnover ratio.

As univariate results are not controlled for confounding variables, the authors have conducted multivariate analysis, controlling for firms’ sales promotion expenditures, R&D expenses, short-term liquidity, business group affiliations, promoters ownership, and executive directors’ ownership. Results indicate a consistent decline in ROA in the three years post issuance compared to the matched firms. TOR also shows a similar decline. RCFA, however, shows decline only in the first year post issuance. The decline in ROS which is not scaled by assets is statistically insignificant. It
may, thus, be concluded that the primary reason for the decline in the operating performance is rapid rise in assets of an IPO firm.

The authors have also tested theoretical prepositions, such as agency theory and entrenchment theory, using multivariate regressions. To test agency theory, they have regressed ROA, RCFA, TOR and ROS on promoters’ retained shareholding in firm, and change in performance of each firm in year of issuance relative to the previous year on promoters' residual ownership, respectively. Promoters' retained shareholding has positive and statistically significant coefficient for ROA and RCFA. However, its impact on TOR and ROS is statistically insignificant. Thus, the results are not conclusive to either rejecting or supporting agency relationship hypothesis. Consequently, the authors matched control firms on the basis of ROA within the same industry at 2-digit NIC. They observed that decline in ROA is substantially muted when IPO firms are matched with the same operating variable. This indicates that decline in performance of high-performance firms is rather a common phenomenon and not limited to IPO firms only.

Summarizing their findings, the authors state that the post-issue operating performance of IPO firms measured as return on asset and turnover ratio records a sharp decline. However, contrary to the findings of extant literature, they find that the decline in ratio of operating cash flow with total assets is confined to the issue year and year after the issue only. Initial decline in the ratio of operating cash flow with total assets could be on account of enlarged capital expenditures, which firms resort to after the IPO. This study also finds that IPO firms continue to outperform matched firms from the same industry when compared in terms of change in relevant operating variables. A battery of tests conducted after controlling for firms’ various attributes such as family-control, business group ownership, size, expenditure on R&D and advertisement and liquidity, etc., indicate that decline in performance cannot be completely explained by agency relationship and entrenchment hypothesis. They also find that the major cause for decline in asset-scaled operating ratios after an IPO is sharper than industry average expansion of the balance sheet size and consequential increase in assets of IPO firms. Therefore, normalisation of the operating performance variables by sales rather than assets is considered more appropriate by the authors.

Source: www.rbi.org.in
Around the world e-payments are gaining share. The value of card payments for Committee of Payments and Market Infrastructure (CPMI) member countries increased from 13% of GDP in 2000 to 25% in 2016. While use of cards varies significantly across countries but there is no apparent difference between Emerging Market Economies (EMEs) and advanced economies (AEs). The average number of payment cards (e.g. credit and debit cards) per person in CPMI member countries rose from 1.10 to 2.50 during the 2007-16 period. Cards issued in EMEs drove this increase, as cards per person were little changed in most AEs. On the other hand, the value of a typical card payment has declined. Over the last decade and a half, the average value of a card payment (in nominal terms) has dropped from above $60 to less than $40. One reason for the increasing number of ever smaller payments is better and more widespread infrastructure. Point of Sale (PoS) terminals used to be fixed terminals installed on counters but they have increasingly been replaced by more convenient mobile terminals. In CPMI countries, their density has doubled between 2007 and 2016 to 13 per thousand inhabitants.

Cash in circulation (scaled by GDP) is frequently used as a proxy for cash demand. Since 2000, cash in circulation is up from 7% to 9% of GDP (on average) in a sample comprising CPMI members and 22 additional countries. The increase is primarily due to an uptick in AEs following the Great Financial Crisis (GFC). Overall, a majority of countries saw higher cash in circulation. Cash demand varies considerably across countries. While one might expect EMEs to have higher cash demand, no such pattern is evident from the data. Demand even differs among countries that are otherwise similar in terms of economic and social characteristics.

As with cards, the infrastructure supporting cash has improved. Since their debut in 1967, automated teller machines (ATMs) have become the key means through which people access cash. Like PoS terminals, ATMs have also evolved; most ATMs now accept cash deposits and some also provide other banking services such as bill payments. The number of ATM terminals per thousand inhabitants has surged over time. In CPMI countries it has risen by 50% since 2007, from 0.40 per thousand people in 2007 to above 0.60 in 2016. Over the same period, the amount of cash withdrawn rose from 12% to 20% of GDP. These increases were driven by rapid growth in EMEs, where the number of ATMs as well as the amounts withdrawn rose significantly. In contrast, for AEs ATM density is, in general, little changed since 2007.

Cash, like other forms of money, is used both as a means of payment and a store of value. A common way to try and disentangle the two types of cash demand is to assume that larger-denomination notes are mostly held as a store of value and smaller ones for payments. The authors use a uniform threshold across countries of $75 (purchasing power adjusted) to distinguish the two components of cash demand. They find that the relative share of total cash in circulation accounted for by large notes varies greatly across the CPMI countries. The evolution of large- and small-denomination notes suggests that cash is being
increasingly used as a store of value rather than for payments. Over the last decade, the demand for large-denomination notes has outpaced that for smaller denominations. In fact, a handful of countries (e.g. Korea and Russia) saw the demand for smaller-denomination notes decline and that for larger-denomination ones increase.

