



# Open and Orderly Capital Movements

Interventions from the  
2016 OECD High-Level Seminar





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## Foreword

This collection compiles the contributions of senior policy experts, academics, and economic practitioners on developments in the financial integration and financial regulation of cross-border capital flows since the 2008 global financial crisis, at the OECD High-Level Seminar “Open and Orderly Capital Movements” held in October 2016. The long-term move towards capital account openness among large emerging markets, the role of macroprudential measures in minimising systemic risk associated with large capital flow volatility, the avenues of reconciling individual country regulatory objectives and the collective interest of open and deep capital markets are discussed. The contributions also consider how the OECD Code of Liberalisation of Capital Movements may be further developed into an inclusive multilateral framework to support a resilient and open global financial system and ultimately robust investment and growth.

An open, transparent and orderly international system of capital flows underpins growth and stability. In an increasingly interconnected world economy, faced with episodes of heightened capital flow volatility, significant value is attached to a credible commitment mechanism that is sensitive both to the need to keep investment flowing but also to ensure financial stability concerns are addressed. A rule-based, co-operative framework for capital flow policies can help countries maintain market confidence and continue to attract the capital needed to support inclusive growth and sustainable development.

The OECD Code of Liberalisation of Capital Movements provides such a framework. As an instrument that encourages co-operation, it has provided a tried and tested process for global dialogue for over 50 years. Currently adhered to by all thirty-five OECD countries (including twelve G20 countries), and open to adherence by non-OECD countries, the OECD Code is the sole multilateral agreement among State parties dedicated to openness and transparency in cross-border capital flow policies. While there is no presumption that full liberalisation is an appropriate goal for all countries at all times, the OECD Code is based on the premise that long-term business investment and growth potential cannot be achieved with closed capital accounts and that “beggar-thy-neighbour” approaches to capital flow policies can result in negative collective outcomes.

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## Preface by Angel Gurría, OECD Secretary-General

Globalisation has undoubtedly brought significant benefits to our economies and societies. From widely diffused productivity gains and a greater variety of goods at competitive prices for consumers, to lifting hundreds of millions of people out of poverty. These benefits have been underpinned both by trade and financial globalisation supporting one another. The latest OECD Business and Finance Outlook provides empirical evidence that restricting one can impede the other.

The expansion of the global economy has benefited from deep, open and integrated markets for funding, liquidity and risk trading. The benefits of these markets are shared by all participants in the system: sovereign governments, enterprises and individuals from any jurisdiction. Open and deeper international capital markets act as an international public good; they support a better risk allocation, they lower the overall cost of capital and they foster global liquidity.

Despite these benefits however, the liberalisation of capital movements and financial markets have also produced numerous challenges such as the faster transmission of international shocks, increased risks of overheating, credit and asset price boom-and-bust cycles and abrupt reversals of capital inflows. This has also contributed to the so called “financialisation” of the global economy. The financial sector in most OECD economies has been characterised by high profitability and very high earnings which are above what employees with similar profiles earn in the rest of the economy. This premium is particularly large for top earners, contributing to growing income and wealth inequality. These developments have also contributed to a backlash against globalisation.

In this respect, global governance aims to establish “rules of the game” that create a level playing field. With regards to financial globalisation, the OECD Code of Liberalisation of Capital Movements – the sole multilateral agreement among States dedicated to openness and transparency in cross-border capital flow policies – is the backbone of these rules. It is specifically designed to provide a framework for moving towards more openness, while allowing for different stages of economic development.

International economic and trade adjustments can be impeded when a part of the world economy is closed to capital flows. This has been one of the reasons for the build-up of imbalances leading to the 2008 crisis. Exchange rate targeting and capital controls can be sources of global distortions. While well-tested and calibrated macroprudential measures can be used to serve as counter-cyclical buffers and mitigate the cost of banking crises, capital flow restrictions – even when used with a declared macroprudential intent – lead more often than not to market fragmentation

and leave a negative mark on investor confidence. Capital flow measures may look like a politically easy short-term solution to avoid painful medicine and may actually postpone the actions necessary to redress imbalances and advance reform efforts to strengthen financial sector resilience.

Leading nations and the G20 share a responsibility to protect open markets and to resist harmful financial protectionism. By adhering to the OECD Code, countries agree to abstain from a “beggar-thy-neighbour” approach to capital flow restrictions. They also demonstrate a strong attachment to the G20 commitment to “refrain from competitive devaluation”.

G20 members that have not yet adhered to the Code have been encouraged under the 2017 German Presidency to consider requesting adherence. The fact that two major non-OECD G20 members have requested to begin their adherence process is a significant step towards limiting imbalances and levelling the playing field.

The OECD is committed to promoting greater international co-operation, accountability, and rules-based policy-making. As such, we focus on equipping policy makers to deal with both today’s challenges, as well as the potential threats and opportunities of tomorrow.

The present publication is part of this effort, compiling interventions by leading voices from ministries, international organisations, central banks, and academia to guide discussions, reflections, and policies on capital flow management.



Angel Gurría  
OECD Secretary-General

## Introduction by Gabriela Ramos, OECD Chief of Staff and G20 Sherpa

The discussion on a co-operative and prudent approach to long term financial integration, promoted by the OECD Code of Liberalisation of Capital Movements, is well timed, given the current economic uncertainty and complexity. The world economy remains in a low-growth trap, international trade is exceptionally weak, and global financial stability is facing the risk of capital flow volatility. Moreover, emerging economies are particularly vulnerable to currency exposures and/or high domestic debts.

### **Resisting the appeal of financial protectionism while equipping governments with a robust policy framework for managing capital flows**

Policy makers are therefore facing an increasingly complex world. As such, we should resist a rising tide of protectionism and collectively strive to keep financial markets open. Lack of progress, and even backtracking, on the opening of global trade and financial markets is causing economic fragmentation and there is a danger that such an inward-looking policy path may further stifle trade, investment and capital flows.

OECD indicators indeed suggest a rise in capital flow measures since 2008 in the form of currency-based restrictions.<sup>1</sup> This is reversing a historic trend and should be a cause for concern. It is evident that supporters of open economic interactions are struggling to clearly demonstrate the dangers of breaking up important economic links that have been built for so many years and that benefited all the economies concerned.

We know that an open, resilient and orderly financial system is the interconnector of the global economy, "lubricating" all economic transactions. It supports better risk allocation, it lowers the overall cost of capital, and when accompanied by robust prudential supervision of finance, it can be an important pillar for robust growth.

OECD research has shown that evidence on the impact of capital flow restrictions on decoupling the economy from global credit cycles is rather mixed. It also suggests that greater capital account openness is associated with overall faster growth, as the

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<sup>1</sup> De Crescenzo, A., M. Golin and A. Ott (2015), "Currency-based measures targeting banks - Balancing national regulation of risk and financial openness", *OECD Working Papers on International Investment*, No. 2015/03, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jrp0z9lp1zr-en>.

positive pro-growth effects outweigh the possible negative impact on financial stability.<sup>2</sup>

Recognising these advantages, it is also worth underlining that global economic integration has not worked for all and this is having a strong impact on policy makers' agendas. The financial crisis itself demonstrated what happens when leaving markets unchecked; the results have been very costly. Global financial integration became an end in itself and not a means for improving prosperity and well-being. Simplistic assumptions and models did not allow us to understand the complexity of the global economy.

Our New Approaches to Economic Challenges initiative (NAEC) – launched in 2012 – is helping us learn lessons from the crisis, and shape policies for more resilient markets, and crucially, for markets that work for people's well-being. It is an attempt to understand a global economy that is now being recognised as uncertain, volatile, complex and ambiguous.<sup>3</sup>

This reality check is also at the core of the ongoing review of the Code.<sup>4</sup> We need to continue to make this instrument stronger, and present the case of the benefits of global integration, while we also check for excesses.

In this sense, it is great to have the emerging economies participate in these discussions, and it is great to have Peru and other countries join the Codes. It is also encouraging to have Argentina and Brazil move closer to the Code, and here I want to recognise Germany's leadership. Even before embarking on their G20 2016/2017 Presidency, Germany had already begun supporting the Code. Moreover, China's stated commitment to openness is also very welcome as it is moving progressively towards full capital account convertibility. Indeed, governments need an actionable toolbox of policy instruments to boost economic and financial resilience, and to deal with capital flow volatility.

Clearly, a sound policy framework must be established in order for an economy to fully benefit from a liberal, open capital account regime – this is the key lesson we drew from successive financial crises over the last two decades. This framework can include well-tested and calibrated macroprudential measures that can serve as counter-cyclical buffers. Even if such measures may have costs in terms of distortions within the financial system, they may be needed to balance the cost of banking crises.

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<sup>2</sup> [www.oecd.org/economy/growth/economic-resilience.htm](http://www.oecd.org/economy/growth/economic-resilience.htm)

<sup>3</sup> [www.oecd.org/naec/](http://www.oecd.org/naec/)

<sup>4</sup> [www.oecd.org/daf/inv/investment-policy/oecd-code-capital-movements-review.htm](http://www.oecd.org/daf/inv/investment-policy/oecd-code-capital-movements-review.htm)

But in doing so, international co-operation, and the Code as a global public good, have a key role in the promotion of *openness, transparency and accountability* and in managing capital movements. The OECD Code is the only binding international agreement on cross-border capital flows, and offers a policy framework to achieve and strike the right balance between these objectives. It offers the possibility and flexibility to adherent countries of reintroducing capital flow restrictions in specific circumstances, provided the latter are regularly reviewed by policy-makers to ensure that restrictions are proportional to the risks faced and not maintained longer than necessary. The OECD co-operative peer review process helps avoid any "beggar-thy-neighbour" policies.

The Code can also act as a "conflict avoidance device". It has served as an anchor for countries' policies in times of financial turmoil, by providing a due process – transparency and accountability – to observe when Adherents reintroduce capital flow restrictions while wishing to signal their continued commitment to openness.

The technical discussions on the Code review are ongoing. The process aims to ensure the Code adequately covers all forms of capital flow restrictions. It also aims to carefully balance countries' rights to introduce policies and to bolster resilience. This is going to be a global conversation, and it is encouraging to see an active participation by all G20 members.

The OECD is deeply committed to greater economic co-operation and prudent, rules-based policy-making at a global level. The global risk environment, uncertain growth and capital flow volatility need an approach that boosts transparency, accountability and encourages peer co-operation.

The OECD Code is a time-tested "watch" that is currently being "fine-tuned" in response to the emerging policy challenges. A reinvigorated instrument should work better to help economic integration pay for all. If we fail to do so, the populist anti-trade trends will continue to gain pace. To counter these, the current global architecture supporting cooperative dialogue must be made to work for the benefit of people's well-being.

## Intervention by Catherine L. Mann, OECD Chief Economist

### Capital account openness, growth and resilience: Evidence from OECD analysis

**The post-war record of severe recessions and financial crises offers several lessons on how to strengthen economic resilience.** Major global crises, such as the 2008-09 episode, are rare but severe recessions have been quite frequent over the past 50 years. Over 1970-2010, 120 episodes of banking, currency or sovereign debt crises were recorded across a sample of advanced and major emerging market economies. Over 100 severe recessions were also recorded during this same period. Severe recessions are referred to as episodes when GDP falls by more than 3½% from peak to trough. The last major episode has shown that, in periods of relative stability in terms of growth and consumer price inflation, signs of growing risks and vulnerabilities are easily overlooked.

**What can policy makers do to lastingly enhance resilience in the face of economic and financial risks?** In looking for answers, they need to be mindful of the potential long-term growth impact of risk-mitigating measures. Mitigating risks can also have costs: in considering policy measures to reduce risks, the benefits need to be balanced against the potential costs in terms of the lower average growth that some policy measures could entail.

**The focus should therefore be on cost-effective measures.** When risk-mitigating measures involve a trade-off between growth and crisis risk, the most cost-effective actions need to be identified, spanning both macro and structural policies. Recent OECD empirical work sheds light on possible growth-crisis trade-offs from two angles: i) looking at the extent to which pro-growth policies can make economies more vulnerable to severe recessions; and ii) assessing the impact on growth of risk-mitigating (prudential) policies.<sup>5</sup> These issues are explored using an empirical approach that provides insights on the impact of various policy settings on average GDP growth on the one hand and either financial crises or exceptionally low GDP growth rates on the other.

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<sup>5</sup> See Caldera Sánchez, A., A. de Serres, F. Gori, M. Hermansen and O. Röhn (2016), “Strengthening Economic Resilience: Insights from the Post-1970 Record of Severe Recessions and Financial Crises”, *OECD Economic Policy Papers*, No. 20, OECD Publishing.

**As regards product and labour market policies as well as those related to the quality of institutions, there is, by and large, little evidence that policy makers would face trade-offs between enhancing growth and reducing risks of crises.** Policy settings conducive to higher productivity (e.g. through higher competition) and employment generally appear to have little impact on crises risk, i.e. they do not reduce the likelihood of severe recessions, but do not raise it either. There are a few exceptions, however. Stronger active labour market programmes result in both higher average growth and less extreme negative tail risks. Reducing import tariffs can have a favourable impact on average growth through increased trade openness, but also through lower crisis risk.

**Higher-quality institutions (e.g. more effective government, greater voice and accountability, better control of corruption) are shown to be associated with higher growth and less extreme negative GDP tail risks.** This confirms that a sound legal and judicial infrastructure, i.e. one that guarantees the enforcement of private contracts, provides adequate protection of property rights and promotes arm's length transactions is good for both growth and resilience. They may do so notably by helping diversify funding sources away from banks.

**Financial market policies involve more substantial trade-offs between growth and crisis risk.** At the global level, countries with more liberalised financial markets experience higher efficiency gains, but the benefits from the latter in terms of average growth are largely offset by the higher risk of banking crises and hence severe recessions. In advanced economies, which have reached high levels of financial development, financial liberalisation can go too far and result in credit excesses that reduce long-term growth.

**The risk of crises can be mitigated through prudential policies,** which are associated with less extreme negative tail risks. At the same time, **greater use of prudential policies can also come at a cost in terms of lower efficiency and average growth.** Though not strictly considered a prudential policy, a higher accumulation of international reserves is associated with less extreme negative tail risks and a small positive impact on average growth.

**Greater capital flow openness and mobility raise overall economic growth but also increase the risk of a banking or currency crisis.** More specifically, a typical rise<sup>6</sup> in the degree of capital account openness is associated with a 1.75 percentage point increase in growth over the 5 years following the reform. However, the likelihood of a joint banking and currency crisis increases by about 1 percentage point over the same period. The latter is corroborated by evidence that higher capital

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<sup>6</sup> See reference mentioned in footnote 1 for details.

account openness increases GDP tail risk, making the economy more vulnerable to extreme negative GDP shocks. Even so, the net long-term effect of greater capital account openness on overall growth is positive, implying that the efficiency gains from greater capital account openness exceed, on average, the costs from increased fragility.

Furthermore, **the composition of capital flows has a significant effect on the impact of capital account openness on the likelihood of twin crises.** When decomposing between different types of capital inflows, results suggest that the impact of net international financing on the likelihood of a twin crisis originates from portfolio investments rather than foreign direct investment (FDI). Portfolio flows are less stable and more prone to reversal than FDI flows, possibly exacerbating the destabilising effect of international sources of financing on recipient economies.

**In light of these results, the benefits of international financial openness are best harnessed by focusing on opening domestic markets to longer-term FDI flows and shifting the exposure away from debt to non-debt related flows.** This could be done, for example, by improving the quality of institutions and trade openness rather than making use of capital account restrictions, which might hamper the development of beneficial flows (such as FDI) and represent only temporary and second best solutions to cope with international financial fragility.

**Specific characteristics of the macroeconomic framework also have implications for the growth-crisis risk nexus.** Countries with a free floating exchange rate experience a lower probability of currency crises. Countries with stronger automatic stabilisers experience less extreme negative tail risks. However, stronger automatic stabilisers mean high government expenditure, the funding of which can harm efficiency and reduce growth. Indeed, OECD research shows that higher automatic stabilisers reduce negative tail risk but also average growth.



## CHAPTER 1 - FINANCIAL OPENNESS AT A CROSSROADS: THE POST-CRISIS WORLD

This chapter looks at the post-crisis developments of financial openness. Global open financial markets are an international public good and G20 members have pledged to resist all forms of protectionism. Yet, there are concerns over the post-crisis policy environment of volatile capital flows and an observed increase in capital flow management measures. Co-operation is needed at the highest policy-making level in order to avoid damaging the positive effects of open markets on global growth and prosperity. Transparency on national financial regulation measures will help minimise any negative spillover effects. Accountability will be improved if communication channels are appropriate and open.

### 1.1. Intervention by Michel Houdebine, Chief Economist, Treasury, France <sup>7</sup>

Capital flows were one of the five work priorities of the G20 International Financial Architecture Working Group in 2016, co-chaired by France and Korea, and remain on the agenda in 2017.

Economic literature has highlighted the benefits of free capital mobility as an engine for global growth in the last decades but the different financial crises episodes experienced since two decades have also underlined the costs associated with such free mobility – I am thinking in particular about the Asian financial crises of 1997/98 and the 2008/09 financial crisis.

The latter one demonstrates well the mechanisms at work:

- First, loose monetary policies in advanced economies have contributed to a surge in capital flows looking for high yield in emerging economies.
- Second, from end-2013, together with the deterioration of the growth outlook in emerging countries and the anticipated normalisation of US monetary policy, flows reversed, leading to a depreciation of emerging currencies (as much as 40% in nominal terms in Brazil, Turkey and South Africa) and to a tightening of financial conditions.

Emerging economies have subsequently been confronted with a double risk: exchange rate risk and refinancing risk. These risks were especially high as the deeper financial integration that was reached in recent years has been associated with greater sensitivity

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<sup>7</sup> The intervention has been translated from French.

to contagion effects, with an increase in external debt and an increase in FX debt (particularly for non-financial corporations).

These evolutions clearly highlight the trade-off with which we are confronted: on the one hand, global financial integration sustains the mid/long term growth potential by improving capital allocation and risk diversification; on the other hand, it can also in certain cases lead to volatile capital flows with destabilising effects on the economy and financial stability of the most vulnerable countries.

In an attempt to address these risks, a large number of emerging countries have introduced measures to manage capital inflows in the period between 2009 and 2011 (e.g. Brazil and Thailand) and to manage capital outflows since 2013 (e.g. Indonesia and China).

Drawing from this observation, I would now like to make a few remarks.

First, measures on capital inflows should only be introduced as a last resort. Indeed, one of the main lessons from crises episodes is that the opening of a capital account requires beforehand a certain level of economic and financial development, and increases the need to maintain sound economic fundamentals in order to avoid crises. That is why, it seems to me, important to recall that macroeconomic policies, both monetary and fiscal, and structural policies should be the first line of defence against potential nefarious effects from free capital mobility. “Domestic” macroprudential measures, i.e. not targeted at FX operations (I am thinking about, for instance, loan to value caps on mortgages) also have a major role to play in avoiding the build-up of macroeconomic vulnerabilities.

Second, it seems to me that circumstances have demonstrated that capital flow management measures – both macroprudential measures discriminating on a currency basis and traditional capital controls (discriminating on a residency basis) – could be justified in certain situations. This is the case in particular when the size of international capital flows is such that the abovementioned policies do not allow the containment of risks associated with such large flows.

In order to go beyond these principles and to best use these types of measures at best, it is important in my opinion to better understand their economic consequences (i.e. their efficiency in managing flows, as well as their collateral effects on the economies that introduce them and on partners’ economies). This knowledge will allow us to diffuse best practices. I hope that today’s seminar and future work in academia and in international organisations will allow us to improve our understanding.

My third remark focuses on the Code of Liberalisation of Capital Movements.

The Code addresses three important objectives, which gives it a central role in defining an efficient framework for managing capital flows:

- a. It is first and foremost the only binding multilateral instrument that aims to promote long term liberalisation of international capital flows;
- b. It defines the boundaries of what is acceptable as a temporary measure to manage capital flows;
- c. It finally ensures transparency on capital flow management measures of countries.

These principles are an important achievement which should be the foundation of the Review of the Code if we want to avoid the risk of protectionism.

Hence, while conclusions on the benefits and costs of free capital mobility appear overall to be split, what is at stake in the Review of the Code is to be able to reconcile micro and macroeconomic gains from free capital mobility, together with its macroeconomic and financial stability implications. These topics have notably been discussed at length within the G20 IFA Working Group, and during the Conference “from Nankin to Paris”, which was organised last March.

