

SECTION 5

EVOLVING MONETARY POLICY FRAMEWORKS AND CAPITAL FLOWS: SEACEN CENTRAL BANKS LEADING THE WAY

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A. Introduction

Over the decades, SEACEN central bank/monetary authorities have faced an environment of volatile capital flows. These flows drove economic activity and exchange rates, making it difficult for central banks to achieve price stability. The flows also elevated financial stability concerns, especially during the Great Financial Crisis (GFC), the Taper Tantrum, and, more recently, during the COVID-19 period. Through it all, however, SEACEN central banks managed the volatility well. Indeed, SEACEN central banks' successes in addressing the capital flow challenges are now helping to forge a new international consensus on how central banks can best confront an environment of volatile capital flows.

The current rethinking of the role of capital flows in the conduct of monetary policy has come at a critical time. Volatile capital flows in the region are here to stay. Several factors driving recent trends point to the spectre of even more destabilising flows than in the past. Bond and equity portfolio flows in particular remain increasingly vulnerable to the whims of a growing number of global investors. Record global sovereign and private debts accumulated over the past decade will fuel debt flows as they need to be refinanced periodically from pools of savings from around the world. At the same time, the global central banking community appears to be on the cusp of ushering in a new period of asynchronous monetary policies, much higher interest rates, and shrinking central bank balance sheets. The extent of the asynchronicity has accelerated sharply recently as some central banks have found themselves falling far behind the curve in their efforts to control

¹ This background study was prepared for the SEACEN Capital Flows Research Project (2020-22). The views expressed in this paper are those of the author and do not necessarily reflect the views of The SEACEN Centre and its member central banks/monetary authorities.

inflation which began in 2021. And, with monetary policy normalisation in the major advanced economies, powerful global monetary policy spillovers to the SEACEN member economies will remain a significant force influencing capital flows and gyrations in financial markets.

SEACEN central banks in many respects are better prepared to address these challenges than they previously were. Access to more detailed capital flow data than in the past opens up opportunities to refine central bank risk analyses of capital flows (SEACEN, 2020a; and CGFS, 2021). With more detailed capital flow data across time and across countries, better methods are being built to assess capital flow developments. These could give central bankers a clearer and more timely picture of financial flow risks.

Central bankers are also benefiting from a more nuanced understanding of the forces driving the new capital flow environment. Recent advances in macro-financial research offer new insights into important domestic and international mechanisms that help to explain how “good” capital flows can turn “bad”. These empirical and theoretical advances help to explain why past policy actions were ineffective at times and point to the economic and financial conditions when policies are likely to be effective.

Armed with the better data and an enhanced understanding of capital flow drivers, central banks have become more open to proactively respond to capital flows. In part, many central banks have been questioning the effectiveness of the narrow inflation-targeting frameworks of the past in delivering economic and financial stability. Given the experience of the past two decades, it is not surprising that central banks are considering the broadening of monetary policy frameworks to address capital flow volatility more explicitly. How far should central banks go towards adopting broader, more holistic monetary policy frameworks? What role should capital flows play in such frameworks, especially given that over the past decade central banks have developed a wider array of interest rate and balance sheet tools that can be deployed – as preventive measures when capital flow risks rise and as countercyclical measures after destabilising capital flows materialise?

The re-evaluation of monetary policy frameworks comes at a fortuitous time as international financial institutions have been taking a far more tolerant attitude toward pro-active policies for reining in capital flow threats, especially those arising from exchange rate fluctuations (BIS, 2019b; and IMF, 2020b). This is in stark contrast to past advice that was often very critical of

such policies. The criticisms tended to suppress productive dialogue about the prerogatives that developing and small, open advanced central banks have when confronting particularly challenging capital flow episodes.

All these developments highlight the case for raising the prominence of capital flows in SEACEN monetary policy frameworks. The rest of this background study discusses the case and its implications for the conduct of monetary policy. Section B describes the evolution of monetary policy frameworks and how capital flow objectives can fit into a three-pillar approach to monetary policy in emerging market economies. Section C spells out conceptual options for integrating capital flow concerns into the conduct of monetary policy. Section D highlights practical considerations when integrating capital flows in broader monetary policy frameworks. Section E argues that central banks should take a leading role in efforts to improve the efficiency of the macro-financial environment so that an eventual return to narrow price-stability-oriented frameworks can ensure even better outcomes than the multi-pillar approaches of today. Section F addresses the challenges that non-traditional central bank mandates pose and their implications. Section G concludes.

B. Evolving Monetary Policy Risk Management Approach for SEACEN Central Banks

It can be said that monetary policy in many SEACEN and other small, open economies is best characterised as having evolved into a three-pillar approach to monetary policy.² This is a more holistic perspective on monetary policy than, say, a narrow focus on inflation targeting. And, as such, the three-pillar approach calls for a more complex set of trade-offs to be considered when setting monetary policy.

