GAPS AND WISHFUL THINKING IN THE THEORY AND PRACTICE OF CENTRAL-BANK POLICYMAKING

Edward J. Kane
Boston College

Of men who have a sense of honor, more come through alive than are slain, but from those who flee comes neither glory nor any help...Ajax in The Iliad

Roles played by fear and disinformation and authorities' response to them are major gaps in conventional theories of crisis management. This is despite the fact that, in the midst of a crisis, the central goal of lobbyists for distressed firms and their various creditors is to magnify governmental fears as a way to secure bailouts.

Detailed descriptions of the 2008 industry and governmental crisis-management environments painted by Bair (2012) and Sorkin (2010) depict a virtual epidemic of fear. While it is often said that fear makes cowards of us all, this is an overstatement. What fear does do is to increase the attraction of myopic actions over sounder, but immediately painful ones. In Europe and in the US, central bankers characterized themselves as wrestling in timely fashion with macroeconomic and financial forces that threatened to destroy prosperity as we know it. But arguably, in the months leading up to the crisis, authorities’ fear that tougher supervision might engender political, bureaucratic, and career punishments intensified the forces they had to deal with. Supervisory forbearances extended the lives of bubbles in housing and in shadowy forms.

* This paper refocuses Kane (2012a). The author wishes to thank Richard Aspinwall, Stephen Buser, Rex DuPont, Steve Hanke, Martin Hellwig, Richard Herring, Stephen Kane, James Moser, Michael Pomerliano, Reinhard Schmidt, Matt Stoller, James Thompson, and especially Robert Dickler for valuable comments on earlier drafts of this analysis.
of financial transacting and this extension aggravated the effects that the crisis-generating bursting of these bubbles had on the real economy (Kane, 2012b). The problems that authorities feared came from the capacity of affected parties to mischaracterize needed discipline as profit-destroying overregulation. Fear of embarrassment led authorities to tolerate (and even encourage) misrepresentation of Libor rates for years on end and to neglect the buildup of risk in seemingly profitable firms such as the American International Group (AIG). The result has been a slow breakdown in the ethics of financial management and government service. Regulatory complicity in the resulting flow of safety-net subsidies is rationalized politically by the unproven and increasingly unconvincing claim that elite financial institutions are economically so important that their managers’ and creditors’ concerns deserve to rank ahead of the interests of other citizens.

The opaque chain of deals and dealmakers involved in producing structured securitizations and other forms of shadowy finance undermined longstanding accountability restraints on self-serving industry and governmental behavior. The observable consequence of this loss of ethical restraint has been a tidal wave of de facto fraud and deception. With each new scandal, the public becomes more and more aware of the extent of regulatory capture and of authorities’ unwillingness to own up to the shadowy deals they are making. Fraud and influence-driven incentive conflict are malignant phenomena that mainstream models of optimal macroeconomic and financial stabilization (e.g., Benigno and Woodford, 2003) studiously ignore or wishfully neglect. This paper seeks to demonstrate that the failure to take into account the impact of fear and disinformation has helped the financial industry to misrepresent the sources of its profits and to sow misconceptions, nontransparencies, and outright loopholes into the capital standards and regulatory definitions of capital and risk that --then, now, and in the foreseeable
future-- are supposed to keep financial instability in check. The author goes on to suggest two changes that would help to uncover the costs of fear and disinformation and to create a structure for confronting them directly.

The Taxpayer Put as Off-Balance-Sheet Capital

This paper conceives of the capitalized value of safety-net subsidies as the flip side of an implicit political contract that allows regulators --at their discretion-- to transfer losses incurred by large and politically powerful institutions to ordinary taxpayers. This contingent credit support enables any institution that benefits from this support to fund itself more cheaply, with fewer covenant restrictions, and in larger quantities than markets would otherwise offer. The existence of this shadowy and coercive "taxpayer put" is not currently recognized as an equitable interest in corporate law and its value is not reported in government or bank accounting statements. This prevents the put from being understood as a losing position that officials load onto the balance sheets of those who are obliged to pay the bill for its exercise (i.e., small banks and taxpayers). Whenever one side understands the terms and nature of a financial contract better than the other, opportunities arise for exploitive profiteering by the informationally advantaged party.