On the basis of these exchanges, and in order to strengthen even further the role of the Code, while retaining its overall philosophy, two lines of action emerge:

- The first is to think about the governance of the Code in order to adapt more easily to financial and prudential innovations; hence, the objective should be to address the challenges from such innovations without having to wait for another review of the Code;
- The second line of action is to think about the best way to account for the macroeconomic and prudential objectives in our assessment of the adequate or inadequate character of capital flow management measures. Indeed, the context in which these measures are taken is often crucial; it thus seems natural to try to take it into account in the analysis.

Finally, to close my remarks, it seems to us that besides these further reflections on the Code of Liberalisation of Capital Movements, it is also important for the Code to be more widely shared. That is why France firmly supports the steps taken by the OECD to encourage non-member countries to adhere to the Code.

## 1.2. Intervention by Rodrigo Vergara, Governor, Central Bank of Chile

Frameworks and initiatives, such as the Code, are certainly of great help when discussing matters of international co-operation on financial regulation. The global financial system remains global, in the sense that there is still a sizeable amount of international financing, although perhaps smaller than there was before the crisis. Flows to emerging markets remain relatively high.

I will make general remarks on capital markets and then I'll move to the Chilean experience with capital flow management measures. By the way, capital flow management measures were called in the old days "capital controls", but it is more politically correct now to call them capital flow management measures. But in the 1990's, when we imposed them, they were called capital controls.

Financial integration is, of course, beneficial in principle. Capital flows finance investment and help to smooth consumption, among other benefits. Despite this capital flows can also produce costs in markets with incomplete information. You might have big swings in flows and that produces costs to the economy in terms of resource misallocation, financial instability and lost growth. The literature is not conclusive in the sense that there are some types of capital flows that have positive effects on growth, such as FDI and perhaps one or two more, but there are others in which the evidence is not that clear. In this sense you may have a case for capital flow management measures particularly as a macroprudential tool to deal with financial stability risks associated with large flows. I want to make a couple of points about this.

First, the first line of defence is always a sound macrofinancial framework. There is no substitute for sound monetary and fiscal policies, and in the Chilean case (as in many other countries), exchange rate flexibility has been a very important instrument as a shock absorber. However, if you have exchange rate flexibility you have to monitor currency mismatches very closely which can be very destabilising.

In more general terms, a flexible inflation targeting regime has helped many economies to weather the turbulences in the external scenario reasonably well. For instance, recently in Chile and in many emerging market economies, particularly commodity producing ones, we faced a significant depreciation of our currencies and hence inflation above target for some time. In the case of my country, Chile, inflation was above target for a couple of years. Now it's back on trend, but it was very important to have this flexible inflation targeting scheme that allowed us to have a more expansionary monetary policy even with inflation above target. The key was that inflation expectations remained anchored to our target during all this period.

Another important feature, in the case of Chile, is the role of our institutional investors, mainly pension funds and insurance companies, which have, large amounts of funds (close to 100% of GDP). In previous cycles they acted very counter-cyclically; during the global financial crisis when there were significant capital outflows, Chilean institutional investors came back to the country, there was a sort of home bias. They thought that assets were cheap so they came back and produced a stabilising effect.

Last, but not least, is of course solid regulation and supervision of the financial system. There is clearly no substitute for this.

The second point I want to make is that it's always easy or tempting to present a capital flow management measure which has a different purpose, such as currency manipulation or current account management, as a macroprudential tool. We have seen a lot of this in some emerging market economies. Many policies have been used or might be used in the name of macroprudential, but their final objective is different. In that sense, international organisations such as the OECD are very important to clearly define what macroprudential policies are and when it is reasonable to use them.

In Chile, we introduced capital flow management measures in the 1990's. We were facing huge capital inflows then and we did not have a flexible exchange rate at the time. We imposed a reserve requirement on capital inflows, which you can think of basically as a tax on capital inflows. These measures were completely dismantled in the late nineties, during the Asian financial crisis.

The evidence that we have on this episode in the case of Chile is that basically they did not have much effect on the amount of inflows to the country but they did have some effect on the composition of inflows, meaning that they induced more long term flows and less short term.

The second evidence is that the longer they last, the less effective they are. The market always finds ways to circumvent these controls. In that sense, they have to be transitory.

So, what is our general view on these capital flow management measures? We do not rule them out but we see them as a very last resort measure. We have not used capital flow management measures since the 1990's, so it has been more than 15 years without them. For the reason I mentioned before, I think there is an important role for defining best practices regarding this matter for international organizations such as the OECD, BIS, IMF, etc.

### 1.3. Intervention by Ignazio Visco, Governor, Central Bank of Italy

Greater uncertainty seems to be a persistent feature of the post-crisis global context. Among the legacies of the crisis are, almost everywhere, higher debt and slower growth, which pose new challenges and, at the same time, limit room for policies. The expansion of global trade has slowed down significantly, with the fading effect of past major liberalisations and a rise in protectionist barriers. Also financial integration – measured by gross foreign assets in percent of GDP – seems to have levelled off since the crisis. In the broader context of the post-crisis adjustment of financial systems, this is not necessarily evidence of financial protectionism, but there are signs of a growing use of restrictive measures in emerging and developing countries alike.

While the evidence so far does not suggest a major reversal of economic and financial integration, a source of concern is the rising backlash against globalisation, sometimes linked to mounting populism. These trends can only be countered effectively by addressing the side effects of the major political, technological and demographic changes, including the integration of world economies that have occurred in the last 25 years or so. In other words, for globalisation to be politically sustainable, we need to address the increase in inequality that takes place within countries while reducing the likelihood of disruptive events such as financial crises.

This said, it is often forgotten that, over the past 25 years, open trade has been a decisive factor in bringing billions of people out of poverty. Indeed, the poverty headcount ratio has declined from 35% to about 10%. As well, financial openness has delivered substantial benefits to emerging market economies and developing countries, particularly in the form of mobilisation of resources for investment and technology transfers. Were the rise in trade and financial protectionism to intensify, it could undermine what has been a keystone of post-WWII development. It could exacerbate uncertainty, discourage investment and innovation, and ultimately jeopardise prospects for growth and job creation.

Countering the risk that the process of trade and financial integration may go into reverse requires, above all, political leadership and international co-operation. But co-operation can also greatly benefit from a clear and globally recognised legal framework. For trade we have the WTO. Do we have something comparable for cross-border financial flows? The OECD Code of Liberalisation of Capital Movements is what comes closest to being such a legal framework, even if the Code is only part of a broader international financial architecture designed to address such risks.

### **Purpose of the Code today**

The Code is a legally binding agreement on a set of principles for introducing or removing certain capital flow restrictions, but the implementation of these principles crucially depends on how the restrictions adopted by each adhering member are assessed by the community of its peers. The very effectiveness of its internal mechanisms of peer pressure requires a sufficient degree of homogeneity across Code adherents, and certain prerequisites must be satisfied (typically, adherents must have already liberalised longer-term capital flows). The fundamental premise is that an open multilateral regime for international capital flows serves the global economy better than closed capital accounts. In this perspective, the Code is a multilaterally-backed tool for promoting the freedom of cross-border capital movements, but it is flexible enough to allow the possibility of reintroducing capital flow restrictions in specific circumstances. More in general, the Code is designed to establish a balanced and orderly process whereby individual countries can pursue liberalisation at their preferred pace and in a safe manner, taking into account their own specific needs and circumstances - while still enjoying the same rights as other adhering countries.

In my view, all these points remain valid today, and ways must be found to enhance the potential contribution of the Code to the international financial architecture. This, I believe, is the aim of the Review of the Code, which therefore could not be more timely. Indeed, the G20 has recently solicited greater co-operation on capital flows and financial stability issues among the relevant international organisations. Even if the G20 has not explicitly endorsed the Code so far, this should not be interpreted as arising from divergent views on principles and objectives, but it rather reflects the differences in mandates, membership and modus operandi of these organisations.

Indeed, the OECD Code is not a tool for economic and financial surveillance, comparable to those developed by the International Monetary Fund under the fourth Article of its Statute. Even if formally binding, the Code crucially depends on peer pressure mechanisms within a restricted circle of countries that share the same values and a broadly similar degree of (long-term) financial openness. By contrast, both the authority of the Fund and the obligations of its members with respect to the “financial account” remain rather limited. Nonetheless, the IMF’s Institutional View provides a framework to determine the conditions under which capital flow management measures (CFMs) are or are not justified.

A key difference with the IMF relates to the fact that the number of Fund members is much larger than the OECD’s: for this reason, the resort to “peer pressure techniques” at the IMF is normally inhibited by time and resource constraints, and surveillance activities remain in the staff’s hands with the Executive Board playing a

relatively minor role. More importantly, the dialogue among Code adherents is predominantly focused on specific measures; broader discussions on countries' liberalisation policies (such as those that are likely to occur at the IMF) are rather rare.

IMF surveillance and the review process attached to adherence to the OECD Code are not substitutes but complements, both from the viewpoint of individual liberalising countries and, more broadly, as tools to encourage the process of capital account liberalisation. This said, what are the benefits attached to the Code? Should current and prospective adherents to the Code expect different benefits? And what else should be done?

### **Benefits and the way forward**

Among the various benefits expected from adherence to the Code, two deserve further scrutiny.

First, the Code may be especially useful to emerging market countries, as they advance on the way to capital movement liberalisation, to signal a commitment to move on in that direction in a transparent way, to avoid backtracking and to avoid discriminatory measures. In this way, market participants would be reassured about countries' intentions not to maintain restrictions broader or longer than necessary. Thus, the decision by the OECD to open also to non-members the possibility to adhere to the Code was very timely and appropriate.

To enhance the Code's signalling value, and for countries to be in fact encouraged to adhere to it, certain conditions should be in place for the signal to be informative. In particular, rules and principles should be formulated clearly and be relevant to present circumstances and new developments, including financial innovations and regulatory changes. As well, standards for new adherents should continue to be high, and focus both on the coherence of existing regulations with the Code's principles and on a minimum degree of initial openness.

Second, material benefits accrue to all adhering countries from the fact that they enjoy the liberalisation measures of other adherents, regardless of their own degree of openness. In particular, they are protected against unfair and discriminatory treatment of their investors in other adhering countries or of their enterprises seeking to raise capital abroad. To this end, they can bring up problems to the Code's governing body and seek remedy; as well, they participate in reviewing and influencing other adherents' policies, shaping jurisprudence and improving rules under the Code. And the magnitude of these benefits will be larger the greater the number of participating countries and the size of their economies.

As the Code is a tool reserved for countries that have already achieved a minimum level of liberalisation, efforts to enlarge the circle of adhering countries should not



be pursued at all costs, and should not go to the detriment of the features that have made this tool effective so far. But the Code offers a number of benefits to its participants, both advanced and emerging market countries, and represents a potent complement to other elements of today's international financial architecture.

However, we cannot ignore that there is widespread concern about the destabilising effects of capital flows. Apart from adhering to the Code, in order to proceed further toward capital movement liberalisation individual countries must thus be encouraged to make their economies and financial systems more resilient, in particular by strengthening financial regulation and supervision, developing deeper and more liquid financial and currency markets, and introducing effective macroprudential frameworks.

At the same time, at the global level, there needs to be effective co-operation to contain risks of macroeconomic and financial instability and to put in place an adequate global financial safety net to prevent crises from becoming systemic.

The obstacles to financial integration go well beyond restrictions to capital movements. There are a variety of national provisions (e.g. in the areas of taxation regimes, insolvency frameworks, pension fund regulations) that have the effect – often unintended – of discouraging cross-border investment and the cross-border provision of financial services. To remove such obstacles and to address market failures affecting the development of capital markets, we have, in the European Union, launched a plan to create a Capital Markets Union. We regard this as essential to strengthening investment and to making our economies more resilient, two objectives that are particularly relevant at the present juncture.

While the EU's Capital Markets Union (and its broader single market agenda) obviously goes beyond the objectives of the OECD Code, I believe that the issues we are addressing with it are relevant to all OECD countries. To the extent that in many cases these issues involve identifying best practices and making regulations more effective and less costly, they are certainly relevant to several other areas of the OECD's activity.

#### **1.4. Intervention by Yannis Stournaras, Governor, Central Bank of Greece**

The issue of open and orderly capital movements is particularly topical and one for which an exchange of views among policy makers across various economies is essential.

It appears to me that the crisis has placed us at a crossroads with regard to many areas of policy-making. Confronted with unprecedented circumstances, we were forced to reassess our policy frameworks in order to better guard our economies

against risks. I believe that, for the most part, we have managed to do so collectively and in a spirit of multilateral co-operation, a spirit that, I would suggest, is necessary in our globalised world.

Policies with regard to capital movements fall into this category. We are called upon to decide how to find ways to harness the benefits from global capital flows, so as to avoid slipping back into protectionism and financial retrenchment, with potentially detrimental effects on global recovery.

### **Benefits and risks of financial openness**

The benefits of free capital movements are well-known:

- efficient global allocation of resources;
- reduced cost of capital in capital-scarce countries;
- greater and more efficient investment;
- normalisation of consumption fluctuations in response to temporary shocks;
- international risk-sharing (see note i);
- support for the transfer of technology and managerial knowhow;
- promotion of financial development and sound macroeconomic policies in recipient countries (see note ii).

Nevertheless, the extent to which countries can realise these benefits presupposes certain conditions (see note iii):

- a developed financial system;
- sound institutions;
- prudent macroeconomic policies and sufficient macroprudential supervision.

Additionally, benefits will depend on the level and composition of capital flows.

Absence of these conditions raises the risks associated with capital flow liberalisation, especially in the event of a negative shock, creating significant challenges for policy makers (see note iv).

### **Managing capital flows**

In the face of risks, countries have at their disposal a range of policy tools for managing capital flows: exchange rate flexibility, foreign reserves accumulation, monetary policy action, macroprudential measures and, in some instances, even capital flow management measures (see note v).

These policies also come with their challenges and can have multilateral spillover effects on global economic and financial stability (see note vi). Policy co-operation

is thus an important complementary tool for capital flow management. Multilateral co-operation can mitigate the cross-border effects of capital flows management measures and can provide economies with a useful framework for gradual capital flow liberalisation in line with their financial and institutional development.

It is precisely in this way that the OECD Code of Liberalisation of Capital Movements makes its contribution. Through the Code, countries are provided guidance on the sequencing of liberalisation and the appropriateness of policy response to shocks. By fostering transparency, dialogue and accountability, adherence to the Code ensures non-discriminatory treatment of countries, provides reassurance to markets as to the scope and duration of measures and catalyses policy support for reforms and adjustments.

Overall, the ever more interconnected international environment makes policy co-operation more necessary. To illustrate this point, I would like to draw on two examples: first, can coordination help moderate volatility in response to specific shocks, especially those emanating from global players? Second, can it prevent the emergence of global imbalances?

### **Diverging monetary policies**

One pertinent example of the need for policy co-operation to avert large and volatile capital flows is in dealing with the effect of divergent monetary policies on global financial markets.

It is broadly agreed that the impact of US monetary policy can have global repercussions, influencing exchange rates, risk premia and asset prices and causing valuation effects of US dollar-denominated liabilities. Thus, changes of stance can be associated with significant capital flows especially to/from emerging market economies. The taper tantrum that affected global financial markets in 2013 is one example (see note vii).

Over the near future, it is widely expected that the US interest rate will be gradually raised, while in the euro area and other advanced economies they will remain low. This divergence is likely to impact on global capital flows. Uncertainty about the pace is judged to be a source of volatility in financial markets. Thus, informal discussions between policy makers, if not closer co-operation, along with clear and coordinated communication and execution of policies, can be a useful tool for dampening volatility and preventing undue financial market turbulence.

### **Euro area imbalances**

My second example, which supports the case for greater co-operation, are the lessons that emerged from the build-up of structural imbalances in the euro area before the crisis.

A corollary of monetary integration is the elimination of exchange rate risk, which reduces transaction costs and increases the elasticity of substitution between financial assets issued by member states of the monetary union. In the euro area, financial linkages were greatly facilitated by the introduction of the single currency.

A distinct feature of these linkages was the build-up of current account imbalances. Deficits accumulated in the periphery were mirrored by a build-up of surpluses in core countries. The financial account counterpart involved significant capital flows from the core to the periphery, with its counterpart in the accumulation of debt – whether public or private. These flows were directed mainly to non-tradable sectors (public consumption and residential investment). The crisis brought with it a “sudden stop” to these capital flows, resulting in sharp adjustment, largely in deficit countries (see note viii).

Subsequently, much has been done to address what we now recognise as deficiencies in the design of the Economic and Monetary Union – the European Financial Stability Facility and subsequently the European Stability Mechanism; the banking union and its components. But more importantly for imbalances, the surveillance framework of EU Member States has been strengthened through new rules and procedures, among them, the Macroeconomic Imbalances Procedure. In short, co-operation is important also at the regional level. These changes are also supporting the reform process in Greece.

## **Conclusions**

The course and magnitude of global financial flows and our own perceptions of financial openness are being continually reshaped in the 21<sup>st</sup> century. A period of relative abundance was rapidly brought to a halt with the international financial crisis of 2008. Our experience with free capital flows can help us ensure that, in the future, we harness their benefits and multilateral co-operation is key to achieving that.

## *Notes*

i) See Obstfeld, Maurice. Risk-taking, global diversification, and growth. No. w4093. National Bureau of Economic Research, 1992, Van Wincoop, Eric. "How big are potential welfare gains from international risksharing?" *Journal of International Economics* 47, no. 1 (1999): 109-135 and Agénor, Pierre-Richard. "Benefits and costs of international financial integration: theory and facts." *The World Economy* 26, no. 8 (2003): 1089-1118.

ii) See Kose, M. Ayhan, Eswar S. Prasad, and Ashley D. Taylor. "Thresholds in the process of international financial integration." *Journal of International Money and Finance* 30, no. 1 (2011): 147-179.

iii) See, for instance, Kose, M. Ayhan, Eswar Prasad, Kenneth Rogoff, and Shang-Jin Wei. "Financial globalization: A reappraisal." *IMF Staff Papers* 56, no. 1 (2009): 8-62 and Prasad, Eswar S., and Raghuram G. Rajan. "A pragmatic approach to capital account liberalization." *The Journal of Economic Perspectives* 22, no. 3 (2008): 149-172.

iv) See Rogoff, Mr Kenneth, Mr Eswar Prasad, Mr M. Ayhan Kose, and Shang-Jin Wei. *Effects on financial globalization on developing countries: Some empirical evidence*. No. 220. International Monetary Fund, 2004.

v) Ostry, Jonathan D. "Managing Capital Flows: What Tools to Use?" *Asian Development Review* 29, no. 1 (2012): 82.

vi) See Beck, R., Beirne, J., Paternò, F., Peeters, J., Ramos-Tallada, J., Rebillard, C., Reinhardt, D., Weissenseel, L. and Wörz, J., 2015. *The side effects of national financial sector policies: framing the debate on financial protectionism*. ECB Occasional Paper 166.

vii) See Fratzscher Marcel, Marco Lo Duca and Roland Straub. "A global monetary tsunami? On the spillovers of US quantitative easing". CEPR Discussion paper No 9195, October 2012, Miranda-Agrippino, Silvia, and H el ene Rey. *World asset markets and the global financial cycle*. No. w21722. National Bureau of Economic Research, 2015 and Lim, Jamus Jerome, Sanket Mohapatra, and Marc Stocker. "Tinker, Taper, QE, Bye? The effect of quantitative easing on financial flows to developing countries." *World Bank Policy Research Working Paper* 6820 (2014).

viii) See Lane, Philip R. "Capital Flows in the Euro Area." *Economic papers* 497 (2013): 1-54 and Hobza, Alexandr, and Stefan Zeugner. "The 'imbalanced balance' and its unravelling: current accounts and bilateral financial flows in the euro area." *European Economy, Economic papers* 520 (2014): 1-32.

### **1.5. Intervention by Luis Caputo, Secretary of Finance, Argentina**

We are traversing a period where several countries, most of them OECD members, are re-thinking the advantages of globalisation and analysing some measures of protectionism. At the same time Argentina, as a G20 member, is giving concrete signs of our willingness to being an active member of a global world.

As you are aware, for almost 10 years we have been missing our obligations with Article IV IMF consultations. For almost 15 years, we have been cut out of credit markets due to an unsolved default on our national debt, probably the longest on

record. We have been taught both economic and social lessons after years of stagflation, fall in competitiveness and productivity, lack of investment and financial isolation, and fall in reserves.

Argentina is back. Our country wants to be part of the discussion of the relevant topics and challenges at the global level. Furthermore we want to be part of the solutions as well.

