Monetary spillovers? Boom and bust? Currency wars? The international monetary system strikes back

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Introduction

I am grateful to Jaime Caruana and Claudio Borio for having invited me to this important meeting. After my brief experience as Minister of Finance in Italy, it is nice to be back in the more stable world of central banking where I have spent most of my professional life.

I hope I will be forgiven for having selected a title for my remarks that may sound too jocular for this occasion and in view of the seriousness of the underlying issues. But a review of the recent academic literature in the post-global crisis period reveals that terms such as "spillover", "boom & bust" and "currency war" have become quite common as economists increasingly try to attract the attention of potential readers using all kinds of verbal "special effects" in the titles of their papers. Even the last Annual Report (2014) of the BIS makes explicit use of this terminology.

In parallel with this trend, I have noticed, again in the literature, a welcome return to front stage of an old and almost entirely forgotten character, the International Monetary System (IMS). The concept was mothballed as a rule-based framework for stability-oriented international policy cooperation many decades ago, only to be periodically dusted off on the occasion of ritual celebrations of round anniversaries of the Bretton Woods Conference. The reason for this revival may be that economists are again feeling the need to look for a "systematic and systemic" approach to the many unexpected and intractable issues that the global crisis has produced. I do not know whether this is true, but I have detected sufficient elements to put together a tentative script for the IMS to "strike back" as in the famous science fiction saga of "Star Wars".

In my remarks today, I will review the three aspects of the current policy debate that I have mentioned. These will be examined separately, but they are components of the same global economic problem and I will make frequent cross-references to highlight the interconnections among them. My analysis would follow the lines that Tommaso Padoa-Schioppa and I indicated twenty years ago in a paper we wrote to celebrate the 50th anniversary of Bretton Woods (Padoa-Schioppa and Saccomanni

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1994). We argued that the Bretton Woods system had gradually been replaced by a "market-led international monetary system" in which global financial markets determined the creation and the distribution of international liquidity and the level of exchange rates. We believed that it was essential for national and international monetary authorities to fully understand the unwritten rules and conventions of the market-led system in order to ensure the stability of the world economy. In subsequent work (Saccomanni 2008), I concluded that a key factor in the recurrent bouts of international financial instability had been the interaction between the monetary policies (both current and expected) of the major advanced countries and the working of global financial markets. Moreover, I argued that a central role in determining the intensity and the implications of this interaction had been played by the behaviour of the exchange rates of these same countries. In this conceptual framework, monetary spillovers, financial cycles and exchange rate disturbances are in fact steps of a sequence that has become by now a standard feature of episodes of financial instability. In the end, I will review what the implications are for policy-makers, at both national and international levels, of this state of affairs, which is clearly sub-optimal from an economic, social and, ultimately, political point of view.

Monetary spillovers

In its 84th Annual Report last year, the BIS forcefully made the point that international financial markets have been "under the spell of monetary policy", showing a keen sensitivity to the impact of monetary policies, actual or expected. It used not to be that way. There were indeed many episodes in the past in which markets were taken by surprise, most famously in 1994, when the unexpected increase in the policy interest rate by the Federal Reserve led to the collapse of the market for government and corporate bonds world-wide, paving the way for the "Tequila crisis" in Mexico. The current spell originates from the conventional and unconventional monetary policies adopted by the major advanced economies since 2008. Policy rates have remained at very low levels for an unprecedentedly long time; long-term interest rates have fallen to historical lows; credit spreads have been compressed across asset classes, including emerging market economies' (EMEs') debt securities and high-yield corporate bonds. This has led to a dramatic increase in global liquidity and, in the context of uncertain growth prospects for advanced economies, to large capital inflows to EMEs. The composition of these flows has seen a decline in bank lending and an increase in portfolio flows, which tend to be more volatile. Especially for countries with relatively underdeveloped and shallow financial markets, large capital inflows may feed credit and asset price bubbles. Moreover, by causing the exchange rate to appreciate, inflows may create external imbalances. Contrasting the impact of such inflows may be costly and not necessarily effective. However, these trends can be quickly reversed if markets become convinced that a change in the monetary policy stance of major countries is imminent.

It is in this context that the so-called "taper tantrum" developed in May-June 2013, at the first hint that the Fed's stance might become less accommodating with economic recovery taking hold in the United States. Tensions in the financial and foreign exchange markets of EMEs were very acute, but did not last for long. The fears that an actual tightening of the US monetary policy would have a significant impact on a global scale have so far turned out to be exaggerated. Bond yields in the US have gradually declined back almost to the levels recorded before the tantrum, in spite of the fact that in the meantime the Fed's tapering has been completed. Several factors may have played a role in moderating market reactions: a more effective communication by the Fed regarding the gradual process of terminating QE and the need to be patient about the possible increase of the federal funds rate; a market perception that the global equilibrium level of interest rates had declined given the prospects for slower growth in Europe, Japan and EMEs; and the expectation of offsetting QE strategies in Japan and in the Eurozone.