In principle, “capital” is a measure of a firm’s ability to sustain losses as a going concern (Hellwig, 1995; Admati, DeMarzo, Hellwig, and Pfleiderer, 2012)). Acting in concert, market and regulatory discipline force a firm to carry a capital position that outsiders regard as large enough to support the risks it takes. When institutions are protected by the safety net, not all of this capital comes from shareholders. Taxpayers become enmeshed in supplying capital to such firms because creditors and other counterparties regard the conjectural value of government
guarantees as a valuable option—a “taxpayer put.” The value of the government-contributed capital supplied by a firm’s taxpayer put is a contra-liability that serves as a substitute for ordinary on-balance-sheet capital supplied by the firm’s shareholders. It frees up opportunities for managers to dividend out capital that shareholders would otherwise have to leave in the firm.

To rebalance the safety-net contract, this paper proposes to refocus the process of financial regulation in two ways. The first is to oblige banks and their regulators to measure—as carefully and explicitly as they can—variation in the size of the taxpayer puts enjoyed by individual firms and to track the value of the portfolio of these puts across the finance sector as a whole. A straightforward method for doing this is explained in Hovakimian, Kane, and Laeven (2012). The purpose of this exercise is to gauge taxpayers' stake in the finance sector so that it can be used as a quantitative policymaking guide. Such a measure could help both to monitor the buildup of systemic risk in economic booms and to calibrate the benefits and costs of different ways to curtail this risk to minimize the danger of crisis. It could also help to target triage strategies in crisis circumstances.

Two attractive features of these authors' measure are that it can be calculated straightforwardly from readily available data and that it fineses the need to develop risk weights for particular assets and liabilities. Experience shows that the Basel committee's efforts to calibrate a series of risk categories based on historical data generates inherently destabilizing regulatory arbitrage.

The second proposal focuses on developing a coterie of professionally trained regulators who would have sufficient technical expertise, and more importantly, sufficient ethical commitment to control the regulated on behalf of the public. The goal is to not just to train would-be regulators, but to school them to think like firefighters and warriors, so that they run
promptly toward dangerous situations, rather than away from them, and commit themselves to a lifetime career of guarding the public trust.

Misconceptions about crises and crisis response

Deception harms those who rely upon it and may be regretted by the deceiver when and if the unpleasant truth comes out. But people lie regularly and usually for the simple reason that the deception is thought to benefit the would-be deceiver in the short run. The unpleasant truth about crisis management is that bailout schemes that purport to "lend" money to insolvent zombie institutions are economically not loans at all. They are coercive equity investments in risky and unprofitable enterprises that are designed to give taxpayers a below-market return for the risks they assume.

Unless they are accompanied by triage, bailouts are half steps and the relief they buy is only temporary (Kane and Klingebiel, 2004). In an environment in which regulators are captured, policies that guarantee the debt of giant zombie institutions are giveaway programs that preserve the jobs of aggressive or incompetent financial-institution managers and promote go-for-broke risk-taking at the expense of solid portfolio management. The day-to-day and week-to-week horizons that have characterized policymaking during the crisis and its aftermath result in short-sighted strategies of financial stabilization, such as those embodied in the Dodd-Frank Act (DFA) and Basel III.

Neither DFA nor Basel tries to define systemic risk operationally or to decide onto just which taxpayers’ balance sheets the implicit debt created by US and European central-bank credit support will finally settle. Both schemes ignore the time consistency and distributional issues that gaps in supervisory coverage and back-door bailouts raise. Proponents of these policies presume that central banks can create enough liquid reserves to keep a growing horde of
insolvent financial institutions afloat forever and that questions about the economic justice, efficiency, and time consistency of bailout strategies can safely be ignored.

