Fluctuations in International Capital Flows: Challenges and Policy Responses

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INTRODUCTION AND SUMMARY

Rapid and significant reversal of private capital flows to a number of emerging economies in the wake of the financial crisis has brought the countries' management of capital flows into international focus. Both the G20 group and the International Monetary Fund, IMF, are currently dealing with the issue, and their aim is to reach conclusions on appropriate economic policy measures.

Capital inflows improve a country's funding options. This provides a basis for increased prosperity, as the improved funding options pave the way for profitable investment, boosting growth and employment. Economic policy should be designed to ensure that the improved prosperity will be of a stable and lasting nature. This should be viewed in light of the fact that the increased supply of funding may contribute to overheating of the economy and entail financial risks in connection with price bubbles or sudden reversals of capital flows. Against this backdrop, some of the recipient emerging economies have sought to address private capital inflows and their consequences, including via the introduction of capital controls.

This article illustrates the size and nature of recent years' capital flows, the policy challenges caused by the inflows, potential and applied policy responses as well as preliminary considerations and discussions in international forums. The main conclusion is that while a number of macroprudential measures and, to some extent also capital controls, have been introduced, the possibilities for adjustment via macroeconomic policy have not been exhausted. An IMF proposal for a framework for managing capital flows emphasises targeting economic policy on the country's fundamental problems. This means that the risk of overheating should be countered by macroeconomic tightening, possibly supplemented by macroprudential initiatives to reduce financial risks. However, it is difficult to reach international agreement on the framework. Part of the reason is that some countries fear such a framework would limit their room for manoeuvre and to a lesser degree disagreement on relevant economic policy measures. Furthermore, some recipient countries find that there is insufficient focus on the implications for international capital flows of an accommodative monetary policy stance in advanced economies.

Denmark – together with the other Nordic and Baltic countries – basically supports free capital flows. With a view to addressing the concerns of some emerging economies, Danmarks Nationalbank finds it appropriate to formulate a globally supported framework. The primary aim should be to better enable the economies to absorb capital flows.

DEVELOPMENT IN PRIVATE CAPITAL FLOWS

The emerging economies have seen a rapid return of private capital flows after the sudden halt in connection with the financial crisis.[1] In just three quarters, the net inflows increased by approximately 3.5 per cent of the gross domestic product, GDP, on average for the emerging economies, cf. IMF (2011a).

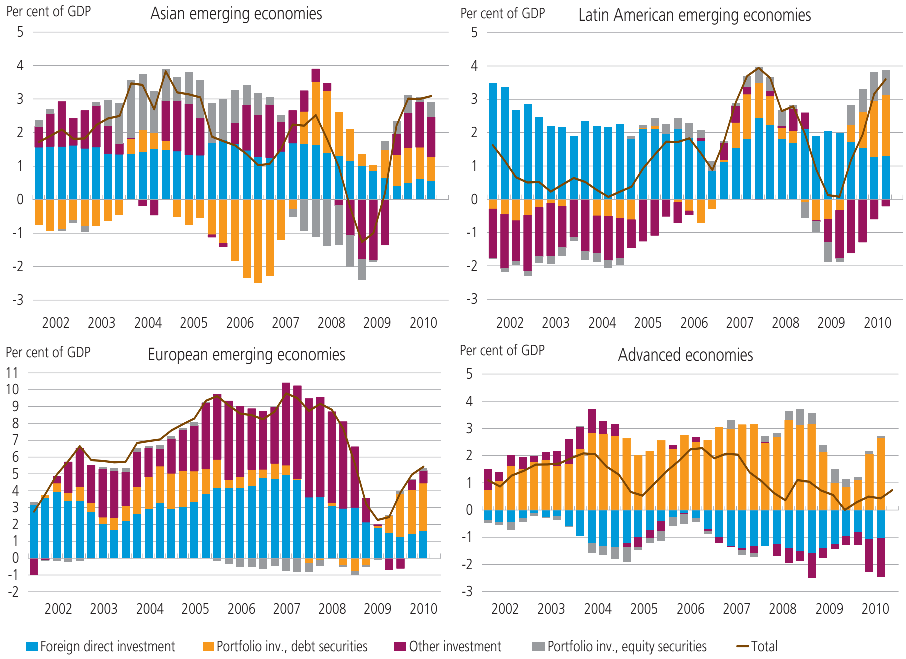
In the ongoing debate on capital flow management, focus has been particularly on Asian and Latin American emerging economies.[2] In comparison, the capital inflows to European emerging economies are still stronger, at approximately 5 per cent of GDP, although the level is more moderate than ahead of the financial crisis, cf. Chart 1. Though the gross capital flows into the advanced economies are much stronger, the net flows are significantly smaller relative to output. Box 1 outlines the relationship between capital flows and the current account of the balance of payments.