During the last 10 months our country has reinforced relationships and joint work with all international organisations and reengaged with our traditional partners around the world. In addition:

- Within the first day we have revamped the National Statistics Institute and a new team was appointed;
- Within the first 10 days we have removed capital and exchange rate controls;
- Within the first 30 days we have started eliminating subsidies and export taxes, freed-up excess regulations and controlled public expenditures;
- Within the first 90 days we have put the default shameful experience behind us reaching and closing a final agreement with our creditors;
- Within the first 120 days, alongside with an independent Central Bank we have put developed a fiscal program aiming at bringing down fiscal deficit from 7% of GDP to 0, and inflation down from 30% to 5%, in a 4-year period.

Within this framework of reforms we specially thank the support and encouragement received from many countries to deepen Argentina's commitment to OECD. For this reason, the Minister of Finance Alfonso Prat-Gay, together with the Foreign Affairs Minister Susana Malcorra, has addressed a letter to the Secretary-General to precise our willingness to join the OECD if the OECD members agrees on formalizing an accession process.

Concerning the Codes and capital flows:

- Capital flows have increased significantly in recent years and are a key aspect of the global monetary system. They offer potential benefits to countries, but their size and volatility can also pose economic policy challenges.
- Capital flows can have substantial benefits for countries, including by enhancing efficiency, promoting financial sector competitiveness, and facilitating greater productive investment and consumption smoothing.

- At the same time, capital flows also carry risks, as they can be volatile and their size can be large relative to domestic markets, which can be magnified by gaps in countries' financial and institutional infrastructure.
- As the recent global financial crisis has shown, large and volatile capital flows can pose risks even for countries that have long been open and drawn benefits from capital flows and that have highly developed financial markets. For example, in several advanced economies, financial supervision and regulation failed to prevent unsustainable asset bubbles and booms in domestic demand from developing that were partly fuelled by cheap external financing. This situation shows that there is a constant need for sound prudential frameworks to manage the risks that capital inflows can give rise to, which may be exacerbated by financial innovation.

Liberalisation, especially in emerging countries like Argentina, needs to be well planned, timed, and sequenced in order to ensure that its benefits outweigh the costs, as it could have significant domestic and multilateral effects. The logic of the sequence must reflect both economic and political economy factors. During the post-crisis policy scenario, we emphasised the need for the Codes review to reflect the specific institutional and cultural context of countries, especially from non-OECD emerging economies.

Furthermore, we recognise the importance of the Codes as a tool for global economic governance. For this, Minister Prat-Gay, in a recent letter addressed to the OECD General Secretary, informed that Argentina after Pierre Poret high-level mission in Buenos Aires, has decided to create a dedicated task-force, under my responsibility as Secretary of Finance, to analyse the Codes in view of an admission during Argentina's G20 Presidency in 2018.

### **1.6. Intervention by Sir Jon Cunliffe, Deputy Governor, Bank of England**

There is a saying in economics that the exam questions remain the same but the answers change. There were a number of capital account and financial crises in the 1990s – I went through Mexico, East Asia, Brazil and Russia – and we had the global financial crisis in 2007/08. But over that period the OECD Code has not been revisited.

Since the Code was last updated, the trend has been towards more financial openness despite a modest fall in financial integration since its peak immediately before the crisis. The volume of capital inflows has fallen and measures of 'de jure openness' have gone down a bit, particularly in relation to emerging markets. Some

of that is a good thing because the position before the crisis was unsustainable and was driven by excess leverage.

Underlying the overall trends in financial openness have been significant changes in the composition in lending and borrowing, for example:

- The rise of market-based finance. For advanced and emerging market economies, the stock of market-based debt finance now exceeds cross-border bank lending. As a consequence the asset management sector has grown in importance to capital flows and behind that the growth of open-ended retail investment funds has become much more important. The top 100 asset managers now have 50 trillion dollars of assets under management, which is an increase of nearly 50% since 2012.
- Another change is that emerging markets have become a more important component of capital inflows. Emerging markets received less than 10% of global cross-border inflows between 2000-2007. Since 2009 they have received around 25%.
- And lastly the amount of debt in capital inflows has grown. Leverage in the global system has grown; non-financial sector borrowing has doubled since 2000.

Those changes bring some welcome diversity but they also bring some new challenges in the management of capital flows.

There are other important changes worth noting, including: First, the economic fundamentals and policies of emerging markets, taken as a whole, have improved since the 1990s. GDP is higher and inflation is lower, external debt is lower, and the combination of currency pegs and liberalisation, which we saw in the 90s and which proved to be so explosive, has in the main disappeared. Foreign exchange reserves have grown though that's not unambiguously positive because self-insurance by holding large foreign exchange reserves can create problems for the global economy as a whole.

Second, at the same time, 'global-push' factors seem to have become stronger as opposed to 'country-specific' pull factors when it comes to capital flows. This is covered in recent work by the Bank of England and by the work of academics like H el ene Rey.<sup>8</sup> The evidence suggests that periods of capital inflows and outflows

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<sup>8</sup> See Hoggarth, G, C Jung and D Reinhardt (2016): "Capital inflows – the good, the bad and the bubbly". Bank of England Financial Stability Paper, no 40, October and, for example, Rey, H (2015), "Dilemma not trilemma: the global financial cycle and monetary policy independence", NBER Working Paper No. 21162, May.



increasingly come in waves and are correlated across countries. They are driven by changes in the global investment environment and much less by changes in country-specific policy and fundamentals. Inflows tend to rise when global financial market volatility is low and fall when global financial market volatility is high.

These two points go to a question that was much debated through the 1990s and early 2000s – the question of 'innocent bystanders'. Are countries always responsible in some way for capital account crises or can they be innocent bystanders? The chances of movements in capital leading to innocent bystanders are probably higher now than in the 1990s. Policy needs to recognise that when we go to the next question about what tools countries have to protect themselves from some of those effects.

The last change is the development, creation or remembrance of macro prudential policy during the last financial crisis and the awareness that just ensuring you have sound individual financial institutions is not enough. You need to look at the financial system as a whole and the things that amplify shocks to the system and you have to take policy action to deal with that. That was a lesson learnt again in advanced economies and is an important policy development for capital flow management going forward.

What does all that mean for policy? Some old truths remain true. The first line of defence is sound and credible institutional frameworks and a sound financial system.

Countries also need macroprudential defences because of the impact on the financial system of capital flows. While the hierarchy of capital flows remains true – equity and foreign direct investment are the most stable forms of capital flows followed by debt instruments followed by interbank lending – there may be a hierarchy within the debt instrument component. There is some evidence to suggest that the rise of retail open end mutual funds could lead to more flightiness in capital which may require a different policy response.

To sum up:

- It seems the right time to look again at the Code. It's probably true that the Code should be looked at more regularly than every 25 years as the world can change quite quickly.
- It is important to look specifically at macroprudential measures because of the need to protect your financial system and the way in which the financial system can react to capital flows.
- It can be difficult to determine whether policy is being implemented for the protection of the financial system and its macro prudential or whether it is being done for other reasons and it's a capital restriction. There is machinery

in the Code to try and distinguish between various policy measures but perhaps more recognition needs to be given in that determination to the role of macroprudential policy and its importance. There are a lot of institutions looking at this including the IMF, BIS and the FSB.

- The OECD has a particularly important role. The Code is the only legally binding agreement internationally on capital movement. Not everyone has joined but it does provide the bedrock for the “rules of the road”. If more countries particularly more large emerging market economies could be encouraged to join, it would lead to less self-insurance, less pressure for a global safety net and reduce the chance of a retreat from open capital markets. Recognising some of the developments that have happened in recent years would take us somewhere in that direction.

### **1.7. Intervention by Ludger Schuknecht, G20 Finance Deputy and Chief Economist, Federal Ministry of Finance, Germany**

After the financial and Eurozone crises, monitoring and management of volatile international capital flows has become more relevant than ever. Particularly, co-operation is needed between emerging markets and advanced economies comprising the G20. Capital movements and the financial sector in general have become more integrated and policy makers need to take into account the interactions between countries’ policies, their compatibility and any spillovers. These issues will be one major focus of our presidency in 2017.

The “OECD Code for Liberalisation of Capital Movements” is a well-established framework to encourage co-operation in this area. Germany will strive to reach agreement by all G20 countries to adhere to the Code or at least evolve towards it. Such a move would be a strong signal that the G20 moves on with opening of economies and coordinating policies. This would also reassure market participants that the G20 does not intend to maintain capital flow restrictions broader or longer than necessary.

Discussions today will provide an update on recent trends in capital flows and new insights that support our ambition during the G20 presidency.

#### **Motivation**

In light of growing cross border capital flows/increased volatility, there is a continued need for global policy co-operation to prevent future crises and address challenges.

The German G20 presidency is responding to these challenges – The G20 finance-track’s top priorities were identified as follows:

- Enhancing resilience;
- Shaping digitalisation;
- Partnership with Africa.

Prudent dealing with volatile capital flows is one critical element to enhance resilience. In this respect, the “OECD Code for Liberalisation of Capital Movements” is a well-established framework to encourage co-operation in this area. It can help liberalised countries to coordinate policies and add transparency and accountability to their actions, while aspiring liberalising countries can benefit from peer experience on a variety of measures that can support financial stability without compromising the unfettered flows of capital.

### **Capital flow liberalisation – controversies and common understandings**

According to IMF there have been significant changes in volume and composition of global capital flows during the last 15 years. Global flows rose rapidly during 2002-2007, reaching a high of US\$12 trillion (over 20% of world GDP) in 2007. They fell sharply in 2008-09 during the global financial crisis, and then recovered in 2010, but never returned to pre-2008 highs. In recent years, gross global capital flows and liquidity have picked up, with increases in flows to advanced economies offsetting declines to Emerging Market Economies (EMEs).

In times of unorthodox monetary policies in Advanced Economies (AEs), EMEs this year have become – again – the preferred destination for investors searching for yield. For example, EMEs fund inflows are running at more than USD 30 bln so far in 2016. EMEs sovereigns issued EUR 28 bln of bonds so far in 2016, already matching the highest annual total this century.

Capital flows and volatility associated with increases in external debt pose chances and risks, in particular for EMEs. EMEs and their experience of capital flow volatility are vulnerable to monetary policy changes in AEs – one has to remember the so-called “taper tantrum” episode of 2013. This raises questions about possible implications of the immediate future of capital flows, as AEs start reverting away from the zero interest rate.

Implications of capital mobility for growth and stability are one of most contentious and least understood issues in economics. According to textbook economics, foreign finance:

- can be used to augment domestic savings;
- helps to relax resource constraints on capital formation;
- comes packed with expertise;

- can be a conduit for technology transfer;
- can be a source of discipline for policy makers.

For all these reasons, capital flows are believed to have positive welfare effects. Free flows of capital are an essential feature of market economies: All OECD members have progressively (and sometimes gradually) liberalised financial markets and open capital accounts.

But the magnitude of potential benefits is disputed and not guaranteed, especially if capital flows set the stage for a financial crisis. Such outcomes are particularly feared in EMEs (in Eurozone: Greece and Cyprus<sup>9</sup>) precisely because of the interlinkages with AE's monetary policy and policies of quantitative easing.

There is a long-standing controversy, including the famous Keynes and White's effort to construct an international regime with limits on capital mobility following World War II (the Bretton Woods fixed-exchange rate international system). Depths of disagreement in academia and politics were added to by the Asian crisis in the late 1990s, following widespread capital account liberalisation. But, some commentators also reached a conclusion that the Asian crisis was a result of failure to more fully deregulate markets and transactions and to limit the government's role and its disruptions.

Based on research in economic history and economic theory (works of Eichengreen, Bordo, Calvo and many others in the last 25 years), there has emerged some form of consensus on some of the rules for capital account liberalisation:

- Opening is prudent only when the institutional and policy environment has been strengthened;
- Policies should limit external borrowing until corporate governance and supervisory infrastructure ensures that banks and firms can manage their own risks;

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<sup>9</sup> Footnote by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Footnote by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

- FDI should be liberalised first, followed by stock and bond markets, and only then should banks be permitted to borrow offshore;
- Domestic exchange rate and monetary policy should be better aligned with capital account openness, i.e. favour either harder pegs or freer floats.

### **G20 Coherent Conclusions for the Management of Capital Flows**

In light of spillovers that are related to cross border capital flows, global co-operation matters. Such a policy was endorsed by G20 leaders in 2011 (in their Coherent Conclusions), as a result of the financial crisis and based on the finance track working group headed by Germany and Brazil). The final outcome ‘-“G20 Coherent Conclusions for the Management of Capital Flows” - was a useful instrument for international co-operation.

The key messages of the “G20 Coherent Conclusions” are still valid:

- Long-term goal for G20: to reap benefits from free capital movements, while preventing and managing risks that could undermine financial stability and sustainable growth, and avoiding financial protectionism.
- Sound macroeconomic policies should bear prime responsibility for ensuring economic health. An appropriate structural environment, including effective financial regulation and supervision, is important for financial stability.
- The role of policy measures to manage capital flows may be multifaceted: Capital flow management measures:
  - may constitute part of a broader approach to protect economies from shocks;
  - in country-specific circumstances of high and volatile capital flows, can complement and be employed alongside, rather than substitute for, appropriate monetary, exchange rate, foreign reserve management and prudential policies;
  - should not be used to avoid or unduly delay necessary adjustments to the economy, e.g. increase flexibility of exchange rates or further strengthen domestic financial sectors;
  - should be transparent, properly communicated, be targeted to specific risks identified, regularly reviewed and adapted or reversed as destabilisation abates;
  - should take potential impact of spillovers into account.

### **OECD Code – features and benefits**

“OECD Code for Liberalisation of Capital Movements” is the sole binding multilateral agreement dedicated to openness, transparency and international co-operation on cross-border capital flows.

The Code can be instrumental in boosting co-operation in the area and ensuring that any measures that are restrictive and taken when necessary because of adverse economic conditions are done in a transparent and accountable manner. The Code:

- supports implementation of “G20 Coherent Conclusions”;
- is consistent with “IMF’s Institutional View” on capital flow management and liberalisation;
- since its inception in 1961, has served as platform to get peer recognition for reform efforts, compare progress and exchange good practices among adherents in a path toward progressive capital account liberalisation;
- is an anchor for countries’ policies in times of financial stress and ex ante signal, by providing due process – transparency and accountability – to observe when countries reintroduce capital flow restrictions while wishing to signal continued commitment to openness is a living instrument which has undergone a process of review and adaption over time to include new challenges;
- is flexible to adapt to each country’s situation, i.e. protection of countries’ policy space regarding reintroduction of capital restriction on capital flows is granted.

Adhering countries can gain significant benefits:

- International support and recognition for openness and communication that, as a co-operative member of the international community, a country refrains from a “beggar-thy-neighbour” approach;
- Reassuring market participants that restrictions will not be extended, or maintained longer than necessary;
- Enjoying liberalisation measures of other adherents, regardless of their own degree of openness;
- The right to transparency regarding measures of other adhering countries;
- Protection against unfair and discriminatory treatment of investors established in other adhering countries or of enterprises seeking to raise capital abroad;

- Entitlement to bring problems to the Code’s dialogue and seek remedies;
- Full participation in reviewing and influencing other adherents’ policies;
- Shaping jurisprudence and improving rules under the Code.

Since 2012, the Code has been open for adherence by non-OECD G20 countries with equal rights and responsibilities as OECD countries. It is in the individual and collective interest to widen adherence to the Code. This is why we will strive to reach agreement by all G20 countries to adhere to the Code. As a minimum, there should be a “roadmap” for adherence. Informal discussions held with relevant countries reveal encouraging signals and the G20 liberalising agenda can progress in a cooperative manner.

## **CHAPTER 2. TAKING A LONG VIEW ON CAPITAL MOVEMENTS LIBERALISATION**

Major emerging economies, in particular the world's second largest economy China, are making plans toward full capital account liberalisation along a path that is very similar to the one which OECD countries that adhered to the Code have followed, starting with phasing out restrictions on long-term capital movements, equity investments before debt instruments. Countries such as South Africa are pursuing efforts to modernise their foreign exchange regimes. In Latin America - Colombia, Costa Rica and Peru are following the path of their OECD neighbours Chile and Mexico, and have made credible commitments to openness and applied for adherence to the Code.

### **2.1. Intervention by Xiangmin Liu, Deputy General Counsel, The People's Bank of China**

In light of the latest developments, updating the Code is very much needed and should be research-based, i.e., reflecting the latest research and international agreements. In this regard, recent research presented by the IMF, OECD economics team and the Bank of England, is particularly important and their key findings should be incorporated into the updating process.

In keeping with the referenced research above, while the long-term benefits of an open capital account have been generally acknowledged, the risks and harm presented by certain disruptive short-term flows (e.g. debt and especially bank deposits and loans flows) should be fully appreciated and flexibility, by taking a tailored approach to address these risks, should be allowed.

Relatedly, a more flexible approach to assessing openness could be considered and further studied. The approach could build on a "core" set of requirements on opening up long-term equity flows that have proven most beneficial and presented minimal risks, with the flexibility of a non-core set of recommendations regarding short term portfolio flows that would allow adherents to take prudential measures to manage accompanying risks.

In line with recommendations by the IMF, the United States, and the United Kingdom, I personally support the idea of an expanded carve-out of macro prudential measures that are consistent with international standards, and closer co-operation of the OECD with the IMF, FSB, BIS and other relevant international organisations in assessing measures adopted with a macro prudential intent.



Since international experience with macro prudential measures is at an early stage, continued monitoring and discussion in this area should be encouraged to better inform the Code updating process.

## 2.2. Intervention by Paul Castillo, Deputy Head for Monetary Policy Design, Central Reserve Bank of Peru

In the BCRP's view, Peru's experience provides information that can prove helpful to other countries. Even though Peru shows a high level of dollarisation, and keeps a number of safeguards in place to counter the risks created by this, the country is in the process of adhering to the OECD Code. Peru fully opened its capital account during the 1990s, as part of a process of sweeping structural reforms that eliminated all restrictions on exchange transactions, as well as controls on invisible transactions and current capital transfers. In addition, residents and non-residents were equally allowed to hold foreign exchange accounts.

**Figure 2.1: Capital Account Openness in Peru**



In 2002, after a successful stabilisation programme that brought inflation down to international levels, Peru adopted an inflation-targeting regime that was successful in keeping inflation low and reducing financial dollarisation. In 2001-2015, inflation and core inflation were 2.7% and 2.1%, respectively, among the lowest in Latin America. During the same period, loan dollarisation declined steadily from close to 80% to less than 30%. In addition, prudent fiscal policy contributed to reducing public debt; and prudential policies were used to mitigate the risks associated with

financial dollarisation. In particular, the BCRP actively uses reserve requirements and a precautionary accumulation of international reserves to limit liquidity and currency mismatch risks in the financial system associated with financial dollarisation.

Capital flows also pose important challenges for macroeconomic management. Pecuniary externalities can play a role in amplifying leverage and increasing the probability of sudden stops of capital flows. In addition, excessive credit growth, economic overheating and currency overvaluation can increase the probability of financial crisis episodes. However, consistent macroeconomic policies and prudential regulation can mitigate capital flows risks without restricting capital flows.

The Peruvian experience is consistent with this empirical evidence. As a result of good macroeconomic and regulatory policies, average economic growth in 2001-2015 was 6.0% and the poverty rate declined from 55% to 23%. Additionally, the financial system was resilient to the heightened volatility created by the global financial crisis and its aftermath. The BCRP's policy response; i.e. actively using reserve requirements to limit the buildup of financial risks in the financial system, proved fundamental to preserving the resilience of the Peruvian financial system.

Clearly, considerable challenges remain, but a fundamental lesson from the Peruvian experience is that good macroeconomic policies, together with a very open capital account, can be important drivers of economic growth, even for economies with financial dollarisation.

For countries like Peru, that have already achieved significant progress in implementing sound macroeconomic and regulatory policies, joining the OCED Codes of Liberalisation represents a unique opportunity to secure the benefits already reached in terms of macroeconomic stability and financial development.

Along these same lines, Peru needs to continue fostering the development of its local capital markets and maintaining high standards in financial regulation. It is also fundamental to preserve price stability, so the de-dollarisation process of the financial system can continue. This will not only reinforce the resilience of the domestic financial system to external shocks, but also make local financial markets more attractive to a larger base of foreign investors, thereby contributing to enhance long-term growth.

### 2.3. Intervention by Ksenia Yudaeva, First Deputy Governor of the Bank of Russia

Russia significantly liberalised its capital account in 2004-2006. According to different measures (IMF's capital account restrictiveness index, Chinn-Ito Index of Financial Openness) Russia's regulation of capital flows is less restrictive compared to the other BRICS countries and comparable to that of OECD countries.