Because insolvency and unemployment are hard to cure, they may be compared to a pair of grievous plagues. To alleviate the nasty side effects of would-be therapies, authorities must prescribe a sustainable cocktail of interacting reforms. In the US, strategies for dealing with regulation-induced innovation and for disciplining the institutions that recklessly spawned these plagues have been assigned to teams of incentive-conflicted and understaffed regulators to work out. Scandals such as the Keating 5 or Abscam episodes document the willingness of legislators to transmit lobbying pressure to regulatory personnel. Regulatory clienteles are using Congress to fan the flames of incentive conflict as the rule-making that the DFA requires creeps forward. For example, Congress is refusing to give understaffed or mis-staffed agencies charged with implementing the DFA (such as the Commodities Futures Trading Commission) the funds needed to carry out their putative assignments and has held up political appointments at safety- and-soundness and consumer regulatory establishments. In the end, US regulators are unlikely to devise and enforce rules or policies that crack down heavily on politically influential firms. Sadly, even more-stressful political biases, turf issues, and budgetary pressures undermine efforts to resolve bank and sovereign insolvencies in the European Union as well.

Distressed institutions continue to shift accumulated losses and the downsides of still-expanding risk exposures to taxpayers and other counterparties. Bankers understand the financial safety net—not as something external to their economic balance sheet—but as a politically enforceable implicit contract that they have negotiated with national governments. This contract allows governments to impose capital requirements in exchange for committing itself to bail out large portions of the financial industry in crisis circumstances. But it has proved
counterproductive to impose requirements as complex and politically driven as those devised in Basel. The absence of cross-country accountability for individual-country rules and enforcement encourages forum shopping.

The timetable for rule-making established by the DFA compels US regulators to act quickly. Lobbyists in other jurisdictions are encouraging their regulators to delay their rule-making. Foreign regulatory clienteles hope to extract rules that would encourage US deals to be booked in their particular markets and at the same time enable their clearinghouses to become important enough that the specter of their failure would scare US authorities into bailing them out in a crisis. This and other kinds of regulatory arbitrage enhance firms’ ability to hide risk-taking and to misrepresent the depth and timing of developing taxpayer losses in ways that vaporize the social benefits of capital requirements.

Financial crises are battles over loss distribution. If governments around the world want to fight these battles more effectively, they need to sharpen the risk-control missions of regulatory agencies and rework oaths of office and bureaucratic incentives at these agencies. They also need to refocus reporting responsibilities for regulators and protected institutions on changes in the value of taxpayer safety-net support.

Duties of the Regulators

Differences in the protections afforded stakeholders in Bear Stearns, Lehman, AIG, and Goldman Sachs clarify that creditors of some institutions are more fully protected than others. What we can call an “elite institution” is one that possesses political clout as well as economic importance. Regulators need to be trained and fortified to resist the malignant pressures that these institutions are apt to exert.
Given that financial safety nets transform taxpayers into unwitting *equity investors of last resort*, regulators and financiers owe taxpayer-investors duties of loyalty, competence, and care in return for their stakes in financial firms. The duties of care and competence imply three specific duties:

1. **A duty of vision**: Supervisors should continually adapt their surveillance systems to discover and neutralize innovative regulatee efforts to disguise their rule breaking;
2. **A duty of prompt corrective action**: Supervisors should stand ready to propose new rules and to discipline regulatees whenever a problem is observed;
3. **A duty of efficient operation**: Supervisors should strive to produce their insurance, loss-detection, and loss-resolution services at minimum cost.

In turn, the duty of loyalty entails both:

1. **A duty of conscientious representation**: Supervisors should be prepared to put the interests of the community they serve ahead of personal and bureaucratic interests;
2. **A duty of accountability**: Implicit in the other duties is an obligation for safety-net managers to embrace political accountability by bonding themselves to disclose enough information about their decision making to render themselves answerable for mishandling their responsibilities.

Unless these duties are honored on political battlefields and enforced in operational and accountable ways, it is unreasonable to believe that authorities can or will adequately measure and contain systemic risk as the next round of boom and bust unfolds.

A critical step would be to strengthen training and recruitment procedures for top regulators. Specialized educational programs are only beginning to emerge. For example,
Macquarie University in Australia is planning a Masters in Financial Regulation and targeting it as an executive course for candidates currently employed as regulators. The most ambitious program is the European Supervisor Education Initiative (ESE). The ESE was formed in 2009 as a confederation of European supervisory authorities, central banks, and academic institutions. It seeks to promote “the concept of a joint supervisory culture in Europe.” It organizes its curriculum in a modular fashion. Table 1 lists the subjects to be covered in 2012.