It is as much the composition of capital inflows as the speed at which they have increased that has given rise to further vigilance. The increase in capital flows is particularly attributable to portfolio investments and for Asian emerging economies also to other investments, including loans and deposits, while foreign direct investments have not risen markedly in the wake of the financial crisis. Portfolio investments as well as bank deposits and similar private capital flows are typically considered the most volatile capital flows.

1 In this article, the shown net capital flows exclude foreign-exchange-reserve changes (as well as errors and omissions).

2 The article focuses on emerging economies that have seen significant capital inflows and have been engaged in addressing these flows. The selection is based on IMF (2011b).

NET CAPITAL FLOWS BY REGION | Chart 1



Note: Other investment comprises e.g. trade credits, loans and deposits, including loans to a bank from a foreign parent bank. The total amount stated is positive in all regions. The reason is partly that foreign-exchange reserve changes are not included, cf. footnote 1, page 68, and partly that e.g. a number of commodity-producing countries are not comprised by the above groups. Appendix A shows a list of countries included in the regional groupings.

Source: IMF (2011a).

Capital flows will follow investors' expectations of the highest expected risk-adjusted return, away from the low interest rate and growth outlook in advanced economies and towards better prospects in the emerging economies. Moreover, IMF (2011b) predicts a structural increase in investments in emerging economies as a consequence of a rising share of these economies in institutional investors' portfolios. This, inter alia, reflects that emerging economies have proven to be resilient during the crisis.

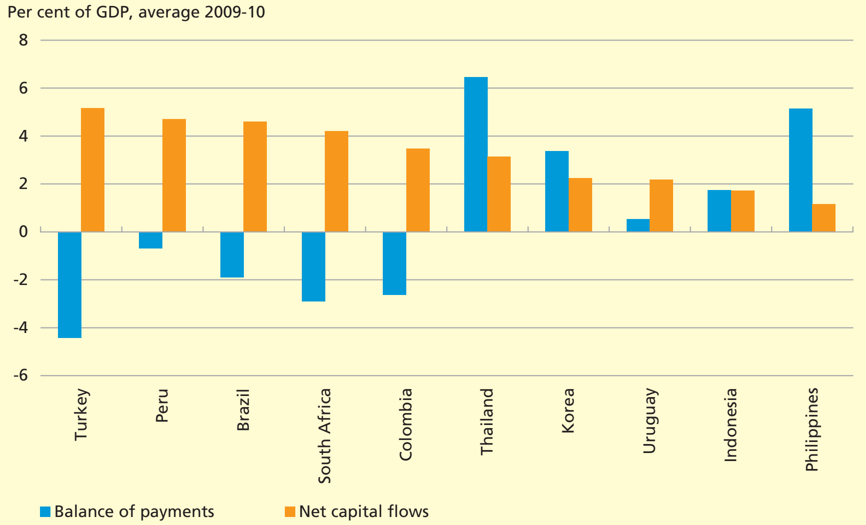
The analysis in IMF (2011a) shows that country-specific factors are most important for the variation in capital flows. Global factors (lower interest rates and a dimmer growth outlook in the advanced economies as well as global risk aversion) still only explain around 15 per cent of total capital flows despite rising importance during the most recent wave of capital flows. This suggests that e.g. the low fed funds target rate in the USA has had a modest effect on capital flows, while expectations of higher risk-adjusted returns in the individual economies have played a larger role.