In the two episodes of financial stress, in 2008-2009 and in late 2014, the Russian monetary authorities did not re-introduce controls on capital outflow despite some pressure from the camp of less market-oriented economists and policy makers. Although a remarkable increase in capital outflows and markets' volatility did threaten financial stability during these episodes, we believe that the decision to liberalise the capital account and maintain its openness constituted the right approach.

First, we believe that free capital mobility is an indispensable prerequisite for the development of domestic financial markets in the modern globalised world and, respectively, an important source of strong sustainable economic growth. Second, the evidence of the effectiveness of capital control measures is weak. Third, an introduction of capital controls at the time of stress is likely to undermine investors' confidence and provoke intensified capital flight.

One recent trend in financial sector regulation is an active use of macroprudential measures by countries seeking to prevent bubbles and safeguard financial stability. Many emerging market economies face the problem of dollarisation and currency risk. In order to mitigate these problems, the Bank of Russia has introduced several macroprudential measures. Russian banks have to apply higher risk-weights to borrowers in foreign currency with insufficient export-based foreign currency revenues. Even higher risk-weights are applied to borrowers from the construction and non-residential real estate sectors. These are the sectors where the largest NPLs built up after the recent exchange rate depreciation. In addition, differentiated required ratios are applied to deposits in Russian roubles and in foreign currencies (5% against 7%). This measure is aimed at creating incentives for Russian depositors to decrease the level of dollarisation of their deposits. The foreign investors' share of total deposits is very small, so this measure is oriented toward domestic clients.

We consider all these instruments as macroprudential measures and not as capital flow management measures. These measures imply no discrimination against non-residents as they are equally applied to residents and non-residents and not directed at restricting specific transactions in international capital markets. We believe that macroprudential measures should receive appropriate understanding in the reviewed OECD Code of Liberalisation of Capital Movements.

#### **2.4. Intervention by Frank Moss, Director General International and European Relations, European Central Bank**

It deserves highlighting a few points regarding the European experience with capital movement liberalisation in view of their potential relevance for the global debate. However, I hasten to add that these points should not be interpreted as trying to promote a European blueprint for how the rest of the world should think and go about liberalisation of capital flows with third countries. Five points merit to be mentioned.

First, the principle of more freedom of capital movement to accompany increasingly free trade was already established by the Treaty of Rome which six European countries signed almost 60 years ago. Indeed, this Treaty spoke of the abolition of capital controls ‘to the extent necessary’ to ensure proper functioning of the common market. The practical implementation of this principle, however, was characterised by a lot of back-tracking at national levels through safeguard measures that often amounted to exchange controls. In the categorisation which Catherine Mann described in her introductory remarks, the preference of member states of the then European Economic Community was for less fragility and perhaps less growth, though not necessarily so, because trade openness was providing a distinct boost to output growth in the first decades of Europe’s economic integration. In other words, the curve representing the trade-off between fragility and growth was probably steeper in these early post-World War decades than in the more recent ones which formed the basis for the OECD analysis to which Catherine Mann referred.

Second, it took a renewed push towards the creation of a genuine single market in Europe in the mid-1980s, i.e. some 25 years later, to achieve a consensus in Europe – embodied in the Single Market Act tabled by European Commission President Delors – on the legal framework that better operationalised the four freedoms, including the freedom of capital movements. Different from the principles of free movement of labour, goods and services, this fourth freedom was a so-called ‘*erga omnes*’ one, meaning that it involved not just freedom of capital movement within the European Union, but also vis-à-vis third countries. Especially in the context of the Economic and Monetary Union (EMU), the first stage of which started in July 1990, free capital movement was seen as a prerequisite to allow for a single monetary and exchange rate policy, conducted by an independent central bank, to operate smoothly across the entire area of the currency union.

Third, as with any smart rule, some degree of flexibility in its implementation to cater for exceptional circumstances is required in order to maintain the credibility of the rule. However, credibility also commands that such exceptions need to be clearly prescribed and circumscribed. In the case of the EU Treaty, several categories of exceptions to the principle of free movement of capital were introduced: for tax

reasons, for prudential reasons, and for public policy and public security reasons. In the case of EU member states not participating in the monetary union, a further important safeguard clause to allow for temporary abrogation of the free capital movement principle related to the occurrence of balance of payments crises. Monitoring and enforcing the implementation of the overriding principle while appropriately assessing the recourse to exceptions to the rule is crucial in this regard. In a multi-national context, covered by an international Treaty, the trust of co-signing member states in a sound control framework can best be inspired by a dedicated supranational body tasked with this responsibility. In the case of the European Union, the task was assigned to the European Commission in its capacity as general guardian of the Treaty. In the case of the European Economic Area member states that were not part of the EU, an EFTA surveillance authority was entrusted with this responsibility.

A fourth point that I would like to make is that the functioning of the EMU has very well demonstrated that capital market liberalisation does not, per se, create effective and sustainable financial integration. National authorities need to do a lot more to that end. If they don't, and if instead they go on a diverging path in terms of economic and financial policies, financial fragmentation will eventually be the outcome, as we have seen in the euro area in the aftermath of the global financial crisis and the euro area sovereign debt crisis. The ECB has been resisting such disintegrationist forces in the euro area banking system through various unconventional monetary measures. At the point in time where the national sovereign/national banking system nexus threatened to transform the fragmentation into a material and ultimately self-fulfilling risk of renationalisation, the instrument of Outright Monetary Transactions (OMT) was created by the ECB. The fact that it eventually did not have to be used can be ascribed in essence to three factors: one, the credibility attached to the tool and, indirectly, to the ECB itself; two, the willingness of euro area member states to revert policy course and call a halt to the divergent path of economic and financial developments; three, the political readiness to break the national sovereign/national banking system nexus through the creation of a genuine banking union. Creating a deeply integrated and well-functioning EMU remains a work in progress, as is also demonstrated by the European Commission's initiative to build a Capital Markets Union in the EU. The latter offers an additional channel for private risk sharing and can lead to a more effective and enduring state of financial integration delivering more benefits in terms of intermediating between savings and investment and hence contributing to real economic growth.

My fifth and final observation seeks to underscore that the functioning of the EMU has vividly demonstrated that balance of payments crises can also occur inside a multi-national union that is neither a political union nor a fiscal union in which member countries have accepted the principle of unrequited cross-border public

transfers to react in a countervailing manner to excessively one-directional cross-border private flows. In such an EMU construction, the imposition of capital controls can remain a useful last-resort option, as we have seen in practice. But, as I have argued above, to maintain the credibility of the rule of liberalised capital markets, such exceptions must be few and well circumscribed. I would argue that the case of Cyprus in 2013 provided a prime example of how the general rule can be reinforced by the occurrence of an exception. Why can one regard the case of Cyprus as a successful temporary deviation from the rule of full capital account liberalisation? Because the experience embodied four critical characteristics of success. A first feature concerns the design of the capital control measures: they have to be effective in order to achieve the intended effect and proportionate to address the situation with which a country is confronted. Two, the controls have to be non-discriminatory between residents and non-resident economic agents. Three, they need to be put in place temporarily, which requires a credible roadmap for their staged withdrawal. And, fourth and foremost, they need to be flanked by the required set of economic and financial adjustment policies to boost the confidence of private agents in a return to the status quo ante of full capital market liberalisation.

I would like to conclude by reiterating that the above-mentioned European experiences should not be regarded as necessarily applicable to all global circumstances. Yet, they do seem to echo a number of points being heard in the ongoing debate on the usefulness of capital market liberalisation more generally, the pre-discussion of the upcoming review of the OECD's Code of Liberalisation of Capital Movements more specifically. First, there is an undeniable link between trade and capital market liberalisation, even if the two processes need not proceed concurrently. Second, the process of capital market liberalisation can be a long drawn-out one, but the end goal should not be lost sight of. Third, it is preferable to have an organised mechanism in place for accommodating temporary setbacks on the road to full capital market liberalisation which has to involve some supranational body overseeing the process. In the absence of a global agreement on legally assigning responsibility for capital account movements to an international institution, the world is currently pursuing two avenues to approach the goal: one involves the IMF as a global institution and tries to build agreed mutual understandings (the so-called institutional view); the other involves the OECD which has less of a global reach, but which can resort to a stronger legal framework (the Code). Fourth, capital account liberalisation is a precondition for cross-border financial integration, but to achieve the latter and, more importantly, to reap the benefits of it in terms of smoothing the intertemporal savings/investment intermediation cycle, much more is needed in terms of accompanying policies and policy frameworks. Fifth and finally, a credible escape clause procedure from the principle of capital account liberalisation involves a number of success factors which have also been seen at work in other country circumstances (such as the temporary,

targeted and transparent nature of the restrictions put in place, the need for appropriate accompanying measures to be introduced at the same time, and the respect of the non-discrimination principle fostering multilateral co-operation).

### **2.5. Intervention by Olivier Jeanne, Professor of Economics, Johns Hopkins University, Peterson Institute for International Economics, NBER, CEPR**

Almost 25 years have passed since the OECD Code of Liberalisation of Capital Movements was first promulgated, and views about the costs and benefits of financial globalisation have changed. There was more optimism about the benefits of free capital flows in the early 1990s than now. We have witnessed a number of balance-of-payment crises caused by “sudden stops” in capital flows and a large literature has found it difficult to detect robust effects of capital account opening on economic growth.

The results most favourable to a long-run impact of capital inflows on growth have been found with foreign direct investment (FDI), but they depend on the type of FDI and the direction of causality is difficult to establish. Portfolio equity liberalisation typically generates a few years of higher growth and investment. But fixed-income (bonds and loans) flows seem to increase volatility more than growth. According to proper sequencing rules these flows should be liberalised last but for many emerging market and developing countries the next step is precisely to liberalise fixed-income flows. Going beyond sequencing, we would like to know more about the level of development at which liberalising fixed-income flows can be done safely. The consequences of capital account liberalisation in China will be interesting to observe in that regard.

The new piece of research presented by Catherine Mann is an interesting addition to the literature but it does not quite nail down the case for capital account liberalisation. Macroprudential instruments (including capital flow management measures) have been used more systematically only recently so that it is difficult to determine whether these measures can improve the terms of the trade-off between volatility and growth in the future.

I would like to focus on one topic, the long-run implications of the international financial integration of China. I will argue that because of the size of China, and of the nature of the uncertainties about the Chinese economy, Chinese financial integration might lead to a type of “cycle” that we have not seen before. This cycle has long-run implications for China and for the rest of the world that I would like to speculate about.

First, let us look at some orders of magnitude. China's stock and bond market capitalisation amounts to approximately 10% of global total market capitalisations.<sup>10</sup> This is a significant amount, lower but comparable in size to the quantity of financial assets that the euro area and Japan have to offer to global investors, and it is likely to increase much faster as China develops financially. Assuming that the foreign share of Chinese assets increases to 30% (which would be consistent with the level of international portfolio diversification that we observe elsewhere) the rest of the world would have to reallocate about 3% of its total portfolio to China. The relatively small size of this number results from the facts that (i) Chinese GDP is still lower than that of the United States or the euro area at market prices, (ii) the Chinese economy produces less financial assets relative to its GDP, and (iii) the well-known home bias in international portfolio diversification. The global portfolio reallocation towards China does not need to affect net capital flows if this change is part an asset swap in which China buys as much foreign assets as it sells to the rest of the world.

A 3% reallocation of global portfolios does not seem very large but this number certainly does not capture all the issues that may arise from Chinese international financial integration. The composition of Chinese foreign assets is likely to shift to more equity and less bonds, especially US Treasury bonds, which could raise the cost of borrowing for the US government. The full inclusion of China will raise challenges to the definition of emerging markets as an asset class, the Chinese financial assets being five times larger than the next largest emerging market economy. I think that these challenges can be addressed and will focus on something else.

The topic that I would like to focus on is how the global financial system will respond to “news” about the Chinese economy. One important way in which China is different from the other main global suppliers of financial assets (the United States, the euro area and Japan) is that it has a significantly lower level of GDP per capita. This implies that the main uncertainty about China is the speed at which it will continue to catch up to the world frontier, that is, the Chinese trend growth rate over the next ten or twenty years. In advanced economies the uncertainty is more about the business cycle than the trend growth rate.<sup>11</sup>

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<sup>10</sup> As of 2014, China's stock market and bond market capitalisations amounted to respectively 11% and 7% of the total capitalisation of the G20 stock markets and bond markets according to World Bank data. The Chinese market for bonds is growing quickly. The United States had shares of respectively 41% and 47%.

<sup>11</sup> There are uncertainties about the trend growth rates of advanced economies that are discussed in the debate about “secular stagnation” but expected cross-country differences in



Fluctuations in market sentiment about the Chinese trend growth rate have a powerful effect on the demand for Chinese assets. Optimism leads to considerable pressure to buy Chinese assets and renminbi appreciation, and pessimism leads to the opposite effect. China has long protected itself from the financial and exchange rate consequences of optimism with controls on capital inflows. What we have seen more recently is the consequences of less optimistic expectations. Looking forward, there might be a new “cycle” driven by shifts in expectations about the Chinese trend growth rate. What are the implications of such a cycle for China and the rest of the world, once China has an open capital account?

First, let us consider the Chinese point of view. Both optimism and pessimism will come with problems of their own. The problem with optimism is that it leads to premature appreciation of the Chinese currency. My own estimates suggest that with an open capital account, an upward revision of the Chinese growth rate by 1% over 20 years could, on impact and other things equal, appreciate the Chinese currency by 20%. How likely is it, however, that China can grow at a very high rate if its currency appreciates by that much? The Chinese authorities may want to resist appreciation (for the same reason as they did in the 1990s and the 2000s) but how can they do that with an open capital account? They could reintroduce capital controls, perhaps this time more market-based and similar to the capital flow management measures used by Brazil between 2009 and 2012. An alternative would be to rely on countercyclical reserve accumulation but the required interventions might have to be extremely large.

Pessimism comes with its own risks. To the extent that the authorities resist appreciation when optimism prevails they generate incentives to do carry trades with the renminbi as the investment currency. The currency mismatch becomes costly when optimism turns to pessimism. The currency mismatch can be controlled in the banking sector, less so in the real sector. We have seen this mechanism at work recently, when the renminbi depreciated after many Chinese corporates had borrowed in dollars to invest in renminbi.

Dealing with a boom-bust cycle induced by fluctuations in market sentiments is a familiar problem in emerging market countries. But Chinese characteristics make it special. The range of plausible expectations about trend growth rates is larger for China than for the average emerging market economy, making the shocks more disruptive. And China itself is much bigger than the average emerging market, so that we have to worry about the spillovers from China to the rest of the world.

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the future growth rate are smaller within advanced economies than between advanced economies and China.

There is evidence that China has had increasing spillovers to the rest of the world, although the main channels have not been financial so far.<sup>12</sup> This will change with increasing Chinese financial integration but it is difficult to say how. This is uncharted territory because we have few comparable historical examples. Bank lending could be the main channel of contagion from China to the rest of the world. During 2010–2015, cross-border bank lending to Chinese entities rose more than five times, to more than 1 trillion dollars, in part to finance the carry trades by Chinese corporates that I mentioned above. It will be more and more important to monitor such sources of systemic risk looking forward.

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<sup>12</sup> The financial channels are not negligible however. The suspension of trading after the drop of the Chinese stock market on 6 January 2016, reverberated across major asset markets globally. Statistical evidence shows a strong and steady increase in the impact of growth surprises from China on emerging market and advanced economy equity returns, especially since the Great Recession.

## **CHAPTER 3. CAPITAL FLOW MANAGEMENT MEASURES WITH A DEEMED MACROPRUDENTIAL INTENT: RECONCILING INDIVIDUAL COUNTRY OBJECTIVES AND THE COLLECTIVE INTEREST**

The regulatory environment has changed since 2008, both in terms of domestic prudential measures and cross-border measures with largely emerging markets making an increased use of capital flow management measures (CFMs) for declared macroprudential purposes. However, caution must be applied when employing these measures, which may also take the form of currency-based measures. Evidence on the effectiveness of currency-based restrictions as a counter-cyclical macroprudential buffer is mixed. Some of these measures may rather serve the same role as traditional capital controls to neutralise the domestic credit implications of engaging in foreign exchange interventions and managing the exchange rate. Some countries concerned with financial stability risks that may arise from capital flow volatility are using Basel III-inspired liquidity coverage ratios (LCRs) and net stable funding ratios (NSFRs) as alternatives to CFMs.

### **3.1. Intervention by Philip R. Lane, Governor, Central Bank of Ireland**

The spectacular and highly-damaging credit boom-bust cycle in Ireland in the mid-2000s serves as an important case study that signals the potential value of effective national macroprudential policies in curbing the impact of the global financial cycle on the domestic macro-financial environment. During the 2003-2007 period, the property boom in Ireland was amplified and extended by extensive overseas funding that was intermediated through the domestic banking system, both via nationally-headquartered banks and the national affiliates of foreign-owned banks. In turn, the tightening in international funding conditions that began in the summer of 2007 played a role in the deterioration in the financial stability of the Irish banking system, interacting with the reversal in the domestic construction sector and increasing evidence of over-valuation in Irish property prices. The fallout from this episode has been extensive, with a severe recession in Ireland and dramatic losses in the banking sector which triggered large-scale publicly-funded recapitalisations and ultimately required Ireland to turn to the IMF and its European partners for official assistance during 2010-2013.

A primary lesson from this episode is a determination to employ pro-active macroprudential measures to increase the resilience of the domestic banking system and protect households from the risk of over-borrowing. In line with broader

European trends, banks now must hold much higher levels of capital and respect stricter liquidity requirements.

In terms of macroprudential measures, the Central Bank of Ireland can now impose a countercyclical capital buffer (CCyB) if it assesses that there is material risk of destabilising procyclical dynamics in the provision of domestic credit. Importantly, the key principle of reciprocity is enshrined in the EU financial regulatory system: if Ireland imposes a CCyB, this must also be implemented by regulators in other countries that supervise banks that are lending into Ireland.

In early 2015, the Central Bank of Ireland also introduced borrower-based measures (BBMs) that impose ceilings on loan-to-value (LTV) and loan-to-income (LTI) ratios for mortgage lending in Ireland. Such borrower-based measures are a direct mechanism to limit the scope for adverse dynamics in the housing market by which increasing property prices interact with more rapid credit expansion. In particular, the requirements for significant down-payments and a limit on the ratio of housing loans to income means that there are effective brakes in the system which should act to mitigate the risk of a credit-fuelled property bubble.

It is important to emphasise that this suite of national macroprudential measures does not discriminate between domestic and foreign residents. However, it is plausible that these measures will reduce the scale of international financial flows, such that the indirect effect may be to limit the amplitude of international financial flows. To the extent that this is just a by-product of building a safer domestic financial system, such a reduction in the gross volume of international financial flows should be accepted in the pursuit of stability over volatility.

### **3.2. Intervention by Kunil Hwang, Director General of the International Finance Policy Bureau, Ministry of Strategy and Finance, Korea**

The policy environment has changed substantially since the global financial crisis. Both trends in capital flows, the size and movements of which have become larger, more volatile and unpredictable, and policy responses, which have reinstated capital flow management measures in order to contain potential risks, have altered with important implications for the review of the OECD Code of Capital Movements. The Code needs to ensure greater policy coordination among Advanced Economies (AEs), also taking into account the spillovers of such policies to Emerging Markets (EMs). By doing so, further capital liberalisation of the latter will be facilitated, and they will be encouraged to pursue adherence to the Code.

### **Capital flows have expanded greatly**

The volume of cross-border capital flows increased substantially, when compared to 1992, the year when the OECD Code of Liberalisation of Capital Movements was last revised. The net capital inflows of EMs increased much more than those of AEs after the global financial crisis.

The type of capital flows also varied in EMs. Bank fund flows showed the most massive and volatile movements after the global financial crisis, which became a cause of systemic risk in EMs. The volatility of net capital flows has increased significantly, and it was much more volatile during the global financial crisis than in the Asian financial crisis. The standard deviation of net capital flows in EMs, as a percentage of GDP, is twice as large as AEs.

As for the fundamental reason for crises, before the 2008 crisis, it can be safely said that the country in trouble had to take the blame for it. However, after the crisis, things started to change. AE's unconventional monetary policies are mostly responsible for the increase in volatility, as illustrated by the taper tantrum of May 2013. We can say that global capital flows have mostly been dependent on the unconventional monetary policies of AEs. Without those policies, capital flows to EMs would have been very different.