Except for including segments on negotiating and communication skills, the ESE program focuses on techniques of supervisory risk assessment and control. Missing from the curriculum is explicit training in the ethics of regulation and in how to prevent bureaucratic incentives from being distorted by the industry’s revolving door and the shadowy influence it exerts in the appointment process. Incentive conflict is the number-one problem in regulatory and supervisory enforcement and placing political patronage rather than competence, character, and courage at the center of the appointment process amplifies incentive conflict.

One's ability to handle incentive conflict is shaped in large part by one's personal sense of honor and duty. In areas of public service that require individuals to put their lives on the line, a candidate’s sense of honor and duty is honed by morale-centered training programs. Although helpful, it is not enough for consortiums of individual agencies or universities to offer specialized instruction in the theory and practice of financial regulation for existing staff. They must change the industry-centered culture of central banking.

Between them, the Federal Reserve and the European Central Bank have used risky forms of collateralized lending and swap facilities to support troubled institutions all over the globe. Their joint propensity to rescue mega-institutions not only keeps mega-firms’ funding
costs inappropriately low, it distorts the size distribution and increases the fragility of the financial-services industry.

As a long-run way to give European and US taxpayer interests the primacy they deserve, I believe that we need to establish a high-profile academy for training financial regulators modeled on West Point and admit cadets from around the world. This would forge connections between graduates at supervisory agencies in different countries and pave the way for more-effective information flows and cross-border regulatory cooperation. Besides studying principles of financial engineering and the ways in which past crises have unfolded, students need to be drilled in the duties they owe the citizenry and in how to overcome the political pressures that elite institutions exert when and as they become undercapitalized. It is striking how effectively training for crises prepares police officers, firemen, and nuclear personnel to run without hesitation toward—rather than away from—danger when emergencies arise.

Central bank and government rescue programs

The worst aspects of the current system of regulation rush to the fore in times of crisis. When regulators pander to the expedient interests of loss-making institutions, they increase expected tax burdens on households and small business. The failure to perform triage prolongs economic malaise rather than cures it. Table 2 summarizes the depth and breadth of the subsidized credit support that the Fed supplied during 2007-2010. The voting and taxpaying public recognizes that central bank and government rescue programs have placed heavy—and not yet fully acknowledged—burdens on the citizenry of the US and EU. Evaluating bailout programs only against a totally irresponsible standard of doing nothing at all, high officials characterize financial crises as generating ruinous external diseconomies for viable financial
firms, and go on to make two self-serving claims: (1) that the indiscriminate use of government credit support is necessary to save us from worldwide depression and (2) that bailout arrangements actually make money for the taxpayer. Both claims are false, but in different ways.

Without adequately measuring the holes in zombie balance sheets or considering distribution effects, authorities have undertaken restucturings that merge visibly weak firms into firms whose accounting numbers may only appear to be stronger. Such mergers eventually surface hidden weaknesses in both partners and require further taxpayer assistance down the line.

Bailing out firms without conducting careful triage and taking control of zombie firms is neither a reliable nor an efficient way to restore financial stability (Kane and Klingebiel, 2004). It wastes taxpayer resources by expanding the opportunity set of previously mismanaged firms and these firms’ attraction to long-shot uses of funds undermines rather than promotes economic recovery. The value of the zombie’s long position in the taxpayer put increases with the volatility of its underlying asset values. This is because the bulk of very large favorable returns accrue to the shareholders, while everything else belongs to the taxpayers. Leaving zombie firms in private hands evokes reckless gambles for resurrection and creates uncertainty about who will finally bear bailout costs and about when and how triage will –as it must eventually-- be accomplished. The US S&L mess shows that, until these issues are resolved, gambles and uncertainties will continue to disrupt the flow of credit and real investment necessary to trigger and sustain a robust economic recovery (Kane, 1989; Kane and Yu, 1995).

In the US, 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 heavily subsidized terms these programs offered, most institutions will be able to service the formal obligations they incurred. But the other half of the story is that US citizens had better ways to deploy bailout
funds. Blanket rescue programs forced taxpayers to provide undercompensated equity funds to deeply troubled institutions, and the largest and most politically influential of these firms were allowed to gamble for resurrection. Government backing permitted insolvent financial firms to avoid having their debt explicitly downgraded to the junk status it deserved. It also allowed some of the largest zombies to absorb the assets of other troubled firms, making them even bigger and harder to fail.

