Good Regulation Needs to Fix the Broken Incentives

Martin Čihák, Asli Demirgüç-Kunt, and R. Barry Johnston[1]

Abstract

It would be wrong to conclude from the recent crisis experience that just "regulating more" is the way to go. It would be also wrong to conclude that more detailed regulations, such as more complex systems to calculate risk-weighted asset ratios, are necessarily better than simpler ratios. Complicated regulations, for instance those that try to mimic markets in estimating economic capital required by each institution commensurate with its risk, may end up leading to regulatory arbitrage and manipulated ratios. More fundamentally, changes in ratios are unlikely to address the underlying failures in economic incentives that led to the global financial crisis.

In this piece, we call for a re-orientation of the regulatory approach, so that it has at its center identification of incentive problems on an on-going basis. The challenge of financial sector regulation is to align private incentives with public interest without taxing or subsidizing private risk-taking. Credible threats of market entry and exit, healthy competition, and disclosure of quality information are essential in getting this balance right.

Specifically, we propose "incentive audits" as a tool to help identify and address perverse incentives faced by financial institutions, market participants, regulators, supervisors and politicians, before they give rise to systemic risk. These audits need to be combined with basic but well-defined capital and liquidity ratios, strong enforcement of transparency and use of complementary market signals. Transparency does not mean simply more reporting: what matters is the usefulness, clarity and comparability of disclosures.

What went wrong?

The global financial crisis that began in 2007 and intensified with the collapse of Lehman Brothers in September 2008 presented a major test of the international architecture developed over many years to safeguard the stability of the global financial system. In this test, the architecture failed, thrusting into the spotlight major shortcomings in regulation, supervision, market discipline, crisis management and surveillance.

It's the incentives, stupid! Despite many potential explanations of what led to the crisis, what really brought the system down were underlying problems with incentives, both in the financial markets and in the regulatory framework. Among economists, breakdowns in incentives are an important unifying theme when discussing the roots of the crisis (see, for example, Demirgüç-Kunt, and Servén, 2009). Incentive conflicts help to explain how securitization went wrong and why credit ratings proved so inaccurate. They also suggest that it would be superficial to blame the crisis on mark-to-market accounting, an unexpected loss of liquidity or trends in

[1] Authors are with the World Bank. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors, and they do not necessarily represent the views of the World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

globalization and deregulation in financial markets. As argued for instance in Caprio, Demirgüç-Kunt, and Kane (2008), the principal source of financial instability lies in contradictory political, bureaucratic and market incentives that undermine the effectiveness of financial regulation and supervision around the world. Preventing future crises therefore requires addressing those underlying incentives.

What's missing in the crisis response so far?

The financial crisis has triggered much discussion and many regulatory reform initiatives. On the global level, Basel III, with new capital and liquidity requirements, is set to replace Basel II, after long transition periods. There are also important global initiatives to fill in financial sector data gaps and to establish basic principles for resolution of financial institutions. There is a growing recognition that for effective regulation and supervision after the crisis, one of the greatest challenges is how to deal with situations where financial institutions have become too large or too inter-connected to fail. On the country level, perhaps the most prominent example of reform legislation so far is the Dodd-Frank Act in the United States, and other countries are discussing different options, such as those identified in the Vickers report in the United Kingdom.

Economists have been following this reform process, and voiced concerns that the reforms are only going half-way (e.g., the CEPR report on the Future of Banking, 2011). The issue is not how to regulate more but how to regulate better. That is, how to regulate in a way that can prevent the heavy costs of financial crises but also support economic growth and development.

Recommendations for regulatory reform have been developed in several academic fora, including the Shadow Regulatory Financial Committee (2011), the Squam Lake Group (2010), and the London School of Economics report on the Future of Finance (2010). While these reports deal with a host of regulatory and reform issues, there are four common themes:

1. Concerns about effectiveness of the regulatory approach adopted by the official sector. (the concerns reflect issues of cost and complexity as well as the capacity of the regulatory approach to address systemic risk that can lead to financial crises);
2. An emphasis on the need to pay greater attention to the underlying or fundamental sources of weakness in financial systems as identified in economic theory;
3. Consensus that these weakness are often due to issues of information asymmetries and the structure of incentives under which agents operate in the financial system; and
4. A need to more fully reflect incentives in the design of regulatory systems.

