5 December 2022

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Impact of monetary policy on rates

A nagging issue when conducting monetary policy is to ascertain whether or not the transmission mechanism is effective. This is important because if the central bank keeps raising or lowering the control rates, and interest rates on deposits and advances do not follow suit with adequate responses, then the efficacy gets affected and purpose may not be achieved.

2022 has been the year when almost all central banks have started raising their policy rates in a bid to control inflation which has received a boost post the Ukraine war where disruptions have contributed to the acceleration in price movement. In this brief study, we have analysed monetary policy actions of global central banks in CYTD22 and their impact on domestic lending rates and sovereign bond yields.

Data indicates that countries such as US, Canada, Australia, Mexico, S.Africa have relatively more effective transmission mechanisms, i.e. lending rates have changed almost in portion to change key policy rates. Government Debt market is seen to be more responsive in case of countries like France, Germany, Brazil, Australia and UK. In case of India, transmission into increase in both lending and G-Sec rates seems to be slower relative to the other countries studied. However, debt market interest yields have risen more (than lending rates) in proportion to policy rates.

Global monetary policy:

Since the outbreak of the Russia-Ukraine war, global commodity prices shot up much earlier than anticipated. As a result, global central banks began tightening their respective monetary policies by hiking key policy interest rates.

- Amongst our sample of 17 major economies, Mexico, S. Korea and UK were amongst the first ones to hike policy rates as economic activity started rebounding post Covid-19 pandemic and inflation was rising.
- While Mexico began its rate hike cycle way back in Jun'21, S. Korea began tightening since Aug'21 and UK since Dec'21. RBI started the rate hikes from May onwards in a surprise policy announced between two scheduled policies.

For the purpose of this study, we have evaluated cumulative hikes in CYTD22 (Jan-Nov'22) alone and their subsequent impact on bank lending rates (Jan-Nov'22) and sovereign 10Y yields (Jan-Nov'22). In CY22, central banks of UK, S. Korea, Argentina, Mexico, and South Africa had commenced monetary policy tightening even before the outbreak of Russia-Ukraine war. Post the war, Brazil Canada, US (Mar'22), India, Australia (May'22) also started increasing policy rates. ECB (Jul'22) and Indonesia (Aug'22) were last ones to hike.

In CYTD22, Argentina has raised the rates the most (+3700bps), and is an outlier, primarily due to domestic inflationary concerns. Apart from this, Mexico (+450bps), US (+375bps), Brazil (+350bps), and Canada (+350bps) have raised the rates the most. India lies at the lower end of the spectrum with 190bps increase, higher than only 175bps increase by Indonesia. China on the other hand has kept its benchmark lending rate unchanged and reduced Reserve Requirement Ratio (RRR) for banks by 60bps in order to release liquidity and stimulate credit growth. Following the war, Central Bank of Russia has reduced its policy rate by 100bps and Turkey has cut rates by 500bps since Sep'21, despite extremely high inflation rates.

Table 1: Change in central bank policy rates

Central Bank of	Current policy rate, %	Change in policy rates (Jan-Nov'22), bps
Argentina	75.00	3700
Mexico	10.00	450
United States	4.00	375
Brazil	3.75	350
Canada	3.75	350
South Africa	7.00	325
Australia	2.85	275
United Kingdom	3.00	275
S. Korea	3.25	225
France	2.00	200
Germany	2.00	200
Italy	2.00	200
India	5.90	190
Indonesia	5.25	175
China	4.35	0
Russia	7.50	-100
Turkey	9.00	-500

Source: Bloomberg, Bank of Baroda Research

<u>Policy impact on rates:</u>

In comparison to change in monetary policy rates, we tracked what is the subsequent change in bank lending rates (mortgage rates, local currency), in order to see how quick the transmission is. Technically all these rates cannot be compared as rates vary across segments of lending. Hence these numbers must be viewed with caution and are supposed to be indicative. For example in India the MCLR has been used which may not be comparable to mortgage rates in other countries. But the idea here is to look at a benchmark lending rate of each of these countries and see how it has moved in response to policy rates.

We also look at 10Y treasury yields of respective countries to see if bond market priced in rate hikes better than lending rates.

To compare across countries the change in the considered benchmark lending rate has been compared with changes in policy rate and the ratio looked at. A ratio of above 100 means there has been full transmission.

