## Box 1.1

Factors Limiting the Effectiveness of Monetary Policy in Emerging Economies

The channels and the extent of the effect of monetary policies implemented by central banks on market rates, aggregate demand, economic activity and inflation are explained by the monetary transmission mechanism. Processes of the transmission mechanism in emerging economies (EMEs) may differ from those in developed economies. Idiosyncratic factors such as vulnerability to global financial cycles, dominant currency pricing, asset and liability dollarization and currency mismatch in bank and firm balance sheets negatively affect the monetary policy transmission mechanism in EMEs, posing a number of challenges to policy makers. Effects of these elements on the transmission mechanism are shown in red in Chart 1.

Chart 1: Monetary Transmission Mechanism
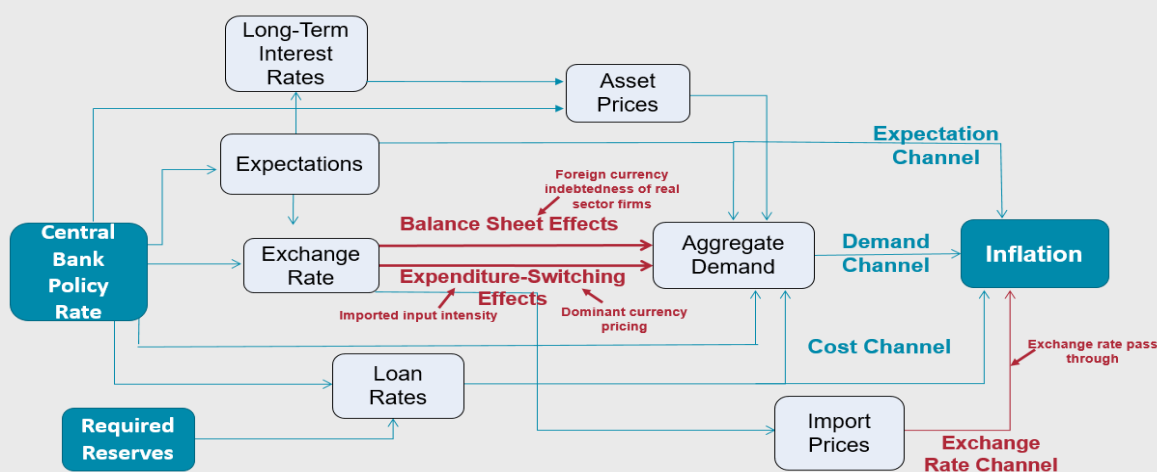
Capital flows towards EMEs may fluctuate due to global liquidity conditions. This can cause an adverse loop among loan growth, asset prices and exchange rate, posing a threat to price stability and financial stability. For example, domestic loan growth may accelerate in periods of excessive capital inflows and easing in external financing conditions, which may result in an accumulation of macro-financial risks due to overheating in the economy, appreciation of the real exchange rate and deterioration in the external balance. An interest rate cut made by the central bank to restrict capital inflows may cause an additional boost in domestic demand, leading to a further increase in credit growth and associated risks. On the other hand, in a period of capital outflows and tight global financial conditions, a tightening policy response in the domestic country will cause an additional deterioration in economic activity. In such a case, while inflation rises due to the depreciation of the local currency, aggregate demand may weaken and policy tradeoffs increase. These examples suggest that global financial cycles may be constraining in determining the monetary policy independently, even with a floating exchange rate regime in small open economies.[1] Still, it is considered possible to determine the monetary policy independently in view of domestic circumstances in the face of these global financial cycles only thanks to the measures on capital flows and macro-prudential policies (Rey, 2016).

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[1] When there is a currency mismatch in the balance sheets of banks and firms, a monetary policy easing under tight global financial conditions can lead to an additional depreciation in the local currency, decreasing the equity of banks and firms and tightening the leverage constraints, which can result in the contraction of economic activity. This is defined as an "expansionary lower bound" in policy rate in EMEs (Cavallino and Sandri, 2019).
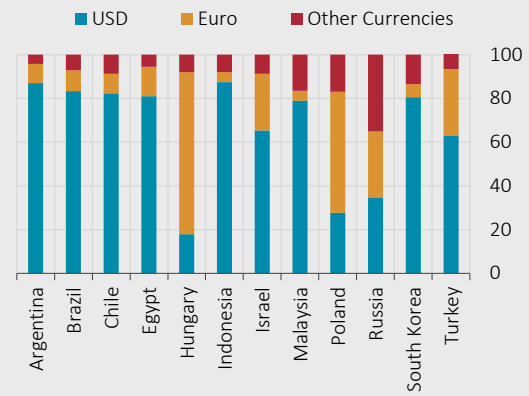
Figure 1: Currency of Export Invoicing* (2019 Shares, %)

USD   Euro   Other Currencies
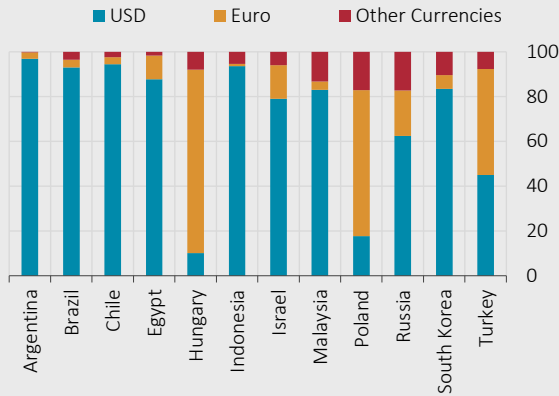
Source: Boz et al. (2020), TURKSTAT.
* Export data is from 2018 for Brazil and 2019 for all other countries.

