Financial Institutions and Consumer Protection Subcommittee
U.S. Senate Committee on Banking, Housing and Urban Affairs
Hearing on Debt Financing in the Domestic Financial Sector
August 3, 2011

STATEMENT ON DISTORTIONS IN SYSTEMIC-RISK MEASUREMENT AND RISK-TAKING IN THE FINANCIAL SECTOR

Edward J. Kane
Professor of Finance
Boston College
Chestnut Hill, MA 02467
Email: edward.kane@bc.edu

Ours is a representative democracy that espouses the principle that all men and women are equal under the law. This ought to mean that, in difficult times, government officials responsible for managing the nation's financial safety net would treat the interests of all citizens more or less equally. But this was demonstrably not the case during the run-up of the housing bubble, nor beginning in 2007 in government efforts to tame the widespread financial crisis that the bursting bubble brought about. Throughout both periods, the interests of domestic and foreign financial institutions were much better represented than the interests of society as a whole.

Taxpayer interests were poorly represented because, over the years, the financial industry has infiltrated the bureaucratic system that is supposed to regulate its risk-taking and sewed huge loopholes into the capital requirements that then and now are supposed to keep financial instability in check. Unfortunately, the industry's capture of the regulatory system is politically well-defended. This can be demonstrated in two complementary ways: (1) by enumerating the problems that last year's Dodd-Frank Act did not even try to address (such as how to define systemic risk operationally or how to resolve the Fannie and Freddie mess) and (2) by examining the loose ends left in the Act's efforts to deal with regulation-induced innovation and with institutions that have made themselves too large, too complex, and too well-connected politically to be closed and unwound. Living wills, enhanced resolution authority, claw-backs of undeserved executive compensation, and a newly minted Office of Financial Research are all good ideas. But the Keating 5 episode tells us how hard it can be for regulators to discipline politically influential firms. Sadly, the very same criticisms can be levied against the reform efforts unfolding in Basel and in the European Union as well.

What can we do to put reform on a more promising path? Governments must rework bureaucratic incentives to refocus reporting responsibilities for regulators and institutions on the value of safety-net support. Until regulatory duties are embraced explicitly and enforced in operational and accountable ways, it is unreasonable to hope that authorities can or will adequately measure and contain systemic risk during future booms and busts.

A first step would be to strengthen training and recruitment procedures for top regulators. If it were up to me, I would establish the equivalent of a nonmilitary academy for financial regulators and train cadets from around the world. The curriculum would teach cadets how to calculate and aggregate the costs of safety-net support in individual institutions and countries. Among other things, students would be drilled in the duties they owe the citizenry and in how to overcome the political pressures elite institutions exert when and as they become increasingly undercapitalized.

<u>Fed and Treasury Rescue Programs Placed Great Burdens on the Citizenry</u>

GAO data (Government Accountability Office, July 2011) show that, using funds that belong ultimately to ordinary citizens, the Fed bought massive amounts of debt on greatly subsidized terms from important foreign and domestic banking and securities firms between December 2007 and July 2010. Starting in the last quarter of 2008, the Treasury's Troubled Asset Relief Program (TARP) piled additional bailout obligations onto these same citizens.

Evaluating Fed and TARP rescue programs against the convenient standard of doing nothing at all, high officials tell us that both bailout programs were necessary to save us from worldwide depression and made money for the taxpayer. Both claims are false, but in different ways.

A financial crisis may be described as a struggle by financial firms whose asset values have collapsed to offload the bulk of their resulting losses onto creditors, customers, and taxpayers. In the early months of the crisis, Fed and Treasury officials assisted economically insolvent zombie institutions (such as Bear Stearns and AIG) to develop new risks and to transfer losses onto the government's balance sheet. Authorities did this by mischaracterizing the causes of these institutions' distress as a shortage of market liquidity and helping insolvent firms to expand and rollover their otherwise unattractive debt. Far from assisting zombie institutions to address their insolvency, unwisely targeted and inadequately monitored government credit support encouraged troubled firms not only to hold, but even to redouble the kinds of gambles that pushed them into insolvency in the first place.

Bailing out firms indiscriminately has hampered, rather than promoted economic recovery. It evoked reckless gambles for resurrection among protected firms and created uncertainty about who would finally bear the extravagant costs of these programs. Both effects disrupted the flow of credit and real investment necessary to trigger and sustain economic recovery.

