The post COVID-19 pandemic world and the fast-evolving landscape of capital flows call for a more robust and innovative framework of integrated policy, whereby monetary policy should be combined with other policy measures, such as macroprudential policies, foreign exchange intervention and capital flow management measures. The design features of policies will have to ensure macro-financial stability of EM SOFIEs by making them less sensitive to the interplay of global factors of liquidity and risk sentiment. Furthermore, taking account of the pro-cyclicality between global and domestic financial cycles, the role of the US dollar in transmitting US economic conditions and policies to the rest of the world (as discussed in Section 1) warrants further considerations on appropriate policy measures along with greater global and regional co-operation through policy dialogue. To this end, the policy interest rate, while helping to achieve internal balance, may have its limitations in the global financial cycle contaminating the macro-financial balances of the domestic economy. For SOFIEs in EM Asia with an Inflation Targeting framework, interest rate policies were shown to be inadequate in managing the procyclicality of capital flows while inflation and the credit cycle have proven to be interlinked. Therefore, tools for price stability and financial stability have often been jointly determined and used.

The SEACEN perspective on the design of the policy framework for managing capital flows promulgates the following features:

- At the highest level of the contours of public policy making, the framework should be firmly based on more welfare theoretic arguments. This is consistent with the pivot towards sustainability and the paradigm shift to environmental, social, and governance (ESG) considerations.

- Pervasive financial market constraints and imperfections in emerging and developing economies can amplify macro-financial cycles, requiring insurance against the risk of capital flow volatility as well as its distributional impact.
The current policy framework is evolving further to consider broader economic and social outcomes, with monetary and financial stability implications.

Therefore, public policy intervention to internalise externalities, to further promote welfare-enhancing policies, to manage trade-offs, and to adopt more flexible approaches in building resilience will be an integral part of overarching policy frameworks going forward. It reinforces the notion of mitigating the social costs from financial crises and output losses from sudden stops of capital inflows.

On the macro-financial policy front, the financial-frictions view offers a different take on exchange rates compared to their traditional role as shock absorbers. Exchange rates are also financial variables and sensitive to imbalances in financial markets and can be shock amplifiers. FXI policies are likely to be more effective and welfare enhancing, if used appropriately, under imperfect markets.

On managing financial stability, the framework emphasises that systemic risk from financial cycles including credit and asset booms need to be managed before they threaten public and financial sector balance sheets and the economy at large. However, by their very nature, systemic threats are “tail events,” and represent an agglomeration of risks from a variety of channels. Operationalising a policy that is both time-varying and rules-based is likely to be unachievable, due to the difficulty of quantifying systemic risk. Therefore, macroprudential policies have to be more proactive in managing the financial cycle.

Capital Flow Measures (CFMs) should be a part of the broader policy toolkit as purely domestic macroprudential measures cannot adequately substitute for CFMs since CFMs better target the root of the problem of the volatility in international capital flows. As is the case with all macroprudential measures, the pre-emptive use of capital flow management tools is critical when there is a risk of large capital inflows. Indeed, systemic risk often builds up in tandem with increasing cross-border interconnectedness and spillovers.

The effectiveness of FXI can be enhanced with the presence of CFMs as part of the broader toolkit. A combination of tools like MPMs and CFMs make it easier to achieve multiple goals such as price stability, financial stability, macro-financial stability, and sustainable external position; and, deal with the complex trade-offs involved.
Such a framework has to be flexible enough without very specific policy rules to accommodate the uncertainty of fatter tails.

The efficacy of managing capital flows squarely lies in an integrated perspective on monetary policy, macroprudential policy, capital flow measures, and foreign exchange intervention. But these policy measures have their associated costs.

Moreover, the efficacy and conditions of using various policy measures, in the context of volatile capital flows, depend on prevailing global and domestic conditions, country circumstances, and the origins of shocks.

In conclusion, The SEACEN Centre has provided its perspective on conceptualising the policy framework for integrating capital flow management, while offering some suggestions on operationalising the conceptual framework.

A. Conceptualising the Policy Framework for Integrating Capital Flow Management: SEACEN Central Banks Leading the Way

Central banks around the world are being asked to consider a broader range of non-traditional monetary policy mandates. These requests reflect a desire by governments to use the economic and financial tools of the central bank to help target key public policy objectives, such as climate change risks, digitalisation, financial technologies, as well as income and wealth inequalities. This longer list of potential central bank mandates represents a new challenge for the decade ahead.

The chief question being asked is: can central banks deliver on their core goal of price stability while considering other policy objectives; or would such new mandates result in a type of mission creep which in the past had led to volatile inflation outcomes, financial instability, and poor economic performance?