Does this mean that there is no reason to worry anymore about the risk of monetary spillovers? I think that such a conclusion would be premature. The global scenario is characterised by a high degree of uncertainty regarding the economic situation and policy stance in key areas of the world, which is reflected in high volatility in financial and currency markets. Among the main factors, the following are



cause for concern: the slowdown of economic activity in EMEs, which is highlighting persistent structural weaknesses and imbalances; the rapid fall in oil and commodity prices and the consequent deterioration of the external position of exporting countries; and different expectations about the actual impact of the recent QE initiatives in the Eurozone and the future shape of a further expansion of the QQE program in Japan. Moreover, the decline in US bond yields could mean that either the markets are currently underestimating the Fed's future policy tightening, or that term premia have moved back into negative territory; in either case, an abrupt market correction cannot be excluded. In these circumstances, a clear sign of change in the Fed's stance may trigger a reassessment of investors' strategies. If these changes are abrupt, the resulting asset price and exchange rate corrections in specific emerging markets could induce a generalised risk aversion and have broader contagion effects.

Financial cycles (i.e. boom & bust)

A monetary spillover could also be at the root of a financial cycle. The issue has been fully analysed by the BIS both in its last Annual Report and in various contributions by its economists, under the leadership of Hyun Song Shin and Claudio Borio. I think it is useful in this connection to recall the BIS definition of a national financial cycle as "the self-reinforcing interactions between perceptions of value and risk, risk-taking and financing constraints which translate into financial booms and busts". The concept sounds a bit abstract, but the BIS has developed a rigorous methodological approach to measure the phenomenon. To define and measure a global financial cycle is of course much more complicated, but several important attempts have been made. A global cycle can be based on movements of different quantity and/or price variables; or, it can be driven by shifts in global investors' risk aversion, as proxied, for example, by the VIX (which is a combined measure of uncertainty and risk aversion); in turn, changes in risk aversion have an impact on both quantity and price variables.

The literature on financial cycles is rapidly expanding, and empirical tests confirm their existence. Hélène Rey (2013), focusing on quantity variables, finds that most types of net capital inflows are positively correlated with one another and across different geographical regions and that there is a negative correlation of net capital inflows with the VIX, even at a geographically disaggregated level. Maurice Obstfeld (2014), focusing on price variables, shows that long-term interest rates are significantly affected by US long-term interest rates and also by the VIX; and moreover, that the existence of different exchange rate regimes does not alter the impact of US long-term rates on other countries' long-term interest rates. Hyun Shin (2013) has developed a measure of global liquidity which "displays a highly procyclical pattern, tracking the upswing before the global financial crisis, the sharp decline with the onset of the global financial crisis and then the subsequent recovery afterwards". Moreover, the global liquidity aggregate reflects also the movements of the exchange rate of the US dollar vis-à-vis other currencies and "the reinforcing interaction of the exchange rate and the local currency aggregates".

Based on this evidence, Borio (2014) has argued that the Achilles heel of the current IMS is that it amplifies the "excessive financial elasticity" of domestic monetary and financial regimes, i.e. "their inability to prevent the build-up of financial imbalances in the form of unsustainable credit and asset price booms that overstretch balance sheets, thereby leading to serious systemic banking crises and macroeconomic dislocations". This definition seems to me quite appropriate also to describe events that took place in the EU before, during and after the global crisis landed on our side of the Atlantic.

These developments in the research on the functioning of global financial markets confirm that procyclicality is a fundamental feature of their behaviour. But what is the main cause of procyclicality? As I have argued in the past (Saccomanni 2008), although global financial intermediaries operate in a highly competitive environment, they have uniform credit allocation strategies, risk management models and reaction functions to macroeconomic developments and credit events. Thus, competition and uniformity of strategies combine, in periods of financial euphoria, when the search for yield is the dominant factor, to generate underpricing of risk, overestimation of market liquidity, information asymmetries and herd



behaviour; in periods of financial panic, when the search for safe assets is predominant, they combine to produce generalised risk aversion, overestimation of counterparty risk and, again, information asymmetries and herd behaviour.

