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Monetary Policy: Independence & Cyclicality

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The preamble to the Reserve Bank of India (RBI) Act, 1934 states that "the primary objective of monetary policy is to maintain price stability while keeping in mind the objective of growth." This Act was amended in May 2016 to provide a statutory basis for the implementation of the flexible inflation targeting framework. RBI's mandate is to keep the headline CPI inflation at 4% with upper and lower tolerance limits of 6% and 2% respectively, for a period of five years from April 1, 2021 to March 31, 2026. Failure to achieve the inflation target is defined as the average inflation being above the upper tolerance limit for more than three consecutive quarters or being lower than the lower limit for three consecutive quarters. Headline CPI inflation has been above the upper tolerance limit of 6% since January 2022. This constitutes failure to achieve the inflation target by RBI as defined in the flexible inflation targeting framework. As per the statute the six member Monetary Policy Committee will be meeting on November 3rd, 2022 to present a report to the Central Government, stating the reasons for failure to achieve the inflation target, remedial actions proposed to be taken by the central bank and an estimate of the time period within which the inflation target shall be achieved pursuant to timely implementation of proposed remedial actions.

The Taylor's Rule: The guiding rule for flexible inflation targeting is a Taylor-type formula which links the nominal interest rate of an economy to its inflation gap (divergence of actual inflation from the stated target) and the output gap (divergence of the actual output from its linear trend or the potential output). The inflation targeting rule adopted by RBI indicates that at full employment output (where actual output equals potential output so that the output gap is zero) and headline CPI inflation at target i.e. 4% (inflation gap is zero), the nominal interest rate should equal 5% based on recent research by RBI which infers an equilibrium neutral rate of 0.8%-1% for India[1]. The neutral rate is that which supports the economy at full employment without changing inflation. This rate is not directly observable and is dependent on many economic factors such as productive efficiency, and demographics.

Taylor's formula for setting of the nominal interest rate by the central bank is counter-cyclical. If the actual growth is more than potential output, i.e. the output gap is positive and inflation is above target, the policy rates need to be higher than the neutral rate to avoid overheating of the economy, and if the output gap is negative while the inflation gap is also negative, then policy rates need to be lower than the neutral rate to support growth. The present level of the policy Repo rate at 5.90% is higher than the ideal 5%, since real GDP has been much higher than its linear trend due to pick-up in activity and a favorable base effect, and inflation has been consistently higher than target for the preceding three quarters. In response to the high inflation and the ongoing Russia-Ukraine conflict, RBI anticipated a significant deviation in the headline CPI vis-à-vis its

[1] Revisiting India's Natural Rate of Interest: Sitikantha Pattanaik, Harendra Kumar Behera and Saurabh Sharma of the Department of Economic and Policy Research, Reserve Bank of India, RBI Bulletin, June 2022.

inflation target, and started increasing the policy Repo rate with a 40 basis points hike in an off-cycle meeting in May 2022. However, it is important to note that the RBI considers the 1 year forward real interest rate and so, at present, the forward real interest rate is positive at 0.10%, with the policy Repo level at 5.9% and RBI's projection of 5.8% headline CPI inflation by end of FY23.

Two separate working papers published in September 2022 by the National Bureau of Economic Research (NBER) and RBI, have detailed their authors' research on the topics of cyclicality of monetary policy in emerging markets[2], and monetary policy independence[3] respectively. While the first concludes that economies like India have been counter cyclical in their approach of setting up policy rates just like the Advanced Economies (AEs), the latter concludes that RBI's foreign exchange interventions have no major constraining impact on the independence of monetary policy. Monetary policy independence, achieved through a flexible exchange rate regime, facilitates the adoption of cyclicality by the central bank expressed through the interest rate channel.