(i) Multi-pillar approach to monetary policy

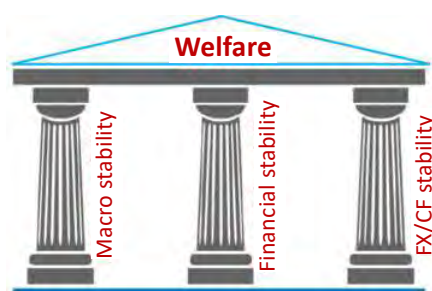
Figure 5.1 provides a graphic view of the three-pillar approach. The first pillar represents the traditional short-term macroeconomic stability mandate of monetary policy. Price stability is the predominant focus for monetary policy. In many respects, stable economic activity is the key to keeping inflation on target. But there are times when inflation expectations are so well anchored

² For a more detailed discussion of the three-pillar approach, see Filardo et al. (2016).

that central banks may take the opportunity to nudge the economy back to its sustainable path. History also clearly shows that when central banks paid too much attention to stimulating output with little regard for inflation, both inflation and output volatility rose.

The second pillar addresses medium-term risks associated with, but not exclusively, domestic financial stability. Now, it is well accepted that central banks should play a key role in ensuring financial stability and many central banks have adopted financial stability mandates. The GFC drove home the lesson that, as White (2006) persuasively argued, price stability is not enough

**Figure 5.1 New Frontier for Monetary Policy Frameworks?
Evolving Three-Pillar Approach**



Note: Each of the three pillars represents key mandates for a monetary policy framework.
Source: Author's elaboration.

for overall economic and financial stability.

The third pillar addresses the special challenges arising from exchange rate and capital flow volatility. Clearly, exchange rates and capital flows have implications for price stability and financial stability. It is, however, additionally evident that the links between exchange rates and capital flows on the one hand, and price and financial stability on the other hand, is non-linear and uncertain. Given the complexities, external developments in the form of exchange rate misalignments (i.e., not consistent with macroeconomic fundamentals) and volatile capital flows arguably should receive special treatment in monetary policy decisions.

(ii) Evolution of monetary policy frameworks toward the three-pillar approach

To better understand the evolution of SEACEN central bank monetary policy frameworks, this sub-section reviews, in broad strokes, how SEACEN central bank frameworks have fitted into global central bank trends since the early 1990s. It is important to note that the evolution over the decades was not so much theory-driven but was rather a pragmatic response to the shifting macro-financial landscape as economies became more open, both economically and financially.

The 1990s saw several small, open advanced economy central banks enshrining price stability as **the** overriding mandate of monetary policy frameworks. These central banks tended to adopt very narrow price stability mandates. Often the narrower frameworks went hand in hand with the strengthening of central bank independence and greater emphasis on central bank transparency, accountability, and credibility. Even though different economies chose different flavours of the price stability mandate, most central banks instituted some form of a formal inflation-targeting framework. Emerging market economies followed suit in opting for inflation targeting too, though SEACEN central banks typically paired the greater prominence of inflation targets with at least some consideration of external factors associated with capital flows and exchange rates. The major advanced economy central banks came late to the game in announcing explicit inflation targets.

Over the decades, nearly all central banks broadened the operational definition of price stability to be more flexible. Flexible inflation targeting emphasised the importance of keeping inflation rangebound **over the medium-term**. In such a scheme, central banks could allow some forbearance with respect to hitting the inflation target in response to short-run economic and financial market developments. The argument for this more flexible approach rested on the assumption that short-term discretionary monetary policy, if calibrated correctly, would improve overall economic and financial stability as long as inflation deviations from target were temporary and medium-term inflation expectations remained well anchored.

The “flexible” part of flexible inflation targeting has generally led central banks to place more weight on economic activity (as measured by output growth and unemployment rates) when setting policy rates than they had

done in the past. The Federal Reserve has always had its dual mandate in contrast to more dogmatic inflation-targeting frameworks. In recent years, other central banks have added explicit mandates for economic activity and labour market activity. Despite putting less weight on inflation relative to economic activity in the frameworks, central banks found that inflationary pressures were fairly quiescent and inflation expectations well-anchored in the pre-COVID-19 period. While central bankers and economists are still somewhat puzzled by the factors behind that favourable inflation performance, the fact that inflation was stable across a wide set of economies facing a diverse set of economic and financial environments has led some to wonder whether central bankers could do more to help out with non-inflation government objectives without seriously compromising their commitment to price stability (an issue which will be addressed in the next sub-section).³

The greater monetary policy flexibility also reflected central banks' experience in addressing the GFC of 2007-08. Since then, central banks have paid more attention to financial stability conditions when setting policy. This dramatic episode drove home the point that stable inflation is not a sufficient statistic to ensure overall economic and financial stability (White, 2006). Financial stability is now understood to be a prerequisite for inflation stability. Some central banks have relied heavily on macroprudential tools to protect against financial system risks. Others have augmented their monetary policy frameworks to incorporate domestic financial stability risks as part of the motivation for the setting of monetary policy.⁴