The payoff structures of lifelines provided to an underwater firm are not those of a loan. They are those of a long-shot equity investment whose substantial downside easily justifies a 15% to 20% return. For example, 3-year Irish government bonds yielded as much as 14% in July 2011 and the yield on 3-year bonds issued by Greece reached 25% in October of that year. Hull, Predescu, and White (2005) calculate that during the noncrisis period of 1996-2003 the risk premium over Treasuries appropriate for comparably low-rated bonds averaged 13.21%.

Unbridled government credit support runs a tab for past and future losses at protected firms and posts the bill on taxpayers’ account. Running such a tab is demonstrably a short-run path of political and administrative least resistance. But in the long run, this strategy breaches the public trust and creates hard-to-contain social unrest. US and EU authorities chose this path without weighing the full range of out-of-pocket and implicit costs of indiscriminate rescues 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 over time.

Accounting for the Rescue Option on Bank, Government, and Taxpayer Balance Sheets
Both in the U.S. and in the Eurozone, authorities have blamed the weak economic recovery on weaknesses in bank, customer, and government balance sheets. However, they are not coming clean about what these balance sheets truly look like. The problem is not just that the assets of many systemically important banks are overvalued. The larger problem is that banks and governments are not made to account for the way in which, when important firms fall deeper and deeper into distress, implicit and explicit taxpayer guarantees absorb much of the asset markdowns that would otherwise have to be booked.

In accounting parlance, a *contra-liability* is an item that is entered on a firm's balance sheet when and to the extent that responsibility for servicing some of its debt falls on a third party. For banks, financial safety nets transform a block of unknown taxpayers into just such a third party. The unacknowledged value of taxpayer guarantees are, economically, an unbooked contra-liability of the modern commercial and investment bank and an unbooked, and uncertainly dated, liability of the taxpaying households and firms. Those taxpayers are the ones that troubled governments are likely to saddle with the final bill for the bailout support that pressure-group politics currently and surreptitiously dictates.

Taxpayers' side of the bailout is a huge drag on the world economy. This is because, with each further delay in resolving the insolvency of zombie banks, rational taxpayers (including solvent banks) have to cut their spending and investment activity to set aside more and more of their wealth in an implicit or explicit precautionary reserve that is large enough to cover their surging tax exposure.

This is why it is disgraceful for spokespersons for JPMorgan Chase (JPM) to claim that its suffering a six-billion dollar loss in derivatives bets in London markets had no effect on U.S. taxpayers. This claim mendaciously ignores the way that observing so massive a failure in bank
and regulatory risk management has increased taxpayers’ estimates of their side of the taxpayer put and fanned taxpayer fears about other hard-to-observe forms of TBTF risk-taking.

Not having to account for taxpayers’ equity stake in too-big-to-fail institutions generated by regulatory delay and forbearance undermines political accountability and limits deceiving management teams' exposure to fraud claims.

In the Eurozone, intense uncertainty exists about the size of the liabilities and the prospective identity of the particular creditors, taxpayers, and range of countries that will finally be made to cover the shortages of the zone’s insolvent banks and sovereign nations. The inability of outside parties to size the insolvencies accurately fans taxpayer uncertainty and makes ordinary citizens’ precautionary reserve all the larger in the aggregate.

Long and counterproductive delays in resolving the insolvency of large financial firms are the rule, rather than the exception. In the European Union today, laying more of the bailout burden on another country's taxpayers is the primary goal of both those pushing for a pan-European solution and those who are resisting their efforts. Whether we are talking about an expanded bank recapitalization fund, a joint deposit-insurance authority, a banking union, or a fiscal union, the issue is the same: Who will pay the bill and how large will it get before it is finally presented?

Seemingly endless negotiations over this issue support gambling for a hard-to-foresee economic recovery in members of the regulatory community and a go-for-broke casino mentality in the increasingly undercapitalized financial community. In the meantime, the job of the European Central Bank has become to issue increasingly poorly collateralized loans to increasingly poorly capitalized and insolvent banks. In my opinion, this process is turning the ECB into the biggest and most dangerous zombie of them all. Moreover, its efforts to register a
derivatives clearing organization (DCO) in the US to clear interest-rate and foreign-exchange swaps looks suspiciously like a devious way to extract subsidies from the US safety net.