Panel data analysis can help shed further light on factors driving cash demand. Following Keynes (1936), the authors focus on three motives for holding cash: transactionary, precautionary and speculative (or portfolio). However, the small size of the data set (fewer than 20 countries, and annual data for 16 years) requires a parsimonious approach. The econometric model uses three different measures of the dependent variable: total cash demand, demand for small notes (transactionary), and demand for large notes (store-of-value or speculative). Opportunity cost is proxied by the central bank policy rate. Uncertainty represents country-specific financial and economic uncertainty. In addition to country fixed effects, the authors control for Age (average age of the population) and GDP per capita. Everything else equal, cash demand is expected to be higher when the average age of the population increases (affinity for cash among older people) and to be lower as GDP per capita increases (lower cash use as countries become richer over time).

Conditional on unobserved country characteristics, the average age of the population is positively related to the total and transactionary demand for cash. Both the total and transactionary demand for cash is also inversely related to GDP per capita. Interestingly, the authors do not find a statistically significant effect of uncertainty in their regressions. There could be a number of reasons for this. For example, the coefficient estimates reflect an unweighted average across countries. This implies that, even if uncertainty is positively related to cash demand in some large countries, it may not be captured in the average estimate across countries. In addition, some of the currencies in the sample have a non-trivial component related to global demand for cash, which could be affected more by foreign rather than by domestic uncertainty. The impact of opportunity cost is statistically significant for total demand and for large notes, but not for small ones.

Source: www.bis.org
For an open, inflation targeting, emerging market economy (EME) like India, exchange rate pass through (ERPT) to domestic prices is a key policy parameter for at least two important reasons. First, it has implications for the central bank’s goal variable - inflation formation. Also, welfare effects working through consumers' disposable incomes and corporations' input costs/profit margins feed back into informing the setting of optimal monetary policy. Secondly, it influences the degrees of freedom available for conducting monetary policy in pursuit of domestic objectives. Quite naturally, the role of ERPT in the conduct of monetary policy has attracted prolific research attention.

In the ultimate analysis, ERPT is an empirical issue. The eclectic policy maker having to deal with it on operational terms is naturally wary about choice of methodology, controls, restrictions, time frame and stability of the estimates over space and time. Just as the empirical literature was coalescing around a settled position - that ERPT is delayed and incomplete; that it is low and stable in advanced economies (AEs), higher but declining in EMEs - one strand has put a finger to the wound. Since the taper tantrum of the summer of 2013, global spillovers from ultra-accommodative monetary policies of systemic central banks have triggered large and sudden risk-on-risk-off swings in investor sentiment and asset prices, especially exchange rates. In this setting, evidence has been turned in on higher exchange rate volatility being associated with higher ERPT and axiomatically, with higher inflation variability. Consequently, the standard approach of estimating ERPT as linear and symmetric could be biased towards overestimation as it would also pick up changes in exchange rate volatility. In contrast to the relative neglect in the standard literature, recent studies are putting out persuasive evidence that non-linearities cannot be neglected. Price rigidities and pricing to market strategies are found to impart convexity to ERPT, while switching costs - low elasticity of substitution between domestic and foreign goods - could give it concavity.

The main findings of the paper can be summarised as follows: ERPT turns out to be lower in the post-2014 period than in the years prior to it. Declining levels of inflation and inflation variability, relatively subdued exchange rate volatility and a fall in the degree of openness embodied in the ratio of trade to GDP in this period contribute to lower ERPT. There are non-linearities in ERPT, which have implications for the conduct of monetary policy as they influence the responsiveness of inflation and output gaps to policy impulses. Illustratively, small depreciations produce relatively high ERPT and stronger monetary transmission, although global shocks could overwhelm steady state effects. These policy implications are examined by calibrating an open economy dynamic stochastic general equilibrium (DSGE) model of the Indian economy.

The degree of ERPT matters for the conduct of monetary policy, and particularly so in a flexible inflation targeting framework, as it informs the policy maker about the extent to which the goal variable - the domestic inflation - is hostage to imported influences. Invariably it conditions the decision on the direction and size of instrument variable adjustment. For the policy maker,
therefore, precision is key in what is ultimately an empirical issue. As against the received wisdom that ERPT is low in AEs and declining in EMEs derived by estimating it as a linear and symmetric process, this paper explores non-linear, asymmetric and time varying properties of ERPT in the Indian context. In doing so, it contributes country-specific evidence to the animated debate on the theme, which becomes interesting in the context of the changing inflation dynamics in India in recent years in an environment of high volatility in food price due to supply shocks and exchange rate volatility stirred up by bouts of global financial market turbulence. The adoption of flexible inflation targeting as the framework for monetary policy influences the discussion significantly.

Important policy inputs are offered in the paper. Notably, the degree of ERPT has declined in the post-2014 period than in the years prior to it. This expands the degrees of freedom for the policy maker in India to pursue independent monetary policy. ERPT matters, i.e., about 15 per cent of exchange rate changes are cumulatively passed through to CPI (consumer price index) inflation over a period of five months, with time varying parameter estimation increasing it to above 15 per cent by 2013-14 and declining since then. With 80 per cent of the national requirement of the petroleum products imported along with almost all of domestic gold consumption, this is critical information - on an average a one percent change in the exchange rate translates to 15 bps change in headline inflation.

Source: www.rbi.org.in