### **Policy Responses to Capital Flows**

Capital flow management measures (CFMs) are designed to influence cross-border capital flows. They usually overlap with macroprudential policy to the extent that capital flows are a source of systemic financial sector risks. Further to this, residency-based CFMs are defined as those that discriminate on the basis of residency and are often referred to as capital controls. Other CFMs do not discriminate on the basis of residency. These include measures that differentiate transactions on the basis of currency, so-called currency-based measures (CBMs). The latter can be seen as indispensable for EMs. Most EMs are heavily dependent on external funding, while the ability to secure external funding using their own currency is limited. Due to heavy reliance on external funding in foreign currency, currency and maturity mismatch is one of their key vulnerabilities. Furthermore, currency mismatch often leads to foreign-exchange liabilities crises.

The example of Korea in 2008 illustrates, however, that even with no evident currency or maturity mismatch a sudden stop can happen. Due to the sudden liquidity crash in global financial markets, the roll-over ratio of banks fell sharply to less than 30%. In such a situation, Basel III requirements, such as LCR and NSFR, may be insufficient for EMs. Managing short-term external debt might be a more appropriate target.

CBMs, then, can be an effective tool to enhance the economic resilience of EMs since they change the composition of capital flows or debt structure. Use of CBMs is associated with a shift away from the riskiest type of external liabilities toward less risky types (Ostry et al, 2012). CBMs can also be effective in lengthening the maturity of inflows (De Gregorio et al, 2000; Cardenas and Barrera, 1997).

The IMF and G20 view capital flow management measures as useful to reap the benefits from financial globalisation, while preventing risks that could undermine financial stability and sustainable growth. CFMs can complement and be employed alongside, rather than substitute for, appropriate macroeconomic and prudential policies (G20 Coherent Conclusions, 2011). In certain circumstances, introducing CFMs can be useful for supporting macroeconomic policy adjustment and safeguarding financial system stability (IMF Institutional View, 2012).

### **Implications for the Code Review**

In light of the changes in the capital flows landscape after the global financial crisis, greater coordination among AEs, taking into account spillovers to EMs, is a must. The OECD, comprised mostly of developed countries, needs to provide a forum for identifying the spillovers and encouraging AEs to internalise these external effects. By doing so, further capital liberalisation will be encouraged among EMs. The latter could implement necessary macroeconomic and structural policies to address systemic vulnerabilities, while moderating the use of CFMs.

The review of the OECD Code could acknowledge this by considering treating CFMs, particularly CBMs, with greater flexibility. The Code review could serve as an opportunity to make the Code more in line with the changed international financial policy environment. Since the global financial crisis, there has been widespread acknowledgement that CFMs are needed for macroprudential purposes. Basel III regulations (LCR and NSFR) may not be enough for EMs' financial stability. As the case of Korea in 2008 illustrates, satisfying those liquidity indicators does not guarantee the prevention of financial turmoil. For EMs, mindful of specific risks, additional and tailored CFMs could be used with flexibility.

With regards to technical discussions on the review of the OECD Code, measures that are treated as equivalent to restrictions, in the meaning and jurisdiction of the Code, should be decided on a case-by-case basis. In depth discussions on controversial issues (e.g. CBMs) must precede a decision on whether to expand the current non-exhaustive list of equivalent measures. The principle of proportionality can be helpful in the decision-making process. When reviewing the proportionality of CBMs, Code adherents need to consider country-specific factors, providing as much leeway as possible. CBMs targeting short-term external debts would be viewed as having greater benefits than costs. An opportunity to take account of the

building up of systemic risks and any necessary preventive regulatory measures is to allow the invocation of the derogation clause of the Code (Article 7) for such preventive measures. Currently, a derogation may be invoked only when a member is already in the middle of financial turmoil (e.g. deterioration of the balance of payments, or a serious economic and financial disturbance). As we have learned from the crisis, however, crisis prevention may be as important, if not more, as crisis response (IMF Precautionary Liquidity Line, 2011; CMIM Precautionary Line, 2014).

The introduction of the OECD Code User's Guide starts with the sentence that free circulation of capital across the national frontier is a motor for economic growth, employment and development. The introduction goes on to say that only a balanced and comprehensive approach to liberalisation can guarantee benefits to society as a whole in the long run. It is very clear that capital liberalisation or an open market itself is not the goal of the Code. But the ultimate goal is sustainable growth and development through capital liberalisation. To achieve this most important goal, the Code should be ready to incorporate measures that are in line with changed circumstances. Only through a flexible mindset, especially toward EMs' specific environment, will the Code achieve its ultimate goal and consolidate its *raison d'être*.

### **3.3. Intervention by Mario Nava, Director of Financial System Surveillance and Crisis Management, DG FISMA, European Commission**<sup>13</sup>

Since 1961, the OECD Code of Liberalisation of Capital Movements has played an important role in promoting the progressive and non-discriminatory liberalisation of capital movements and in supporting the integration of the global financial system. Coming back to the title of the present session, the Code has helped in "reconciling individual country objectives and the collective interest".

Today, we need to ask ourselves how to preserve this balance, and how to apply it to capital flow management measures with macroprudential intent.

For the EU, ensuring that countries have sufficient room for manoeuvre to safeguard financial stability while preserving the ultimate liberalisation objective entailed by the Code is a prerequisite.

Free capital mobility is one of the four fundamental freedoms of the EU. The Treaty on the Functioning of the European Union prohibits any restriction to capital movements between Member States of the EU, but also between Member States and

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<sup>13</sup> The first part of the intervention up until the third Section has been translated from French.

third countries. When necessary, the Court of Justice of the European Union ensures that this rule is respected by using its powers of sanction against Member States.

The legal framework of the EU naturally allows exceptions to free capital mobility, by permitting Member States to impose proportional restrictions, but only in very specific circumstances and notably to safeguard financial stability.

Macroprudential measures, which do not have the restriction of capital movements as their main goal, are acceptable under European Law, provided they are well designed and applied according to their objective. These macroprudential measures should be used for managing the systemic risks linked to excessive credit growth, coming itself from capital flows. Whether these capital flows are domestic or cross-border does not have, a priori, any incidence on financial stability, or on the use of macroprudential policies.

### **The specific framework of the EU**

In the European single market, we need harmonised prudential standards. As the EU is not a single country, we also need a degree of flexibility to allow European standards to be adaptable to the different Member States, which could be confronted with different economic conditions, or could find themselves at different phases of the macroeconomic cycle.

However, these national interventions are subject to a red line: they should be justified by legitimate objectives, which means that macroprudential measures have to be thought of as addressing risks to financial stability, and by no means should be used as a form of capital controls.

Within the EU (and particularly within the Eurozone), financial integration is an important objective and financial links are tight. Cross border capital flows thus represent an important share of transactions and can have, in certain cases, destabilising effects. Credit expansion phases can lead to asset price inflation, which do not necessarily reflect consumer price inflation. These risks can be too specific to certain regions or sectors for monetary policy to be effective.

Macroprudential policy is an important tool to manage spillover effects across countries. It can also prove very useful in mitigating or preventing excessive credit growth or excessive leverage, but also in mitigating or preventing excessive maturities or liquidity imbalances, or more in limiting excessive exposure concentration.

### **Controlling the spillover effects of macroprudential policy**

One of our main concerns with regards to macroprudential policy is the necessity to manage and limit negative spillover effects of these measures. In the EU, we address



this concern by subjecting most macroprudential measures to a system of coordination and approbation, under the authority of the European Systemic Risk Board (ESRB). This procedure ensures: (i) that potential distortions associated with macroprudential measures are taken into account by Member States other than the one introducing the measures, and (ii) that financial stability concerns are considered in light of the impact of these measures on other European countries, including the negative impact on capital flows.

For instance, the systemic risk buffer – a capital buffer to be applied only to certain exposures or to the whole balance sheet of a particular bank - needs to be approved by the European Commission with input from the ESRB, in the specific case where it is calibrated at more than 3% of Risk Weighted Assets.

The possibility for Member States to impose capital and liquidity requirements beyond the minimum level in effect in the EU is also subject to a process of notification and authorisation involving the Commission, the ESRB, the European Banking Authority (EBA) and the Council (representing the EU Member States).

In the same vein, the use of the countercyclical capital buffer - a dynamic tool used to ensure the availability of credit in the economy of each Member State - is subject to ESRB guidelines.

### **Borrower based measures outside of the EU framework**

Macroprudential measures address a range of financial stability risks. However, with the exception of the countercyclical capital buffer, capital-based measures seem to have had a more indirect, limited effect on cyclical adjustments and the costs of loans. This may make them less effective in restraining excessive credit demand and addressing emerging bubbles, for example, if house prices appreciate rapidly.

Alongside the EU macroprudential framework, which is mostly capital based, an increasing number of Member States (17 out of 28 so far) have implemented borrower-based measures based on their own national laws, such as loan-to-value (LTV) caps, and debt-service-to-income limits to address the impact of low interest rates on their housing market.

Borrower-based measures appear to be particularly effective due to the strong link between the housing market and credit growth, which makes the housing market a source of potential systemic risk. In practice, the borrower-based measures are therefore reducing vulnerabilities on balance sheets of both banks and households.

### **Currency based measures**

Having discussed the EU framework for macroprudential policy, let me now say a few words on currency based measures.

It is true that the EU macroprudential framework provides limited scope for currency based measures. EU law<sup>14</sup> merely envisages the possibility for national authorities – in the absence of any other policy tools – to take stricter measures, including stricter liquidity requirements in cases where macroprudential or systemic risk has the potential to have serious negative consequences on the financial system and the real economy in a specific Member State.

However Member States are also able to adapt Basel III minimum standards such as the LCR and NSFR to address such risks. A couple of relevant examples are worth considering, when discussing this topic.

Hungary put in place a foreign exchange funding adequacy ratio, as a response to a high number of loans denominated in foreign currencies. This NSFR-like measure targets excessive maturity mismatches in foreign currency positions on banks' balance sheets, which became an acute macroprudential risk following the conversion of FX loans into Hungarian Forint in February 2015. Most of these assets had been funded with short-dated FX loans, which exposed banks to liquidity and roll-over risks and also made them vulnerable to external shocks stemming from sharp changes in exchange rates and foreign financing conditions. This measure is a macroprudential measure, and not one intended to restrict currency flows.

As a second example, in 2013 Sweden put in place a Liquidity Coverage Ratio (LCR) differentiated by currency. Again, this is not considered to be a restriction on currency flows. This foreign currency specific LCR targets risks stemming from the reliance of Swedish banks on FX wholesale funding, in particular in USD and EUR and the fact that the Riksbank's lender-of-last resort support capacity in non-domestic currencies is limited.

Indeed, both of these examples of macroprudential measures are consistent with the ESRB's 2011 recommendation on lending in foreign currencies<sup>15</sup> which calls on authorities to be particularly vigilant regarding the financial stability risks of a reliance on foreign markets for currency swaps. Furthermore, measures that relate to the granting of mortgages in foreign currencies will now also have to adhere to the Mortgage Credit Directive, which imposes specific information requirements on lenders and obliges Member States to ensure that consumers' exposure to exchange rate risk is limited.

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<sup>14</sup> Art. 458 CRR

<sup>15</sup> ESRB/2011/1

### **Supervision, resolution and the free movement of capital**

Finally, I would like to make an important point relating to the resolution framework, and how it relates to the principle of the free movement of capital. In the EU, one of the developments that has facilitated the movement of capital across borders has been the establishment of branches. These allow banks to operate across borders, without having to observe distinct prudential requirements for that branch. This means a branch does not have the liquidity constraints, or the need for capital pre-positioning that a subsidiary would have, because it is not a distinct legal entity as such.

As a result, the move by EU member states to convert subsidiaries into branches should in theory be regarded as a positive development for the free movement of capital. However, it also has important implications for the process of orderly resolution because within the EU, it is not possible to wind-up a branch on a stand-alone basis. In order to put a branch into resolution, we have to put the entire entity into resolution. And that includes the parent, and all of its branches. This could have severe implications for financial stability.

Therefore, in order to ensure branches can be resolved in the event of a crisis, certain restrictions or guarantees might need to be placed on its capital resources. Having some amount of 'ring-fenced' capital may, under certain circumstances, be desirable to manage the cumulative risks and liabilities that would flow back to the parent company, and which would have to be dealt with by the home regulator in the event of a resolution.

Therefore, whilst supporting the principle of free movement of capital, within the EU there are certain instances where barriers might need to be imposed in order to maintain financial stability. At the same time, such measures are not aimed to restrict currency flows, or to obstruct the proper functioning of the branch/subsidiary network. Therefore such measures seem to 'conciliate individual country objectives and the collective interest'.

### **3.4. Intervention by Stijn Claessens, Senior Adviser, Board of Governors, Federal Reserve System**

This note summarises recent thinking on the interactions between capital flow management tools (CFMs) and macroprudential policies (MAPs) and provides a framework to guide policy actions, so as to prevent inefficient choices and to reduce negative externalities from unilateral actions. Much evidence supports the longer term benefits of an open capital account (Kose et al 2009). At the same time, evidence is mounting that global factors affect local financial conditions, for various reasons and through both asset prices and capital flows, especially in small open

economies (Rey, 2015; IMF, 2016). While identifying and measuring the causes and transmission channels remains difficult, including how they vary by global, source and destination country circumstances, it is increasingly recognised that there can be negative cross border externalities and adverse effects on domestic financial stability, possibly calling for the use of CFMs. (The focus here is on CFMs on capital inflows used as prudential tools; CFMs have also been applied to outflows, but most often to deal with the aftermath of financial crises). More recently, and in part due to analytical progress, it is also recognized—by advanced, emerging and developing countries (EMDCs) alike—that MAPs can help address systemic stability concerns arising from financial procyclicality (Claessens et al., 2009, 2012a, b). (I do not discuss MAPs motivated by cross-sectional aspects, e.g., to deal with systemic risks arising from “too big to fail” institutions).

CFMs have been used for some time, but mainly by EMDCs. While many countries had also used tools now being labelled as MAPs (e.g. reserve requirements, limits on credit growth, capital requirements, limits on loan to value ratios), these were often motivated by objectives other than systemic financial stability (e.g. more traditional monetary or microprudential policy objectives). Also, since at times CFMs and MAPs have been used as substitutes for good economic management or structural reforms, it is clear that the use of MAPs and CFMs requires a clear policy framework.<sup>16</sup> And even then, their use, or lack thereof, can give rise to cross border spillovers, arbitrages and leakages, both inward and outward, varying by source and destination country circumstances.<sup>17</sup> As for other forms of financial regulation, this calls for international coordination, but in practice this has been limited to date (coordination mechanisms are being defined for some MAPs only). While more progress can be envisioned, there will remain limits (it is unlikely, for example, that source countries will adopt MAPs in capital markets or CFMs on outflows to address specific recipient countries’ risks). Given possible adverse cross-border spillovers and de facto imperfect coverage and coordination of MAPs, it is being acknowledged that domestic MAP efforts may not suffice to fully address financial

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<sup>16</sup> In a closed economy context, the use of MAPs raises complex issues. What MAPs are most effective and least distortive? What are the best institutional settings for conducting (specific) MAPs? With the (emerging) paradigm one in which monetary policy is primarily aimed at price stability and MAPs at financial stability, do monetary policy and MAPs enhance or diminish each other’s effectiveness? How to adapt these policies given various interactions or if policies operate imperfectly? Many of these are being debated, but not reviewed here.

<sup>17</sup> For example, some “demand-side” MAPs (e.g., LTVs) can be circumvented by cross-border transactions. Or “supply-side” MAPs (e.g. time-varying capital adequacy requirements) can lead to greater capital outflows, aggravating procyclicality elsewhere, or larger inflows, reducing their effectiveness.

stability concerns. Within the set of unilateral responses, this can make CFMs, in combination with MAPs, part of a useful policy response.

This emerging view raises questions on the use of and interactions between MAPs and CFMs. As a start, neither MAPs nor CFMs should substitute for good macroeconomic management or necessary structural reforms. For example, to the extent that a large current account deficit, perhaps associated with credit and asset price booms, is driven by the wrong mix of macroeconomic policies, MAPs or CFMs should not substitute. And the use of CFMs (and MAPs) needs to preserve the longer term gains from international financial integration. Much evidence suggests that, when having passed some thresholds, economies that are financially more integrated and otherwise have greater foreign financial presence, benefit from greater risk diversification, more efficient domestic financial intermediation, even when they do import at times some risks (Kose et al 2009). Therefore any tradeoffs that may arise, including with assuring financial stability, have to be seen in a long run perspective.<sup>18</sup>

The interactions between MAPs and CFMs is a complex and relative new area of policy analysis (this draws on Ostry et al 2011, 2012). To set the stage, Table 1 provides a (not exhaustive) list of possible tools classified under three types: MAPs, foreign exchange (FX) related measures, and CFMs. It suggests many grey areas, e.g., many FX-related tools can be classified as either MAPs or CFMs.

As also highlighted by IMF (2015) and OECD (2015), a prime difference should be the objective. MAPs are designed to limit systemic financial vulnerabilities, including those associated with capital inflows and exposures to exchange rate risks. CFMs are designed to influence capital flows and affect the exchange rate. While there can be overlaps, notably with the FX-related measures, MAPs do not seek to directly affect the strength of capital flows or the exchange rate per se. Another important distinction in principle is legal: CFMs are by their nature aimed at non-resident transactions, whereas MAPs not necessarily so. In practice, this legal distinction may or may not matter.

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<sup>18</sup> A related important distinction is between permanent or cyclical CFM tools, see Klein (2012), a distinction not too different from MAPs and time-invariant microprudential (MIP) regulations.

**Table 1: Classification of Macroprudential and Capital Flows Management Tools**

<b>Capital flow management tools</b>	<b>FX-related prudential measures</b>	<b>Other macroprudential measures</b>
Discriminate between residents and non-residents in cross-border capital movements (OECD Code of Liberalisation of Capital Movements, 2009). Economy-wide or sector or industry specific (usually financial sector). Cover all flows, or target specific types (debt, equity, FDI; short vs. long-term).	Discriminate according to the currency, not the residency, of the flow. Applied to regulated financial institutions, primarily banks.	Reduce systemic risk without discriminating based on residency/currency.
Examples: Unremunerated reserve requirements on non-resident deposits; Tax on capital gains for NR investments, on equity and bond inflows, on settlement of derivative contracts with NRs, fees on NR purchases of central bank paper; Licensing requirements; Outright limits or bans.	Examples: Limits on banks' open FX (derivative) position (as a proportion of their capital), on FX lending by domestic banks, on ratio of banks FX loans and securities to FX borrowing; Reserve requirements on foreign currency deposits, capital requirements for FX loans.	Examples: LTV ratios; Limits on credit growth and sectoral lending; Dynamic loan-loss provisions, and counter-cyclical capital requirements; Reserve requirements for local currency deposits; Levy on interest from consumer loans; Capital requirements for specific sectors, loans.

*Source:* Ostry et al 2011

Other, more operational differences, relate in part to the type of capital flows. While banking flows can present financial stability risk, they are also more likely under the purview of supervisory agencies. For example, MAPs limiting (gross or net) borrowing or open positions in foreign exchange can be relatively easy applied and

will often suffice. Other flows, such as foreign direct investment, are less likely to lead to financial stability concerns. For capital flows not directly under the purview of regulatory agencies, yet that can give rise to financial stability concerns—such as (equity and bond) portfolio flows—CFMs might be needed. For example, borrowing by non-financial corporations in international capital markets is harder to control by MAPs. And even though these flows are less likely to directly generate systemic financial sector risks, they can still lead to overall overheating and macroeconomic risks, and thereby indirectly lead to systemic risks (see IMF, 2012 on CFMs).

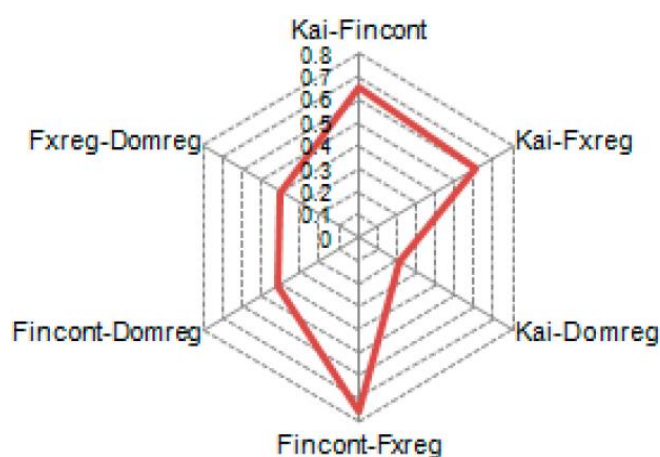
While there are these conceptual, legal, operational and other differences, since some MAPs can operate economically and financially similar to CFMs, especially for small open economies, distinctions can be blurred. Even if some MAPs do not explicitly restrict transactions between residents and non-residents, and thus do not meet the strict legal definition of a CFM, they may have the same discriminatory effect. E.g. restricting the ability of banks to attract funds or lend in foreign exchange may be a MAP (or even a microprudential, MIP) measure, yet it may affect non-residents more. As such, there can be considerable overlap in practice between MAPs and CFMs. More generally, to contain systemic risks related to international financial integration may optimally involve both MAPs and CFMs. A conceptual way of how to view the use and choice could be a “decision tree”. Obviously, any use of policies needs to start with the specific channel by which financial or macroeconomic risks can arise. When flows are intermediated through the regulated banking system, MAPs (and MIPs) targeted to the key concerns—external liability structure, currency and credit risk, broader risks from lending/asset price booms—may be the appropriate first responses. CFMs may next be useful if MAPs cannot effectively deal with the targeted risks in a timely manner. And economy-wide CFMs may be useful if flows might migrate to the unregulated sector and then lead to systemic risks.