These reports contain many recommendations to address the identified weaknesses, but the policy response has so far focused on symptoms rather than the underlying incentive breakdowns that led to the financial crisis.

So, what is the core of our proposal? Asymmetric information and incentive issues are the fundamental sources of vulnerability in financial systems, as identified by economic theory (see, for example, Bebczuk, 2003) and broad body of evidence. Our key point is that a successful reform of the regulatory framework has to address these issues head-on.

Asymmetric information

Asymmetric information refers to a situation where one party to the financial transaction, usually the debtor, has access to information material to the valuation of the transaction that is not available to the other party, usually the creditor. Asymmetric information is a central problem in financial systems because it limits the capacity of the investors/lenders and analysts to monitor effectively and to price correctly the risks in financial institutions and instruments. The problems of asymmetric information have increased as financial instruments, structures and interconnections; regulatory and accounting rules; and institutions' risk control and assessment techniques have become more complex.

Enhancing the disclosure of information should be at the core of regulatory reform. This would allow creditors/investors and analysts to assess directly the solvency of the financial institutions and not have to rely on a delegation of responsibilities to rating agencies and supervisory authorities with its potential high costs and conflicts of interests. With sufficient disclosure, investors/analysts could prepare their own assessments of capital adequacy and liquidity, and would not have to rely on specific Basel mandated measures. This would have the advantage that there could be multiple measures and scope for competition and evolution in the design of the most appropriate measures. It would help limit the buildup of risk that occurred prior to the financial crisis because of a focus on inappropriate official measures of capital adequacy. No matter how well intentioned and executed the Basel III redesign of the capital rules, it is a static measure and as with its predecessors (Basel I and Basel II) will be overtaken by events. Greater disclosures can be combined with simpler regulations that would be easier to monitor

Incentive issues

Incentive problems are the second fundamental source of financial instability. The academic literature has identified a number of market failures that are relevant to financial stability and that result from incentive problems (see, for example, Johnston, Chai and Schumacher, 2000):

The identification and correction of incentive problems that create systemic risk should be at the center of any framework that seeks to maintain financial stability. However, regulators and financial stability assessments have been very slow to address incentive issues. The importance of some incentive elements is now being recognized in response to the crisis, e.g. in the attention to compensation polices, but the approach is generally piece meal.

The identification of incentive problems would require a specific analysis of incentives -- ***an incentive audit***. The idea of such an audit was first suggested by Johnston, Chai and Schumacher (2000). The authors compared different approaches to assessing financial stability, including risk models and use of supervisory codes and standards, and concluded that an analysis of financial vulnerabilities had to go beyond these approaches to include the assessment of structural weaknesses in financial systems. They proposed that this assessment should be

structured as an "incentive audit" and that it would focus on the key elements that motivated and guided financial decision making. The crisis experience has brought the importance of incentives and incentive-compatible reforms back to light (see, e.g., Calomiris, 2011).

What is needed is that regulations have better coverage of institutions and markets, that they are stronger in terms of providing the right incentives to the owners, managers, depositors, and other stakeholders. To get the incentives right, regulations need to allow for more credible threats of market entry and market exit, and they need to enforce greater transparency to ensure that market discipline can play its role.

Credible regulatory reforms must address shortcomings and distortions in the underlying incentive structure. This includes the incentives of the supervised financial institutions and other market players to avoid effective regulation. It includes incentives of supervisors, regulators, and politicians to forebear. It also includes incentives of depositors and other financial system counterparts. How to implement a framework that gives due attention to incentive issues? This requires the following:

First is the need to develop an approach that identifies incentive problems on an ongoing basis, and with sufficiently wide scope to cover the issues identified during the crisis. The current reform agenda does not directly address those problems. This is a lacuna. We propose incentive audits to identify perverse incentives giving rise to systemic risk become a core part of the financial architecture.

