



Government Guarantees: Why the Genie Needs to Be Put Back in the Bottle

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With governments beginning to implement new financial regulation, the G20 in its recent Pittsburgh summit laid out four principles they will coordinate on:

1. Building high quality capital and mitigating pro-cyclicality;
2. Improving over-the-counter derivatives markets;
3. Arranging better plans for the resolution of cross-border and systemically important financial institutions by end-2010;
4. Reforming compensation practices to support financial stability.

The authors are professors of finance at the New York University Stern School of Business and co-editors of the book Restoring Financial Stability: How to Repair a Failed System.

Will the proposed reforms do the job? Overhauling the financial system is a tricky thing. But we have been here before...

The last major financial crisis led to the sweeping reforms undertaken in 1934. The Glass Steagall Act insured deposits (up to a threshold amount) to prevent bank runs. In order to address the moral hazard induced by deposit insurance, the Act also restricted commercial banks from undertaking risky security activities. The Federal Deposit Insurance fund was set up to charge premiums against the insurance and be in charge of resolving failed banks.

WHAT WENT WRONG

While these reforms worked well for over half a century, they became antiquated

in the face of modern and global banking. Financial developments allowed U.S. banks to innovate around its restrictions. European banks were all universal, unlike their U.S. counterparts, and did both commercial and investment banking. Competitive forces led to a steady repeal of the Glass Steagall Act. And the liability structure of banks evolved from just deposits, bonds and equity, to also include recourse from complex off-balance sheet entities and derivatives positions.

In the process, however, banks and other financial institutions grew large, effectively attained too-big-to-fail status, and competed so fiercely with each other that regulatory arbitrage became their primary business model rather than an aside. A shadow banking world of conduits and money market funds grew

to several trillion dollars, performing a large chunk of intermediation activity. Traditional banks morphed first into underwriting houses and eventually into casinos: interest margins thinned and fee- and trading components of bank revenues ballooned.

Any semblance of doubt that the unregulated shadow banking world was subject to market discipline was erased in this crisis. We bailed out banks brought down by recourse from off-balance sheet vehicles, guaranteed money-market funds, and effectively back-stopped over-the-counter guarantees that enabled banks to scale their risks multifold in a few years.

There is little doubt that a part of the problem was that Wall Street had a huge incentive to make carry trades and spread bets, generating false profits and booking the proceeds as profits. But the G20 notion that the failure of governance was (only) between rogue traders and shareholders is false and dangerous.

The fact that bank shareholders ex post took a bath in this crisis doesn't change the fact that they did exceedingly well in the preceding years. All evidence points to shareholders, through their boards, encouraging

the risk-taking activities until the game ended. And creditors of large financials did not worry about these risks either. In effect, all risks were being transferred onto the taxpayers.

Though regulators are right that it is tough to fight such moral hazard in the midst of a crisis, one cannot escape the reality that the Wall Street profits were privatized but that its risks have been socialized.

THE NEED TO ADDRESS GOVERNMENTAL FAILURES AS WELL AS MARKET FAILURES

Hence, unlike in 1934, we have a slightly more difficult job on hand. We need to address not just market failures, but also regulatory failures arising due to government guarantees.

Mispriced government guarantees are pervasive throughout the financial system—inadequately-priced deposit insurance, the too-big-to-fail designation, the too-many-to-fail problem, and subsidies provided to government sponsored enterprises. These distort risk-taking incentives in the system and their destabilizing effects percolate to the shadow banking world too.

There is perhaps no greater example of this activity than the cases of Fannie Mae and Freddie Mac. For every \$1 that shareholders put up, they borrowed another \$25 to invest in risky, relatively-illiquid pools of subprime mortgages at very attractive spreads. No surprise they ended up accumulating a \$1.5 trillion portfolio.

Why did they take such a risky bet? Because they could. Capital markets offered them cheap leverage. Of course, the reason leverage was cheap was that creditors could not care less about risk in the case of Fannie and Freddie—the government had provided an implicit guarantee of the debt.

WHAT TO DO ABOUT GOVERNMENT GUARANTEES?

Correcting this regulatory failure is apparently simple. If we require that financial institutions fully pay in good times for the guarantees they receive ex post, in all likelihood, this will organically cause financial firms to no longer take unsound risks.

But charging for government guarantees is not easy. What guarantees are being used for can change quickly. Thus it is worthwhile to assess carefully the available options.

First and foremost, some abuse of government guarantees must be checked at source. In the case of Fannie and Freddie, a complete ring-fencing of guarantees—by shutting down their financial investments arm—is called for. Similarly, if the shadow banking world of conduits has effective recourse to bank balance-sheets, it should simply be on bank balance-sheets.

However, eliminating all guarantees—especially deposit insurance—is unlikely to be credible or have any political support. And given that some are calling for extending guarantees to money-market deposits and possibly even secured inter-bank borrowing ('repos'), it is important to approach the charge for such guarantees in a principled manner.

It is simply unacceptable that, when the FDIC's deposit insurance fund reserves exceed a certain level, many banks are no longer required to pay fees into the fund. In fact, large banks did not pay any significant deposit insurance premium for the decade leading up to the crisis and the insurance funds are now depleted. By not charging for insurance during the run-up to the crisis, the government exacerbated the moral hazard problem.