India has been classified as a 'floating' exchange rate regime under the Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) by the International Monetary Fund (IMF).While a rule based framework reduces the central bank's discretion, the ability to respond purely to endogenous shocks is also limited due to the so-called impossible trinity, where the simultaneous achievement of a fixed exchange rate, monetary policy independence and an open capital account are impossible. Hence, a flexible exchange rate regime is vital for monetary policy independence. An accumulation of a sizable war chest of foreign exchange reserves has been instrumental in keeping the depreciation of the rupee against the dollar as orderly as possible, and allowed the RBI to raise interest rates by 190 basis points, when the US Federal Reserve has increased its rates by a significant 375 basis points, over a similar time frame.

Monetary Policy Independence: It is the ability of the central bank to set the interest rate in the domestic economy independent of the anchor economy[4]. Gopinath et al rightly point out that if the US Federal Reserve hikes interest rates, then emerging markets tend to cut interest rates, evidence of which can be seen in Chart 1. The period 2016-2018 was characterized by the successive rate hikes by the US Fed and rate cuts by the RBI in anticipation of economic contraction. However, this does not stand out as an immutable law, and the current situation is different with both the US Federal Reserve and the RBI hiking interest rates. Monetary policy independence, and by consequence cyclicality, are highly contingent on whether economic conditions are turbulent or calm,

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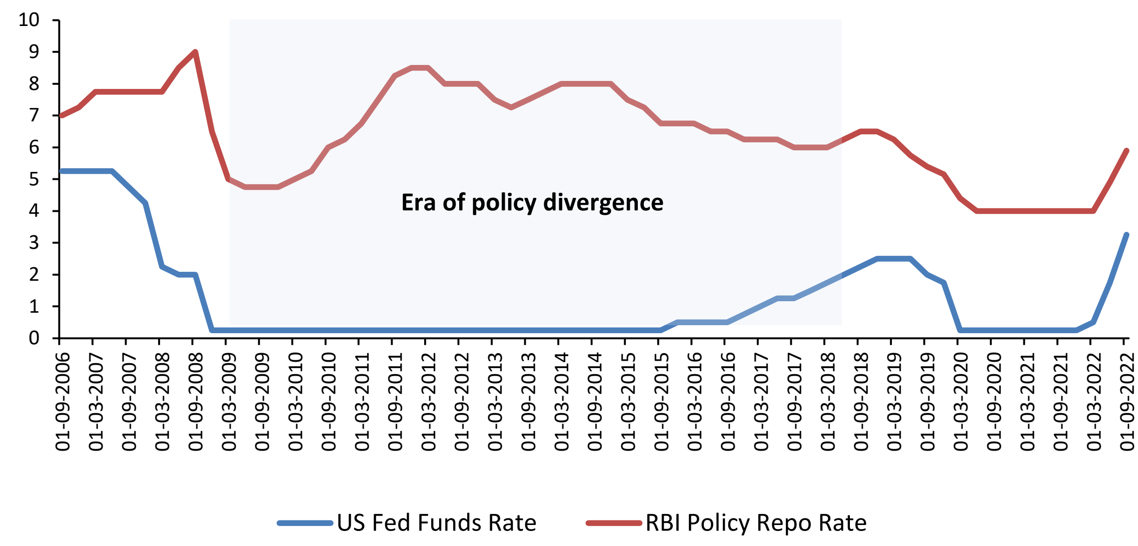
[2] Monetary Policy Cyclicality in Emerging Markets -De Leo, Pierre and Gopinath, Gita and Kalemli-Özcan, Şebnem, National Bureau of Economic Research, Working Paper Series-30458,September, 2022.

[3] Monetary Policy Independence under a Flexible Exchange Rate Regime – The Indian Case ,Harpreet Singh Grewal and Pushpa Trivedi-RBI Working Paper Series No. 14,September, 2022

[4] Aizenman, J., Chinn, M., and Ito, H. (2013). The "Impossible Trinity" Hypothesis in an Era of Global Imbalances: Measurement and Testing. Review of International Economics, 21(3), 447-458. https://dx.doi.org/10.2139/ssrn.2071311

especially for emerging market economies like India. The context of economic conditions is paramount.