There could be modifications to these rules. Obviously, the institutional environment and sophistication of the country’s financial system matter. Since regulatory arbitrage is both more likely in countries with either weak supervision or sophisticated financial institutions and deep capital markets, however, it is hard to tell when which tool is preferable. MAPs may also cause flows to be intermediated (more) through unregulated, cross-border transactions, which could call for a customized mix of CFMs and MAPs geared to country circumstances. It can be that MAPs tilt the level playing field for access in favour of credit to large firms (as only they can access international markets) and against smaller firms and households. In such cases, CFMs on direct borrowing abroad may level the playing field more than regulations that raise the cost of domestic bank borrowing. And international obligations (e.g., EU treaty, GATS, existing OECD code, or various bilateral investment treaties; see IMF, 2012) may prohibit or constrain the use of CFMs, thus

necessarily favouring MAPs. Altogether then, it is hard to generalise which tools are best used when.

Not only conceptually, but also in actual usage, MAPs and CFMs tend to overlap. Figure 3.1 provides the various correlations of types of MAPs with CFMs for a number of countries. It makes clear that many countries use both tools. Not surprisingly, most overlap is between CFMs (both economy-wide and financial sector) and FX-related prudential regulations, and less between these measures and the domestic MAPs. This overlap already suggests some complementarities as well as substitutions in use, and possibly also in effectiveness.

**Figure 3.1: Correlations between Macroprudential and CFM measures**



*Note:* Kai = Schindler's capital controls index. Fincont = mean of binary variables reflecting restrictions on financial sector's borrowing abroad, maintenance of accounts abroad, and differential treatment of accounts held by nonresidents. Fxreg=mean of binary variables reflecting restrictions on financial sector's lending locally in FX, purchase of locally issued securities denominated in FX, differential treatment of deposit accounts in FX, and limits on open FX positions. Domreg=mean of reserve requirements, restrictions on concentration in specific sectors, and LTV ratios.

*Source:* Ostry et al 2012.

In terms of the evidence on the (relative) effectiveness of MAPs and CFMs, there are no easy answers, in part since problems of identification and causality are numerous (and have plagued research on the effectiveness of CFMs (see Forbes, 2007, and Klein 2012 for literature reviews) and more recent work on MAPs (see IMF 2013; Freixas, Laeven, and Peydró, 2015; and Claessens 2015 for reviews). An important (additional) constraint for the joint analysis of MAPs and CFMs is that



there can be much coincidence between the build-up of domestic and external vulnerabilities. As documented, capital inflow surges are often associated with credit booms—including risky booms that end in busts—and greater reliance on foreign exchange credit in the economy. And there are large differences among countries in the use of MAPs and CFMs, varying from fully liberalised systems that use these tools at the margin to financially more repressed systems that have these in place most of the time.

With these and various other caveats, stylised facts and analysis presented by Ostry et al (2011 and 2012) nevertheless suggests that countries with CFMs tend to have less crisis-prone external liability structures; countries with CFMs and FX-related prudential regulations have a lower reliance on FX-lending (while other prudential regulations are associated with a lower incidence of domestic credit booms); and countries with CFMs and FX regulations have greater growth resilience during a sudden-stop episode. Forbes, Fratzscher and Straub (2015) study CFMs and FX-related MAPs (they do not cover pure domestic focused MAPs such as LTVs). Using propensity scoring techniques—to reduce selection problems—and studying higher frequency data—such as weekly portfolio flows and various asset prices, they find MAPs to be more effective than CFMs in reducing measures of financial fragility, such as bank leverage, credit growth, and exposure to portfolio liabilities. Most CFMs do not appear to affect macroeconomic targets, such as capital flows, exchange rate appreciation, interest rate differentials and equity prices. Removing CFMs on outflows, though, helps limit real exchange rate appreciations. They conclude that certain MAPs and CFMs may be useful in reducing specific vulnerabilities, but many others, what they call “popular” measures, are not efficient in achieving their stated aims. This and other evidence confirms that it is best to use those MAPs and CFMs that are targeted at specific financial vulnerabilities.

## Conclusions

International dimensions are crucial when considering financial stability in light of the de-facto financial integration of most economies and the global financial cycle. Financial openness provides many long-run benefits, but can create short-term risks and reduce the effectiveness of domestic MAPs. The potential gains from international coordination of MAPs are large, but in practice achievable gains are much more limited. For financial and economic stability, countries may have to adopt unilaterally a mix of MAPs and CFMs, considering carefully both the longer-run benefits and risks of financial openness and the multilateral aspects of such policies. While solid analytical frameworks are still lacking, countries need to operate MAPs and CFMs using clear objectives and providing full transparency, so as to enhance their macroeconomic and financial stability without risking adverse multilateral consequences.

### 3.5. Intervention Dong He, Deputy Director, Monetary and Capital Markets Department, IMF

These remarks focus on the use of macroprudential policy to address financial stability risks associated with capital flows. While the liberalisation of capital movement and an open international financial system is generally beneficial and desirable, capital flows can give rise to systemic financial risks through a range of different channels. I will cover the following three issues: First, through which channels do capital flows give rise to systemic risks? Second, which policy instruments or measures are most efficient or effective in limiting such risks? Third, how can we facilitate effective macroprudential policymaking at the country level and at the global level? How can we ensure that changes in other policy frameworks, such as the OECD Code of Liberalisation of Capital Movements, are consistent with this goal?

As we know, the global financial crisis underscored the costs of systemic instability at both the national and global levels and highlighted the importance of effective macroprudential policy, which uses primarily prudential tools to limit systemic risks. Systemic risks refer to the risk of widespread disruption to the provision of financial services that is caused by an impairment of all or parts of the financial system, and which can cause serious negative consequences for the real economy. Fundamental to the definition is the notion of negative externalities and distortions arising from the interconnectedness between market participants and common exposures, and interactions between risk appetite, leverage and asset valuation. This calls for a second best approach to policies—the existence of market distortions means that additional restrictions that counteract those distortions can be welfare enhancing.

Since the crisis, experience with macroprudential policy has been growing. A large number of countries have put in place dedicated institutional arrangements. Progress is being made also with the design and implementation of macroprudential tools, and an increasing body of empirical research is available to evaluate the effectiveness of macroprudential policy.

Capital flows can contribute to systemic risks both directly (through cross-border lending to domestic banks and corporates) and indirectly (through asset valuation and collateral effects). Specific channels include (i) increases in short-term wholesale funding of the banking system; (ii) increases in foreign currency funding of the financial system; (iii) contributions of capital inflows to local credit booms and asset price appreciation; and (iv) credit risks from foreign currency denominated loans.

These risks can be addressed by well-designed macroprudential measures. For example, exposure to short-term (potentially foreign currency) wholesale funding can be addressed with Basel III liquidity tools—minimum standards for the

Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), potentially differentiated by currency. If necessary, excessive capital inflows can be contained with a levy on bank FX inflows, or required reserves on banks' foreign exchange liabilities. Risk from FX funding or lending can be limited by liquidity requirements in foreign currency, constraints on banks' net and gross open FX positions, and higher risk weights, or tighter loan-to-value (LTV) and debt-service-to-income (DSTI) ratios on FX loans. Excessive credit and asset price growth could be mitigated by tighter capital requirements (risk weights) on specific loans, LTV or DSTI ratios.

A number of observations can be made about the use of macroprudential tools to address risks associated with capital flows. First, the size, composition, and volatility of capital flows matter for financial stability. How much they matter varies from country to country and depends on the structure of specific financial systems. As a result, the use of macroprudential tools to manage risks associated with capital flows should be commensurate with the profile of such risks. In addition to a heavy reliance on judgement, this often implies a gradual approach to the tightening of tools, and a tendency to start any policy action with less intrusive tools. However, the benefits of such an approach have to be balanced against the need to take more decisive action when risks are elevated.

Second, effectively managing systemic risks associated with capital flows requires a policy tool kit that goes beyond Basel III liquidity measures (including currency-specific measures). Sometimes, and particularly for small open economies where capital flows are relatively large as compared to their domestic financial systems, capital flow management measures (CFMs), i.e., measures designed to limit capital flows by influencing their size and composition, can be more efficient and effective. But this does not mean in general that CFMs are becoming a predominant form of macroprudential policy. In any case, neither macroprudential policy nor CFMs should substitute for warranted macroeconomic adjustment or appropriate microprudential regulation and supervision.

More broadly, macroprudential policymaking requires an ongoing and forward-looking process that translates assessment of systemic risks to policy action. Actions need to be taken when risks are building up and not only after they have materialised. Macroprudential authorities should also conduct careful cost-benefit analyses. Strong institutional foundations are essential to the effectiveness of these processes, since macroprudential policy can be subject to biases toward inaction or insufficiently timely action when the benefits are uncertain while the costs are often more immediate. At the same time, they also help guard against abusive use of macroprudential tools and avoid overburdening macroprudential policy with objectives it is not suited to achieve, such as managing the level and composition of aggregate demand or the business cycle.

How can the review of the OECD Code be consistent with and facilitate effective macroprudential policy making while maintaining its objective of promoting capital flow liberalisation? First of all, it is important to note that while macroprudential measures may have the collateral effect of raising the cost of cross-border capital flows in the short-term, financial stability is conducive to the maintenance of an open and free international financial system in the longer term, and is consistent with the ultimate objective of the OECD Code of Liberalisation of Capital Movements. Indeed, effective domestic macroprudential policy that helps to contain risks in one country can support financial stability elsewhere, creating positive externalities. Lowering the probability of a financial crisis in one country reduces the scope for negative trade and financial spillovers at the regional or international level. To harness these effects, international arrangements (such as IMF surveillance and Financial Sector Assessment Programs) can be used to buttress national macroprudential frameworks and strengthen “enlightened self-interest.”

Secondly, while many macroprudential tools are structural in nature, an important dimension of macroprudential policy making is about varying prudential tools over time. Macroprudential policy can also be market-sensitive and requires careful planning of communication. In other words, macroprudential policy making has many similarities with monetary policy making. In this context, it is useful to note that policy intent and policy effects can be quite different. While most macroeconomic and macroprudential policies are likely to affect capital flows to various degrees, only a subset of them are directly intended to change the size and composition of capital flows. Thus, treating macroprudential measures the same way as restrictions under the OECD Code could prove unduly restrictive.

To sum up, the emerging global consensus on the main elements of effective macroprudential policy calls for more flexibility in the OECD code. In this spirit, I believe that the IMF Institutional View on the liberalisation and management of capital flows has achieved a good balance between global consistency and national flexibility. I certainly hope that the revised Code will find a mechanism to take policy intentions of country authorities and the special characteristics of macroprudential policy making better into account.

### **3.6. Intervention by Kevin Noel Cowan, Director for Chile and Ecuador, Inter-American Investment Corporation, Alternate Executive Director for Chile and Peru, Inter-American Development Bank**

#### **The Chilean Experience with Capital Controls<sup>19</sup>**

This intervention focuses on the Chilean experience with capital controls. To do so, it splits these remarks in two sections – a brief description of the Chilean experience with an unremunerated reserve requirement in the 1990s, and some broader policy thoughts on the use of capital controls (and reserve requirements) as a macroprudential policy tool.

#### **The Chilean Capital Control Policy in the 1990s**

Let me start by very briefly describing the period in which the Chilean authorities implemented capital controls in the 90s.

In the early 1990s – Chile along with several other Emerging Market Economies – was able to return to global capital markets for the first time after the debt crisis of the early 1980s. This increased supply of foreign capital was driven by a combination of low global interest rates, and steps taken towards resolving outstanding issues from the crisis.

The result was a substantial inflow of capital, and a real exchange rate appreciation. In this context, the Central Bank reinstated an unremunerated reserve requirement on capital inflows (henceforth URR). This URR forced foreign investors to deposit a share of the inflows at the Central Bank for determined period, with no remuneration on the deposit.

Two aspects of the URR in particular are worth highlighting. The first is that Foreign Direct Investment (FDI) was excluded from the URR. The second is the Tobin Tax nature of the URR. As the effective tax that arises from the URR is a fixed amount, its effect on the net returns on investment in Chile decreases with the maturity of the foreign liability (or the term for which it is held). As such it has a larger impact on short-term, non-FDI inflows. Interestingly, it is also a tax that is

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<sup>19</sup> This document does not represent the views of the Inter-American Development Bank or its board of directors. Document prepared for the OECD *High Level Seminar – Open and Orderly Capital Movements: Does Global Cooperation Matter?*. I am grateful to Rodrigo Cifuentes for providing numbers on the estimated effect on the exchange rate of the Chilean capital controls.

proportional to global interest rates – as these rates affect the cost of holding a share of inflows with zero remuneration.<sup>20</sup>

The main stated policy objective of the URR was to reduce the appreciation of the Chilean Peso. Authorities viewed export growth as a key component in the medium term development strategy, so that this mercantilist role of the URR figured high on the policy objectives.

In addition, as it affected short term capital flows most, it was argued that the URR could play a role in reducing the size of these more volatile forms of inflows. Hence, authorities at the time also saw a secondary stability role for the URR, by promoting long term debt and equity inflows.

In discussing the effects of the URR on key macro variables it is important to look at not only statistical significance but also at economic significance.<sup>21</sup> To do so I reviewed those studies that found statistically significant effects, and focused on those that found the largest effects. All in all, most aggregate effects of the URR were economically small. On the Real Exchange Rate (RER), following results by Edwards y Rigobon (2011), the largest effect is a 4% depreciation in the 1990s. On total net capital flows, Gallego et al (1999) find cumulative effects on inflows of close to 2% of GDP. It should be noted that cumulative total flows reached 27% of GDP over the sample period.

Where studies do find larger effects is in the composition of gross inflows flows. On the one hand, Chile has a lower share of bank debt, vis-a-vis FDI and portfolio flows. In addition, Chile has a 24% lower share of foreign debt intermediated by banks, than similar countries (Cowan and De Gregorio 2007). I would like to highlight this last effect as I will come back to it later. The smaller role of Chilean banks in intermediating capital flows is driven by several factors: i) greater supervision of URR compliance for banks (SBIF must supervise capital controls for banks); and ii) the maturity transformation role by banks is impacted by different effects of the URR on different terms.

Three factors suggest that the macro effects of an URR, if implemented today in Chile, would be even lower than in the 1990s – low global interest rates, increasing foreign assets and financial market sophistication.

The effective tax of an URR is increasing with the global interest rate. In the 1990s, the effective tax on a 6-month inflow, with a 30% URR held for one year was 5%.

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<sup>20</sup> For a detailed description of the URR and its consequences see Cowan and De Gregorio (2007)

<sup>21</sup> This section draws on Cowan and De Gregorio (2007).

After 2011 (based on average LIBOR rates and the same 12 month URR) the same 6- month operation would have had a tax rate of 0.2%. In other words, one 25<sup>th</sup> of the effect it had in the 1990s.

Theoretically, this is not an issue, as the percentage of the URR could be adjusted upwards and the holding period increased. However, in the case of Chile, existing free trade agreements (FTA) limit the extent of this flexibility, imposing maximum periods on the URR (as in the FTA between Chile and the United States) or by imposing caps on the share of inflow to be deposited (as in the European Union FTA with Chile that caps the URR at 30% for two years).

An increased stock of foreign assets held by residents will also reduce the impact of capital controls on net capital flows and the real exchange rate, although it should not reduce the effects of the URR on the composition of gross inflows. Chile, as with many other EMEs, has seen substantial increases in gross capital flows in recent decades (and hence in the gross stocks of foreign assets and liabilities). In Chile, there is evidence that these foreign assets have played a relevant stabilising role for dealing with external funding shocks after 2008 (see for example Cowan et al (2008), Cifuentes and Jara (2014) and work by Avalos and Moreno (2013)).

These large stocks of assets are likely to reduce the impact of an URR on the RER and net capital flows. At least in Chile, authorities cannot restrict asset purchase decisions *ex post* (only *ex ante*). This being the case, an URR will not impact the decision to repatriate foreign assets. If an URR is imposed, then local investors have a strong incentive to repatriate foreign assets, hence reducing the impact of the URR on net flows and the real exchange rate.

Finally, more complex financial markets are likely to make the generation of leakages in the URR faster and more prevalent. Financial complexity has grown substantially in Chile since the 1990s – with the development of a corporate bond market, a derivative market and substantial fund industry.

### **On the use of URR as a macroprudential tool**

Capital controls in general – and an URR in particular – can potentially play a role in reducing systemic financial risks. They should be thought of, however, as a third line of defence against systemic risks. The first line of defence being consistent macroeconomic policies and, ideally, a flexible exchange rate regime.<sup>22</sup>

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<sup>22</sup> Kamil (2012) finds that non financial firms in Latin America substantially reduce their exposure to exchange rate volatility once countries adopt flexible exchanges.

An adequate regulatory and supervisory framework should be the second line of defence – which should include several of time varying or cross sectional macroprudential components that have been extensively discussed after the global financial crisis.

The rationale for capital controls as a systemic risk tool is based on their broad coverage – potentially addressing a build-up of risks outside the regulated financial system, which cannot in turn be offset by regulation within the system. This being the rationale, any use of capital controls with this objective would need to be clearly motivated by the potential risk build up, and by a clear explanation of the limitations in financial regulation for addressing that risk.

Several other considerations should be made when considering the use of capital controls to reduce systemic risks.

The first is operational. Like any tax, implementing a capital control requires an adequate institutional framework, requiring a mechanism of direct or delegated supervision of capital flows, and the willingness and capacity to adjust the mechanism as loopholes are opened and exploited. This was the case in Chile, where the Central Bank had a dedicated staff to monitor flows and compliance with the URR and where several changes in the URR were made over the years as loopholes were identified. As mentioned above – this process is likely to be significantly more complex in sophisticated financial markets.

This monitoring and enforcement is extremely relevant because capital controls impact non-financial institutions – not otherwise subject to supervision. Unless substantial investment is made in institutions for monitoring and enforcing capital controls, the de facto impact of capital controls will be lower in non-financial institutions, which erodes one of the main benefits of these controls as a risk tool.

Evidence from Chile (see, for example, De Gregorio et al 2000) suggests that, even with dedicated resources and proactive capital control policies, the effectiveness of capital controls falls over time. This suggests that capital controls are best suited as a short-term measure to reduce risk. Moreover, as discussed above, in the case of Chile, existing FTA also limits the maximum time span of capital controls.

The second consideration is the possibility of unintended consequences from imposing controls, which could potentially shift sources of systemic risks. In Chile, evidence indicates that the URR shifted the composition of gross foreign liabilities towards equity, FDI and longer term debt, and that Chilean banks played a smaller role intermediating these flows. This suggests that in Chile, capital flows were nudged towards safer (longer term and more stable) flows hence reducing risks.

This need not always be the case. Recent research by Powel et al (2016), for example, shows that after 2009 corporations in emerging market economies that



imposed some form of capital controls were more likely to engage in carry trade operations – borrowing abroad and depositing in the local banking system. They suggest that where capital account transactions are highly regulated, non-financial firms (and in particular foreign firms) have a comparative advantage. They may issue abroad and use inter-company loans that are normally considered as FDI to transfer financial resources across countries.

The findings by Powell et al, raise two concerns. One is to the stability of this intra-company loan component of FDI. The other is to the spillover effects on the banking system of firms intermediating capital (an issue raised repeatedly by the Bank of International Settlements).

A market where unintended consequences may be particularly relevant is the derivative market. A capital control that is not accompanied by a similar tax on derivatives could potentially shift speculative positions to the OTC derivatives market, with potentially negative effects on financial stability. While not driven by capital controls, the rise in cross border positions in Korea after 2009, and the regulatory response from Korean authorities, suggest that this channel can be particularly relevant.

