

THE QUEST FOR FINANCIAL AND ECONOMIC STABILITY

by Jordi Galí*

The global financial crisis of 2007-2009

A widespread consensus has gradually emerged on the origin and nature of the financial and economic crisis that has shaken the global economy since the summer of 2007. One can summarize this consensus view as follows:

- Many industrialized economies experienced a large and prolonged increase in housing prices before the crisis. The price rise could be partly accounted for by 'fundamental' factors, including robust income growth, declining unemployment rates, and low interest rates. Yet, an important component of the housing price boom was likely a 'bubble', as a result of the investors' willingness to pay a price above the fundamental value, based on the belief that the price will continue to rise. The bubble component is reflected in the disproportionate rise in housing prices relative to rental rates.

- The housing boom was supported by an extraordinary increase in the volume of credit allocated to real estate developers, construction firms, as well as the ultimate house buyers. This credit boom had two key underpinnings: (i) the apparent safety caused by expectations of continued appreciation of the houses serving as ultimate collateral for the loans, and (ii) the ability to transfer the loans beyond the banking system proper, through widespread securitization.

- The positive feedback loop linking the credit and housing booms came to an end and turned into a negative feedback loop when US housing prices started to decline in 2006. Low income, high risk borrowers found it difficult to refinance their mortgages, and the rise in loan delinquencies (subprime first, prime later) began to bring down the market value of mortgage-backed securities. This



led to losses by banking institutions and investors across the globe. Furthermore, it triggered a collapse of money markets, starting in August 2007, as a result of the simultaneous attempt to hoard liquidity by all financial institutions, in an environment in which there was extreme uncertainty about the value of any institution's asset portfolio and, thus, unwillingness to lend to each other at rates not involving a huge risk premium. Given the huge volumes of cross-holdings among institutions/investors located all over the globe, the crisis rapidly spread beyond the US borders and became a global financial crisis.

- The magnitude of the losses experienced by banks and other fi-

nancial institutions worsened their capital positions. Given the difficulties (and cost) of raising fresh new capital, restoring the desired/required capital ratios forced banks to contract their loan portfolio and to try to sell some of their assets. The simultaneous effort to do so lowered their market prices even further and hence the financial system's losses.

- The decline in housing demand, and the fall in consumption resulting from (i) the loss of wealth (stocks, housing), (ii) the collapse of confidence experienced by households and (iii) the harder access to credit, led to a reduction in aggregate demand, output and employment. In other words, the financial crisis got

transmitted to the real economy, triggering the deepest economic downturn experienced by the industrialized world since the Great Depression. The worsening of the real economy led to a further rise in loan delinquencies, and greater losses for financial institutions, with the consequent contraction of credit. Thus, an adverse feedback loop between the financial and real sectors got underway.

It is worth stressing that the anatomy of the crisis of 2007-2009, summarized above, closely matches that of the numerous crises with a financial origin that capitalist economies have repeatedly experienced over the past 300 years, as documented in Kindleberger's classic book *Manias, Panics and Crashes*. The details, the actors, the instruments change over time, but not the substance. In the past, financial crises occurred quite frequently in the most financially developed nations. That frequency has declined, largely as a result of (i) the widespread adoption of deposit insurance and (ii) an active role of central banks as lenders of last resort. Despite the progress made, Ken Rogoff and Carmen Reinhart identify as many as 18 financial crises in industrialized countries during the post-war period before the current episode, with the Scandinavian and Japanese crises of the early 90s being among the most significant recent ones.

The case for pre-emptive government intervention

The nature of the current crisis and its similarities with past episodes raises two natural questions: Should governments intervene pre-emptively to forestall the credit and asset price boom that invariably precedes every financial crisis? And, if so, what form should that intervention take?

Modern economic theory justifies public intervention in economic matters in cases of market failure. In the case under consideration, the rationale for pre-emptive government intervention hinges on the existence of externalities in financial institutions' portfolio and investment decisions: those decisions are based exclusively on considerations of private profitability and do not take into account their possible consequences on other economic agents or on the economy as a whole. This may lead to a situation of excessive systemic risk, i.e. one in which the decisions of a large number of players (when considered jointly) or of an individual player (when large), generate significant risks for the system as a whole. In the case of a financial crisis, those externalities take different forms. Most prominently, during the boom that characterizes the run-up to the crisis, no individual institution takes into account the consequences for the system of a default on its loans (beyond its own losses), or the impact of its portfolio decisions on the asset valuations and leverage constraints of other institutions. More often than not, the simultaneous unwinding of positions that invariably accompanies a financial crisis leads to an overall reduction of credit and a collapse of asset valuations that trigger an economic recession.

Empirically, recessions caused by a financial bust tend to have a longer duration and larger magnitude than the average recession. The best way to prevent them would be to fight the market failure that was at the root of the speculative boom preceding the crisis. One can think of two main strategies in order to attain that goal: (i) the prevention of bubbles through the stabilization of asset prices, and (ii) the stabilization of bank credit. I shall briefly discuss them in turn next.

The stabilization of asset prices through monetary policy

To the extent that the overvaluation of prices of one or more asset categories is a key feature of the boom that precedes any financial crisis, it is often argued that central banks should preempt the bust (or at least contain its damage) by actively seeking to stabilize asset prices and ‘pricking the bubble’ before it grows too large. Under that proposal, monetary policy would no longer focus exclusively on the stabilization of inflation but should also seek to prevent excessive fluctuations in asset prices.