In case of lending rates, it was noticed that in economies like Argentina, Brazil, US, Mexico, Canada, Australia and South Africa the transmission is near complete. In fact, in case of US and Brazil, mortgage rates have increased even more than policy rates. On the other hand, a slower rate of transmission can be seen in European and Asian economies. Amongst these, UK has performed better than the others, as the transmission is even slower in countries like Germany, France, S. Korea and India. In Indonesia, the rates have only now (since Oct'22) begun to increase, and have come at par with last year. In Russia, lending rates have fallen even more than the cut in the policy rate, to spur credit growth to support the battered economy. In Turkey lending rates continue to inch up despite cut in policy rate by the central bank.

Table 2: Change in bank lending rates

	Change in lending rates (Jan-Nov*'22), bps	Change in lending rate (% share of change in policy rate)
Argentina	3114	84%
Brazil	660	189%
Turkey	427	-
United States	339	90%
Mexico	328	73%
South Africa	325	100%
Australia	275	100%
Canada	267	76%
United Kingdom	170	62%
S.Korea	119	53%
Germany	104	52%
Italy	86	43%
India	80	42%
France	43	22%
China	0	-
Indonesia	-1	-1%
Russia	-43	43%

Source: CEIC, Central Bank of Türkiye, Bank of Baroda Research|*Data as of Oct'22 for Argentina, Germany, Indonesia, Russia, UK and S. Korea; Sep'22 for Brazil, Canada, France, Italy, and Mexico| Note: Mortgage rate is used for Argentina and Türkiye , Variable rate housing loan for Australia, IFS lending rate for Brazil and Russia, Residential mortgage rate (insured) for Canada, 1Y LPR for China, Mortgage rate (upto 1Y) for France and Germany, lending rate working capital for Indonesia, Prime lending rate for S. Africa, floating mortgage rate for UK, 30-Y fixed mortgage rate for US, 1Y MCLR for India, mortgage rate for new loans for Italy and S. Korea.

Table 3 below does the same for movements in 10-year sovereign bond yields to policy rate changes. In general, sovereign yields are impacted not only by current monetary policy actions, but also by expectation of future course of rate hikes/cuts, estimates of how economy will perform in the near to mid-term and global factors.

As inflation remains elevated in Europe, and energy crisis and Covid-19 related slowdown in China is likely to impact European countries more, 10Y yields in France and Germany have reacted the most. They have increased even more than the change in policy rate. In countries like, Brazil, UK and Australia too bond markets have priced in the rate hikes.

Interestingly, in US, Canada, India, Mexico, S. Africa bond markets have not moved as much as policy rates.

Table 3: Change in sovereign yields

	Change in 10Y yield (Jan-Nov'22), bps	Change in 10Y yield (% share of change in policy rate)
Argentina	3274	88%
Italy	270	135%
France	221	110%
United Kingdom	219	80%
Germany	211	105%
United States	210	56%
Brazil	190	54%
Australia	186	68%
Mexico	166	37%
Canada	151	43%
S. Korea	143	63%
South Africa	99	30%
India	83	43%
Indonesia	56	32%
China	14	-
Turkey	-1266	-

Source: Bloomberg, Bank of Baroda Research| Data for Russia is unavailable due to prevailing sanctions

Conclusion:

- Argentina, Turkey and Russia can be considered as outliers for the purpose of this study as extraordinarily high inflationary conditions, domestic political developments and outbreak of war have impacted policy decisions in these countries.
- In terms of change in lending rate and 10Y yields, divergent trend is observed in most economies.
- While countries like Brazil, US, Mexico, Australia, S. Africa, Canada, have near perfect transmission mechanism for bank lending rates, their corresponding 10Y yields have not reacted as much to change in policy rates. One of the reason can be that 10Y yields also react to expectations of future changes in policy rates and how the overall economy is expected to perform.
- In case of European economies, transmission into bank lending rates is most visible in UK, followed by Germany, Italy and France. Response in UK also appears to be relatively good at 80%. Hence, bond markets in Europe seem to have fully priced in the impact of monetary policy rate hikes.
- Amongst the Asian economies, S. Korea began tightening much earlier than countries like India and Indonesia. As a result, transmission into lending rates and bond market reaction is much better than India and Indonesia. While Indonesia began hiking only in Aug'22, movement is lending rates is already visible from Oct'22.
- In case of India, it ranks toward the lower end of the spectrum in both transmission into lending rate and bond market reaction.

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