Currency wars

Monetary policy changes in a key country have an obvious impact on the exchange rate of its currency vis-à-vis other currencies. At the same time, exchange rate movements can have an impact on investors' strategies and contribute to amplifying the impact of monetary spillovers and to triggering a financial cycle. Whether or not these interactions constitute hostile initiatives in the context of a "currency war" is not very relevant for an assessment of the viability of the current IMS (for an alternative view, see Eichengreen 2013). The fact is that, when interest rates are near or at the zero-lower-bound, the exchange rate becomes the main transmission channel of monetary policy. So when major countries embark on quantitative easing strategies, their impact is likely to be felt on a broad spectrum of EMEs. Indeed, exchange rate movements tend to be, or are expected to be, quite large and their international repercussions could be quite significant. Moreover, there is a growing consensus that flexible exchange rates act as a shock absorber only in a limited way, and may also contribute to spreading spillovers further (Rawdanowicz et al. 2014). Governor Rajan has eloquently endorsed this view: "Indeed in the recent episode of emerging market volatility after the Fed started discussing taper in May 2013, countries that allowed the real exchange rate to appreciate the most during the prior period of quantitative easing suffered the greatest adverse impact to financial conditions" (Rajan 2014). This may be due, inter alia, to the fact that foreign exchange is increasingly traded as a financial asset per se, with little relation to the real flow of commercial or direct investment transactions between the currencies paired in the exchange rate. Exchange rate movements therefore may not necessarily reflect changes in the underlying fundamentals of countries and in their competitive positions.

The "currency war" outcry has not been voiced only by the monetary authorities of EMEs. In the United States, there is another school of thought that maintains that a war is indeed being waged by a group of "currency manipulators" - mostly, but not exclusively, in Asia - who intervene heavily in foreign exchange markets to prevent the appreciation of their currencies vis-à-vis the US dollar and the euro. Fred Bergsten (2014), a constant advocate of reform of the international exchange rate regime, has recently proposed introducing reforms in the IMF and the WTO to prevent and sanction competitive undervaluation of currencies and put an end to currency wars. On a different case, Daniel Gros (2015) has argued that the attempt of the Swiss monetary authorities to contain the impact of speculative capital inflows by pegging the exchange rate of the Swiss franc to the euro was in fact an "overlooked European currency war" and that Switzerland had done more to "manipulate" its currency than China.

The IMS strikes back?

The monetary-financial-exchange rate interactions that I have tried to describe are in fact the manifestations of the shortcomings of the current IMS. And indeed some sort of a debate on reforming the system, restoring international monetary order, or promoting international monetary coordination has begun, involving both central bankers and academic economists (see, in particular, Farhi et al. 2011, Taylor 2013, Mohan and Kapur 2014, Rajan 2014, Cœuré 2014). The overall impression, however, is that there is a deep divergence of views and that little progress is being made towards any form of consensus on what should be done to fix the system. Basically, we are still seeing the confrontation of two old schools of thought: the house-in-order approach, based on sound domestic macroeconomic policies plus floating exchange rates, and a more cooperative, pro-active, approach to the management of international financial disturbances.

Just before the "taper tantrum" started, in February 2013, the Finance Ministers and Central Bank Governors of the G7 countries stated their position on these issues: "We reaffirm that our fiscal and monetary policies have been and will remain oriented towards meeting our respective domestic objectives using domestic instruments and that we will not target exchange rates. We are agreed that excessive volatility and disorderly movements in exchange rates can have adverse implications for economic and financial stability. We will continue to consult closely on exchange markets and cooperate as appropriate." It was in substance a reiteration of the traditional house-in-order approach, but in more blunt terms than in the past and with an insistence on the domestic nature of the policy-making process, which I would not have subscribed to had I been participating in that meeting. There was a recognition that "volatility" - a nice euphemism - of exchange rates may create disturbances, but no promise of any coordinated action beyond "close consultation". The statement reflected to a large extent the position of the US authorities, in view of the dominant role of the dollar in currency markets and the influence of the Fed's policy on global monetary conditions. But it is fair to say that it reflected also the position of the European Central Bank (Cœuré 2014), although the views of European governments were more differentiated.

This attitude softened somewhat after the "taper tantrum". Bill Dudley reconfirmed the Fed's opposition to monetary policy coordination, but recognised that "our attempts in the spring of 2013 to provide guidance about the potential timing and pace of tapering confused market participants" and indicated that "we have taken a number of steps in recent years to increase transparency and improve our communications" (Dudley 2014); Stan Fischer argued that "because the dollar features so prominently in international transactions, we must be mindful that our markets extend beyond our borders and take precautions, as we have done before, to provide liquidity when necessary" (Fischer 2014).