Policy makers in SEACEN central banks and other central banks in small, open economies have been leading the way in addressing concerns arising from volatile exchange rates and capital flows. Volatile capital flows have made it harder to achieve price stability but also harder to ensure domestic financial stability and ultimately price stability. As a consequence, these central banks have relied heavily on exchange rate intervention to smooth out destabilising volatility in exchange rates; in part, the motivation to use intervention arose because swings in exchange rates play an important

³ The surge in global inflation since mid-2021 arguably has less to do with competing tradeoffs than with difficulties forecasting inflation during the rather unique circumstances arising during the COVID-19 period.

⁴ See Box 3 in Part 1 for a discussion of the economic justification for integrating financial stability concerns into monetary policy frameworks arising from financial sector externalities; Box 4 and 5 of Part 1 of this publication address implementation issues.

role in carry trade dynamics which can then lead to sharp reversals in flighty capital flows. Traditionally, central banks intervened by buying and selling foreign exchange assets; in recent years, central banks have been extending their methods to include purchases and sales of exchange rate derivative contracts (BIS, 2019b). Policy rates have also been used for the purpose of promoting stability. Moreover, some central banks have leaned against persistent overvaluations of their currencies, which have had competitiveness implications.

Finally, any future role of monetary policy in addressing capital flows must be viewed in the context of a country's use of capital flow management tools and other macroprudential tools. SEACEN economies have demonstrated over time that systematic and **pre-emptive** deployment of capital flow management tools can improve financial stability conditions and provide more room for manoeuvre with respect to a central bank's macroeconomic trade-offs. At the same time, there is a greater recognition of the fact that systematic monetary policy that responds to capital flow volatility (*via* the exchange rate channel or the gross flows channel) using exchange rate intervention can buttress efforts to achieve these goals. In other words, the different tools complement each other in the pursuit of economic and financial stability. Ongoing research is starting to make some progress toward a better understanding of the relationship between monetary policy and capital flow management measures, which is critical given that international institutions' views about the role of capital flow management tools is currently in flux (IMF, 2020a).

(iii) Prioritising mandates

Operationalising the Three-Pillar Approach requires applying appropriate weights on the different policy objectives when making decisions. When there is only one objective – an inflation target – the monetary policy considerations are much simpler. If inflation is above target, use the policy instruments to nudge it down; if below target, nudge it up.⁵

⁵ As mentioned above, early advocates of inflation-targeting regimes considered this narrow framework as critically important for achieving price stability and the inflation-fighting credibility of a central bank – especially for a central bank with a relatively checkered inflation record. Experience confirms that a sharp focus on inflation is key to achieving and maintaining price stability.

Three-pillar frameworks are more complex because they require the weighting of the different mandates, even if price stability remains the core mandate of the central bank. But how much weight should be placed on economic activity and financial stability concerns when making monetary policy decisions?

One attractive weighting scheme is referred to as lexicographic preferences. Lexicographic preferences put all the weight in decision making on inflation stability (over a particular time horizon) **if inflation deviates from target**. But, if inflation is roughly on target, the central bank can consider using its available tools to address its other objectives. Many central banks have chosen inflation objectives to be met over the medium-term horizon, even though the length of time in quarters and years is typically left vague. This ambiguity provides some wiggle room for central banks to address short-term developments (e.g., with respect to unemployment, financial stability, and capital flows) while keeping inflation on track over the medium-term and inflation expectations well-anchored. Some call this type of policy approach “constrained discretion”.

Another weighting scheme allows a central bank to place a high, but not all, weight on inflation control. In this case, weight would be placed on all mandates. Under these preferences, if transitory inflation were to deviate **modestly** from target over the policy horizon, a central bank might still prefer to take account of worrisome domestic financial, exchange rate, and capital flow challenges. These preferences intuitively capture the desire of some central banks to have sufficient room for manoeuvre to address key public policy goals in their purview even if the result is a modest loosening of control over inflation. As long as modest deviations from target are not deemed too costly in terms of economic welfare, a central bank may find that developments (e.g., capital flow volatility) are much more costly and hence deserve attention despite some slippage of inflation objectives over the medium-term.

Much more complex conditional weighting schemes are possible. However, the main takeaway is that central banks with multiple objectives need to consider how to best weigh the importance of their various mandates when making decisions. Communication issues with the public, especially financial markets, will be more difficult if the weighting schemes are too complex and discretionary. It is critical that the weighting scheme not appear vague and arbitrary.

(iv) Bottom line on multi-pillar frameworks

The past 30 years have ushered in a global central banking era focused on price stability. However, over time central banks have realised that narrow inflation-targeting frameworks have not been sufficient to ensure a broader sense of welfare, i.e., economic and financial stability. This has especially been the case in emerging market economies.