The claim that the Fed and TARP programs actually "made money" for the taxpayer is half-true. The true part of the proposition is that, thanks to the vastly subsidized terms these programs offered, most institutions were eventually able to repay the obligations they incurred. But the neglected parts of the story are that these rescue programs forced taxpayers to provide under-compensated equity funds to deeply troubled institutions, and that the largest and most influential of these firms were allowed to become even bigger. The government's deals compare unfavorably with the deal Warren Buffet negotiated in rescuing Goldman-Sachs. His deal carried a running yield of 10% and included warrants that gave him a substantial claim on Goldman's future profits. Lifelines provided to an underwater firm are not truly loans; they are unbalanced equity investments whose substantial downside deserves to carry at least a 15% to 20% return.

Government credit support transferred or "put" to taxpayers the bill for past and interim losses rung up by protected financial firms. Authorities chose this path without weighing the full range of out-of-pocket and implicit costs of their rescue programs against the costs and benefits of alternative programs such as prepackaged bankruptcy or temporary nationalization and without documenting differences in the way each deal would distribute benefits and costs across the populace.

The Crucial Problem is: How to Define and Measure Systemic Risk?

Acting in concert, market and regulatory discipline force a financial firm to carry an equity position that outsiders regard as large enough to support the risks it takes. Taxpayers become involved in capitalizing major firms because creditors regard the conjectural value of the off-balance-sheet capital that government guarantees supply through the taxpayer put as at least a partial substitute for on-balance-sheet capital supplied by the firm’s shareholders.

The nature, frequency and extent of modern financial crises support the hypothesis that changes in risk-taking and concealment technologies available to aggressive financial institutions have repeatedly outstripped social controls on the job performance of the parties that society asks to control the safety and soundness of interlocking financial systems. The root problem is that supervisory conceptions of capital and systemic risk fail to make government officials accountable for the role they play in generating either variable. Policymakers' knee-jerk support of client firms' creative forms of risk-taking and officials' proclivity for absorbing losses in crisis situations encourage opportunistic firms to foster and exploit incentive conflicts within the supervisory sector and to make sure that tough decisions favor industry interests over those of the taxpayer.

Systemic risk can be likened to a disease that has two symptoms. The Dodd-Frank Act and the Basel III framework seek to use higher capital requirements to treat only the first of these symptoms: the extent to which institutions expose themselves in *directly observable ways* to credit risks that might transmit exposures to default across a chain of leveraged and short-funded financial counterparties. But to be effective, the medicine of capital requirements must be adapted to take fuller account of a firm's particular funding patterns and to treat a second and more-subtle symptom. This second symptom is the ease with which actual or potential zombie institutions can use financial accounting tricks and innovative instruments to hide risk exposures and accumulate losses until their insolvency becomes so immense that they can panic regulators and command life support from them.

It is this second symptom that gives large and politically powerful institutions the ability to shift responsibility for potentially disastrous losses to taxpayers. In good times and in bad, the existence of this "taxpayer put" allows these elite institutions to issue the equivalent of government debt and makes ordinary citizens uncompensated equity investors in such firms. Offering taxpayer support to zombie firms impedes macroeconomic recovery by making crippled institutions look stronger than they are and turns a blind eye to the ways in which their underlying weakness disposes such firms to seek out long-shot investments instead of fostering flows of healthy business and consumer credit.

My recommendations for regulatory reform are rooted in the straightforward ethical contention that protected institutions and safety-net managers owe fiduciary duties to taxpayers. The existence of a safety net makes taxpayers silent equity partners in major financial firms. As *de facto* investors, taxpayers deserve to be informed at regular intervals about how their side of the taxpayer put is doing. Consistent with US securities laws, Kane (2011) calls for managers of important financial firms to measure and report under penalties for fraud the value of taxpayers' stake in their firm on the same quarterly basis that they report to stockholders and for government officials to examine, challenge, aggregate, and publicize this information.

My two-piece conception of systemic risk casts it as an option-like equity investment by taxpayers in the firms the safety net protects. The value of taxpayers' position varies inversely both with the risk that an institution might sustain losses that exceed its ownership capital (i.e., the size of a firm's tail risk) and the percentage of this tail risk that the government may be expected to absorb. If tail risks turn out favorably, the institution reaps most of the gains. But when things go disastrously sour, the management "puts" the losses to taxpayers.