In many respects, the invitation for central banks to consider new responsibilities is a consequence of their success. Over the past two decades, central bankers have achieved considerable success in delivering sound economic and financial stewardship. In most cases, the successes followed the adoption of monetary policy frameworks which elevated the role of the price stability mandate to the highest priority. For many SEACEN central
banks, this included the adoption of formal inflation-targeting frameworks. For other SEACEN central banks, this meant raising the prominence of price stability without adopting formal inflation targeting. Nearly all have been targeting inflation even if they did not adopt inflation targeting. Monetary policy contributed to periods of low inflation and sustained growth, with the GFC and the COVID-19 pandemic being exceptions. SEACEN central banks have performed rather well in terms of traditional measures of monetary policy success. Moreover, the requests to take on new responsibilities, likewise, reflect the vital role of banking and finance in pursuing other objectives that will address risks related to climate change, harness the full potential of financial technologies and innovations, and promote a more equitable distribution of welfare gains.

But considering broader structural trends with monetary and financial stability implications certainly increases the complexity of central banking in the region. Indeed, having multiple policy objectives can overburden monetary policy, reduce its coherence, and lead to a loss of credibility. Moreover, a central bank cannot consistently pursue and achieve multiple goals with only one policy instrument, such as the short-term interest rate. Overreliance on monetary policy may reduce its effectiveness when the appropriate policy involves other instruments or public institutions. To highlight these new challenges in a historical perspective, Figure 4.1 shows the evolution of central banks expanding mandates and considerations with potential future implications. The orange line represents the phase in which small, open, advanced economies pioneered the adoption of narrow inflation-targeting regimes. In general, these early manifestations of inflation targeting put most weight in policy decisions on inflation concerns with some central banks still heeding short-run (over a year or so) developments in the real economy. The green line illustrates the broadening of monetary policy frameworks, with weights being put on concerns from, amongst other things, financial stability, exchange rates, and capital flows. Over time most flexible inflation-targeting central banks lengthened the target horizon of inflation and emphasised “over the medium-run.” Effectively, this allowed central banks to respond to a wider range of economic and financial developments of both domestic and global types in the short-run.

The proposed conceptual framework underscores that fact that operationally, the weight on capital flow developments was particularly large in SEACEN economies over the past decade. The weight appeared to vary systematically over time – low when capital flow developments were rather quiescent
and high when rather volatile. With detailed capital flow data becoming increasingly available and timelier, SEACEN central banks can use various analytical approaches to assess the vulnerabilities from capital flows. The data are now more granular which makes it possible to understand capital flow dynamics better. New methodologies to analyse these data are shedding more light on the time-varying risks. Armed with better data and more accurate assessments of the risks, monetary authorities may be interested in putting even more weight on capital flow developments. More research is called for to establish just how central banks might want to weight these mandates in the conduct of monetary policy. In addition, further research is needed to examine and assess the trade-offs between various policy objectives while giving considerations to provide practical guidance to SEACEN members.

One possible way of conceptualising the framework is by considering the evolution of central banks’ expanding mandates and considerations with potential future implications. To this end, the broader structural trends with monetary and financial stability implications certainly increases the complexity of central banking in EM SOFIEs.

![Figure 4.1: Proposed SEACEN Central Banks Broader Framework and Considerations](image-url)

**Notes:** The weights on different mandates are normalised relative to the inflation goal. This graph illustrates the more complex weighting scheme required for trading off a wider range of mandates. Maximising the welfare of its country also factors in implications for credibility, accountability, and transparency.

*Source: Andrew Filardo and The SEACEN Centre.*
The current policy framework is evolving further to consider broader economic and social outcomes, with monetary and financial stability implications. The outer purple line indicates how policy mandates and other considerations are evolving rapidly reflecting the paradigm shift towards a more holistic approach, encompassing the social effects of capital flows such as financial crises with income and output losses. In addition, the balance sheet effects of exchange rate volatility warrant policy consideration. As such, FX intervention in imperfect markets to manage exchange rate amplification from financial imbalances can be welfare enhancing. The effectiveness of FXI can be increased by the presence of CFMs as part of the broader toolkit because systemic risk often builds up in tandem with increasing cross-border interconnectedness and spillovers. Putting even more weight on capital flow developments now while strengthening risk management tools is needed to design more effective CFMs that have the flexibility to be more pre-emptive. In this framework, CFMs should be a part of the broader policy toolkit as purely domestic macroprudential measures cannot adequately substitute for CFMs since CFMs better target the root of the problem of the volatility in international capital flows. Like with all macroprudential measures, the pre-emptive use of capital controls is critical when there is a risk of large capital inflows. In addition, it is important to also consider the holistic impact of structural policies on the domestic economy. In the long-run, when done right, these may complement central banks’ expanded policy toolkits to manage external risks by mitigating the risks from capital flow fluctuations. Nonetheless, striking the right balance between policy tools given their short-, medium-, and long-term effects remains a critical challenge not only for SEACEN economies, but for many other economies as well.

