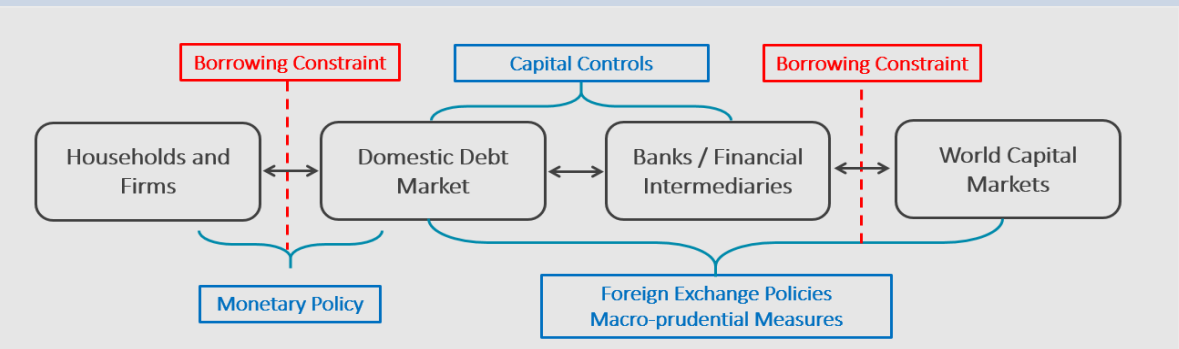
Box 1.2

Integrated Policy Framework

In emerging market economies (EMEs), issues such as dominant currency pricing in foreign trade, dollarization in assets and liabilities, maturity and currency mismatch in banks' and firms' balance sheets, external financial constraints, and worsening inflation expectations lead to differences in the functioning of the monetary transmission mechanism and policy trade-offs from those in developed economies. These problems make EMEs more vulnerable to such shocks. In the face of capital outflows and major domestic currency depreciation, central banks may have to trade raising interest rates to control inflation expectations off against driving the economy into a sharp slump. Due to these constraints affecting the exchange rate pass-through to inflation and the real economy, the interest rate policy alone may not be sufficient to establish price stability and financial stability. In that case, the optimal policy requires a combination of many policy tools such as capital controls, exchange rate policies, and macro-prudential policies. Consequently, central banks in the EMEs respond to shocks by implementing other tools than interest rate policy. For example, central banks in countries with high exchange rate pass-through and massive foreign currency debt intervene aggressively in exchange rate volatility, while, in other countries with fewer vulnerabilities, they intervene more limited (BIS, 2019; Basu et al., 2020). Therefore, in EMEs, a policy framework is required that determines when, how, and to what extent policy tools should be implemented to reach policy goals taking into account each country's characteristics. Thus, the IMF has presented the Integrated Policy Framework incorporating monetary policy, capital controls, macro-prudential policies, and exchange rate policies to address these needs (Basu et al., 2020; Adrian et al., 2020).

Chart 1 shows how macro policies incorporated within the Basu et al. (2020) model transmit to the economy through different agents and markets to show those policies' implementation within the integrated policy framework.

Chart 1: Integrated Policy Framework



Source: Basu et al. (2020) is used for the scheme.

In the integrated policy framework, monetary policy influences the interest rates banks apply to households and firms. The model incorporates both domestic and foreign borrowing constraints. Domestic financial intermediaries borrow in foreign currency but issue bonds in domestic currency and this generates currency mismatch in their balance sheets. Besides, since financial intermediaries have limited capital, and cannot fully alleviate the exchange rate risk as they are subject to external borrowing constraints, they charge a risk premium on bonds because of the default risk. The policy instrument moderating the currency mismatch risk in financial intermediaries' balance sheets is modeled as taxes on capital inflows. This policy tool limits excessive borrowing and minimizes the currency mismatch in the pre-crisis period or mitigates capital inflow volatility induced by global financial cycles.

In the integrated policy framework, the exchange rate policy incorporates the central bank's *foreign exchange transactions*. The central bank also affects financial intermediaries' lending and borrowing capacity through reserve requirement ratio. Thus, the central bank affects the risk premium on foreign borrowing by regulating financial intermediaries' balance sheets, thereby affecting the exchange rates.

In the integrated policy framework, the optimal policy is determined as a function of shocks and each country's vulnerabilities. For example, each country's initial conditions, financing constraints, the foreign exchange market's depth, and the currency and maturity mismatch in balance sheets generate a discrepancy in the optimal policies that differ across countries.

Since both benefits and costs are endogenous in this approach, it is not optimal to implement all policy tools simultaneously because employing a policy tool affects other tools' cost-benefit analysis. For example, implementing capital controls in the pre-crisis period affects the cost-benefit analysis of the monetary policy conducted during a crisis. Limiting capital inflows in the absence of a crisis restricts aggregate demand and debt accumulation, thereby preventing risk exposure and vulnerability in the economy, and reducing the monetary policy's need to stimulate demand by mitigating the impact of any adverse shock. Consequently, although the model presents different policy tools to analyze the integrated policy framework, the optimal policy is determined according to each country's specific conditions.