The challenge going forward for all central banks, especially in light of the recent surge in inflation internationally, is whether broad, more holistic monetary policy frameworks can continue to deliver on the core mandate of price stability while addressing other, albeit subordinate policy objectives.⁶ For SEACEN central banks, this issue is particularly relevant as the environment of volatile capital flows is likely to remain, if not intensify.

C. Capital Flows and the Conduct of Monetary Policy

How might a SEACEN central bank translate an increased prominence of capital flows into its conduct of monetary policy on a meeting-to-meeting basis. This section offers three different perspectives using Taylor-type rules as helpful ways to motivate the main points of the discussion.⁷

Perspective 1: Central banks have often addressed capital flow challenges with foreign exchange rate intervention (FXI). The assumption underlying this perspective is that less volatile exchange rates lead to a less volatile

⁶ One could interpret policy decisions in 2021-22 as suggesting that central banks fell behind the curve with respect to inflation. Even though inflation surged above target and was quite persistent, central banks around the globe initially kept real policy rates very low and, in many cases, negative. Concerns about COVID-19, disrupted supply chains, recession risks, and domestic and international financial conditions appear to have complicated the ability of central bankers and the private sector to forecast the surge in inflation.

⁷ Note that the assumption behind this section is that various capital flow management and macroprudential tools have been implemented with an over-the-cycle policy focus. They may include automatic stabiliser-type properties, but it is assumed these tools are not used in a discretionary fashion in a way similar to monetary policy.

capital flow environment.⁸ One option, which is labelled as “Taylor-rule Plus”, is a variant of a conventional Taylor-rule which treats the two policy tools – policy rate (R) and FXI – separately:

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

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

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, $(y(e) - y^p)$, where y^p denotes potential output. In this version, the dependence of inflation and output on the exchange rate (e) is emphasised.

Equations (2a) and (2b) offer two versions of a FXI rule. In other words, Equation (1) indicates that the policy interest rate is used primarily to achieve domestic equilibrium with respect to inflation and output; Equation (2) indicates that FXI is used primarily to smooth the exchange rate and hence reduce the volatility of capital flows associated with exchange rate developments.

Version A (Equation 2a) of the FXI equation emphasises a preference for reducing the standard deviation of exchange rate changes, $\sigma(e)$. Version B (Equation 2b) is an alternative which focuses on the cyclical deviation of the exchange rate from the “equilibrium” exchange rate, $(e - e^*)$.⁹ Both versions have their advantages and disadvantages which largely depend on

⁸ The implicit assumption here is that international financial frictions are significant. For example, carry trade dynamics and other exchange rate developments can drive disruptive gross capital flows. See Box 4 of Part 1 for a further discussion. Central banks also have reasons to smooth exchange rates other than the impact on capital flows, such as competitiveness concerns (BIS, 2019a).

⁹ Filardo et al. (2022) argue that FXI effectiveness depends on the extent to which exchange rates diverge from cyclically adjusted swings in macroeconomic fundamentals. In particular, the $\lambda(e - e^*)$ term would be replaced by $\lambda(e - e^{*,h})$ where the superscript h reflects short-, medium-, and long-cycle exchange rate misalignments. Note here that these policy rules are symmetric and two-sided. Filardo and Siklos (2015) point out that persistent, one-sided FXI interventions to keep a currency undervalued have proved destabilising in the past.

the ability to assess the volatility 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 have influences on output, inflation, and the exchange rate. Such a policy rule is captured in Equation (3), labeled an “FXI Extended Taylor-rule”:

$$h(R, FXI) = \alpha + \beta(\pi(e) - \pi^*) + \gamma(y(e) - y^p) + \lambda(e - e^*). \quad (3)$$

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 precision is critical for achieving the policy goals of the central bank. However, establishing such a relationship is a challenge, especially for emerging market economies. These economies have generally had little experience of these tools being used systematically during stable economic and financial environments. Over time, more experience 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:

$$h(R, FXI) = \alpha + \beta(\pi(e) - \pi^*) + \gamma(y(e) - y^p) + \lambda(e - e^*) + \mu(CF \text{ tail risk}) \quad (4)$$

The tail risk term in Equation (4) represents a desire to directly lean against tail risks before destabilising capital flows materialise. With better leading indicators of capital flow tail risks, this type of leaning becomes feasible. Ideally, such pre-emptive actions would help prevent adverse outturns; if destabilising capital flows were to materialise, early policy actions would likely reduce the severity. Of course, reliable tail risk indicators are key. The higher the quality of the leading indicators, the greater the ability to prevent capital flows from disrupting economic and financial 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 ultimately an empirical issue.