THE CORRELATION OF CAPITAL FLOWS WITH THE CURRENT ACCOUNT Box 1

Capital flows into and out of a country are reflected in the "financial account" of the overall balance of payments. The account matches the balance of the current account and capital account. The account includes private and public financial transactions, such as direct investments, portfolio investments, bank deposits etc. in addition to foreign-exchange reserve movements.[1]

The discussion on managing capital flows concerns net capital flows excluding foreign-exchange reserve changes, which will often be based on other factors than market-driven factors. Net capital inflows will typically be associated with a current-account deficit and thus a savings deficit. However, if a country builds up foreign-exchange reserves, it may still have a current-account surplus concurrently with otherwise positive capital inflows. Among the emerging economies currently dealing with the issue of capital inflows, the Asian economies generally have current-account surpluses, while the Latin American countries as well as Turkey and South Africa run deficits, cf. Chart 2.

NET SAVINGS AND NET CAPITAL FLOWS IN SELECTED EMERGING ECONOMIES Chart 2



Note: Net capital flows, excluding foreign-exchange reserve changes.
Source: IMF (2011a), Balance of Payments Statistics and own calculations.

Hence, it is not necessarily a savings deficit that causes concern in connection with periods of substantial capital inflows, but just as much the risk of overheating and build-up of financial instability as a consequence of the size, composition etc. of the capital flows.

Source: Danmarks Nationalbank (2007).

[1] Denmark publishes all Danmarks Nationalbank's external accounts (both reserve assets and other external accounts). This article follows the IMF's classification, in which the reserve assets are a separate instrument.

STRONG CAPITAL INFLOWS – EFFECTS AND POLICY RESPONSES

Capital inflows improve funding options and may thus provide access to cheaper funding and facilitate profitable investments to the benefit of growth and employment. Large and sustained capital inflows can also contribute to developing capital markets, paving the way for more advanced financial products, which would otherwise not exist in the market. However, even in good times, economic policy must be designed appropriately to reduce the risks associated with capital inflows. This could involve prevention of overheating of the economy, erosion of competitiveness via strong appreciation of the currency as well as financial risks associated with a sudden reversal in capital flows. Relevant policy responses will depend on the exact challenges that the capital flows bring.

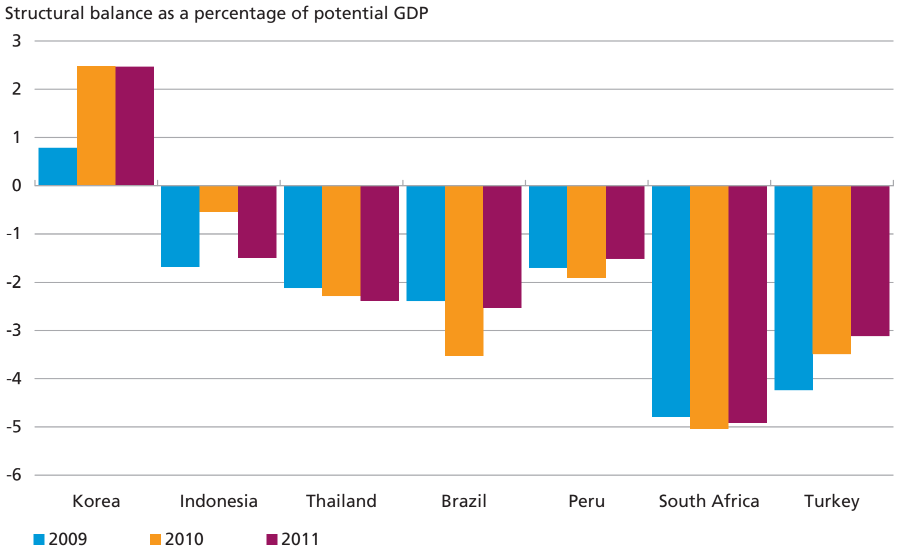
Due to the easier access to funding of consumption and investments in e.g. equities or real property, inflationary pressures and price bubbles may build up. Signs of overheating have been growing, particularly in Latin America, but also in Asia, in the form of rising inflation and credit growth. In Latin America, current-account deficits are also widening, albeit not yet at alarming levels, cf. IMF (2011c and 2011d).

Tighter fiscal policy can offset trends towards overheating and strong credit growth as well as provide better room for manoeuvre in monetary policy. It would be opportune to reduce distorting incentives to borrow, such as reduction of interest deductibility, in a situation with strong credit growth fully or partly funded by capital inflows. However, fiscal policy in the relevant emerging economies has only at a late stage or to a limited extent contributed to dampening demand pressures, cf. Chart 3.