Second is the need to explicitly include an incentive assessment as part of regulatory rule making. This would have helped address some of the regulatory distortions that contributed to the financial crisis, such as the relative capital treatment of trading versus the banking book under Basel II, or the low risk weights on mortgages. However, it would not completely remove incentive problems in the regulations that seek to address risk externalities and systemic risks. For example, the use of internal risk models as part of Basel II was designed as incentive compatible. However, by accepting the internal risk weights Basel II failed to address systemic risk, since the models only covered the risks to the individual institution and not the system as a whole. It is doubtful that regulations to deal with risk externalities could be designed as fully incentive compatible.

Third, the regulatory frameworks will therefore need to be complemented with an overlay that monitors and responds to emerging systemic risks. This is the role proposed for macroprudential regulators. The macroprudential regulator would also be responsible for the incentive audit and the incentive assessment of financial regulations.

Fourth, and perhaps most difficult, would be how to respond to identified perverse incentives that contribute to systemic risk but fall outside the financial regulatory sphere. One example of this is the role of the broader political agenda in promoting home ownership, which was identified one of the key factors contributing to the U.S. subprime mortgage crisis (see e.g., Calomiris and others, 2011). A sufficiently independent macroprudential regulator could identify polices that contribute to systemic risk but fall outside its mandate, and could be required to do so formally as part of its accountability for maintaining financial stability.

A focus on correcting perverse incentives would require a significant redesign of financial regulatory and supervisory framework starting with the mandates and resources of the bodies charged with oversight of financial systems. It would involve a reorientation away from regulatory and supervisory frameworks that focus on the micro management of risk and capital adequacy in financial institutions to one that focused on the sufficiency of information disclosures, factors that influence the incentives to monitor activities within financial firms, corporate governance and compensation practices, conflicts of interest, explicit and implicit guarantees.

This redesign could have important benefits over the current regulatory and supervisory approach. In particular, it would more clearly delineate between the responsibilities of public bodies and officials for systemic risk that results from externalities and market failures and those of private investors for the risks in individual firms, contracts and instruments. A clearer delineation would enhance the incentives for monitoring by the private sector, since there would no longer be official sanctioning of solvency of individual institutions, and this would promote disclosures and transparency;

Another advantage of the redesign is that the new approach would be system wide rather than sectoral specific, and thus help to avoid the potential for transactions to be channeled through vehicles that avoid scrutiny. Moreover, an approach that emphasized system wide principles for disclosures and corporate governances rather than detailed rules for risk management that differentiate between types of individual firms, would create less incentives for regulatory arbitrage.

The proposed incentive-based approach would also be much better attuned to a country's individual circumstances, with application across low and middle income countries as well as advanced economies. While the Basel rules allow for some differentiation depending on the stage of development of financial systems, the flexibility is limited. By contrast, an incentive based approach starts with an analysis of the structural characteristics of the individual country, and drills down to identify the sources of perverse incentives/market failure in that specific context. There would be some uniformity in the application of the approach across countries, but the regulatory solutions would be tailored to the country's specific circumstances;

Finally, the incentive-based approach provides a framework to better integrate the different branches of policies that impact the financial system, specifically financial regulation and supervision; crisis management and safety net arrangements; and competition policy.

Simplification of regulatory rules

The third element of the regulatory reform would be a simplification of the regulatory rules. The incentive audits need to be accompanied by basic but well-defined capital and liquidity ratios that are more difficult for the supervised market participants to bypass. There is some empirical evidence to support this. For example, Demirgüç-Kunt, Detragiache and Merrouche (2010) use a multi-country panel of banks to study whether better capitalized banks experienced higher stock returns during the financial crisis, finding that before the crisis, differences in capital did not have much impact on stock returns, but during the crisis, a stronger capital position was

associated with better stock market performance, most markedly for larger banks. Importantly, they find that the relationship between stock returns and capital is stronger when capital is measured by the leverage ratio rather than the risk-adjusted capital ratio and that higher-quality forms of capital, such as Tier 1 capital and tangible common equity, were more relevant.