D. Practical Challenges for SEACEN Central Banks Facing Capital Flow Volatility

Systematically responding to capital flows introduces many important considerations for a central bank: the conduct of monetary policy, tracking of policy-relevant capital flows, deploying policy tool options, intertemporal trade-offs, the policy tool mix, other central bank balance sheet policies, and political economy concerns. This section delves into each of these practical challenges.

(i) The conduct of monetary policy

The alternative policy perspectives described in Equations (1)-(4) raise several interrelated issues. First, a word of caution. The Taylor-type rule approach is not meant to be used as a hard and fast formula that central banks need to follow precisely. But it is a succinct way to highlight the key factors that a central bank needs to focus on in making sound decisions. Also, the coefficients in the rules provide some guidance about how a central bank might weigh the economic and financial developments in pursuit of its policy goals. For example, the size of the coefficient on inflation is meant to capture how much of an inflation deviation from target dominates the policy stance relative to, say, capital flow developments.¹⁰

Second, the choice of a particular approach will depend on country specifics. As the new research on FXI effectiveness highlights, the capacity of the domestic financial system to accommodate gross capital flows will determine how important capital flow volatility is for achieving and maintaining economic and financial stability. When the absorptive capacity is high, the Taylor-type rule coefficients on exchange rates and capital flow tail risks are likely to be small; when low, the coefficients are likely to be significantly different from zero. In other words, financial frictions make the policy rate and FXI more effective at influencing the exchange rate, financial flows, and hence economic activity.

Third, success will depend in part on the ability of the central bank to influence private sector expectations. Clear, credible monetary policies are likely to have a bigger impact on private sector expectations than discretionary ones.

¹⁰ To the extent that history can be used as a guide, Taylor-type rules can also capture past empirical regularities which help guard against “this time is different” decision making.

At both conceptual and practical levels, monetary policy “rules” for exchange rate can be effective ways to influence private sector expectations just as they are for domestic economic and financial stability (Filardo et al., 2022). SEACEN central banks have traditionally been less transparent about FXI than other emerging market central banks. While it is true that opaque FXI tactics tend to be more successful in surprising markets over short horizons, systematic use of FXI that is credible is more likely to have a more sustained impact at longer, policy-relevant horizons.

Finally, even though the rules can help to clarify how a central bank may want to calibrate its response to a particular set of circumstances, data availability from periods of relative stability limits the accuracy of such an approach. Judgment will always be an important feature of the monetary policy deliberative process. One could imagine more complex rules for trying to capture more features of the policy environment, but as pointed out in Cochrane et al. (2020), simple rules may outperform more complex rules when the more complex rules are inaccurately calibrated.

(ii) Tracking policy-relevant capital flows

Empirically, distinguishing between “good” and “bad” capital flows has proved challenging but the situation is improving in at least two respects.¹¹ First, tracking cross-border flows from savers, through the complex international intermediation chain, to final borrowers has proven elusive and incomplete. However, in the past decade, various efforts have been made to improve the breadth and accuracy of cross-border financial statistics (e.g., the Bank for International Settlements International Banking and Financial Statistics) as well as detailed portfolio gross bond and equity flows.

Second, innovative econometric methods and models of financial frictions with financiers facing limited risk-bearing capacity offer new ways to identify periods of heightened risky capital flows. Converting these models into accurate leading indicators of “bad” capital flows is still a work in progress. But, as advances are made, tracking and interpreting capital flow risks becomes less of an art and more of a science. Indeed, recent researches, including

¹¹ Conceptually, capital flows are a two-edged sword. On the one hand, capital flows are a key feature of the modern global financial system. Financial integration and financial deepening have long been considered keys to raising national standards of living. On the other hand, history is replete with examples of destabilising capital flows, especially gross portfolio flows, which have been associated with severe downturns and crises.

Section 2 of this study and capital flows-at-risk (Gelos et al., 2022), offer a new surveillance methodology for identifying periods likely to experience sharp capital flow reversals, i.e., capital flow tail risks (SEACEN, 2022b) [see Part 1, Section 2]. This novel methodology holds out considerable promise for improving the ability for SEACEN central banks to forecast and hence prepare for periods turbulent capital flows.

(iii) Policy tool mix

In principle, a central bank would like to know how best to calibrate its range of tools. It has several choices. A central bank has the option to choose the intensity with which it deploys its tools; this is called the **intensive** margin of the policy choice. A central bank can also determine the range of tools to use; this is the **extensive** margin.