Defining systemic risk as taxpayers' side of an unfavorably structured claim also provides a metric for tracking systemic risk over time. Requiring authorities to calculate and disclose fluctuations in the aggregate value of the taxpayer puts enjoyed by large institutions would make regulatory authorities operationally accountable for the quality of their supervisory performance in booms and recessions alike. Although considerable disagreement exists about the best way to construct a measure of systemic risk, everyone agrees that it arises as a mixture of leverage and the volatility of financial-institution returns. Most existing measurement strategies incorporate the pioneering perspective of Nobel Prize Winner Robert Merton. For example, Carbo, Kane, and Rodriguez (2011) use Merton-type contingent-claim models with a one-year horizon to undertake cross-country comparisons of the quality of banking supervision before and during the crisis. Hovakimian, Kane, and Laeven (2011) use such a model to evaluate U.S. financial supervision during 1974-2009 and to show that regulators could have used the growing correlation of institution risk exposures as an early warning system for the current crisis. Expanding the format for collecting information from covered institutions to include estimates of the loss exposure (i.e., the "volatility") of their positions over different horizons in individual countries could improve both the precision of systemic-risk estimates and officials' accountability for regulatory and supervisory performance

<u>Traditional Reporting and Incentive Frameworks are Inadequate</u>

Accounting standards for recognizing emerging losses make evidence of an institution’s insolvency dangerously slow to surface. During the housing and securitization bubbles that preceded the 2007-2008 financial meltdown, top managers and top regulators of US and EU financial institutions claim that there was no way they could see the buildup of crisis pressures. Moreover, as the crisis unfolded, these same officials were reluctant to prepare and publicize timely estimates of the financial and distributional costs of bailing out firms that benefited from open-bank assistance.

By engaging in regulation-induced innovation, nurturing clout, and exerting lobbying pressure, a country's systematically-important-financial institutions (SIFIs)have kept their tail risks from being adequately disciplined. The importance of political, bureaucratic, and career interests in regulatory decision- making allows such firms to screen regulatory appointments and to distort regulatory policies *ex ante* and to reshape their enforcement *ex post*.

In a world of derivative transactions, top regulators need special training to understand --and considerable mental toughness to discipline-- the incremental taxpayer exposures to risk that innovative instruments and portfolio strategies entail. Efficient safety-net management requires a more sophisticated informational framework than current methods of bank accounting and examination provide. To protect taxpayers and to enhance financial stability, examinations and bank accounting reports should not focus so narrowly on measures of tangible capital. They should also develop and report explicit estimates of the *intangible* value of an institution's claim on taxpayer resources. To keep up with the regulated, regulators must develop adaptive statistical strategies that can extract from an ever-wider array of market data the evolving size of the public risks that they should be sworn to protect. Finally, to hold themselves accountable for carrying out these tasks conscientiously, regulators must accept a system of ethical constraints that requires them to share this information with the public.

Summarizing, regulators need to measure and publicize the implicit and explicit costs taxpayers incur in supporting national and international safety nets. To help them to do this skillfully and conscientiously, we need to change the way they are trained, recruited, and incentivized. I believe that a National or International Academy for Financial Regulators could assist in these tasks.

References

Carbo, Santiago, Edward Kane, and Francisco Rodriguez, 2011. "Safety Net Benefits Conferred on Difficult-to –Fail- and –Unwind Banks in the US Before and During the Great Recession," Working Paper, Milan: Paolo Banfi Centre (July 12).

Hovakimian, Armen, Edward Kane, and Luc Laeven, 2011. "Progress Report on the Hovakimian-Kane-Laeven Research Project for the Institute for New Economic Thinking" (July 1).

Kane, Edward J., 2011. "Missing Elements in Financial Reform: A Kubler-Ross Interpretation of the Inadequacy of the Dodd-Frank Act," Journal of Banking and Finance (forthcoming).

United States Government Accountability Office, July 2011. Federal Reserve System: Opportunities Exist to Strengthen Policies and Processes for Managing Emergency Assistance. Washington. (GAO – 11- 696).