Chart 1 : The Fed Funds Rate and Repo Rate (%)

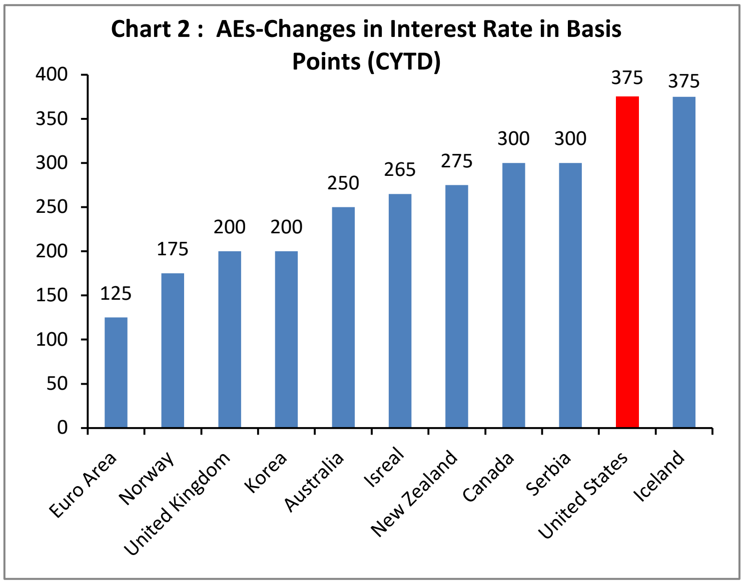


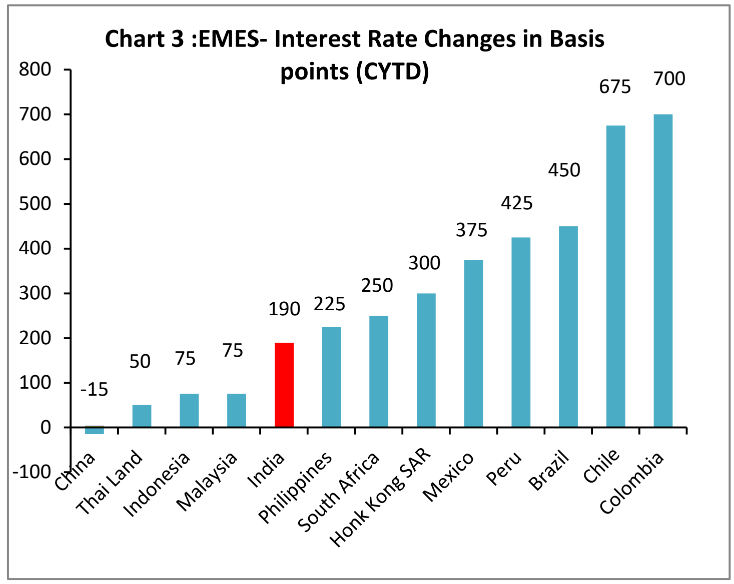
Source: FRED, RBI

Monetary Policy Cyclicality: Cyclicality as in the case of fiscal policies, would mean, the direction adopted by monetary policy in the context of the variations in the GDP/output. Hence, a pro-cyclical monetary policy would mean a monetary policy where interest rates are cut when growth is strong and an interest rate increase when growth is faltering. Conventional wisdom states that monetary policy which stabilizes business cycles is optimal. Hence, a central bank would be better off pursuing a countercyclical monetary policy, or in economic parlance "lean against the wind". Cyclicality will depend largely on the degree of the central bank's independence to anchor economies.