House-in-order, greater transparency, better communication, a promise of liquidity: is that enough to stabilise the IMS? There are, of course, different opinions. As we are in Asia, I thought that it would be appropriate to refer to the very frank and illuminating book Julia Leung has just published (Leung 2015). Based on her long experience in the Hong Kong Monetary Authority and Government, Leung outlines the following key aspects of what she calls "an Asian framework", taking for granted that "competitive monetary easing is a fact of life". The Asian framework would include features that are by now uncontroversial, namely that "financial stability should be part of central banks' mandate" and that "monetary policy must be supplemented with macroprudential tools to deal with asset bubbles". However, Leung also feels strongly that "currency intervention is the norm to cope with excessive currency appreciation or depreciation pressure", that "building up foreign reserves has become a significant instrument of self-insurance" and that "capital controls are an essential part of a comprehensive set of tools to maintain stability".

A comparison of the G7 and the Asian approaches highlights the crucial dilemma confronting policy-makers when dealing with financial cycles, which Rey (2013) described as follows: "independent monetary policies are possible if, and only if, the capital account is managed, directly or indirectly, regardless of the exchange rate regime". If international monetary policy coordination is precluded by political considerations and/or the domestic orientation of central bank mandates, then the issue is how to devise an efficient and effective strategy to manage the capital account. It is obvious, at least to me, that this goes beyond the regulatory measures to strengthen the capital base and the liquidity position of banks and financial intermediaries. This process is well underway within the Basel and FSB fora, and it is being implemented in both advanced and emerging economies. But, as Governor Zeti Akhtar Aziz eloquently put it: "Our efforts will not be sufficient to prevent the next mega tidal wave" (Aziz 2014), because, incidentally, shadow banking activity continues to grow unabated. Management of the capital account will inevitably involve the introduction of restrictions on capital movements and/or the adoption of a comprehensive set of macroprudential measures; it will also imply the conduct of frequent currency market intervention and the accumulation of massive precautionary foreign exchange reserves. But it must be clear that in the end the process may lead to a drift towards financial protectionism. Even



macroprudential policies may involve forms of geographical ring-fencing that may hamper the efficient management of cross-border banks and financial intermediaries.

Is this what the world economy really needs? To roll back financial integration and to promote financial fragmentation? And what for? To preserve temporarily the independence of national policies until the next crisis, when all countries will be forced to cooperate under the pressure of events? It seems to be a very shortsighted approach, and it might hamper the growth prospects of the world economy. Rather, I do not see why it should not be possible to improve our ability to prevent and mitigate financial crises by combining the necessary but insufficient house-in-order approach with a realistic reform that would strengthen the instruments and the procedures for managing international financial instability within the institutions that have been created over the years for that very purpose.

Here is where the IMS comes into the picture. There are, at least, four areas where reform efforts could significantly strengthen the current IMS. All areas present difficult political constraints, but a lot of preparatory work has been conducted on each of them and there is no need to start from scratch. A first priority would be to implement the reforms of IMF governance and quotas agreed by the IMFC but still awaiting formal ratification by the US Congress. As this is not considered possible at the present political juncture in the US, the IMF should find alternative ways to achieve the rebalancing of votes and voices in favour of EMEs. The need to move in this direction finds support also among influential American observers (Bergsten and Truman 2014) who feel that IMF reforms should not be blocked because the US refrained from exercising the leadership role it enjoys under the IMF Articles of Agreement. Approval of the reforms will enhance the credibility and the legitimacy of the IMF as the key institution of the IMS.

Another important step in the same direction would be the inclusion of the Chinese renminbi in the SDR in the context of the basket review scheduled for 2015. Although the renminbi is not a fully convertible currency in the terms envisaged by the IMF Articles, its use as a medium of exchange and as a reserve currency has significantly increased in Asia and in major financial centres (Leung 2015). It should be possible to reach a consensus on this reform, which would also enhance the credibility of the SDR by making it more representative of the changed conditions in world currency markets. Whether this step would lead to a new reserve currency regime, as advocated by the Governor of the People's Bank of China (Zhou 2009), remains to be seen. But I see no harm in trying.

A reform of a more general significance would entail the expansion of the global safety nets to an extent sufficient to discourage an excessive accumulation of reserves, which can have a negative impact on economic activity and foreign trade. There is considerable support for this reform from a broad range of officials and economists (see, among others, Fahri et al. 2011, Rajan 2014, Leung 2015). The reform would involve primarily IMF facilities, but should also envisage a greater role for regional arrangements: significant progress has been achieved in the EU in building the instruments and procedures for dealing with systemic crises and the risk of contagion. A full institutionalisation and expansion of the Asian safety net established under the Chiang Mai Initiative should be considered.