If the capital inflows consist of investments in debt instruments, the increased demand for bonds may put downward pressure on long-term market rates. These effects become particularly pronounced if the capital flows are significant relative to the size of local bond markets. Lower market rates may weaken the monetary-policy transmission mechanism and at the same time reduce the incentive to fiscal discipline. Calculations in IMF (2011c) show that long-term interest rates have declined about 5 basis points on average for each percentage point rise in foreign ownership. However, monetary policy is still considered to be efficient.

Monetary policy may be an important tool to dampen inflationary pressures. Nevertheless, the emerging economies seem to have been hesitant in raising interest rates. In spite of mounting domestic inflationary pressures, monetary-policy interest rates have been kept below historical levels at corresponding inflation rates, cf. IMF (2011b), and real interest rates are negative in Korea and Thailand. Due to fears of

DEVELOPMENT IN THE PUBLIC-SECTOR STRUCTURAL BALANCE Chart 3

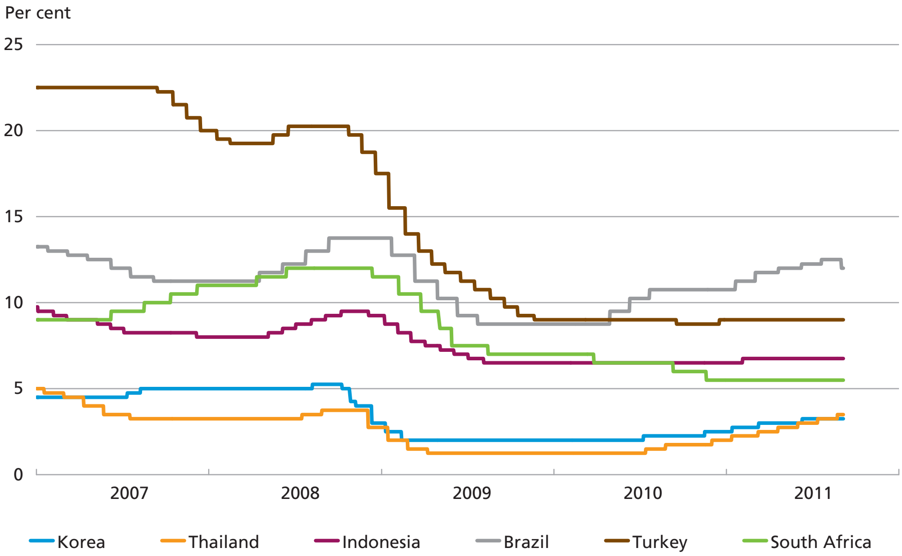


Note: A positive change corresponds to tighter fiscal policy.
Source: IMF (2011a).

attracting further capital, Turkey actually cut interest rates in 2010, cf. Chart 4, though inflation was above the target rate.

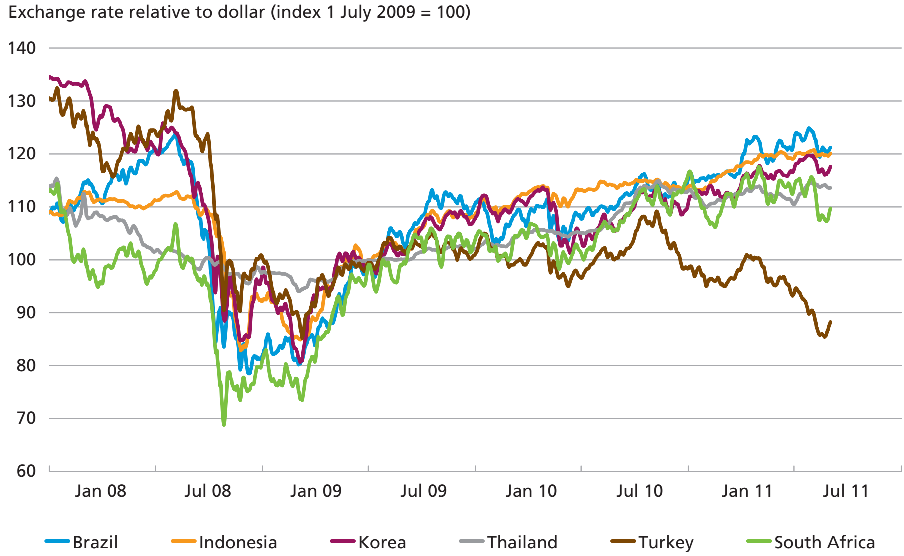
Moreover, capital inflows may lead to upward pressure on the currency. This could help ease pressures on the economy, including inflationary pressures, but could erode competitiveness, if the exchange rate

MONETARY-POLICY INTEREST RATES IN SELECTED EMERGING ECONOMIES Chart 4



Source: Reuters EcoWin.