Observing the policy interest rates of the US Federal Reserve and RBI, it can be said that India maintains policy divergence during periods of global financial and economic stability while it loses a good degree of independence to maintain cyclicality during periods of crisis. This observation can be extended for most of the emerging markets (EMs) and is displayed in charts below (2 & 3). The past decade was riddled with crises of global magnitudes. Observing RBI's behavior since the Global Financial Crisis of 2008, it has responded more to the internal macroeconomic impulses rather than external economic changes, when the US Federal Reserve was monetary policy was dormant, maintaining the Fed Funds Rate near the zero lower bound (ZLB).

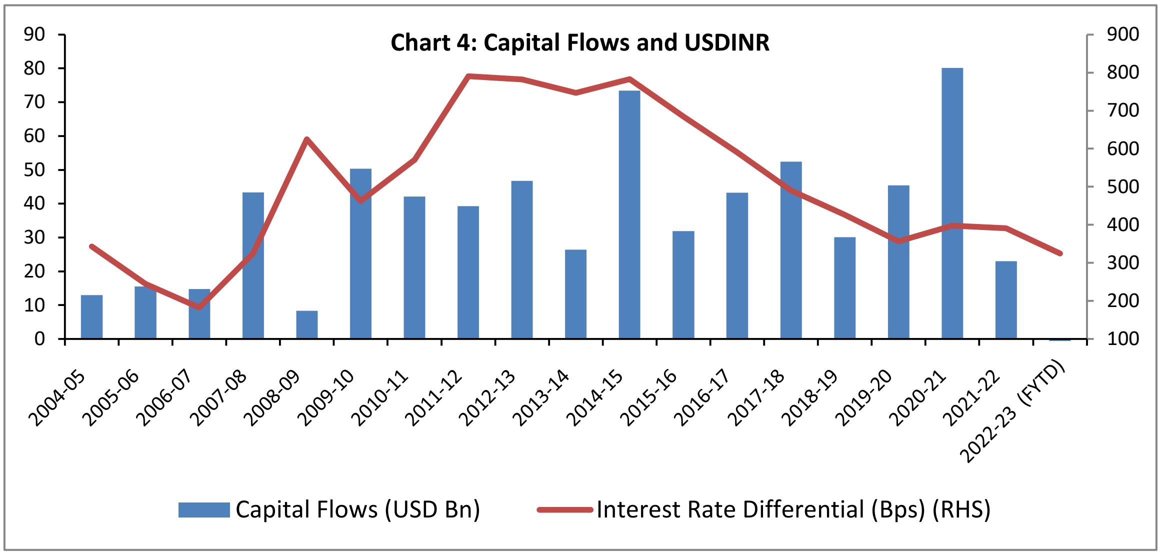
The perception of the academic research world was that emerging markets are usually pro-cyclical when it comes to setting up of monetary policy. This reasoning was challenged in the NBER paper (Gopinath et al) as the chosen medium of analysis in the earlier studies was the market interest rate which has an added element of risk premium which masks the movements of the monetary policy. New evidence suggests that monetary policy in the EMEs is counter-cyclical, i.e. RBI increases interest rates as growth picks up and inflation is seen rising, and it lowers interest rates as it sees growth faltering and inflation cooling off due to slack in aggregate demand.





