

Summary of Discussion
“Capital Flows and Macro Prudential Policies”
By William White

Second IMF Financial Stability and Systemic Risk Forum

Washington DC

14 March, 2014

Introduction¹

The fundamental premise underlying the discussion at this seminar was that capital flows, driven by the financial cycle in Advanced Market Economies (AME's), could have highly disruptive effects on Emerging Market Economies (EMEs). The discussion was based on two presentations made by Pierre Olivier Gournichas and Anton Korinek respectively. The first explored the conditions under which a floating exchange rate regime might not be an optimal choice for an EME, leading on to consideration of the possible merits of their introducing capital controls and macro prudential policies. The second rather focused on how the introduction of such policies might themselves have externalities which might be best dealt with through a process of international policy coordination.

Before proceeding to the discussion of the seminar topic itself, it is worth noting that a number of participants noted other problems that have also contributed to the current "fragility" in global markets. A number of participants suggested that the rapid expansion of credit in EME's in recent years was largely due to domestic policies, with capital inflows acting to exacerbate related problems. One participant suggested forcefully that policy makers had erred in following policies that sought to maximize welfare. Rather, given the degree of uncertainty about how economies really work, they should have directed their policies to avoiding the "truly bad outcomes" that have in fact materialized. I suggested in a similar vein that that treating the economy as a complex adaptive system leads to the conclusion that we are always potentially on the edge of crisis. One reason is that the private sector will always push the limits of stability in trying to be both efficient and innovative. The public sector then has the responsibility for introducing measures to promote the "stability" (dampening endogenous cycles) and the "resilience" (in the face of exogenous shocks) of the system. It was noted

¹ Since the meeting was held under Chatham House rules, the only references made by name are to the authors of the Power Point presentations that motivated the discussions.

that this was never an easy task, particularly if innovation was rapid and the public sector overseers failed to keep up.

Crisis Prevention: What is the Problem?

It seemed generally agreed at the seminar that financial cycles (typically longer than business cycles) can be observed in AME's and that these have always had disruptive effects on EME's. However, today we are witnessing this in a particularly virulent way, with central banks in AME's having moved the policy rate effectively to the Zero Lower Bound and their having engaged in a wide and unprecedented variety of other expansionary policies. This has tended to push down long rates in AME's as well.

As for identifying effects on EME's, numerous references were made to "currency wars" and to the evident effects on EME's of the mere mention of the possibility of "tapering" by the Fed. Long bond rates in EMEs had also become increasingly correlated with bond rates in AME's, contributing to financial instability via excessive maturity transformation. One discussant provided an overview of the many channels in the transmission mechanism of easy money from AME's to EME's and then back again, a process which also increased liquidity at the global level. Both Korinek and the same discussant observed that the instruments through which capital can flow could change over time, and that bond market flows to EME's had recently increased in importance relative to international intermediation through banks.

Focusing more narrowly on the flows from AME's to EME's, the first link in the chain of causation has to do with the setting of monetary policy, at the Fed in particular. Shin and others have convincingly shown how this drives leverage, especially at the large banks with global reach. Of particular importance seems to be the influence of the policy rate on perceptions of risk (as reflected in the Vix), which drives down estimates of Value at Risk. Increased leverage in turn leads to capital inflows into EMEs, potentially leading to or exacerbating a number of problems. Depending on the policy response, these inflows could lead to an

undesirably appreciated exchange rate, higher domestic inflation and/or “imbalances” of a variety of sorts (higher asset prices, real side misallocations etc.) that could contribute to “boom- bust” credit cycles.

Crisis Prevention: What is the Solution?

The organizing principle for finding solutions is to examine how each link in the transmission chain might be broken or minimized.