However, the most necessary and yet more difficult reform is in the area of international policy cooperation. Here again, an important body of background information and analysis has been assembled since the outbreak of the crisis by the G20, the IMF, the World Bank, the BIS and the OECD. But, with a few exceptions, results of these efforts have been modest so far, to say the least. As noted in the last Annual Report of the BIS, "cooperation is continuously tested; it advances and retreats", and, I may add, it retreats from where it would have been more useful. Sometimes the communication from international cooperation fora tends to broadcast, perhaps not intentionally, a message of the opposite sign, like "it's every man for himself now".

This is not acceptable, and I fully share the view of the BIS that in a highly integrated global economy "the need for collective action - cooperation - is inescapable. (...) At a minimum, there is a need for national authorities to take into account the effects of their actions on other economies and the

corresponding feedbacks on their own jurisdictions". This assessment should be facilitated if national policy frameworks incorporated financial cycles systematically, as argued very convincingly - at least to me - by Jaime Caruana (2014). This would imply that "policies - monetary, fiscal and prudential - should respond more deliberately to financial booms, by building up buffers, and respond less aggressively and persistently to busts, by drawing the buffers down. This calls for longer policy horizons than those currently in place - recall that the financial cycle is much longer than the business cycle. And it calls for governance arrangements that effectively insulate policymakers from the huge political economy pressures that induce asymmetric policies: no one objects during the boom; everyone demands support during bust".

An analytical framework for what I would call "cooperation for the XXIst century" is therefore already available, and it could at least be tested and form the basis for ad-hoc multilateral discussions among the Ministers and Governors of the major countries within the G20, the IMF and the BIS. It is with some surprise, then, that I read that the member governments of the IMFC (2014) last October called for "deeper analysis of risks, spillovers, and the external sector; enhanced and better integrated financial and macroeconomic surveillance; integration of bilateral and multilateral surveillance; and the provision of evenhanded, tailored and well-communicated policy advice", as if nothing had been done in these areas by the competent institutions. The question therefore seems to be more political than technical and, to quote from a perceptive lecture by a former Governor of the Reserve Bank of India, Y.V. Reddy, the real problem is that "short-term motivations at the national level seem to run counter to the longer-term interests of the global economy. There are unmistakable signs of diminishing returns from the G20 (...)" (Reddy 2012).

This is a pity because I believe that governments and monetary authorities have the ability to orient the expectations of global financial markets towards stability objectives, provided they are ready to use all available policy instruments for that purpose. In contrast with what is being increasingly done at a national level, with forward guidance on interest rates, major countries are not taking advantage of the good advice provided by the institutions of international cooperation: they could use it to give guidance to economic agents and market participants as to the likely impact of the stance of their macroeconomic policies on market parameters that are relevant for the working of global financial cycles. Ideally, as I have argued elsewhere (Saccomanni 2014), the output of an enhanced form of international cooperation would be a "multilateral forward guidance" covering both interest rates and exchange rates in such a way as to minimise the risk of destabilising spillovers and financial cycles.

Conclusion

Let me conclude with quotations from two central bankers that I greatly admire, Paul Volcker and Tommaso Padoa-Schioppa.

Twenty years ago, in an important lecture on exchange rate stability, Paul Volcker (1995) stated: "My sense is that we will find success easier than feared by so many - that the market will more often than not respond constructively to a firm and intelligent lead by governments and that exchange rate stability will reinforce prospects for growth. One thing is for sure: without trying, we will never know." Please note the carefully chosen adjectives: *firm* and *intelligent* lead by governments.

Tommaso Padoa-Schioppa (2010), in a masterly Per Jacobsson Lecture delivered a few months before his untimely death in 2010, examined the troubled relationship between governments and markets which has deeply influenced the evolution of the IMS since the end of World War I. He made the point that the function of governments is to provide public goods - that is, goods that markets cannot produce spontaneously. He went on to say that: "Humans sharing common interests constitute groups of different sizes on a scale that goes from the condominium to the population of the world.

Goods like a garden, the judiciary system, navigation on the Rhine, or the biosphere are 'public' for different jurisdictions such as a town, a country, a continent, or the planet. It follows that also the government - as the provider of public goods - needs to be structured at different levels in order to operate in different jurisdictions and to refer to different constituencies. Government must be, therefore, plural and multilevel."

It is sad to note that our governments still hesitate to provide a "firm and intelligent lead" to markets and that, despite their frequent claim that "global challenges require global solutions", our leaders have not yet succeeded in establishing an effective government function at a global level, for the production of the public good of international financial stability.

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