EXCHANGE-RATE DEVELOPMENTS Chart 5



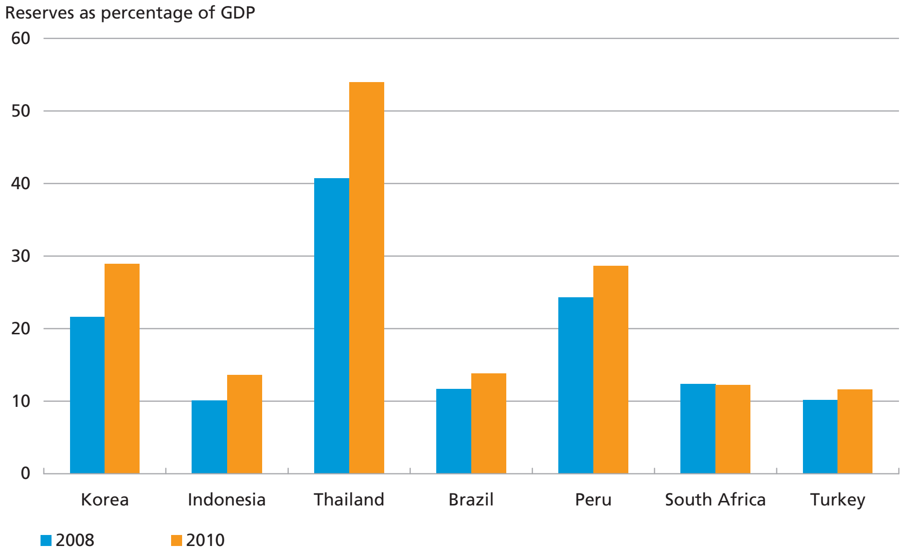
Note: 5-day moving averages.
Source: Bloomberg.

is overvalued relative to the long-term equilibrium level. Since the reversal of private capital flows in mid-2009, some large emerging economies have seen exchange-rate increases between 10 and 25 per cent against the dollar, cf. Chart 5. However, in several cases this has happened after significant depreciation in connection with capital outflows during the financial crisis. IMF (2011a) finds that the exchange rate in e.g. Korea is still below its long-term equilibrium level, while the exchange rates of Brazil and South Africa tend to be overvalued.

Many countries have intervened concurrently and hence increased their foreign-exchange reserves, cf. Chart 6. That would be wise in cases where the reserve is considered to be too small for precautionary purposes. However, intervention may involve significant costs. The costs comprise interest on the securities issued or sold to offset (sterilise) the liquidity effect of the intervention. The interest rate will typically be higher than the potential return from investing the foreign-exchange reserve. In IMF (2011b), the costs of sterilising the liquidity effect of the intervention are estimated at 0.1-0.3 per cent of GDP in 2010 for some of the countries that have seen particularly strong increases in capital flows (Brazil, Peru, Thailand, Indonesia and South Africa).

Finally, the economy becomes vulnerable to a sudden halt or reversal of capital flows, particularly when the inflows are of a more short-term nature. This is not only a risk for countries running current-account deficits. It may also be a problem relative to banks' funding and/or foreign-

TRENDS IN FOREIGN-EXCHANGE RESERVES Chart 6



Source: IMF.

exchange exposure. Furthermore, it may be more difficult for firms to withstand declines in income, if the funding is based on debt rather than share capital. The risk of a sudden halt in capital inflows and of a banking or currency crisis is highlighted in OECD (2011). Out of historical periods with substantial capital inflows, 60 per cent has ended in a sudden halt, and 10 per cent has ended in a banking or currency crisis. The risk more than doubles in the case of debt inflows compared with foreign direct investments.