Figure 2: Currency of Import Invoicing* (2019 Shares, %)

USD   Euro   Other Currencies

Source: Boz et al. (2020), TURKSTAT.
* Import data is from 2018 for Brazil and 2019 for all other countries.

In addition to the fluctuations in capital flows, certain structural factors specific to EMEs may also reduce the effectiveness of the monetary policy. The first of these is *dominant currency pricing*. In foreign trade, using reserve currencies such as the US dollar or euro rather than any one of the currencies of the two trading countries is called *dominant currency pricing*. EMEs invoice large part of their import and export in US dollars, while the EU member countries, and in the countries with high trade volume with the EU, such as Israel, Russia and Turkey, euro invoicing has also reached significant rates (Figures 1 and 2). In an economy where pricing is made according to any of the currencies of the two countries, if the currency of the domestic country depreciates, the import demand decreases, while exports increase as the currency becomes more competitive (Expenditure-Switching Effect). In such a case, which describes the traditional trade channel, the increase in net exports becomes expansionary by supporting aggregate demand. However, in dominant currency pricing, the price of the traded commodity in terms of US dollars or euro remains constant, which inhibits the price advantage of the depreciation of the local currency. Therefore, a higher depreciation in the exchange rate is needed compared to local currency pricing for the necessary adjustment in the balance of trade. Dominant currency pricing reduces the effectiveness of monetary policy by limiting the expansionary effects of depreciation and the adjustment in the external balance (Chart 1).[2] In addition, dominant currency pricing may cause a strong transmission of the exchange rate to domestic prices depending on the export conditions and increase the exchange rate pass-through driven by the cost channel (use of imported inputs) (Chart 1).

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[2] The intensive use of imported inputs is also a factor limiting the adjustment in the external balance following a depreciation in the local currency. Please refer to Akgündüz and Fendoğlu (2019) for the imported input intensity of exports in Turkey

Figure 3: Currency Composition of Borrowing* (2009-2019 Average, %)
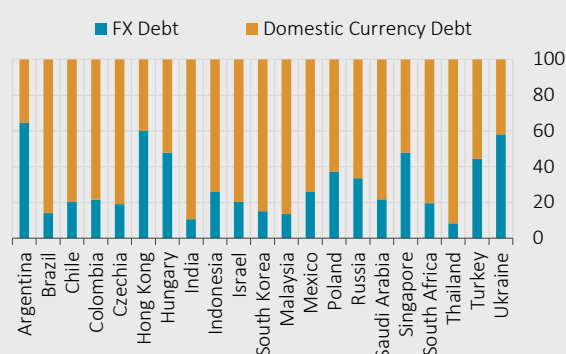
Source: IIF.

Figure 4: Borrower Composition of Foreign Currency Borrowing (2009-2019 Average, %)
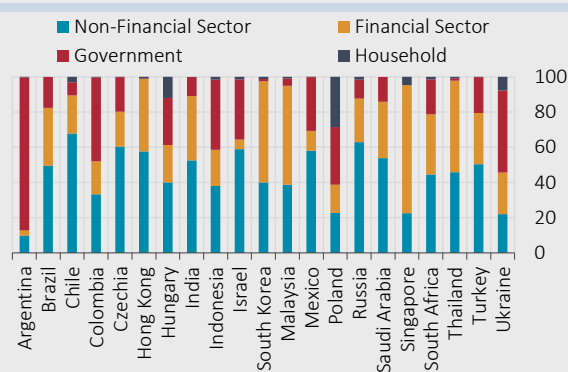
Source: IIF.

Other factors that reduce the effectiveness of monetary policy in EMEs are foreign currency indebtedness and asset dollarization. The amount of foreign currency borrowing in EMEs is significantly high while that in countries such as Argentina, Hong Kong and Ukraine is above 50% (Chart 3). An analysis of foreign currency indebtedness by debtors reveals that household indebtedness is relatively high in countries such as Poland and Hungary, and real sector indebtedness in countries such as Chile, Czechia and Russia (Figure 4). In cases where firms' foreign exchange indebtedness is high, the depreciation of local currency may adversely affect aggregate demand through the balance sheet channel, limiting or completely eliminating the expansionary effect of net exports (Chart 1). In this way, the balance sheet channel may increase the impact of external shocks and increase policy tradeoffs by causing a negative feedback loop between the real sector and financial intermediation during periods of severe depreciation. In addition to foreign currency indebtedness in emerging economies, it is also common for economic units to hold foreign currency assets in order to hedge against foreign currency risk. In the case of high asset dollarization, a shock that drives the exchange rate up may increase the consuming propensity of foreign currency savers through the wealth effect, limiting the effectiveness of the monetary policy response to the effects of a rising exchange rate.

In sum, fluctuations in the global risk appetite pose a threat to macroeconomic and financial stability, and the idiosyncratic structural characteristics of EMEs further increase the effects of the shocks and negatively affect the monetary policy mechanism. Therefore, using solely the policy rate tool to deal with the shocks affecting the economy may not be sufficient. This points out the need for a policy framework that allows the use of an optimal combination of different policy instruments in view of country-specific circumstances to increase the effectiveness of monetary policy in EMEs and to minimize the trade-offs.

References

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