A third consideration is the effect of capital controls on efficiency. In Chile there is evidence, by Gallego et al (1999) and Forbes (2005), that the URR had a larger effect on smaller firms. The way the URR was implemented in Chile drove a wedge between the cost of short term and long term financing and between bank and direct cross border financing. As smaller firms are more dependent on short term financing and on bank funding, the impact of the URR on their costs of funding was higher.

## Conclusions

1. The effect of the URR on macro variables in Chile (RER and net flows) was limited and eroded over time. This effect is likely to be even lower now given foreign asset positions and low global rates.
2. Capital controls can potentially play a valuable role in addressing certain systemic risks as they do appear to affect the composition of gross inflows. Moreover, rising holdings of foreign assets will not dilute this effect on gross flows.
3. This being said, it is crucial to weigh the benefits of risk reduction against possible efficiency losses and implementation costs. Due to leakages in the controls, these trade-offs are likely to be most favourable if capital controls are imposed as temporary measures.
4. If capital controls are imposed, careful monitoring is imperative to avoid a build-up of risks as agents seek to avoid the controls.

5. Capital controls should be considered a third line of defence against systemic risk. The first line is to ensure consistent macro policies and in particular to avoid policies that temporarily eliminate variance in key macro variables such as the exchange rate. The second is domestic financial regulation, including macroprudential tools.
6. Finally, the optimal level of controls will in part depend on global financial regulation. Coordinated efforts to reduce pro-cyclicality in core financial markets will reduce the likelihood of large (supply driven) swings in capital flows to emerging economies. This being the case – regulatory coordination is, and will continue to be, key for global financial stability.

### *References*

Avalos, F. and R. Romero (2013), “Hedging in Derivatives Markets – the Case of Chile”, BIS Quarterly Review, March.

Caballero, J. U. Panizza and A. Powell (2015), “The Second Wave of Global Liquidity: Why are Firms Acting Like Financial Intermediaries?” London, CEPR Discussion Paper No. DP10926.

Cowan, K. and J. De Gregorio (2007), "International Borrowing, Capital Controls, and the Exchange Rate: Lessons from Chile", NBER Chapters, in: *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices and Consequences*, pages 241-296 National Bureau of Economic Research, Inc.

Cowan, K., J. De Gregorio, A. Micco and C. Neilson (2008), "Financial Diversification, Sudden Stops, and Sudden Starts", in K. Cowan, S. Edwards and R. Valdés, *Current Account and External Financing*, chapter 5, pages 159-194, Central Bank of Chile.

De Gregorio, J., S. Edwards and R. Valdes, Rodrigo (2000), "Controls on capital inflows: do they work?", *Journal of Development Economics*, Elsevier, vol. 63(1), pages 59-83, October.

Edwards, S. and R. Rigobon (2009), "Capital controls on inflows, exchange rate volatility and external vulnerabilit,", *Journal of International Economics*, Elsevier, vol. 78(2), pages 256-267, July.

Forbes, K. (2005), "The Microeconomic Evidence on Capital Controls: No Free Lunch", NBER Working Papers 11372, National Bureau of Economic Research, Inc.

Gallego F., L. Hernández y K. Schmidt-Hebbel (1999), "Capital Controls in Chile: Effective? Efficient?", Working Papers Central Bank of Chile 59, Central Bank of Chile.

Jara, A. and R. Cifuentes (2014), "Facing Volatile Capital Flows- The Role of External Assets and Exchange Rate Flexibility", Working Papers Central Bank of Chile 742.

Kamil, H. (2012), "How Do Exchange Rate Regimes Affect Firms' Incentives to Hedge Currency Risk? Micro Evidence for Latin America", IMF Working Paper No. NO.12/69.

## CHAPTER 4. THE REVIEW OF THE OECD CODE - TOWARDS A GLOBAL LIBERALISATION FRAMEWORK FOR CAPITAL FLOWS

The Code has provided a legally-founded framework for progressive financial liberalisation for more than 50 years. It has underpinned the opening of the capital accounts of 35 OECD member countries and has recently shown the potential to become a key instrument in the context of the global debate that has been taking place in international forums, including implementing in practice the commitments made in the G20 Coherent Conclusions on capital flow management adopted in 2011. Open to adherence by non-OECD countries since 2012 with equal rights and responsibilities as OECD countries, the Code is being reviewed to ensure its continued relevance in an evolving global financial landscape. All G20 members are invited to contribute to this work.

### 4.1 Intervention by Ana Novik, Head Of Investment Division, OECD Directorate for Financial and Enterprise Affairs

#### **The OECD Code of Liberalisation of Capital Movements is an international co-operation device**

The OECD Code is a key element in the international framework for economic co-operation since the post-war period. While the GATT was adopted to oversee open trade, and international current payments and transfers were brought under the jurisdiction of the IMF's Articles of Agreement, the OECD Code has, since its inception in 1961, promoted a collective view and common disciplines on capital flow management and liberalising policies among adhering countries.

Currently, thirty-five OECD members, including twelve G20 countries have adhered to it. Since 2012, the Code is also open to non-OECD countries, which can adhere without any engagement to join the OECD. All Adherents have an equal say in the governance of the agreement.

The establishment of the Code in 1961 was based on several premises validated by evidence and experience:

- An open multilateral regime for international capital flows, which also takes into account countries' own circumstances, serves the global economy better than closed capital accounts. The Code favours a gradual liberalisation approach (giving priority to liberalising long term investment), which allows each Adherent to progress at its own pace.
- Reintroducing capital flow restrictions can play a role in specific circumstances. In these circumstances, transparency and international co-

operation are important. While restrictions may be considered justified from an individual country's viewpoint, a "beggar-thy-neighbour" approach to restrictions can lead to negative collective outcomes.

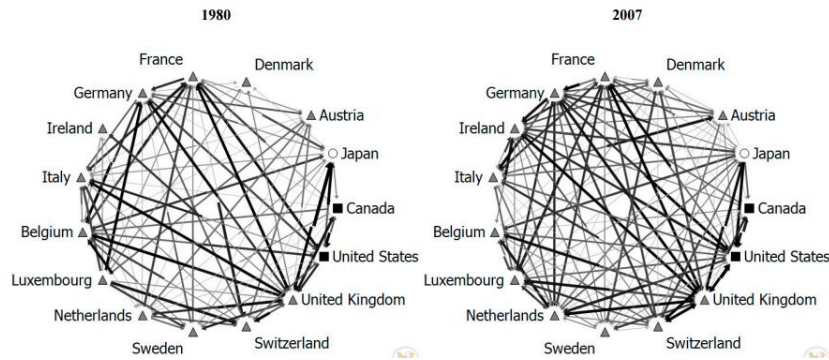
The Code was established at a time when many OECD countries were in the process of economic recovery and development and when the international movement of capital faced many barriers. When the Code was first established, its coverage was rather limited. Since then, national economies have become more integrated, financial market regulation more harmonised and financing techniques more sophisticated. Over time, the Code has been revised to reflect both these changing economic realities and new aspirations of adhering countries.

Currently, important momentum has built up for another review of the Code to verify and ensure its continued relevance. The current policy environment around capital flows has moved multilateral co-operation, openness and transparency to the top of the policy agenda. The global financial and economic crisis of 2008 left the international monetary system with vulnerabilities caused by volatile capital flows and the spillover effects from diverging national policies. On 17 March 2016, Adherents adopted terms of reference for the update of the Code and there has been strong encouragement to proceed with in-depth technical discussions on the review through the G20 forum.

The OECD Code can be seen as a capital liberalisation "north star" - it signifies a desired common outcome that all current and potential adherents strive to reach, while taking account of country-specific circumstances. Article 1 of the Code spells out the central idea: members subscribe to the general aim of progressively eliminating restrictions on capital movements between each other. The remaining provisions describe the framework under which Adherents shall work towards reaching this goal.

### **The Code has successfully created a global dialogue on managing capital flows without undue restrictions**

The world economy has become considerably more financially integrated since the 1980s. Minoiu and Reyes (2011) have illustrated this interconnection between a few OECD countries in the chart below. This has been a result of gradual liberalisation and the increasing sophistication of the world's financial systems.

**Figure 4.1: Global financial interconnectedness**

Source: (Minoiu, Reyes 2011)

The Code has supported liberalisation in a multilateral setting with the presumption that, overall, an open multilateral regime for international capital flows serves the global economy better than closed capital accounts. The Code supports a liberalisation process without clauses for reciprocity - an adhering country should benefit from the liberalisation measures of other adherents regardless of its own degree of openness.

Importantly, there is an understanding that individual country circumstances matter and new adherents can join the Code with a list of reservations tailored to their needs, risks and circumstances, and a commitment to their gradual and progressive removal. Article 2 of the Code protects the right of Adherents to reintroduce and maintain measures which limit liberalisation obligations.

Adherents can lodge a reservation at the time of adherence, when obligations are added or expanded, to any List A operation that they are not in a position to liberalise. This can be done at any time for List B operations.

By lodging reservations, adherents can maintain measures in force while still placing them under the disciplines of the Code's provisions, both procedural (transparency and peer review) and substantive (granting of equal treatment to all adherent countries and commitment to standstill).

For measures with a bearing on List A operations, for which standstill applies, restrictions can be imposed by invoking the Code's derogation clause under Article 7, which is allowed:

- if an Adherent's "*economic and financial situation justifies such a course*", as per Article 7(a); or
- in case of "*serious economic and financial disturbance*", as per Article 7(b); or

- if the “*overall balance of payments of a Member develops adversely at a rate and in circumstances, including the state of its monetary reserves, which it considers serious*”, as per Article 7(c).

Over the last five years, two Adherents have invoked Article 7 (b). The invocation of the derogations for balance of payments (Article 7(c)) and for economic and financial disturbance (Article 7(b)) are well tested for cases of temporary departures from standstill obligations,<sup>23</sup> and there is precedent for long-lasting derogations justified under the “*economic and financial situation*” clause (Article 7(a)) for countries in process of development (a case by case assessment approach applies). However, the use of Article 7 to introduce preventive measures to deal with capital inflow surges that might threaten stability or to cover a measure introduced for an indeterminate time period and intended as a permanent feature of the financial regulatory regime, are not tested practices that are supported by precedent.

An open and transparent international system of orderly capital flows can underpin global growth and stability. In light of the increasingly interconnected global financial and economic system, as well as heightened capital flow volatility, significant value is attached to credible commitment mechanisms that signal to economic partners that investment channels will remain open. This, in turn, can help countries to continue to attract the long-term, high-quality capital needed to support inclusive growth and sustainable development. Since the global financial crisis, worries about financial stability have tended to bring about some protectionist measures. OECD research on economic resilience suggests that greater capital account openness is associated with overall faster growth, as the positive pro-growth effects outweigh the possible negative impact on financial stability. Capital flow restrictions are second best solutions to be used when alternative policy remedies appear ineffective to address stability concerns. Resilience is best achieved through sound macroeconomic policies and structural policies, including reducing the tax bias towards corporate debt and lowering barriers to FDI.

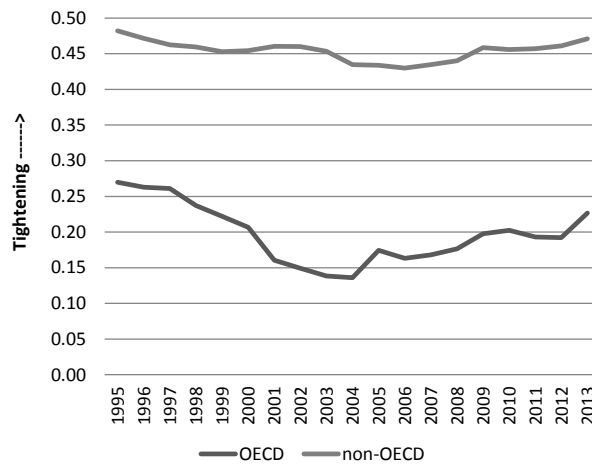
### **Restrictive measures have increased since the crisis and this is reversing a liberalisation trend**

A number of empirical studies have recorded the increase in capital flow restrictions globally. Fernandez et al (2015) have updated their comprehensive index of capital account restrictiveness using traditional residency control measures. Forbes, Fratzscher and Straub (2013) report increases in capital controls and macroprudential measures among emerging markets. Beck, Beirne, and others (2015) summarise sets of policy measures which have used the restrictiveness of

<sup>23</sup> These clauses have been used 30 times since 1961.

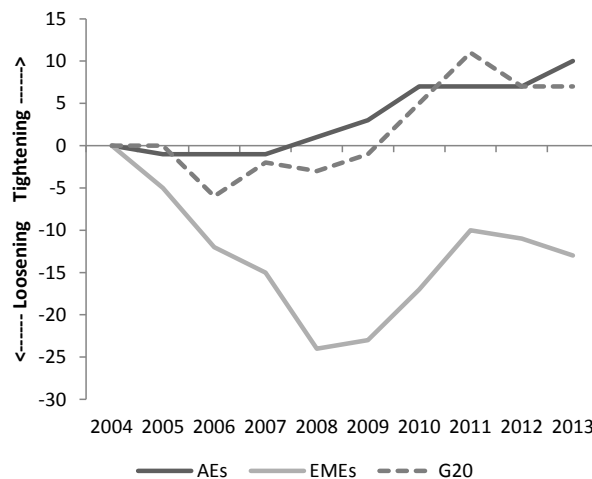
countries' capital accounts and that contributed to financial fragmentation. OECD research (De Crescenzo et al, 2015) shows that, in addition to traditional residency-based capital controls, a lot of measures that target flows based on the currency of operations and are called currency-based have emerged under the mantle of macroprudential measures.

**Figure 4.2: Index of capital account restrictiveness**

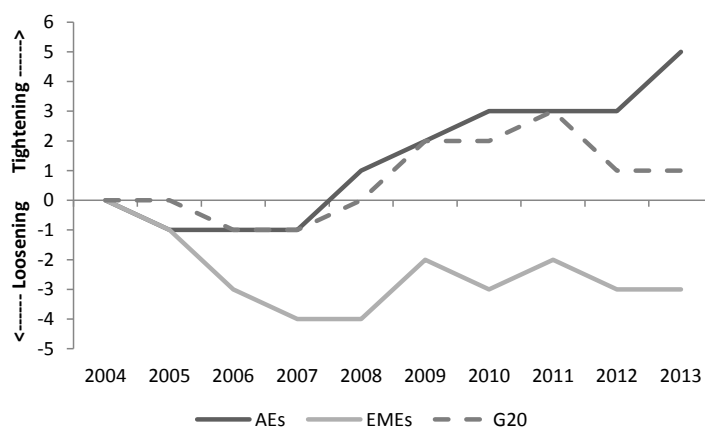


Source: Fernández, A., Klein, M., Rebucci, A., Schindler, M., Uribe, M., "Capital Controls Measures: A New Dataset," NBER Working Paper no. 20, 970, February 2015

**Figure 4.3: OECD (2015) index of currency-based measures (CBMs)**





**Figure 4.4: OECD (2015) index of CBMs targeting FX liabilities of banks**

### **A review of the Code is needed to take account of this changed policy environment**

The Code review process provides a timely and important opportunity to advance consensus on the desirable features of a multilateral regime for cross-border capital movements. On 17 March 2016, Adherents adopted terms of reference for the update of the Code. The purpose of the review is to strengthen the Code and to ensure its continued relevance. The review of the Code will also improve clarity and predictability in the implementation of the instrument, as well as the transparency of specific measures introduced by Adherents. Ultimately, work on the review will be a contribution to shaping the desirable features of the open, transparent and resilient economy that we want.

Key areas of on-going consideration among participants in the review include:

- a. Reaffirming the broad scope of the Code. This includes considerations of the extent to which levels of reserve requirements, which are higher when applied to operations with non-residents, may amount to restrictions to capital movements in the meaning of the Code. On innovative financial instruments that have been generated by markets since the last review of the Code in 1992, there is an inclination to agree that the list of Code operations is comprehensive enough to include them.
- b. Developing understanding on the treatment of measures with stated prudential objectives. The vast majority of macroprudential measures fall outside the scope of the Code. Preliminary discussions suggest that national adaptations of liquidity coverage ratio (LCR) and net stable funding ratio (NSFR)

requirements differentiating by currency should not be considered as capital flow restrictions. That is already the case for the regulation of net external positions of banks and currency matching requirements for non-bank financial institutions.

- c. Considering the merits of rebalancing the list of operations subject to standstill (i.e. derogation is needed to introduce new restrictions), and the list of operations that is not subject to standstill (i.e. new reservations can be lodged to reflect new restrictions). The Terms of Reference for the review have noted non-residents' deposit accounts with domestic financial institutions as a possible candidate to be moved from the former to the latter category.
- d. Considering ways of strengthening the governance in practice and improving the decision-making process. Serious consideration is being given to formalising the possibility in the Code's procedural articles to elicit inputs from relevant International Organisations to assist adherents in their deliberations on invocations of derogations, other reserved measures under review, on generic emerging issues, and informing their decisions.

Ultimately, the key questions to be answered during the review concern (i) strengthening versus flexibility of the Code in order to support global liberalisation efforts better, as well as (ii) the manner in which currency based measures with macroprudential intent are to be considered under the Code. A successful outcome will be one that boosts co-operation opportunities, ensures state parties that adhere to the Code, but not only, are mindful of the costs of uncoordinated and unfettered regulation that causes spillovers, and furthers the Code's role as a discussion platform for a fair, transparent and efficient response to capital flow volatility.

#### **4.2 Intervention by Otávio Ribeiro Damaso, Deputy Governor, Central Bank of Brazil**

The OECD policy seminar on “Open and orderly capital movements: does international co-operation matter?” was an important event, recognising the Code as a relevant instrument to contribute to the integration and development of countries.

The session “The review of the OECD Code – Towards a global liberalisation framework for capital flows” was a significant opportunity to share a brief understanding of the Code under the current review perspective and, particularly, to present a quick outline of macroprudential measures relevant to all economies, especially for Emerging Markets Economies such as Brazil.

The robust agenda of Brazil, including the key partnership with OECD, demonstrates our appreciation for technical debate and mutual commitment. In this

field, the Code plays a significant global role and is clearly successful as a living and long lasting instrument.

Transparency, co-operation, dialogue, mutual understanding and common discipline are attributes that expand sound bridges and boundaries under responsible commitments. They pave the way to harmonisation of regulation and can lead international capital to flow as a natural outcome – in a prudent and balanced manner, recognising specific circumstances and the policy space of each country.

One of the main objectives of the Code is to ensure clear, comparable, sound and transparent rules on capital flows, essential to allow long-term productive investments, one of the main challenges for all economies, especially for emerging market economies.

Permanent assessment and debate about Code provisions is, of course, a pillar to keep the instrument responsive and feasible. More than that, provisions must also be updated and in line with financial policy makers' main challenge: ensuring financial stability.

Flexibility on the recognition of idiosyncrasies and economic dynamics is a basic condition which is essential for emerging economies.

In this context, it would be worthwhile to highlight Brazil's experience with macroprudential policies adopted during the period 2009-2011, including outcomes and motivations to implement these measures which were, adopted to address financial risks and, in a broad sense, to reinforce economic stability.

At that time – the second half of the last decade – Brazil presented quite positive economic prospects, mostly resulting from both the global financial and economic environment, as well as from the macro and microeconomic reforms implemented by Brazilian authorities in preceding years.

The country could, then, sail well through the very first period of the 2008 global financial crisis, counting on a sound, well capitalised and well-regulated financial system, with adequate liquidity buffers and development of the local financial market. Not to mention potential new consumers, originating from the growing middle class.

This encouraging environment, together with the high level of global financial liquidity and the commodity price cycle, resulted in a surge of capital inflow – quite acute in some periods and with an increasing share of short term flow.

The record level of net capital inflow was achieved right before August 2011 – around USD 130 billion (12-month basis). This figure represented 6.1% of GDP and it is quite significant when compared to 2.7% of GDP (average from 1995 on). In this context, the Central Bank of Brazil adopted both an international reserve

accumulation policy, which in that period increased by USD 158 billion – around 22% per year, as well as a policy to withdraw excess of liquidity in the domestic market resulting from this surge of capital inflow.

Despite these policies, domestic credit continued to increase and averaged 18.3% y.o.y. for the period 2009-2011. Consumer and car loans, as well as housing, were the main responsible for the intense credit growth. All these movements, including the possibility of reversals (sudden stop) were clearly risk factors to financial stability and triggered an adequate policy response, ranging from prudential to traditional macroeconomic measures.

On the macroprudential side, the following measures could be emphasised as addressing the impact of excess liquidity over the domestic credit market:

1. Increase of the reserve requirements (from below 20% of total deposits to 35%);
2. Higher capital requirement on consumer credit over 24 months – total capital required from institutions for these loans from 8% to 16.5 of Risk Weight Factor (RWF);
3. Caps on Loan to Value (LTV) and Debt/Loan-to-income (DTI) ratios;
4. Limit on maturity mismatches; and
5. Tax on domestic credit (from 0.0082% to a cap of 3% – previously 1.5%).