SYSTEMIC RISK MUST DRIVE THE PREMIUM FOR GOVERNMENT GUARANTEES

Another key insight is that government guarantees do not kick in each time a bank fails. If an individual bank fails, it can be readily sold to others. Even insured deposits are often assumed by acquiring banks. The real problem arises when there is a systemic crisis, that is, banks fail but no potential acquirers are healthy enough to purchase them. Now, the government has to step in and help find a suitor, pay off insured depositors and often guarantee even the uninsured creditors.

Hence, charging for government guarantees requires charging for an institution's systemic risk rather than its individual risk.

Indeed, there was tremendous, mostly unrecognized, growth in the systemic risk of financial institutions during 2004-07. The best example of this was Wall Street ignoring its own business model of securitization by holding onto the non-diversifiable credit risk associated with the AAA-tranches loan portfolios, particularly tied to residential real estate but also commercial real estate and other consumer credit. This turned out to be a \$2-3 trillion one-way asymmetric bet on the economy.

Systemic risk imposes a negative externality on the system because the external cost of a financial institution's collapse—which leads to failures of others and/or the freezing of capital markets—is not internalized by that institution. Since regulations such as Basel capital requirement and deposit insurance premiums focused mostly on individual risk as opposed to system-wide risk, financial firms loaded up on assets with low volatility but high systematic risk, and therefore higher expected returns than their under-priced cost of borrowing.

Any Econ 101 textbook explains how to resolve negative externalities. Once we recognize that systemic financial institutions are no different than a typical industrial company that pollutes the air with carbon emissions, it becomes clear that the solution is to 'tax' the institution by taking into account of their contributions to systemic risk. For instance, the actuarially fair deposit insurance premium—the premium that exactly covers the expected cost to the deposit insurance provider—should not only increase in relation to individual bank failure risk but also in relation to joint bank failure risk.

Of course, the devil is in the details. If regulators simply produce coarse categories of

systemic risk of institutions based on size and function, substantial arbitrage will occur at the edges. A group of smaller players (for example, investment banks) can concentrate systemic linkages and be a greater source of risk. Hence, a systemic risk tax must vary smoothly across the dimensions of risk and size.

One possibility is to require each institution purchase insurance against its losses in pre-defined crash events. To reduce the moral hazard, the payoffs on the insurance would not go back to the institution, but to a systemic risk fund to help with the resolution of the financial sector in a crisis. Equally important, the insurance premium would be paid on a continual basis by the financial institution, so that any reduction in the firm's 'systemic' risk-taking activities would lower its fees. The insurance could be partly provided by private players to create an actively-priced market for systemic insurance of financial institutions. The rest can be provided by the regulators to avoid an A.I.G.-type problem. There is a precedent to such a public-private approach to insuring systemic events, namely the Terrorism Risk Insurance Act of 2002.

Another possibility is to tie capital requirements to market-based measures of systemic

risk. For instance, consider a simple statistical tool—'Marginal Expected Shortfall' (MES)—that measures average loss of an institution's capitalization when the market is in its (say) 5 percent worst days. MES, computed based on data prior to the crisis, does a remarkably good job in predicting those who performed worst during the crisis. For example, the top 10 financial institutions in terms of MES in June 2007 were Citigroup, JP Morgan Chase, Bank of America, Morgan Stanley, Goldman Sachs, Merrill Lynch, Wells Fargo, Fannie Mae, A.I.G., and Wachovia, by and large a who's who of troubled firms. And though Bear Stearns and Lehman come in respectively 21st and 12th, these firms are 3rd and 6th respectively on a market cap-adjusted basis.¹ It isn't rocket science to figure out who we need to focus on.

RESTORE INCENTIVES & LET THE MARKET DO THE REST

Some argue that once financial institutions have to fully pay for their guarantees and their systemic risk contribution, it will be so onerous that they will no longer be profitable. However, if banks in their current large and complex form cannot make it without

full government backing, then this says more about the business model of large, complex banks than anything else. If we really think the only source of capital is the government, we will have implicitly socialized our private financial system.

Under our proposal, the creative destructive nature of capitalism will solve this problem. Once firms in their current form no longer have access to government freebies, market discipline will come back to the whole financial sector. All financial institutions will have to change their behavior, most likely leading them to spin-off subsidiaries and become less systemic. This way, the reform of systemic risk will end up being mostly organic and incentive-based, rather than requiring the heavy hand of government.

It is a little disconcerting, however, that, throughout this crisis, regulators have gone in the opposite direction. Mergers have been encouraged that create more systemically-important institutions: Bank of America - Merrill Lynch- Countrywide, JP Morgan Chase - Bear Stearns - Washington Mutual, Wells Fargo - Wachovia, and so forth. As incredible as it might seem, the scarcity of strong balance sheets

in the financial sector means that institutions with full government guarantees, like Fannie Mae and Freddie Mac, now wield even more power than before the crisis. In recent months the money market sector, the asset-backed securities loan market, and the debt of financial firms were effectively given the full backing of the U.S. government, greatly expanding issues related to moral hazard.

While some of this may have been necessary, now we will have to find some way to put the genie back in the bottle. The proposals above should help do the trick.

Letters commenting on this piece or others may be submitted at <http://www.bepress.com/cgi/submit.cgi?context=ev>.

NOTES

1. Acharya, V., L. Pedersen, T. Philippon, and M. Richardson (2009) "Measuring Systemic Risk." NYU Stern School working paper.

REFERENCES AND FURTHER READING

Acharya, V. and M. Richardson, Eds. (2009) *Restoring Financial Stability: How to Repair a Failed System*. New Jersey: Wiley.