The Fed should “internalize” the “externalities”

A number of participants, mostly from EME’s, suggested that the problem begins with central banks in AME’s, especially the Fed, failing to take into account the externalities associated with their policies. In effect, the Fed is setting monetary policy for the whole world, but it does so solely on the basis of what is good for the United States. Indeed, given domestic legislation it would seem that it can do nothing else. This might have been expected to lead on to a discussion of the International Monetary System (or currently Non System), but it did not. Only one participant noted that, under the French chairmanship of the G 20, an attempt was made to suggest rules for adjustment for countries with large current account surpluses and deficits respectively. This had foundered on Chinese and American resistance and the preoccupying onset of the euro zone crisis.

Other means to treat the problem at its source

The next link in the transmission chain has to do with the effect of easy money on capital outflows from AME’s. Korinek suggested that policymakers might target the source of these flows. Indeed, he suggested this is already happening in that, under Basel 3, “host supervisors” can request “home” supervisors to raise capital requirements on banks acting as the source of worrisome capital inflows. It was disappointing that no one addressed directly the question of the leverage cycle at big banks and what (if anything) might be done about it to reduce the problem of excessive international capital flows.

Some delegates indicated they were particularly skeptical that other sources of inflows (say, large but unleveraged asset management firms) could be controlled

in any practical way². One participant made the point that many of the sources of inflows were actually owned or strongly influenced by governments of AME's. Such governments would be doing everyone a favor if they prevented these quasi governmental institutions from acting imprudently, as they often did.

Self protection through floating

Given that it was unlikely that the problem would be adequately addressed at source, what can EME's do to protect themselves? There was general agreement with Gournichas that, given the limitations of timely fiscal tightening to support a fixed exchange rate regime, adopting a floating exchange rate regime (anchored in domestic price stability) had much to recommend it. That said, there was also sympathy for Gournichas' complementary suggestion that capital flows could still cause significant problems. As one delegate put it, in the real world there will always be some ambiguity about which regime is better.

Remaining concerns included substantial exchange rate overshooting, given that the theorem of Uncovered Interest Rate Parity only seemed to apply over long periods. One delegate noted that there were empirical studies indicating that momentum trading could be extremely profitable over extended periods. Perhaps of even greater concern were what Korinek called "financial externalities". Increases in the exchange rate lowered the domestic value of debts denominated in foreign currency. This made further loans easier to get (in whatever currency) and generated a degree of exuberance that could easily turn irrational. The dynamic was very similar to that created by an increase in the value of domestic assets with the two phenomena often appearing together³.

Considerations such as these also had important implications for the conduct of monetary policy in EMEs. If tighter monetary policy attracted capital inflows and a stronger exchange rate, overall financial conditions could actually become easier

² A recent paper by Floris, Shin and Kaphyap points in the direction of Korinek's proposal. Their paper suggests that the behavior of big asset management firms can have systemic implications for the financial system, even when they are unleveraged.

³ See the two recent articles by Korinek in Vox

rather than tighter. This insight is what caused Helene Réy recently to conclude (at Jackson Hole) that policymakers in EME's do not face a "Trilemma" but a "Dilemma". Faced with easy money arising from the financial cycle in the AME's, and recognizing the possible perverse effects of a stronger exchange rate, capital controls are their only protection.

Other conventional measures

However, at this IMF conference, participants first discussed other possible responses to these significant market failures. As noted above, fiscal tightening was not thought likely to be practically useful. In contrast, foreign exchange intervention was considered useful, if sterilized, but then this brought on all the problems and risks associated with managing a portfolio of foreign assets. One participant suggested that intervention, if not conducted extremely forcefully ("Swiss style"), could easily encourage even more inflows. He also noted that the government in Brazil had tried to convince speculators to hedge their positions in the real more vigorously, relying on the argument that the "good times" always end badly for those with large exposures. Finally, it was suggested that EME's might issue GNP linked bonds and thus transfer the risks back to the AME's if anything were to go wrong with the domestic economy.