To illustrate this extensive margin, consider the case of a business cycle upturn accompanied by strong capital inflows. A central bank could jack up policy rates to slow economic activity which, in turn, may dissuade foreign investors from investing. However, given that strong capital inflows are often accompanied by strong economic activity, higher inflation, and buoyant financial conditions, a higher policy rate response can prove counterproductive. In some circumstances, a higher policy interest rate would accelerate gross inflows. To boost policy effectiveness, a central bank may prefer to limit its policy rate increases and rely more on FX intervention and other discretionary capital flow measures.¹²

Calibrating such tools is not without its difficulties. Research has begun to try to establish a policy matrix that relates the tools of a central bank (such as the policy rate, central bank balance sheet tools, capital flow management tools, and macroprudential tools) and the associated impact elasticities for key policy variables (such as economic activity, inflation, and capital flows). So far, stable relationships have been difficult to pin down with a sufficient degree of empirical precision. In part, the reason is that the choice of various policy tools and their impacts depends on a range of factors, not least being the state of the business cycle, the volatility of capital flows, the level of financial deepening, the ability to hedge exchange risks, and others. Over

¹² Rey (2013) has highlighted evidence that global capital flows have undermined the independence of monetary policy in small, open economies (i.e., the dilemma versus trilemma debate).

time, experience may yield insights into a workable policy mix. Until then, further experimentation with a range of central bank policies will allow central banks to learn how to best deploy them.

(iv) Other balance sheet policies

International experience with central bank balance sheet policies over the past decade has opened up new possibilities when responding to capital flow volatility. To the extent that the private sector has limited balance sheet capacity to absorb large adjustments in gross capital flows, central banks have demonstrated that they can step in decisively to serve as a buffer. In the case of sizable changes in the gross flows of local currency bonds, for example, SEACEN central banks could set up a securities facility that mimics the borrowing and lending facilities for reserves. In the case of gross equity flows, ETF facilities, like that established at the Bank of Japan, could provide opportunities to moderate the effects of boom-bust equity price dynamics associated with capital flows. The effectiveness of such facilities for smaller economies remains an open question. Also, central banks must carefully analyse the long-run consequences of such facilities in terms of the detrimental effect they can have on private sector financial system efficiency and resilience.

(v) Political economy constraints favor monetary policy leadership

One policy challenge when dealing with capital flows is jurisdictional. Typically, responsibility for reducing capital flow volatility is split across different government agencies and departments. Some argue that central banks should adopt narrow mandates targeting inflation and rely on other government policies and market discipline to address capital flow risks. However, as noted above, central banks are being increasingly seen as possessing important tools and expertise to take on important policy objectives such as capital flow volatility and its consequences.

One underappreciated reason that central banks should play a more prominent role than in the past is that they typically have an important advantage over other government authorities – flexibility. When governments impose new regulations under the guise of capital flow management tools or financial stability tools, the ability to change the regulations in the future is very limited even after such regulations become obsolete or counterproductive. In large part, vested interests fight to keep

the existing regulatory regime, which leads to bureaucratic inertia and other issues (Taylor, 2019). Monetary policy frameworks, on the other hand, are much more flexible and can change more easily as the underlying domestic and global macro-financial systems evolve. Being able to reverse quickly and eliminate stop-gap regulations is important because the inability to do so results in complexities and opaqueness in a regulatory regime which can hold back an economy from reaching its potential. This aspect of policy flexibility argues for an enhanced leadership role for SEACEN central banks in addressing volatile capital flows rather than the subordinate role envisioned in the IMF's latest Integrated Policy Framework.

(vi) Dealing with global monetary policy spillovers

Issues of global monetary policy spillovers *via* capital flows are nearly impossible for SEACEN central banks to address unilaterally. Without a doubt, the intensity and volatility of past capital flows has reflected the monetary policy decisions of major advanced central banks. While it is true that some of the spillovers were helpful during periods of synchronised global cycles, at other times the spillovers aggravated the domestic policy environment in emerging and small, open advanced economies (Chen et al., 2016). Dialogue in international and regional forums has increased the awareness of monetary policy spillovers and spillbacks, but the global central banking community has yet to forge a new consensus on how best to deal with them. Better modeling and the availability of cross-country data have facilitated a better understanding of the increasingly interconnected nature of the global economy but these global models are still wanting.

More needs to be done. Continued leadership by SEACEN central banks at international forums will remain essential for progress in addressing the problem of monetary policy spillovers from major central banks to emerging market economies. Over the past decade, Asian central bankers were on the front lines arguing for a change in the Washington Consensus, which largely rested on a commitment to a purely flexible exchange rate regime, unfettered capital flows, and narrow inflation targeting. The Asian experience demonstrated the flaws in the consensus and highlighted the need for a new global monetary system. Now, there is a much better global understanding of what is at stake and the direction of change.

(vii) Implications for research departments at central banks

Multi-pillar frameworks which include a significant role for capital flows have several implications for the institutional design of both monetary policy briefings and the staff that supports the committees. Such frameworks put additional burdens on staff with respect to data needs, economic and financial sector surveillance, and analytical considerations. In terms of advising monetary policy committees, the staff has greater responsibilities for explaining the complex set of trade-offs and uncertainties to be assessed when setting monetary policy, relative to a narrow inflation targeting framework.