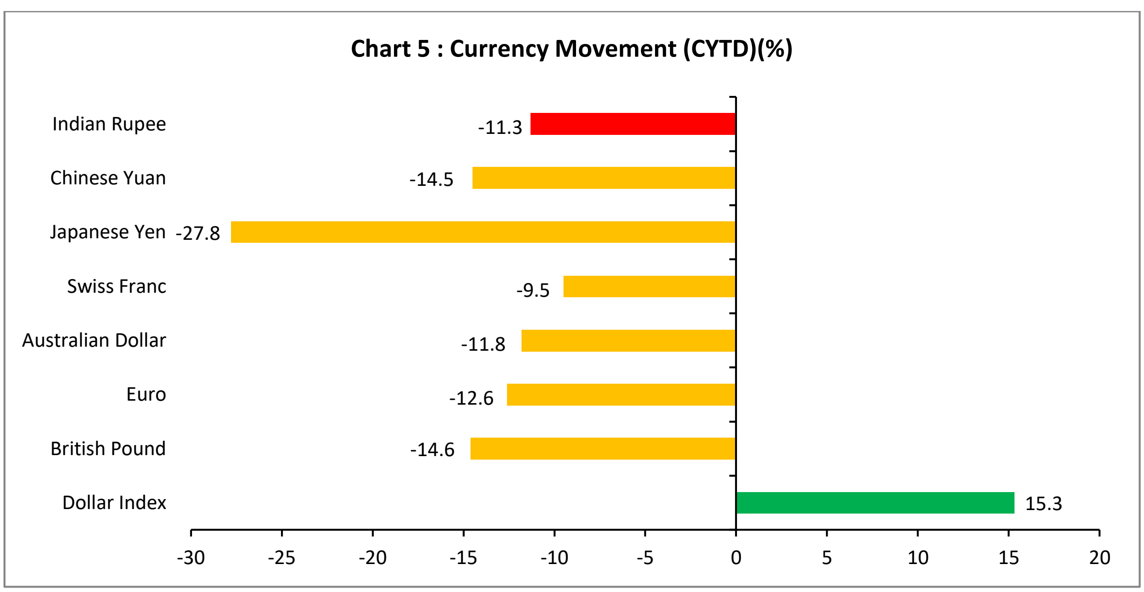
Source: RBI

The capital flow argument: An argument often made in favor of mimicking the US Federal Reserve in India is based on the financing of India's Current account Deficit (CAD) through foreign capital flows. While it is true that an unsustainably high CAD as a percentage of GDP needs foreign capital, capital flows are affected not only by interest rate differentials, but also by the risk-on/risk-off sentiment of global financial markets. Here again, the economic context is the dominant factor in determining the direction of the flows. In a classic risk-off scenario or an economic crisis, capital will flow to safe haven assets irrespective of the interest rate differentials. The chart given below indicates that even when the interest rate differential between is as high as ~750 basis points capital has not really flowed in any great measure as that was the time of the "Taper Tantrum" in 2013. Conversely, during the pandemic years FY20, FY21 India saw robust capital inflows even with an interest differential of 350-400 basis points over the effective Fed Fund rate.



Source: RBI & Bloomberg

The impossible trinity and the cyclicality of RBI: The RBI paper establishes that the foreign exchange currency interventions done by the RBI have no major constraining effect on the monetary policy independence of RBI. More importantly, India has opened its capital account in a gradual and orderly manner. RBI has a fair amount of regulatory controls on capital flows. This is imperative for the central bank to be as independent as possible. Due to a floating exchange rate regime, the RBI does not target any specific level for the USDINR exchange rate, but through interventions in the foreign exchange markets, ensures that whatever level it reaches, it acquires the path of least resistance. The accumulation of huge dollar reserves has stood the RBI in good stead so far in maintaining a smoother trajectory of rupee depreciation. A stable exchange rate is a precondition for interest rate stability in a highly globalized world.



Source: RBI, Bloomberg

This time is different: The cyclicality of a central bank i.e. the setting up of interest rates in a pro-cyclical or counter cyclical manner depends on the degree of independence it enjoys from its anchor economy. In our view, India has been independent during periods of relative economic stability in the US and responsive to external changes during crises. Today, due to inflation targeting being the most favored approach of central banks around the world, crisis times elicit synchronized responses from central banks costing a good degree of independence for individual central banks. Conventional wisdom dictates that central banks respond to inflation driven by changes in aggregate demand. That seems to be changing with time and very high inflation caused by supply driven factors is provoking central banks in varying degree to raise policy interest rates. India has not been an exception, though it seems to be closing the gap fast, and a terminal Repo rate of 6.5%-6.7% will lead to a real interest rate of close to 0.8-1% range, assuming headline CPI inflation follows RBI's projected trajectory.

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