Capital controls and macro prudential measures

Before looking at costs, benefits and tradeoffs, some participants made a preliminary point. It was very important to focus on gross inflows and outflows of capital, as well as underlying changes in the stocks of debt and credit. Net flow data misses important vulnerabilities, not least liquidity risk and the possibility that counterparties could default. In summing up the morning discussion, one participant made a similar point. He noted there were different kinds of problems associated with different kinds of inflows, implying that different kinds of inflows might merit the use of different kinds of policy instruments.

Many participants, most likely brought up in the Neo Classical tradition, seemed uneasy with recommending the use of either capital controls or macro prudential instruments. Nevertheless, I sensed more unease with the former, and a grudging

recognition that both might have their uses in different circumstances. As Gourchinas put it “Different countries have different tool boxes and different forms of governance”. Since each instrument has its pros and cons, a lot of judgment would be required.

As for the merits of **capital controls**, a wide variety of views were expressed. Some noted that they interfered with the efficient allocation of capital internationally. In response, I noted Rey’s contention (in her Jackson Hole paper) that there was very little evidence that such flows had contributed significantly to growth. As for their effectiveness, some felt they could be made effective. Others noted that they became more porous with time. Specific references were made to recent measures introduced by Korea. While they seem to have been quite effective, there is still uncertainty as to whether they are better classified as capital controls or macro prudential instruments⁴.

There was a more extensive discussion of the merits of **macro prudential instruments**⁵, though again no firm conclusions. A number of participants did feel they could help to constrain the potential systemic damage associated with credit expansion driven by capital inflows. Others were less sure. While one participant noted that these measures had been in wide spread use some decades ago, before the cult of “market efficiency” became dominant, many participants still expressed great uncertainty about their efficacy in reducing “procyclicality”. As well, there were many practical uncertainties. For example, what instruments should be used and in what order?

An even more important issue is what indicators should be used to trigger tightening? Should emphasis be put on parsimonious models of the Borio-Lowe

⁴ These measures include the 2011 levy on non deposit foreign currency liabilities of both domestic banks and the branches of foreign banks. A regulation on the foreign exchange derivatives position of banks was also introduced in 2010. The Advisory Task Force on the Codes, meeting in Paris, is still assessing whether these measures conform to the OECD Codes of Liberalisation of Capital Movements.

⁵ Perhaps it would be better to say “instruments used for macro prudential (or systemic) purposes”. That is because many of the instruments themselves are actually micro prudential in nature (eg bank capital ratios, leverage ratios, etc.)

type or on Financial Sector Indicators thrown up by “risk map” considerations? Or both? One participant referred to this issue indirectly when he noted that the purpose of macro prudential tightening is to reduce “balance sheet vulnerabilities”. This includes the balance sheets of borrowers as well as lenders. A narrow focus on “risk maps” and “financial stability” (stability of the financial sector) could miss the forest for the trees.

Another set of issues had to do with the incidence of the macro prudential measures. Most such measures focus on constraining lenders, in particular banks. However, since such constraints will only encourage non-bank lending, they might have to be extended to non banks as well. This raises another whole set of practical issues akin to managing systemic risks arising from the “shadow banking sector”. Further, as Korinek noted in his presentation, foreign lenders are increasingly lending directly to domestic borrowers without the use of intermediated credit. How is this to be dealt with? This led to a discussion of the merits of instruments directed to constraining the options of borrowers; eg, loan to value ratios, loan to income, and overall borrowing constraints. Making this work, without full knowledge of the financial situation of all households and corporations (credit registries?) would be very difficult. Nevertheless, Korinek seemed to suggest it might be possible.

A final issue had to do with the joint use of macro prudential instruments and monetary policy. On the one hand, as suggested above, this will be less likely if tighter monetary policy simply attracts more capital inflows. On the other hand, some participants noted that a failure to raise rates plays into the hands of vested interests that gain from low rates. As well, hesitant behavior on the part of the domestic central bank might damage its credibility, encouraging an upward shift in inflationary expectations and still more speculative behavior. Again, there was no consensus as to the best form of action.