Concerning measures to address the deteriorating composition and negative impacts on financial stability of intense short term capital flow, I would mention higher tax on external credit inflows with lower maturities and tax on portfolio investment.

It must be stressed that capital inflows were one of the most important transmission channels into Brazil of quantitative easing policies from advanced economies. In addition, the impact of capital inflows on credit aggregates and credit risk is particularly significant, which lead us to a natural conclusion about the relevance of macroprudential measures on capital flows to address financial stability risks.

The policy action was quite effective, having addressed vulnerabilities, such as composition and volatility of inflows, liquidity allocation and the credit expansion – including maturity lengthening. It must be stressed that the measures were also quite relevant for the following years, when global economic conditions began to change and Brazilian terms of trade deteriorated.

At this point, some rhetorical questions remain: what would be the real financial and economic condition in Brazil without the adoption of macroprudential measures? What would be the spillover effects on other countries – and the impact on international coordination? Would “cleaning” be more effective than ‘leaning’?

What would be the impact of “cleaning” on the liberalisation efforts supported by the Code?

In the context of the Brazilian experience, lessons from our past challenges and the policy space required to address them reinforce our position on the decisive role of the Code as a living instrument and, mostly, with a flexible and, at the same time, “resilient” approach. These qualifications would contribute to reinforce the Code’s effectiveness and its use as a comprehensive tool to support liberalisation efforts.

Thus, a flexible and resilient approach should allow:

- the possibility to consider prudential measures adopted in the past and to be adopted in the future, which, by the way, will not necessarily have the same variables and solutions involved; and
- the possibility of preserving basic purposes and provisions that gave birth to the Code, with particular benefits for sound and sustainable long term investments.

### 4.3 Intervention by Ana Fernanda Malguashca, Co-Director, Bank of Colombia

The central bank is not the lead discussant in the accession process to the Codes, but we are a key player in the subject since we define some of the macroprudential policies that have been discussed during the day. On the other hand, when the process began, I was Head of Financial Regulation and then Deputy Minister of Finance, and therefore responsible for another set of these policies. What I will share here is my personal view of how the adherence process has advanced for Colombia, having been both on the side of the government and now as part of the Board of the Central Bank.

#### 1. Counter-cyclicality

It would be my understanding that the Code allows for the space that the regulatory and policy framework in emerging markets might require in order to introduce macroprudential measures; that was the case for Colombia. However, it might be useful to more formally introduce language that allows for *preemptive* countercyclical measures, which give the capacity to local regulators to increase the marginal cost of some inflows when push factors might be fostering excessive balance sheet expansions and/or asset price valuation processes. The language in

Article 7<sup>24</sup> describes more corrective procedures and it would not be optimal if these processes threaten to deviate the economy from a sustainable trend of liberalisation. In the long term, I would depict the liberalisation process as a trend towards a more open equilibrium, but one that allows for countercyclical reactions that protect the process from crises that would harm the long term goal. These pre-emptive measures can work for a more consistent and resilient process.

Our experience in adhering to the Code is that it provided space for such measures but I think it would be convenient to incorporate the “ex-ante logic” in temporarily increasing the marginal cost of certain flows. The nature of these flows may be difficult to differentiate and therefore it is hard to affect only the portfolio debt flows, found to be the most harmful, which means, among other things, that the unintended consequences that were described in previous interventions will be taken into account when taking the decision of imposing them or not.

If a country is committed to a long term process of liberalisation, it will be evident that, increasingly, the costs of imposing such measures will be higher than the benefits, precisely because the economy gains resilience along with the strengthening of the regulatory and policy framework. The Chilean example is a good illustration in that sense. However, it is imprudent to lose the *capacity* of being able to use the measures, ahead of time.

In the case of Colombia, we have retained the faculty to react counter-cyclically to certain flows, but, looking at recent history it is also evident that resiliency has increased and that we have not used them in a long period of time. As in Chile, we have also witnessed some stabilising effects of foreign asset holdings of local institutional investors; there is an endogenous reaction of currency mismatches to the volatility of the floating exchange rate; and the framework in general has changed the conditions under which we have adjusted to the very strong negative terms of trade shock that the economy has lived through. We experienced very heavy inflows of portfolio investment in the first three quarters of 2014, and then, the extremely strong shock I mentioned in terms of trade, at the end of that same year. Along the inflow period, we increased our international reserves accumulation and strengthened our buffers; put in place some internal macroprudential policies too (probably even before this juncture), but we did not impose capital movement measures. Once the shock hit us, we allowed the exchange rate to absorb it, with a sharp depreciation, which from trough to peak reached levels short of 85%. Fluctuations of this sort without any major disturbance to corporate and financial institutions are new to our history and speak of the resilience that the economy has gained.

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<sup>24</sup> Ed. note: OECD (2016), “Article 7: Clauses of derogation”, in *OECD Code of Liberalisation of Capital Movements*, 2016

Authorities internalise the costs of any capital flow measure in the face of market reaction, as well as rating agencies, and I do not believe that they will be used unless there is a real threat to sustainability, in which case I think they will go in as a protection to the long term liberalisation process.

## **2. Currency risk and liquidity risk in foreign currency**

This is the second issue in which I believe there is need for some space within the Codes, and we need more collective work on the subject. There is still the need to better understand the effects of currency risk and liquidity risk in foreign currency in financial balance sheets; I would concur with what was said earlier in the sense that Basle III may not gather these risks in the magnitude that is relevant, at least for emerging markets.

## **3. New advances**

Finally I want to deviate, substantially I fear, from what we are discussing today, but it seems a pertinent remark to make in the middle of a review process of the Code. The technological advances, all the digital innovations that we are witnessing, from *crowdfunding*, to *cryptocurrencies* will change, are changing rather, the way financial services are provided. Many of these new technologies will create flows that will fall out of the current categories. Residency, place of origination, frontiers in general, will grow blurry with this progress. It will be interesting for this group to elaborate on the challenges of all that is called fintech, in discussion of the Code.

### **4.4 Intervention by Vivek Arora, Deputy Director, Strategy, Policy and Review Department, IMF**

In order for the OECD Code to support capital flow liberalisation efforts, the main question to be addressed is what is the right balance between “strengthening” versus “flexibility.” This intervention addresses this question through the lens of the Fund’s Institutional View, as the IMF experience with its near-universal global membership may be helpful for the OECD Code review. In this context, this note also discusses how macroprudential measures that are also capital flow management measures (CFMs) are covered in the institutional view, and some of the issues that are raised by the proposals now being considered at the OECD regarding capital flow restrictions undertaken with macroprudential intent.

I should say at the outset that “flexibility” and “strengthening” are not in fact mutually exclusive. A framework that helps countries deal effectively with the risks associated with capital flow liberalisation would strengthen, not weaken, countries’ ability to pursue liberalisation, benefit from openness, and avoid crises. The

institutional view tries to strike just such a balance and speaks to the needs of a diverse global membership.

Conventional wisdom for many years assumed that free capital mobility was always the best option for all countries at all times. The benefits of capital flows are well known, and include both direct benefits like the new technology that often accompanies FDI, and so-called “collateral benefits” like financial sector development, macroeconomic policy discipline, and the increased room that capital flows provide for smoothing consumption and enhancing investment.

But a question for many countries that seek to benefit from more open capital flows is how to do so safely. Crises related to capital flows have occurred in recent decades, and macroeconomic and financial volatility has occasionally been hard for countries to manage with traditional instruments. The terms of the debate in the global discussion have, therefore, shifted from ideological considerations of being for or against free capital flows to more pragmatic ones of how to make openness safe for the many countries that are striving to open up and develop their financial systems, as well as for the global economy as a whole.

Countries in our membership are diverse and face varied challenges related to capital flows. Some countries with long-standing restrictions seek to liberalise but avoid the crises that others before them have experienced, some are large or systemic, and are the source of significant capital flows to others, and some with relatively open capital accounts face volatile inflows and outflows that pose challenges for stability. A concern among countries dealing with volatile flows in recent years was whether particular policy responses to capital flows, even if they are motivated by the need to maintain macro-financial stability, would be perceived negatively by investors in light of the lack of any global consensus on appropriate policy responses to capital flows.

### **The Fund’s institutional view on capital flows**

The Fund’s institutional view came into being in this environment, drawing on the experience of our members and fuelled by new research and analysis at the Fund. The institutional view provides a basis for us to provide consistent policy advice and, where relevant, assessments to our near-universal global membership on countries’ capital account policies in our surveillance, lending, and capacity building operations. It does not alter members’ rights and obligations under the Fund’s Articles of Agreement or under other international agreements. The institutional view is expected to continue to grow and evolve in response to new experience, analysis, and feedback from our members—another dimension of “flexibility”. Currently, we have been engaged in a review of experience with policies related to capital flows since the institutional view was adopted, which will also try to identify emerging new issues from this experience.



The institutional view may help contribute to greater multilateral consistency in the design of policy space for dealing with capital flows. At times the approaches embedded in the various multilateral frameworks and regional/bilateral arrangements can seem to pull in different directions, as the G20 has discussed. In part, these seeming tensions owe to different obligations and definitions under different frameworks.

For example, the Fund's institutional view and macroprudential policy framework may regard a particular measure as being appropriate in certain circumstances based on our recognition of the intention of the measure and of its role in helping address macroeconomic and financial stability risks associated with capital flows. The measure can nonetheless be subject to special approval or other requirements in other frameworks (such as reservations or derogations at the OECD, or other procedures in bilateral and regional agreements). These differences can create a perception of conflicting policy approaches.

The institutional view holds that capital flow liberalisation is generally more beneficial and less risky if countries have reached certain levels or thresholds of financial and institutional development. While there is no presumption that full liberalisation is always an appropriate goal for all countries, countries with extensive and long-standing restrictions are likely to benefit from further liberalisation in an orderly manner; that is, liberalisation that is well planned, timed, and sequenced in order to ensure the benefits outweigh the costs.

The institutional view recognizes that capital inflow surges or disruptive outflows can create policy challenges. A key role needs to be played by macroeconomic policies, as well as by sound financial supervision and regulation. In certain circumstances, CFMs can be useful, although they should not substitute for warranted macroeconomic adjustment. CFMs should, in general, be temporary, and be removed once the circumstances that justified their use have abated, and entail the least discriminatory measure (between residents and non-residents) that is effective. This view is nuanced, however, in the case of CFMs that have a prudential intent, which I will discuss next.

### **Capital flow management measures with macroprudential intent**

An area of much discussion in the international community is the treatment of CFMs with macroprudential intent. The institutional view considers that when capital flow volatility contributes to both macroeconomic and systemic financial stability risks, a measure that is designed to limit capital flows in order to address these risks could be seen as being both an MPM and a CFM. Such measures should be the least distortive and most effective, efficient, and direct ones for addressing the policy objective; should seek to treat residents and non-residents in an even-handed manner; and should not be used as a substitute for necessary macroeconomic adjustment;

When the capital flow volatility abates, the measures should be scaled back. However, certain measures could be maintained over the longer term provided they are not substituting for macroeconomic adjustment; for example, if they have a prudential intent and are considered important for managing systemic financial risks. But their usefulness relative to their costs needs to be evaluated on an ongoing basis, including whether there is an alternative way to address the prudential concern that is not designed to limit capital flows.

Two key issues under examination in the context of the OECD Code review are, one, the coverage of “equivalent measures” (measures that are considered equivalent to restrictions), such as MPM/CFMs that seek to secure systemic financial stability by restricting capital flows, as well as MPMs that do not aim to restrict capital flows but may nonetheless in effect do so; and, two, extending the carve-out of prudential measures that are already in place to include new Basel-3 measures with a macroprudential role, such as the LCR (Liquidity Coverage Ratio) and NSFR (Net Stable Funding Ratio), which when they are adopted would otherwise violate the Code.

A pre-determined list of equivalent measures that includes MPMs and a partial carve-out along the above lines would each seem to raise important questions. A list of measures deemed automatically “equivalent” to restrictions, as well as a partial carve-out to include Basel-3 and like measures could encourage the use of particular MPMs because they are not considered equivalent or because they are carved out rather than because they are best suited to the systemic financial stability concerns at hand. Similarly, the list and partial carve-out would need to rely on considerable discretion to determine what measures to include. But the basis for judging the appropriateness of such measures should presumably be their effectiveness in achieving the macroprudential objectives. Separately, the notion of assessing measures based on whether they are “proportional” to observed risks seems at odds with existing macroprudential policy approaches (including the recent IMF-FSB-BIS paper) that advise implementing MPMs in a manner that prevents an excessive build-up of systemic risk.

A broader carve-out may avoid some of these difficulties, although it would raise a different set of issues. A broader carve-out that, for example, encompasses all MPMs or, alternatively, MPMs that differentiate by currency would allow the use of MPMs to focus on whether a particular measure is the best one to address the macroprudential problem at hand; avoid de facto encouraging or discouraging the use of measures based on whether they are on or off a list; and allow measures to continue to be assessed on the basis of their effects on capital flows. However, it is true that such a carve-out could end up including some CFMs because they are also MPMs, raising concerns about the appropriateness of their use, which would need to be addressed.

### **Looking ahead**

Looking ahead, there seems to be a need for more consistency and coherence across the various frameworks for dealing with capital flows, including with regard to how they treat CFMs with a macroprudential intent. Actual or perceived inconsistencies in requirements and expectations across different frameworks may prevent or discourage countries from implementing CFMs – including CFM/MPMs – that are warranted by macroeconomic or financial circumstances.

The Fund has tried to move in a direction that tries to help countries harness the benefits of open capital flows while managing the risks. The design of policy space for dealing with capital flows needs to recognize the varying challenges and circumstances across a diverse membership. It would seem important for the OECD Code to also be more flexible based on lessons from the global financial crisis and developments in the international financial architecture, including with regard to macroprudential regulations and co-operation. If done well, this would enhance the relevance of the Code.

### **4.5 Intervention by Andrew Baukol, Principal Deputy Assistant Secretary for International Monetary Policy, United States Department of the Treasury**

The OECD Code on Capital Movements plays a valuable role in promoting openness of capital flows among countries with relatively well-developed financial systems. A commitment to open capital flows among such countries provides residents with access to the capital markets of counterpart countries, helping to support and expand trade and investment, which in turn promotes economic growth and a rise in living standards. It is important not to lose sight of the rationale for the OECD Code for its participants. There is a particularly strong case for the economic benefits of foreign direct investment (FDI) on recipient economies. And, countries with sound macroeconomic policies (including exchange rate policy) and robust financial systems also reap important benefits from portfolio flows. Moreover, openness to capital flows can help provide discipline to domestic policy makers in setting macroeconomic policies.

The basic elements of the Code remain relevant. These are: (1) a high standard on openness; (2) expectation of movement toward less restriction over time; (3) flexibilities to introduce restrictions on short-term flows and during a crisis on long-term flows; and (4) transparency and peer review. The Code is not meant to be a universal standard for all countries, but an aspirational standard for countries with sufficiently developed financial regulatory systems. Over time, as countries reach a certain level of development, a number have found it to their benefit to adhere to the Code. We are sceptical about lowering the standards of the Code to make it more

attractive to a larger set of countries. This seems to be a misplaced search for more universal relevance.

The Code incorporates important flexibilities. It permits countries to take a reservation from “List B” (generally related to short-term capital flows) at any time. There is a presumption that new restrictions falling within the scope of List B will be temporary. During times of “serious economic and financial disturbance”, the Code also permits countries to derogate from “List A” (generally related to capital flows with original maturity of one year or longer), subject to periodic peer review and an expectation that the country will seek to remove the restriction as soon as circumstances permit. It is reasonable to periodically consider whether existing flexibilities continue to meet the purposes of the Code. We are not aware of cases where countries have been unduly constrained by the Code.

We recognize that volatility of capital flows, particularly short-term flows, can pose challenges for financial stability, and the Code allows countries to impose restrictions in a temporary, targeted, and transparent manner. Often times, however, capital controls are not the answer.

- In considering how to respond to capital flow volatility in a particular country, it is useful to look at the magnitude of flows scaled by GDP (to put a potential surge in proper perspective), and understand the composition of capital flows, particularly if increases are driven by FDI and “pull factors” such as strong GDP growth prospects.
- It is also important to recognize that turning to a capital flow measure (CFM) as a first line of defence – before making needed adjustments in macroeconomic policy and strengthening financial sector supervision – may fail to address the underlying issue. Take the case of a country with an undervalued exchange rate that experiences a surge in inflows. That country may view the capital flows surge as a threat to financial stability, and the country may feel justified in implementing restrictions to slow down capital inflows, but the pressure is unlikely to abate until the undervaluation of the exchange rate is addressed.
- Finally, we need to recognise that capital controls may or may not be effective, and even if initially effective they can lose potency over time as economic actors eventually figure out ways to work around them.

The Code should not stand in the way of a country’s financial stability. The Code Review discussions will examine whether additional clarity or flexibility is needed with respect to policy measures with a stated prudential purpose that also have implications for capital flows. The Code already has significant flexibilities to accommodate such measures. We are open to discussing whether or not certain measures with a stated prudential intent should be subject to notification and

reservation under the Code, and whether remaining maturity of one year may be an appropriate dividing line for the Code in certain circumstances.

The Code review should also consider the evolution in the framework for financial regulation. Already, a limit on the net open foreign exchange positions of banks, a widely-recognized prudential measure, is exempt from the Code. The Code Review will consider the appropriate treatment under the Code of measures that are related to widely-recognized regulatory frameworks, such as currency-specific Liquidity Coverage Ratios and Net Stable Funding Ratios under Basel III. It is appropriate to take into account whether a measure is a commonly shared practice recognized by international standard-setting bodies. We are sceptical about putting the OECD in the role of judging financial stability risks.

There has been some debate as to whether the OECD Code conflicts with the IMF Institutional View. We see the Code and the Institutional View as serving two different, though complementary purposes. The Code is a voluntary high standard and a signal to markets of a country's commitment to openness. The IMF Institutional View is meant to provide a consistent framework for policy advice across advanced, emerging and developing countries. A country's voluntary commitment to the Code requires a country to refrain from turning to controls on long-term flows except in a crisis, and to only rely on controls on short-term flows in a temporary and transparent manner through a reservation. The Code is broadly consistent with the IMF Institutional View's characterisation of temporary and targeted CFMs as a potential second line of defence when macroeconomic policy and financial sector supervision responses prove insufficient. But the Code appropriately holds its adherents to a higher standard with respect to transparency and efforts to keep capital flows open.

## Concluding remarks by Pierre Poret, Director of the OECD Directorate for Financial and Enterprise Affairs

Perhaps I can offer a few takeaways, at least from the perspective of the current review of the OECD Code and related G20 reflections.

The question of the seminar was whether international co-operation matters when it comes to capital flow liberalisation and management.

For many contributors, the answer was **Yes**. This is not surprising. By construction, the capital flows of one country are somebody else's capital flows in the opposite direction. These capital flows affect the exchange rate, the price of your economy vis-à-vis the price of somebody else's economy.

Therefore, depending on the force of a measure that liberalises or restricts capital flows, spillover effects are to be expected. These effects can be positive or negative.

The purpose of international co-operation is to precisely minimise harm and, if possible, maximise benefits in the collective interest.

- From our discussions, it was clear that being transparent about your measures is the minimal degree of international co-operation: by notifying your measure to your peers, you give them an opportunity to ask for consultation, in the event that they have issues to raise. Accountability is one step further and we have the experience of Greece and Iceland observing due process in terms of reporting on the extent to which conditions are met, or not met, to relax capital controls.
- The OECD Capital Movements Code has both transparency and accountability provisions but the Terms of Reference for the review provide for an examination of the scope for strengthening these provisions.
- The next level in international co-operation is the dialogue among peers aimed at reaching a collective understanding of least distorting measures and best practices. We had good discussions today on the interface between capital flow restrictions and macroprudential policies, in particular on the potential merit of measures targeting both sides of banks' balance sheets, as opposed to their FX liabilities in terms of addressing liquidity and other financial stability risks while being neutral on capital flows and the exchange rate. These discussions will continue in the context of the Code and its review.
- And last in the international co-operation chain, we have the situation of large economies with still-restrictive capital accounts, but in the process of opening up, thereby wishing to contribute their full part to a truly open and

integrated global system. This is to be welcomed. Much of the literature seems too focused on small open economies, but the implication for the global system of large closed economies wishing to pursue the liberalisation path of their peers that have already joined the OECD Code is something that still needs to be better informed. This seminar is a first step in this direction.







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