

The Arrival of Asset Prices in Monetary Policy

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Once upon a (not long ago) time, there was a widely established set of blueprints for regimes of monetary and exchange rate policies, one expected to fit not only the full range of economies in the global arena, but also to serve as a guide for international monetary cooperation. Confidence in the effectiveness of those blueprints has been shattered by the scale and simultaneity of asset price booms and busts that led to the current global economic crisis. A reshuffling of views on monetary and exchange rate policies may turn out to be a companion to the revision of financial regulation.

It is now increasingly accepted that, to some degree and extent, mainstreaming reactions to asset price moves in monetary policy is to become a new norm. It is also becoming clear that the previous world of theoretical determinacy and optimum rules of conduct is to give way to less-obvious policy choices and more discretion.

The purpose of this note is to highlight how the special complexity and indeterminacy intrinsic to international monetary-financial relations will deepen under the new regime. In the case of financial transactions between advanced financial systems and emerging markets, there is in addition an asymmetrical impact in terms of higher foreign reserve requirements on the latter.

The determinate world of inflation targeting and exchange-rate corner solutions

“The past 10 years have been the decade of inflation targeting. (...) Narrowly defined, inflation targeting commits central banks to annual inflation goals, invariably measured by the consumer price index (CPI), and to being judged on their ability to hit those targets. Flexible inflation targeting allows central banks to aim at both output and inflation, as enshrined in the famous Taylor Rule. The orthodoxy says that central banks should essentially pay no attention to asset prices, the exchange rate, or export prices, except to the extent that they are harbingers of inflation”([Frankel, 2009](#)).

Asset price cycles were seen as basically harmless – or insignificant as a channel of transmission of monetary policy, as in the case of developing economies without financial depth. Even when the frequent appearance of bubbles started to be acknowledged, the belief – “the Greenspan doctrine” – was that attempts to detect and prick them at an early stage would be impossible to accomplish and potentially harmful. If necessary, resorting to interest rate cuts to safeguard the economy after bubble bursts would be a safer procedure.

Low and stable inflation could then be attained through a forecast-oriented, anticipatory manipulation of basic interest rates, as the single focus for monetary authorities. Movements of

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floating nominal exchange rates would reinforce the effectiveness of interest rates set to target inflation. Stable inflation would also lead to low-risk premiums and higher financial stability.

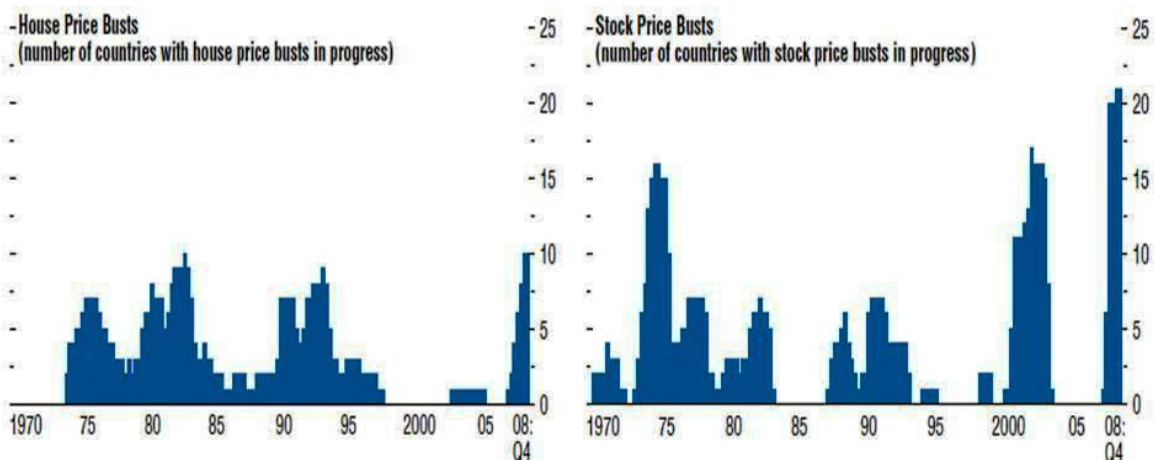
In the case of small countries, fixing the nominal exchange rate and abdicating monetary policy would import stability from inflation-targeting countries. The “Great Moderation” period, with developed economies exhibiting relatively low inflation rates and output fluctuations from the mid-80s onward, seemed to vindicate that confidence.