Crisis Management

A number of participants reminded us that many years have passed since the beginning of the financial cycle in the AME's. Accordingly, the EME's should now be in crisis management mode, rather than thinking simply about crisis prevention. They have already imported many of the "imbalances" first associated with the AME's, not least a possibly massive mispricing of domestic assets. A more substantial reversal of capital flows than those seen to date could arise from a number of sources. Participants mentioned a disorderly market response to Fed "tapering", a significant downturn in China, more difficulties in the euro zone, a highly synchronized withdrawal by big asset management companies, fear on the part of retail investors and contagion via ETFs. In short, there was much to worry about.

Moreover, in such circumstances, measures to support the economy of EME's might not prove effective. As one participant said, "asymmetry is a crucial part of reality". Macro prudential measure might be even less effective as an accelerator (if reversed) than as a brake. Moreover, easing monetary policies could easily run into a liquidity trap or a collapse of the currency if the economic fundamentals in the country in question were not deemed "sound". This led one commentator to emphasize the importance of ensuring such "soundness" through ex ante structural reforms, as had been done in Brazil⁶. Another agreed by saying "There is simply no room for bad fundamentals". Evidently, this leaves EME's who have been less attentive to structural reforms in a bad place. Moreover, some participants noted that the markets might actually be less discriminating and punish almost everyone. This led to the final comment that the IMF should be well prepared to help countries that had "sound" fundamentals but nevertheless suffered from capital outflows.

⁶ He noted in particular measures to make the banking system less dependent on foreign funding and more "resilient".

Domestic Governance and International Cooperation

These issues came up throughout the day, but especially in response to Korinek's presentation. On **domestic governance of macro prudential policy**, it was suggested that there should be an "independent" body looking at the buildup of systemic risks in the economy. There was no thorough discussion of who that "independent" body might be, though one downside of giving such powers to the central bank was noted. Macro prudential policies can have distributional implications. Since distributional issues are inherently in the political domain, this implies that their use by central banks might threaten their current "instrument independence". If both traditional monetary policy and macro prudential measures were used to "lean against the wind" of excessive credit growth, this danger would be even greater. Finally, it was noted that each of the major AME's has decided to deal with this systemic oversight issue in a different way. As with so many other issues, there is no agreement on best practice.

As for **international cooperation** concerning the use of macro prudential instruments, Korinek's main point was that these instruments are expected to have spillover effects to other economies and this was generally an efficient outcome. There is then, again in general, no need for international policy cooperation to deal with externalities. However, similar to Gournichas' paper, Korinek then went on to outline a number of cases in which international cooperation might nevertheless be warranted. This proposition seemed broadly accepted by the participants though there was little discussion of the practical examples referred to by Korinek. Rather, participants seemed more preoccupied with how international cooperation might be expedited in a world in which each country's institutional structure for dealing with systemic issues was different. As Henry Kissinger once put it, "When I want to call Europe, who do I call?"

Finally, Korinek raised the issue of whether it was better to have internationally standardized regulatory frameworks or diversified ones, and presented cogent arguments for each. In this context, I returned to the idea that we should treat the global economy as a complex adaptive system. From this perspective, regulatory standardization has the downside that it can induce the major players

to react in the same way to common shocks. This seems likely to make the system less resilient rather than more resilient. It is a common finding in complex systems that diversity is stabilizing.

Conclusion

While it is difficult to identify common (much less strongly held) policy views on the part of the participants, they did not rule anything out. It was recognized that, in the real world, there are a lot of uncertainties and tradeoffs and the need for tough judgments will always be with us. The discussion was extremely lively and at least clarified some issues and moved the debate forward. A similar meeting is likely warranted next year as well. At the least, it could provide an occasion to review any analytical progress made, by deliberations both at the IMF and in other fora, on important issues related to financial stability and systemic risk.