B. Operationalising the Policy Framework for Integrating Capital Flow Management

One possible way of operationalising the framework is by integrating capital flow risk management into the policy framework using a variation of the Taylor-type rule whereby the central banks may want to respond systematically to capital flow tail risks when setting the stance of monetary policy by directly leaning against tail risks. Box 8 below provides various options in operationalising this framework.
Box 8: Integrating Capital Flows Risk Management into the Policy Framework*
(Andrew Filardo and The SEACEN Centre)

Integrating capital flow risk management into the policy framework can be operationalised with three different perspectives using Taylor-type rules as helpful ways to motivate the main points of the discussion.

**Perspective 1**: Central banks have often addressed capital flow challenges with exchange rate intervention. The assumption underlying this perspective is that less volatile exchange rates result in a less volatile capital flow environment. One option, which is labelled as “Taylor-rule Plus,” is a variant of a conventional Taylor rule:

\[
R = \alpha + \beta (\pi(e) - \pi^*) + \gamma (y(e) - y^p) \quad (1)
\]

\[\text{a)} \quad FXI = g(\sigma(e)), \quad (2a)\]

\[\text{or}\]

\[\text{b)} \quad FXI = g(e - e^*) \quad (2b)\]

Equation (1) is a conventional Taylor-type rule for a closed economy which relates the setting of the policy rate, \(R\), to the inflation gap, \((\pi(e) - \pi^*)\), and the output gap, \((y(e) - y^p)\); in this version the dependence of inflation and output on the exchange rate is emphasised.

Equations (2a) and (2b) offer two versions of an exchange rate intervention (FXI) rule. In other words, the policy interest rate is used primarily to achieve domestic equilibrium with respect to inflation and output; FXI is used primarily to smooth the exchange rate and hence reduce the volatility of capital flows associated with exchange rate developments.

Equation (2a) of the FXI equation emphasises a preference to reduce the standard deviation of exchange rates, \(\sigma(e)\), while Equation (2b) is an alternative which focuses on the cyclical deviation of exchange rates from ‘equilibrium’ exchange rates, \((e - e^*)\). Both versions have their pros and cons which depend on the ability to assess the measures accurately and to establish a reliable link between the monetary policy response and the exchange rate.
**Perspective 2:** Alternatively, central banks may prefer to jointly determine the policy tool mix. The policy rate and FXI both influence output, inflation, and the exchange rate. Such a policy rule is Equation (3), labelled an “Extended Taylor-rule”:

\[ h(R, FXI) = \alpha + \beta(\pi(e) - \pi^*) + \gamma(y(e) - y^*) + \lambda(e - e^*) \]  

Equation (3)

Such a rule requires a good understanding of the trade-offs between the interest rate and FXI in the policy mix. In principle, determining these trade-offs with a high degree of certainty would be helpful in achieving the policy goals of the central bank. However, establishing such a relationship is a challenge, especially for emerging market economies. These economies have had little experience of these tools being used systematically during stable economic and financial environments. Over time, it is possible that more experience in deploying the two tools systematically will provide useful data for acquainting policy makers with the trade-offs.

**Perspective 3:** A third alternative captures the possibility that central banks may want to respond systematically to capital flow tail risks when setting the stance of monetary policy:

\[ h(R, FXI) = \alpha + \beta(\pi(e) - \pi^*) + \gamma(y(e) - y^*) + \lambda(e - e^*) + \mu(CFtailrisk) \]  

Equation (4)

The tail risk term in Equation (4) represents a desire to directly lean against tail risks before they materialise. With better leading indicators of capital flow tail risks, this type of leaning becomes feasible. The higher the quality of the leading indicators, the greater the ability to prevent capital flows from disrupting economic stability.

Each one of these perspectives highlights the different ways a central bank may want to raise the prominence of capital flows in its policy meetings and hence policy decisions. The relevance of any one of these perspectives is an empirical issue.

* See Section 6 for more discussion.
The Bottomline: Evolving EM SOFIEs’ monetary policy frameworks in a more complex world and with inherent market imperfections and financial channels of risk transmission may need to balance multiple objectives, considerations, and trade-offs. EM SOFIEs in Asia have been more closely integrated with global financial markets, not only as recipients of capital but also as a net exporter of capital. While they have reduced their external re-financing risks, eliminated currency mismatches at the national level and have widened their domestic investor base, new sources of risks can worsen the trade-offs. Therefore, taking a more multifaceted approach and incorporating the following features may be helpful:

- Holistic, pragmatic, and flexible (less rules-based) broader framework;
- Putting a premium on resilience and having policy buffers to build resilience to tail risks;
- Having the ability to be pre-emptive, such as having ex-ante prevention mechanisms in place;
- Incorporating the role of the exchange rate as a stabiliser under certain conditions;
- Hard-wiring macro-financial stability considerations;
- Having the ability to implement countercyclical safeguard measures along the MPM/CFM spectrum; and
- Acting as a “dealer of last resort” to provide some backstop to systemic risk emerging from market-based finance.