Chart 2: Risk Premium Shock

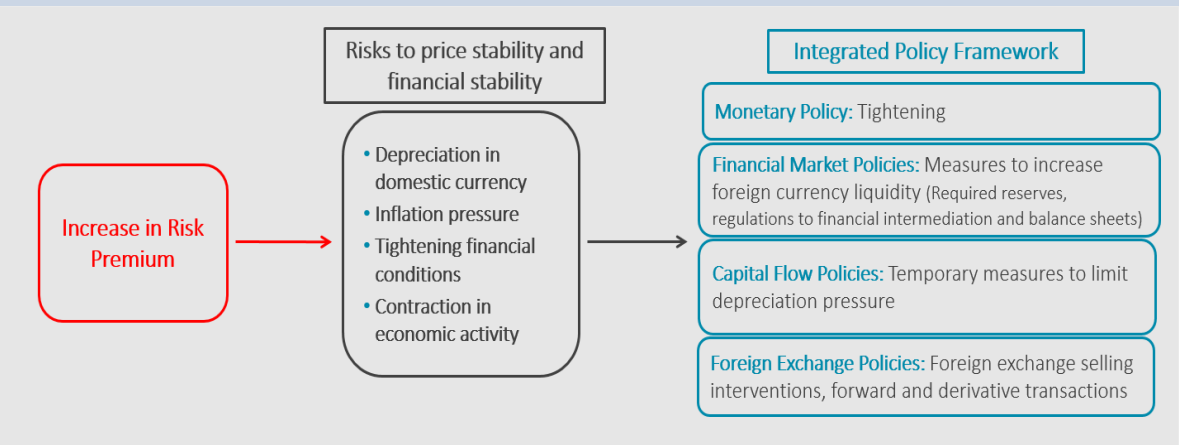


Chart 2 shows the risks induced by unexpected domestic currency depreciation in a country with high exchange rate pass-through and currency mismatch in balance sheets, and the integrated macro policy conducted in response. The domestic currency depreciation raises inflationary pressures through the exchange rate pass-through channel. The currency mismatch in balance sheets means that the domestic currency depreciation and exchange rate volatility tighten domestic financial conditions through external financing and balance sheet channels. This leads to a contraction in credit capacity and subsequently slows down economic activity. The integrated policy framework also proposes a policy rate increase to moderate price stability risks, as in classical models. However, unlike classical models, supplementing monetary policy with exchange rate policies or capital inflow taxes in the integrated policy framework limits domestic currency depreciation and reduces policy tradeoffs.

Chart 3: Rise in Global Risk Appetite

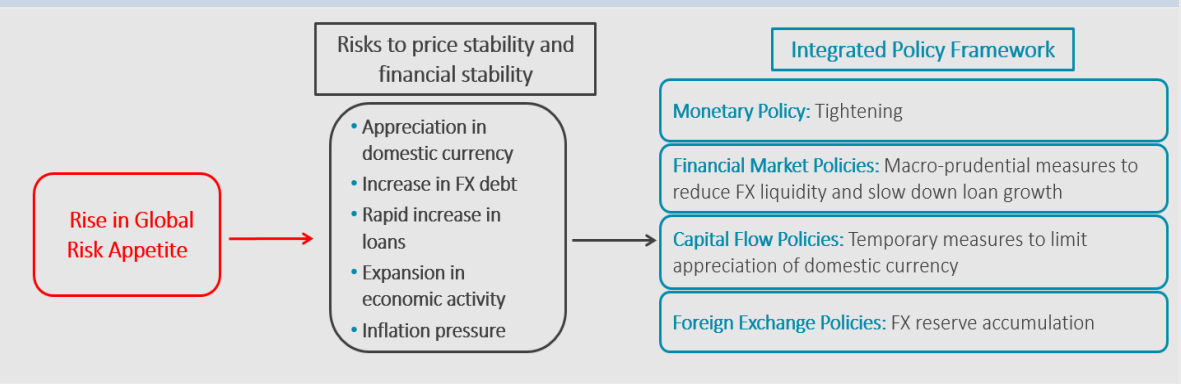


Chart 3 shows risks induced by a rise in global risk appetite and macro policies to be implemented in the integrated policy framework in response to those risks. A rise in global risk appetite relaxes financial constraints, thereby leading to foreign currency debt accumulation, acceleration in capital inflows, and appreciation in the domestic currency. This situation also relaxes domestic financial constraints, for instance causing growth in consumer credits and thereby expanding economic activity. However, growing consumer credit capacity worsens the current account, raising the possibility of a sharp domestic currency depreciation and fueling financial stability risks. In case of such a threat to price stability, monetary policy may require tightening. However, in times of strong risk appetite, tightening monetary policy may lead to further domestic currency appreciation, therefore, monetary policy should be supported by macro-prudential policies restricting borrowing (such as rising required reserves , cutting maturities in consumer loans, reducing credit/value or loan/income ratios, etc.) to moderate risks to financial stability. As for exchange rate policies, central banks are advised to accumulate foreign exchange reserves during such periods.

Due to coronavirus epidemic, many countries experienced more than one economic shock simultaneously. For example, many EMEs have recently experienced shocks that have adversely affected domestic and foreign financial conditions, raised risk premiums, and contracted global demand. In such a period, it became necessary to make use of different policy instruments together. The integrated policy framework model provides a setup in which policy tools can be determined according to each country's characteristics. Since this new approach incorporates many policy tools, the policy communication clarifying when and how those policy tools will conducted becomes more important.

References

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