Macroprudential regulation can play an important role in addressing the financial risks of inflows, both relative to strong lending growth and high growth in stock and house prices as well as to vulnerability to shocks. Such regulation may comprise stricter reserve requirements on the banks, reduced loan-to-value ratios for real property, maturity- or currency-differentiated taxes and reserve requirements as well as restrictions on currency exposure etc. Several of these measures have been applied recently.

Finally, growth-promoting structural policy, such as competition-enhancing deregulation of product markets and reduction of comprehensive job-protection schemes, may contribute to changing the composition of capital flows towards more productive and stable flows, including increased foreign direct investment, cf. OECD (2011). However, it is difficult to assess the net effect on capital flows, as improved conditions at the same time will make it more attractive to invest in the country.

Capital controls

Capital controls are typically defined as measures discriminating against non-resident investors. Overall, the controls can be divided into market-based measures (e.g. taxes) and administrative measures (e.g. caps or actual bans on capital flows). Both types have been applied in connection with the most recent capital inflows to the emerging economies in both Latin America and Asia, cf. Box 2.[1]

In IMF (2011b), a study of selected countries' recent use of capital controls shows that restrictions and other more specific measures have generally been targeted on specific risks, such as short-term capital inflows of a more speculative or volatile nature, hence not on avoiding inflows of more "productive" capital. There is some empirical evidence that capital controls may, in some cases, be efficient with a view to addressing such specific risks. In an overview of a number of studies, Magud et al. (2011) conclude that the introduction of capital controls results in a changed composition of capital inflows towards longer maturities.[2] However, IMF (2011e) underlines that the literature has not yet identified the reasons why they work in some instances and not in others.

The efficiency of the controls is dubious because the capital will seek to circumvent them as long as there are prospects of high returns. IMF (2011b) concludes that the effects of the recent specific measures have been mixed. For instance, the effect of taxes imposed on foreign investors' acquisition of certain bonds in Korea and Thailand is expected to be limited because double taxation agreements imply that part of the bond purchases will be exempt from tax. Indonesia has introduced minimum periods for investment in central bank bonds to counter speculation (not a capital control in the strict sense, as the requirement, in principle, applies to all investors). This only led to a short-lived decline in non-residents' holdings, which was subsequently more than reversed. All in all, it has been difficult to prove a lasting effect of the more specific measures on the intended capital flows.

But a generally negative market sentiment as a consequence of the introduction of capital controls has not been evident. According to market participants, the absence of more general restrictions on mobility as well as clarification of the aim of the measures have been key reasons why investors have not shunned countries that have introduced controls.

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1 The free flow of capital is a fundamental principle in the European Union.

2 Magud et al. (2011) compare the results of a number of studies relative to four intentions: 1. dampen appreciation, 2. dampen speculative inflows, 3. dampen the size of capital inflows, and 4. regain monetary autonomy. They do find an increased degree of monetary autonomy, while the results are mixed regarding appreciation and the overall size of capital inflows.

EXAMPLES OF RECENTLY APPLIED CAPITAL CONTROLS — Box 2

Taxes

- Brazil: Reintroduction of higher taxes on portfolio investments of between 2 and 6 per cent (lowest for investments in equities, highest for fixed-rate bonds).
- Korea: Reintroduction of 14 per cent withholding tax on non-residents' purchases of e.g. government securities.
- Thailand: Reintroduction of 15 per cent withholding tax on non-residents' interest income and capital gains on new purchases of government bonds.

Reserve requirements

- Taiwan: Higher, reserve requirements on balances of non-residents' local currency accounts. Required reserves are no longer remunerated.

Quantitative controls

- Indonesia: Short-term central bank bills phased out in favour of i.a. 6-month non-tradeable term deposits, which are only available to banks operating in Indonesia.
- Taiwan: Ban on time deposit accounts for foreign investors.

Source: IMF (2011b) and Pradhan et al. (2011).

INTERNATIONAL DEBATE ON CAPITAL FLOWS

The issue of managing international capital flows is discussed several in forums, particularly the IMF and the G20 group. In the spring, the IMF staff presented a possible policy framework for managing international capital inflows. They have been developed in recognition of a rising need to advise member countries in this area, and they aim to minimise the distorting effects of any measures.