These basic but well defined capital and liquidity ratios need to be combined with strong enforcement of transparency and increased disclosures. We cannot stress enough this does not mean more and more mindless reporting. While the volume of information released by financial institutions has been increasing over time rather robustly, the same can not necessarily be said of the reports' clarity. In fact, there is some empirical evidence that, rather than present accounting narratives objectively, managers have been using variations report's clarity to emphasize good news and obfuscate bad news (Courtis, 1998).

Implementation

One important implication of this analysis is that there is a need to develop a new regulatory architecture that would have at its head an independent but accountable authority responsible for identifying and mitigating systemic risk. This authority would use incentive audits as one of its core tools. Other instruments available to this authority would have to include: (1) micro prudential tools (capital and liquidity requirements, provisioning and collateral policies, prompt corrective action) tailored to address systemic risks that would be applied to the regulated sector; (2) disclosure requirements that could be graduated depending on the threat to systemic risk and which would cover both regulated and unregulated entities; (3) conduct of business rules, intended to address conflicts of interest and transparency of financial transactions, to be applied to all financial firms, agents, auditors and rating agencies; (4) compensation practices in financial firms that pose a threat to systemic stability; (5) mergers and acquisitions involving financial firms that pose or potentially pose a threat to financial stability; (6) cease and desist orders covering both regulated and unregulated entities intended to deal with threats to systemic stability; and (7) resolution regimes for financial firms intended to address too big to fail and moral hazard concerns.

Many of these instruments probably look familiar. Indeed, in response to the crisis, countries around the world have been setting up new macroprudential bodies or giving existing regulators new instruments, some of them in line with those above. And indeed, most of the regulations introduced in response to the crisis have implications for incentives. But addressing incentive problems with regulations is far from easy, and often addressing one incentive issue only leads to creating incentive breakdowns elsewhere. Identification of incentive problems should therefore be at the center of the regulatory approach rather than being an afterthought. The proposed incentive audits would put incentive issues front and center.

References

Bebczuk, Ricardo, 2003, Asymmetric Information in Financial Markets: Introduction and Applications (Cambridge, MA: Cambridge University Press).

Calomiris, Charles, 2011, An Incentive-Robust Programme for Financial Reform, *The Manchester School*, Vol. 79, pp. 39-72.

Caprio, Jr., Gerard, Aslı Demirgüç-Kunt, and Edward J. Kane, 2008, "The 2007 Meltdown in Structured Securitization: Searching for Lessons, Not Scapegoats", Policy Research Working Paper 4756 (Washington: World Bank).

CEPR, 2011, *The Future of Banking* (edited by Thorsten Beck). VoEU.org book.

Courtis, John K., 1998, "Annual report readability variability: tests of the obfuscation hypothesis," Accounting, Auditing & Accountability Journal, Vol. 11, No. 4, pp. 459–471.

Demirgüç-Kunt, Asli, Enrica Detragiache, and Ouarda Merrouche, 2010, Bank Capital: Lessons from the Financial Crisis (World Bank: Policy Research Working Paper No. 5473).

Demirgüç-Kunt, Aslı, and Luis Servén, 2009, Are All the Sacred Cows Dead? Implications of the Financial Crisis for Macro and Financial Policies (World Bank: Policy Research Working Paper No. 4807).

Johnston, R. Barry, Jingquing Chai, and Liliana Schumacher, 2000, Assessing Financial System Vulnerabilities (IMF Working Paper WP/00/76).

London School of Economics (2010), *The Future of Finance: The LSE Report* (London School of Economics).

Squam Lake Group, 2010, *The Squam Lake Report: Fixing the Financial System* (Princeton University Press: Princeton).

Shadow Regulatory Financial Committee, 2011, "The Basel Proposed Rules on Liquidity Regulation and a Suggestion for a Better Approach" September 12.