Rethinking systemic risk

This paper’s title metaphor of “wishful thinking” puts one in mind of the middle stage of the Kubler-Ross model of how people work through the pain of emotional or societal crises. After first panicking over the crisis and denying its severity, individuals are deemed to bargain fruitlessly with God or other unseen forces to make the problem magically disappear. Central bankers’ operative problem is to pass from the wishful-thinking stage to conceptualize the roots of the crisis realistically and to assess the risk that half steps of insolvency resolution and reform might make things worse in the long run.

The root problem in supervisory conceptions of capital and systemic risk is that they shield government and industry officials from timely accountability for the roles they play in generating adverse movements in the true value of each variable. Politicians and regulators are reluctant to acknowledge regulation-induced elements in innovative forms of risk-taking and loss deferral undertaken by client firms or to report publicly on the ways in which the industry exerts perverse lobbying pressure upon them.

The industry reinforces authorities’ disincentive to engage in careful crisis planning because the claim of unforeseeability glorifies self-serving industry and regulatory responses to crisis pressures and makes it easier for that response to exploit ordinary citizens. The primary task of so-called Wall Street lobbyists is to foster among politicians and regulators an inordinate fear of letting either the reliability of industry accounting standards or the health of major industry segments be called into serious question. This fear leads central bankers to proclaim
their willingness "to do whatever it takes." Such promises cement the taxpayer put and feed an expectation that officials will absorb losses and loss exposures in crisis situations. Despite the numerous changes promulgated in the DFA and Basel III, this expectation remains strong (see, e.g., Table 3). These fears and proclivities encourage opportunistic firms to cultivate turf battles and exploit incentive conflicts within the supervisory sector to make sure that tough decisions favor industry interests over those of other citizens.

Definitions of systemic risk used by the Basel Committee and other policymakers focus on *contagion*: i.e., they treat systemic risk as coming from unpredictable spillovers of institutional defaults across important firms in the financial sector and from this sector to employment and asset values in the real economy. This perspective conceives of safety-net costs more or less as negative externalities and fails to acknowledge that safety-net arrangements are rooted in an implicit political contract. In crisis circumstances, legislators and regulators renegotiate the terms of this contract and its enforcement with industry counterparties, with little input from taxpayers. The widespread understanding that authorities will be afraid to let creditors absorb potentially ruinous losses helps to complete financial markets by credibly segregating downside risk in protected institutions and assigning the deepest tail-risk exposures to taxpayers. When tail events do not materialize, the institution keeps the risk premiums their loss exposures generate. But when and if things go disastrously sour, the management "puts" substantial losses to taxpayers.

My two-piece contractual conception of systemic risk clarifies that it comes from a coercive option-like equity investment that government officials make in protected firms. As agents, government officials and the managers of protected firms owe their taxpayer principals complementary duties of loyalty, competence, and care. Taxpayers' position in each protected
firm provides an insurance-like benefit to shareholders and creditors that in a competitive guarantee market beneficiary firms would be required either to surrender or pay for. The value of this benefit can be shown to vary inversely with the risk that an institution might sustain a series of losses that exceed its ownership capital (i.e., with the expected value of a firm’s deepest downside risks) and with the percentage of a firm’s tail risk that the government is likely to absorb if this were to occur.

Research indicates that bond, stock, and swap markets reward elite institutions for increases in asset size and tail risk. See, for example, Brewer and Jagliani (2009), Penas and Unal (2005), and Völz and Wedow (2009). Hence, empirical research supports the common-sense view that implicit and explicit government guarantees distort the ways in which banks conduct and report their risk-taking.

Taxpayer exposure to loss from shadowy risk-taking is not an external diseconomy. This exposure is generated by an implicit market-completing contract whose exercise is under the control of government regulators. Unfortunately, regulatory cooperation in concealing tail risks at politically and economically important firms has been helping to sustain an exploitive contract structure.