This world of presumed stable and stabilizing monetary and financial spheres was shaken by the global financial crisis. In hindsight, asset price booms and busts became acknowledged as both increasingly pervasive and harmful, with real-estate and stock-market booms leading to excess U.S. household debt and to fragile asset-liability structures; a generalized bubble burst pushing the global economy to a quasi-collapse.

Endogenous creation of liquidity and the “sea of bubbles”

Chapter 3 of the latest IMF’s “World Economic Outlook” sets forth evidence on the presence of real-estate and stock-market asset price busts over the past 40 years ([WEO - ch.3](#)). The recent experience with widespread busts of both house and stock prices is singular in the last 40 years (Chart 1). However, one can observe not only the frequency of previous episodes, but also that those “asset price busts are relatively evenly distributed before and after 1985 – a year that broadly marks the beginning of the ‘Great Moderation’” (p.95).

Chart 1 – Asset price busts



Source: IMF, “World Economic Outlook”, October 2009 (p.96)

Besides noting the typical economic costs associated with asset price busts, the IMF study detects and points out some leading indicators of busts, namely, “rapidly expanding credit, deteriorating current account balances, and large shifts into residential investment.” As one might nowadays easily expect, with the benefit of hindsight, “inflation and output do not typically display unusual behavior ahead of asset price busts” (p.93). In other words, well behaved inflation and output performance is no guarantee against asset prices acquiring a cyclical life of their own, with potentially dire consequences. The even distribution of episodes of stock market and housing busts before and during the “Great Moderation” (Chart 1) - until the current crisis - is an illustration of that.

Another perspective is offered by The Institute of International Finance (IIF, 2008), one in which asset price cycles since the early 1990s are seen as a sequential process, comprehending a wider set of assets and culminating in the recent widespread financial boom and bust:

“...the U.S. mortgage boom and bust should not be viewed as an idiosyncratic phenomenon, but rather as the latest, and by far the most serious, in a sequence of capital flow cycles which began in the early 1990s, and which have since shaped not only general conditions in financial markets but, more importantly, the global business cycle. Indeed, these capital flow cycles have taken over from policy makers as the key drivers of the global cycle. (...) this increasingly global housing boom and bust is the latest in a series of surges and collapses in capital flows that has been underway since the early 1990s, each of which has played a key role in shaping the global business cycle against the backdrop of what has become a far more stable global policy environment. The previous two major swings—the East Asian/Emerging market fixed income boom and bust of 1992-98, and the Information Technology boom and bust of 1996-2003—preceded the current housing boom and bust (2003-2008, and counting). Each grew out of the other. The conditions created by the bust in one helped shape the boom in the next. (p.1)”

The IIF suggests that the beginning of the “Great Moderation” period in early 1990s also represented a structural break in the relationship between U.S. monetary policy and the overall global business cycle. Whereas previously monetary policy tended to drive business cycles, after the early 90s it became more responsive to capital flow cycles involving factors such as credit booms, binges of large current-account deficit financing, and finance made available to real-estate and other previously illiquid assets – roughly the same factors singled out by the IMF as leading indicators of asset price busts. Along those lines, **Chart 2** splits U.S. monetary policy in the period 1969-2008 into two phases. In the first phase, one can observe the extremely activist role played by Fed funds rates, in a struggle to master the business cycle. Its effectiveness counted then on a tight regulation of private capital flows and financial institutions. Since the early 1990s, however, rates have hovered at lower levels and variations in interest rates have also become less significant.

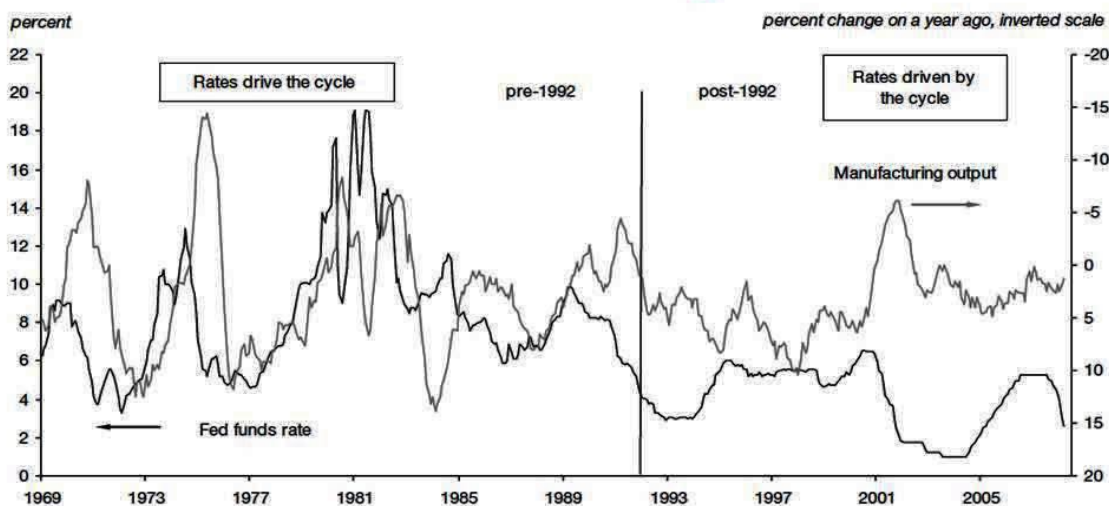
Such a structural break can be associated with three interrelated sets of phenomena:

- (i) To different national degrees, a general move toward fewer capital controls took place, as well as the phasing out of tight financial regulatory frameworks, with the latter taking place in the United States after a prolonged process of erosion.
- (ii) With help from the information technology revolution, that move opened the way for securitization and the emergence of innovative instruments and asset-liability structures (new derivative products, the “shadow banking” system, and so forth). It is well known by now what a powerful “liquidity-generating machine” was set up, one put at full gear by competition and

search for yield. (iii) With the conquest of low inflation and output volatility, short-term interest rates could settle at lower levels and be established in a more preemptive mode.

However, these conditions also created the potential for the emergence of powerful cycles and risks in finance. As the U.S. economist Hyman Minsky had already pointed out in contributions until his death in 1996, long periods of stability in market economies tend to stimulate leverage and debt creation, which in turn lead to endogenously created risks of financial crises. The powerful liquidity-generating machine made possible by that structural break in early 1990s, in combination with the perceived macroeconomic “Great Moderation,” turned out to be a “serial bubble blower.”

Chart 2 Two phases of the relationship between US rates and the US business cycle



Source: IIF, “Global capital flows and the global business cycle”, September 29, 2008

The even distribution of asset price busts before and during the “Great Moderation” depicted in the WEO – except for the recent cluster of busts - derives from its focus on real estate and stock markets. Once a broader set of assets is considered, the IIF view of a structural break in the early-90s comes to the fore, including the emergence of powerful liquidity-generating processes. In any case, both analyses lead to the conclusion that if monetary policymakers are to succeed in their macroeconomic stabilization mission, complacency with respect to asset price cycles will have to be left behind.

Reacting to - not targeting – asset prices

How to integrate asset price cycles into the monetary policy framework? Should policymakers go down the road to the point of incorporating some indicators of asset prices and potential financial vulnerability as components of “Taylor rules?” Should they react automatically to variations in asset prices, as they do in the case of variations in output gaps and goods inflation?

The WEO Report does not recommend treating asset prices on the same footing as the common components of “Taylor rules”. After all, “even the best leading indicators of asset price busts are imperfect – in the process of trying to reduce the probability of a dangerous bust, central banks may raise costly false alarms. Also, rigid reactions to indicators and inflexible use of policy tools will likely lead to policy mistakes. *Discretion is required* (our emphasis)” (p.116).

That does not mean continued complacency. On the contrary, signs of increasing macro-financial risks are now seen as demanding a response from policymakers. Either aggressive monetary policy reactions and/or the resort to time-varying macro-prudential instruments to dampen credit market cycles (acting thus on yield curves, rather than on short-term rates) should be put into action.

Those macro-prudential instruments may be “dynamic provisioning” rules – capital requirements of financial institutions that rise/fall faster than leverage – or discretionary setting of required reserves, in both cases reinforcing – and reducing the burden of – the direction taken by basic monetary policy. In any case, depending to a large degree on a judgment call about whether benign or malign factors are driving asset prices, policymakers should be ready to act.

Such a monetary regime that includes reactions to asset price movements (not targeting) and discretionary choices regarding interest rates and/or macro-prudential instruments is full of complex requirements:

- (i) Correct identification of sources of shocks behind the evolution of credit, investment, balance sheets, and external balances is paramount – a task that is far from being simple and standardized.
- (ii) Requirements for transparency and clear communication of monetary decisions are even more important than in conventional rule-based, forecast-oriented inflation targeting, as the demonstration of consistency with long-term macroeconomic stability becomes trickier.
- (iii) The self-sufficiency of inflation-targeting monetary authorities gives way to the need of information exchange and close consultation with financial supervisory authorities; and
- (iv) During the boom phase of asset price cycles regulators come under intense political pressure *not* to burst the bubble, which creates the illusion of widespread prosperity and is good for political incumbents. A lot of thought need to be given to the political economy of regulation and how to shield regulators from political pressures, especially if we move into more discretionary monitoring and action on asset prices.