One can think of several difficulties being associated with this strategy:

- The identification of bubbles in asset prices is not a trivial task, since their fundamental value is by its very nature unobservable.
- Interest rate adjustments motivated by the desire to limit the excessive growth in the price of certain assets would necessarily affect all asset prices, including those that do not contain any bubble.
- It is not necessarily true that an interest rate rise would contain or eliminate the bubble component of an asset price. Instead, it may just increase the bubble’s rate of growth, since investors would then require a higher return on any asset, including their bubble component.
- Many asset price booms do not end in a financial collapse. According to a recent IMF study, only 25% of the stock price booms and 40% of housing price booms lead to a subsequent financial crisis and a recession. For instance, the stock market boom that led to the crash

of October 1987 did not have any significant implications beyond the stock market itself.

- Assigning the objective of asset price stabilization to monetary policy, on top of its current objective of inflation stabilization, would violate the well-known Tinbergenian rule of ‘one instrument, one target’. By doing so it would likely create difficulties in the communication of monetary policy decisions. Most importantly it could imply a step back in the ‘conquest of inflation’ achieved by most industrialized countries over the past decade, which has relied on a clear mandate for central banks to focus on the attainment of low and stable inflation.

THE IMPLEMENTATION OF FINANCIAL STABILITY POLICIES FACES A SERIOUS PRACTICAL PROBLEM: THE LACK OF INCENTIVES

The stabilization of bank credit

The empirical evidence, much of it conducted by the Bank for International Settlements (BIS) and the International Monetary Fund (IMF), suggests that asset price booms end up in financial and economic crises only when they are accompanied by a strong growth of bank credit and household and corporate indebtedness (often financed by foreigners). This observation would seem to justify a greater focus on bank credit and leverage ratios as potential sources of financial instability.

This focus also has a theoretical justification. An individual bank’s decision to expand its credit or to expose itself to greater portfolio risks has some externalities, as discussed above. If we

are dealing with a small individual entity, such externalities can be ignored. However, in the case of a large entity or many small ones making decisions in the same directions, the potential for non-negligible systemic risk arises, due to the feedback loop between credit growth and asset prices on the one hand, and those two variables and overall economic activity on the other.

No individual entity will find it 'in its interest' to take such external effects into account when making its decisions. It may thus be necessary to 'tax' the expansion of credit by individual banks, with a penalty rate that varies over time as a function of the degree of systemic risk built-up in the economy.

The natural instrument to play that role is the capital ratio, i.e. the fraction of bank assets that must be maintained in the form of capital (including shareholders' equity and accumulated reserves). Thus, in periods of excessive growth of asset prices and bank credit that may contain the seeds of an eventual financial collapse, it would be desirable to see the required capital ratio increase, in order to dampen credit growth (by making it more costly in terms of own resources used) and leverage and, as a by-product, enhance the overall solvency of the system in the event of an eventual collapse, making the risk of default smaller for any given size of asset losses. On the other hand, in periods of asset price deflation and credit stagnation, the capital requirements could be relaxed in order to dampen and hopefully overturn the associated adverse feedback loops.

The counter cyclicity of capital ratios implied by the above proposal, contrasts with the likely consequences of the Basel II Accord, whose implementation was underway across the globe when the current crisis hit. The Basel II

regime implies that the asset base used in the computation of capital ratios has to weigh assets by their current risks. As a result, the effective capital requirements tend to decline during economic booms, when the ratings of assets generally improve, and to increase during recessions, when the ratings worsen. The consequence is an effective capital ratio with procyclical properties, which can only enhance the feedback loops between credit, asset prices and economic activity described above.

In addition to the development of a regime that implies countercyclical capital ratios, there are other measures that could help offset the externalities and other market failures present in the financial sector:

- Prevention of regulatory arbitrage and the emergence of a shadow banking system, by extending the same rules that apply to banks to all institutions that are functionally equivalent.
- Minimum information requirements before the approval of a loan, as well as maximum loan-to-value ratios.
- Tighter regulation of rating agencies, given the public good nature of their services and the conflicts of interest underlying their current operations.

The challenge of implementation

The implementation of financial stability policies of the kind described in the previous section faces a serious practical problem: the lack of incentives. To be more specific: no government is willing to undertake policies that are likely to abort an economic and

financial boom. One needs an institution with sufficient independence from political pressure to be able 'to take away the punch bowl just as the party gets going' in the words of William M. Martin (Fed Chairman, 1951-1970) when describing the job of the Federal Reserve.

The Spanish experience of the 2000s provides a clear example of 'negationism' leading to inaction. Even though by 2004 institutions like the BBVA and the Banco de España, to name but two, had already warned of an overvaluation of housing between 25% and 35%, the government deflected all such warnings on the grounds that prices were justified by the outstanding economic outlook and were likely to experience an eventual 'soft landing' rather than an outright fall. This negationism reached its most visible manifestation in July 2007, when the then Housing Minister Carme Chacón refused to answer a question on the problem of housing overvaluation during an interview with the BBC. Despite the overwhelming evidence calling for the need to cool down the housing boom, the government maintained the fiscal

incentives on housing purchases. It also introduced programs to subsidize the rental of housing by young individuals. Given a fixed stock of housing in the short run, such programs can only lead to higher rental rates and thus higher housing prices. Thus, and regardless of the initial intentions, measures of that sort only helped to fuel the housing boom and to divert more and more resources towards the construction sector and away from other activities, giving rise to what became known as 'the brick economy', which is currently being painfully dismantled.

The next few months are going to be critical in determining whether and how this implementation problem is solved, as decisions have to be made at different levels regarding the new financial stability architecture, including the determination of the institutions, existing or new, that will be in charge of the implementation of the relevant policies. The extent to which these institutions enjoy effective independence from politicians is likely to be an important factor in determining how long it will take for a global financial crisis to recur.

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SELECTED PUBLICATIONS:

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