The taxpayer put may be conceived alternatively as a reinsurance contract that makes taxpayers unacknowledged equity investors in protected firms when it is exercised. But this view still implies that policymakers should measure and collect compensation for taxpayers' exposure to tail risk at protected firms. As a matter of simple justice, the value of taxpayers' stake in such firms can and should be measured jointly by managers and regulators and be supported by an appropriate annual or quarterly dividend. This compensation should be framed as a user fee rather than a tax. Precisely as required by the contracting structures that have been worked out
for other stakeholders, taxpayers deserve to have their stake in financial firms monitored and serviced fairly.

Usefulness of capital requirements has been oversold

Regulation may be likened to medicine and systemic risk to a disease. Medicines and other kinds of therapeutic treatments are bundles of good and bad side effects. Therapies seldom prove beneficial for all **intervals of time** or for all **types of patients**. In the financial sector, treatment protocols should be judged by their ability to create net value for patients and society through time.

To evaluate regulatory treatments properly, one must look beyond their immediate palliative effects. One must also worry about both the long-term comprehensiveness of the diagnosis regulatory “doctors” have adopted and the limitations of the therapy they prescribe. In the laboratory in which global regulatory strategies are crafted today (the Basel Committee on Banking Supervision), the diagnosis that regulators are pursuing is misconceived. Their treatment plans inevitably misperceive capital and misweight risk. Authorities acknowledge that financial crises are socially costly to cure, but they pretend that crises can be avoided by aligning a firm’s deceptively understated leverage with politically negotiated conceptions of its exposure to risk. Regulators profess to believe it is sufficient to force protected institutions to accept a marked increase in their equilibrium ratio of **accounting net worth** to total assets. But games that can be played with loan-loss reserves and other discretionary items make accounting net worth a loophole-ridden concept whose meaningful economic counterpart is ultimately driven by an institution’s appetite for risk. In practice, a firm whose books make a show of higher capital is often riskier than a firm whose books show less. Hence, while accounting measures of US bank
capital to assets have remained relatively flat in recent years, measures of the economic value of bank capital fluctuate a great deal. Table 4 shows estimates of the ratio of the economic value of US bank capital to assets prepared by Hovakimian, Kane, and Laeven (2012). This ratio increased in 2004 as investments in high-yield assets expanded and began to fall after 2006 as the low quality of many of these assets became increasingly clear.

Hence, the preventive leg of the Basel diagnosis is overly hopeful and not supported by empirical research. On the contrary, financial crises seem inevitable. Where data exist, they show that every country’s financial sector passes through a succession of three-stage sequences: a pre-crisis bubble in credit, an actual crisis, and a post-crisis period of creative destruction and healthy recovery (Kindleberger, 1978; Reinhart and Rogoff, 2009). Of course, the durations of the different stages vary across countries and across time, and transitions from one stage to another become clear only in retrospect.

**Need for Improved Status and Training for Regulators**

Historical data do support a less sweeping hypothesis: namely that bubbles and crises can be amplified by weaknesses in insolvency detection and by subsidies to risk generated by zombie firms’ ability to battle for bailouts. In practice, crises and subsidies arise dialectically from path-dependent collisions of efforts by: (1) regulators in their supervisory capacity to control leverage and other forms of risk-taking with (2) disruptive efforts by regulated and “shadowy” financial institutions to expand risks in nontransparent ways and to shift responsibility for ruinous outcomes onto national safety nets. Bank managers face a trinity of malignant incentives: to lobby for lenient standards, to hide and understate risk exposures, and to overstate accounting net worth. This set of incentives makes risk and stockholder-contributed net worth hard to measure.
accurately and reliable standards by which to judge improvements in incentive alignment difficult to set and enforce.

Because regulators have relatively short terms in office, they are attracted to temporary, rather than lasting fixes. The costs and benefits of capital requirements extend far into the future and are by no means fixed or exogenous. Regulatees search tirelessly for ways to reduce the burdens of regulation. Value maximization leads bankers to devise progressively lower-cost ways to exercise political clout, to adjust and report their asset and funding structures, and to choose the jurisdictions in which they book particular pieces of business.

This kind of financial engineering resembles what happens on a “makeover” television show. Top managers deploy the equivalents of fashionistas, cosmeticians, and hairdressers to revamp their firm’s external appearance without changing the underlying character of the risk exposures that they expect taxpayers to support.