This more holistic perspective emphasises a risk-management approach to monetary policy and the consideration of the different types of uncertainties that a broader framework entails. The nature of the monetary policy uncertainties falls into three major buckets. There is uncertainty about the state of the economy (data uncertainty). There is uncertainty about the impact of policy (parameter uncertainty). There is uncertainty about the low-probability, worst-case scenarios (tail-risk uncertainty). This last category of risks is the most difficult to characterise but may be the most important to consider as central banks look out for developments which could derail an economy and financial system (Kay and King, 2020). Each type of uncertainty presents its own challenge for a research staff to analyse and monetary policy committees to judge. Specialised tools and talent are needed to perform the appropriate risk management assessments.

E. Keeping One's Eye on the Prize – Aiming for Narrow Price Stability Frameworks

Raising the prominence of capital flows in monetary policy frameworks in the near term should not be interpreted as a permanent state of affairs. As noted earlier, the justification for boosting the prominence of capital flows is largely due to the current importance of financial market frictions and global monetary policy spillovers. Resolving these issues could eventually lead to narrower monetary policy frameworks focused on price stability delivering even better outcomes.

This perspective underscores the point that complexities in monetary policy often reflect the complexities of the macro-financial environment. Hence,

as the macro-financial environment becomes more efficient at absorbing potentially destabilising capital flows, central banks can aim at adopting simpler policy frameworks. A simpler framework focused more exclusively on inflation stability may, in this context, result in a new Great Moderation era, this time with a strong enough foundation to endure.

From this long-run time perspective, the integration of capital flow dynamics into monetary policy decisions should be seen as a stop-gap measure. Stop-gap measures are typically transitory solutions to challenging situations. In the case of monetary policy, central banks have a comparative advantage in addressing volatile gross capital flows with policy rates and central bank balance sheet policies. These policies can directly influence the push and pull drivers of capital flows. Another advantage is that these tools can be reversed much more easily than typical capital flow management and financial stability tools. Of course, the overall attractiveness of these monetary policy tools has to take account of the potential risks to price stability and central bank credibility.

Over time, progress will depend on the pace of financial domestic liberalisation and globalisation. Many reforms will be needed, not least being incentivising the development of robust hedging markets and well diversified financial sector balance sheets. SEACEN central banks have an important role to play during this gradual transition to a more stable, or antifragile (Taleb, 2012), capital flow environment, in large part because SEACEN economies will benefit by mitigating push and pull factors driving disruptive gross flows and worrisome capital flow tail risks. It will be important that central banks should not only have a seat at the table promoting domestic reforms that will improve financial system resiliency and the transmission of monetary policy, but should take an enhanced leadership role within governments. Efforts should strive for reducing capital flow tail risks by boosting domestic financial systems resiliency to absorb gross capital flows.

Having said this, it is important to note that getting one's own house in order is not sufficient. SEACEN central banks must continue to push for a new consensus on the rules of the global monetary system. Their aim should be reducing global monetary policy spillovers, especially from the major advanced economies. The reluctance of the major advanced economy central banks and key international financial institutions to take on this challenge is well known. So, forging a new international consensus will not be easy. In the near term, regional efforts may help. Building on past efforts to enhance

regional central bank cooperation – with The SEACEN Centre having played a pivotal role – SEACEN central banks should also continue to strengthen the preparedness of regional institutions, such as AMRO, to step in just in case there is a need.

In the end, success in accelerating the transition to a safer regional and global financial system will afford central banks the opportunity to adopt narrower frameworks over the long-run that are focused on price stability – the enduring core of monetary policy – which in turn will help secure higher economic growth and standards of living.

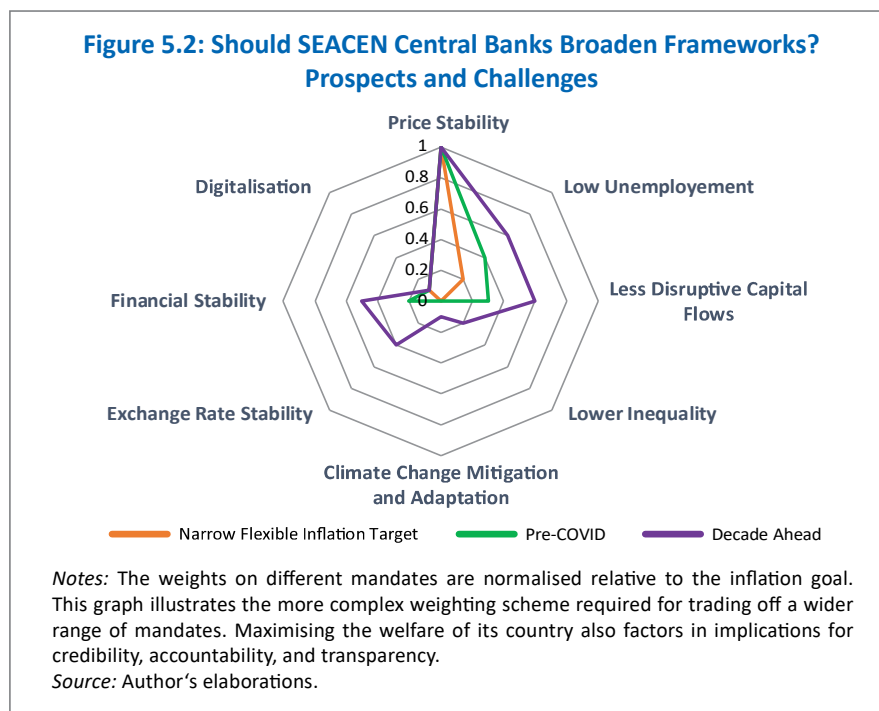
F. Monetary Policy Risk Management Approach – The Challenges Ahead