The framework outlines the conditions under which it may be appropriate to apply macroprudential measures and possibly capital controls, cf. Box 3. The IMF has previously rejected the use of capital controls and still finds it important that the member countries exhaust their scope for monetary and fiscal policy measures as well as structural initiatives before direct measures against capital flows are implemented.

However, the framework has not received broad support among IMF members. The substance was broadly supported by most member countries, but some of them complained that the analysis did not encompass policies in other countries that lead to capital inflows. The accommodative US monetary policy is a case in point. Moreover, the member countries preferred the framework to be based on more in-depth studies of measures and their efficiency in a large selection of countries. Finally, some countries were concerned that the framework would limit their room for policy manoeuvre. According to its current Articles of Agreement, the IMF has no explicit mandate to monitor capital flows.

KEY ELEMENTS OF THE IMF STAFF'S PROPOSED FRAMEWORK FOR MANAGING CAPITAL INFLOWS — Box 3

Macroeconomic policy instruments take precedence:

- Allow the exchange rate to appreciate when it is undervalued.
- Build up foreign-exchange reserves, if they are not more than adequate from a precautionary perspective. Neutralise the liquidity effect by sterilisation, if inflation is a concern.
- Lower monetary-policy interest rate or tighten fiscal policy to expand the monetary room for manoeuvre as long as it is consistent with inflation objectives, and overheating is not a concern.

Then come the measures for managing capital inflows, including macroprudential initiatives and capital controls:

- Capital flow management measures can be used if the conditions mentioned above are not fulfilled or if e.g. sterilisation costs are too high or fiscal tightening is not an option. The measures should not replace the necessary macroeconomic policy adjustment, but can complement it in light of the lags associated with fiscal tightening.
- Give precedence to macroprudential measures over capital controls.[1]
- The measures should be commensurate to the specific challenge and be lifted when the risks recede. Country-specific circumstances should be taken into consideration in designing the capital flow management measures. These include the country's administrative capacity and whether capital inflows are intermediated through financial institutions subject to regulation or via other channels.

Ongoing strengthening of the institutional framework:

- Macroprudential and structural measures with a view to improving the financial sector's ability to handle financial stability risks and the capacity of the economy to absorb capital inflows can be used at any time.

Source: IMF (2011b).

1 Macroprudential measures could be stricter capital and liquidity requirements, reduced loan-to-value ratios etc.

In this light, the IMF's advisory body, the International Monetary and Financial Committee, IMFC, considers the framework as a first step towards developing a more comprehensive and balanced approach to managing capital flows. This should also include recommendations regarding policies that give rise to outward capital flows.[1] The work ahead will take place in parallel with similar work in G20.[2]

1 The IMFC's communiqué of 16 April 2011 states: "The IMF's recent work on managing capital inflows is a step that should lead toward a comprehensive and balanced approach for the management of capital flows drawing on country experiences. Giving due regard to country-specific circumstances and the benefits of financial integration, such an approach should encompass recommendations for both policies that give rise to outward capital flows and the management of inflows …"

2 Thus, the communiqué from the meeting between finance ministers and central bank governors in the G20 group on 14-15 April 2011 said: "To strengthen the international monetary system, we agreed to focus our work, in the short term, on […] coherent conclusions for the management of capital flows drawing on country experiences."

Together with the other Nordic and Baltic countries, Denmark supports free capital flows. Policy measures prompted by capital inflows must be targeted towards better enabling the economy to absorb the flows by using macroeconomic policy, structural policy and macroprudential measures in line with the approach proposed in the IMF's framework. Capital controls should be used only temporarily in cases where other possible actions have been exhausted.

There is no global international institution that monitors and advises the member countries on capital flow management, and the consequences may be significant, particularly for the recipient economies, if the effects of the flows are not handled properly. The Nordic and Baltic countries find it sensible that the IMF assumes an advisory role. Hence, the Nordic-Baltic constituency of the IMF supports the development of a framework for capital flow management to be used by the IMF in its advisory function towards the member countries.

APPENDIX A: COUNTRIES INCLUDED IN WEIGHTINGS

Country selection follows IMF (2011a). Regional groupings comprise:

- Asian emerging economies: China, Hong Kong, India, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand.
- Latin American emerging economies: Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Peru and Uruguay.
- European emerging economies: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Turkey.
- Advanced economies: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, UK and USA.

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