Is the propensity to create bubbles a myth?

There are those who still believe that the concern with a supposed propensity for bubble creation has been exaggerated. In fact, one must acknowledge that several idiosyncratic – and removable – factors may have played a role in the making of the current crisis. Some policy or regulatory features may have magnified asset price movements and these features, if addressed, would have reduced the amplitude of the asset price cycle and might have averted such a deep crisis as the one in course. For instance:

(i) The U.S. tax system has a clear bias toward household and corporate indebtedness. The system of mortgage interest deductibility has led to over consumption and undermined the impact of moderate movement of interest rates on house prices. Moreover, it was a key part of a system that enabled consumers to purchase homes with virtually no money down.

(ii) There was a phenomenon of a generalized belief that, if markets grew up in response to various “risks” --and these were priced and traded-- then somehow that meant that those risks were being appropriately handled.

(iii) Excess reserves accumulated by countries that maintained devalued exchange rates were recycled despite surpluses at their balance-of-payments level fed liquidity-generating processes in the U.S. and other developed economies.

(iv) Interest rates were kept too low for too long and they would have been the main factor explaining asset bubbles. The (unsustainable) global disequilibrium of current-accounts associated with the previous factor allowed excess domestic absorption with low inflation in advanced deficit countries and thus justified the maintenance of low interest rates.

Those who emphasize these idiosyncratic policy and regulatory features tend to conclude that not much in addition to removing such distortions would be necessary to fix the system, as far as monetary policy and asset prices are concerned. According to these interpretations, policymakers should not focus *too much* on bubbles, with too much intervention and ad hoc responses, when in fact it might be that bubbles are to a large extent inevitable, and what matters is that bubble crashes not be amplified through inappropriate policy choices.

The subject is still open to fierce controversy and it will take time before it settles. Nonetheless, in our view, none of these factors – or even the factors altogether – would have weight enough to explain the magnitude and the depth of the global financial vulnerability that has surfaced since the beginning of the current crisis. Therefore, we believe that the mainstreaming of reactions to asset price cycles into monetary policy is something that has probably come to stay.

The higher complexity of international monetary-financial relations

The full acknowledgement that asset price booms and busts matter for macroeconomic stability reaches well beyond stock markets and real estate. Whatever may be the ultimate format acquired by post-crisis financial regulatory frameworks, it is likely that a significant proportion of markets and institutions will become subject to greater requirements in terms of capital and liquidity buffers, “Chinese walls” and safety belts for some institutions/instruments, with a higher frequency of ad-hoc interventions.

The demise of the presumption of stability as the normal condition of financial markets has also shattered confidence in the self-adjustment of nominal exchange rates in currency markets. The loss of confidence on the effectiveness of stable centers of gravity for nominal exchange rates came as a corollary of the realization that protracted “over-shooting”, slow and unstable convergence toward interest rate parities, and so forth, are common phenomena in foreign exchange markets.

It is not by chance that the end of “corner solutions” as inevitable options for exchange rate regimes and the rising profile for international reserves as a buffer against shocks are among the new “in” concepts in global money, as highlighted by Frankel (2009). We have left behind the theoretical world summarized at the beginning of this note, one in which there was no role for discretionary interventions by policymakers on those markets. Accumulation and discretionary use of reserves tend now to be accepted as a cross-border equivalent to the manipulation of macro-prudential instruments in the context of domestic asset markets.

Cross-border asset transactions and the corresponding possibility of bubbles imply additional layers of complexity as compared to the case of domestic asset markets. After all, one may have funding and leverage on one side and bubbles on the other. The requirements for effective monetary regimes that include reactions to asset price cycles, as suggested in the WEO report, become even harder to obtain. In a world where discretionary decisions are deemed as the norm - rather than (notional) rules - the identification of sources of shocks, transparency and communication of decisions, as well as information exchange and consultation between monetary and financial supervisory authorities, all tend to become more riddled with international political economy factors.

In the case of capital-receiving countries, higher levels of desired reserves are an expected outcome. Given the costly nature of the accumulation of international reserves, this is an asymmetrical result of the move toward a world no longer deemed to be described by trustworthy equilibrium equations.

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