Central banks around the globe are currently 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 government objectives and considerations, such as climate and inequality priorities. Prioritising this longer list of potential central bank considerations 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 addressing other policy objectives? Put another way, 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 request for central banks to take on new responsibilities is a consequence of their past success. Over the past two decades, central bankers have achieved considerable success for 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 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 formal inflation targeting. SEACEN central banks have performed rather well in terms of traditional measures of monetary policy success.

Adding new mandates would certainly increase the complexity of central banking in the region. To highlight these new challenges in a historical perspective, **Figure 5.2** shows the evolution of the expanding mandates of the past with the potential mandates of the future. 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 developments 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 and considerations in the pre-COVID-19 period, 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 an intentionally vague notion of “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. Operationally, the weight on capital flow developments was relatively 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.

The purple line illustrates the implications for the weights if central banking trends continue and central bankers were to heed calls for integrating climate change and inequality issues in central bank frameworks and policy considerations. Two features stand out. First, central banks would be expected to depart from the narrow price stability mandates. Second, the addition of new mandates for climate and social issues would represent a sea of change in thinking about monetary policy frameworks. It is important to note that the new mandates and policy considerations, while admirable, go well beyond what have traditionally been the responsibilities of central banks. Juggling all these important societal goals will certainly be complex, resource intensive, and time consuming. Moreover, central banks are not well armed to take on these new mandates. Traditional monetary policy tools are blunt and are only tangentially related to the drivers of the key issues of climate change and inequality. These problems are shared among the new tools being considered: targeted lending, sectoral ETF and corporate bond purchases, green QE, special discount rates for banks investing in ESG priorities, and reduced use of QE tools that primarily benefit the wealthy.

In sum, **Figure 5.2** shows how central bank frameworks and other considerations may be broadened in the future. Many worry that this is evidence of mission creep and raises several critical policy questions that need to be answered before central banks take on new mandates. Will the expansion of monetary policy frameworks severely compromise the strength of the medium-term inflation anchor and, if compromised, will it be costly to secure it once again? Certainly, the surge in inflation in 2021-22 is a stark reminder that inflation control can be lost very quickly. Could the quasi-fiscal nature of the expansion lead to fiscal dominance and a loss of inflation-fighting credibility? Would the expansion of monetary policy frameworks be effective in addressing important governmental policy objectives? Would such efforts from central banks contribute to the overall national welfare sufficiently to make it worth taking the risk of compromising price stability? These are very important questions that central banks are just beginning to grapple with.

G. Concluding Remarks

In the 2020s, SEACEN central banks will face a range of policy challenges and considerations. Important questions remain about the appropriate role of monetary policy. However, the emerging global consensus is that central banks in developing and small, open, advanced economies have reasons to be pro-active when addressing capital flow volatility.

The importance of elevating the prominence of capital flows in monetary policy decisions will undoubtedly vary from country to country. There is no one-size-fits-all. Cross-sectional differences among SEACEN economies, not least being the state of the business and capital flow cycles, the level of financial deepening, the ability of each financial system to hedge exchange risks, and others, make it hard to take the experience of one country and apply it to another. Each economy's vulnerabilities to global monetary policy spillovers also matter.

Over time, however, there is good reason to believe that central banks eventually will be able to revert to narrower frameworks. However, that is likely to occur when, and if, the macro-financial environment becomes much more stable and resilient. For a time in the past, there was a belief that a central bank focused narrowly on price stability would result in broad economic and financial stability. That result did not materialise. History instead suggests that narrow price stability frameworks are the byproduct of having first achieved a sufficient level of economic and financial stability. Until then, constrained discretionary monetary policy within a multi-pillar monetary policy framework may be the best we can hope for.

As in the past, the SEACEN central banks and The SEACEN Centre will have an important role to play in this evolution. The region's monetary policy diversity is an important source of information in international policy debates. With SEACEN's impressive regional research and learning hub, it is important that the unique regional experiences and lessons learned be shared both inside the region and beyond.



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