The endogeneity of regulatory burdens leads us to view: (1) ongoing negotiations in the Basel Committee on Banking Supervision that seek to establish global risk-based capital rules and (2) disruptive bank objections to—and circumvention of—emerging rules as **conflicting forces** in a dialectical evolutionary process:

**Regulation** (e.g., Basel I) immediately begets and subsequently perfects patterns of **avoidance**.

**Avoidance** begets (after a long gestation period) **re-regulation** (Basel II & III), often in response to **crisis pressures** and a credit “crunch.”

**Re-regulation** spawns further rounds of **avoidance**.

Weaknesses in the way US and EU regulators chose to implement Basel standards create differences in the costs of loophole mining that help explain why the crisis hit their financial
systems harder than those of Canada, Asia, Latin America, and Oceania [see Shadow Financial Committee Report(2011), posted at aei.org]. Although Basel II ties risk weights for sovereign debt to credit ratings, it permits national authorities to go below those weights for central-government debt (or debt guaranteed by a central government) that is issued and funded in the currency of the country in question. For political reasons, US regulators assigned unrealistically low weights to mortgage-backed securities and EU officials set zero risk weights for member-state debt. The European Central Bank (ECB) contributed to the process by accepting the sovereign debt of all Eurozone countries at par value when posted as collateral for ECB loans. When and as the debt of the “GIPSI” nations of Greece, Ireland, Portugal, Spain and Italy began to be downgraded, the EU and the ECB failed to “haircut” their treatment of these countries’ increasingly risky debt.

All this was part of a larger strategy of cross-country denial and concealment. EU stress tests and Basel’s risk-weighted capital ratios (Demirgüç-Kunt, Detragiache, and Merrouche, 2011) failed demonstrably to distinguish between failing and viable banks. The fundamental weakness in Basel arrangements is their contractual incompleteness. Basel accords fail to make credit-rating organizations and individual-country regulators accountable either to the Basel Committee or to banking regulators in other member countries. Political interference in the risk-weighting process appears to have deepened the crisis by greatly expanding bank loans and securitizations in favored sectors, feeding bubbles in associated asset prices that burst disastrously.

Basel II experience with "risk-adjusted" capital requirements illustrates Groucho Marx's ironic contention that politics consists of misdiagnosing pressing policy problems and misapplying the wrong remedies. The three categories singled out for favorable risk weights in
the 2004 accord were sovereign-government bonds, bank debt in OECD countries, and home mortgages. Because banks reacted to these special provisions by overlending to these sectors and because decisionmakers in the sectors chosen have a nearly insatiable appetite for leverage, the damage inflicted has proved unusually slow to heal.

**Undone by the Regulatory Dialectic**

Contracting theory tells us that how fully regulators embrace their duties to the taxpayer and how well taxpayers can monitor their performance is important. Regulators need training to understand their duties and the activities they entail, while taxpayers require a transparent performance measure--one wrapped around the value of the taxpayer put--to know whether their interests are being properly served.

My Hegelian perspective dramatizes the incentive conflicts that regulators and regulatees face. Crises and subsidies arise in a path-dependent manner from prior tensions between efforts by regulators in their supervisory capacity to control leverage and other forms of risk-taking and efforts by regulated and so-called “shadow” financial institutions to expand risks in nontransparent ways and to shift responsibility for ruinous outcomes onto national safety nets.

Institutions’ incentives to create and exploit loopholes make lobbyists’ disinformational claim that tougher capital requirements will make banks pass up profitable financial opportunities seem distressingly dishonest. Accounting ratios are not --and will never be--difficult to overstate and bankers do not and will not accept high statutory burdens passively. Other things equal, higher capital requirements lead banks to choose riskier strategies and to strive harder to conceal the resulting loss exposures from regulators so as to curtail adverse pressure on bank profits and stock prices.
One can only hope that the crisis is teaching the public some important lessons about the game regulators and regulatees have been playing on them. A game-theory perspective clarifies that the Dodd-Frank Act and the Basel III framework are using stress tests and higher capital requirements to treat only a subset of the problem: the extent to which institutions expose themselves in *directly observable ways* to credit risks that transmit exposures to default across a chain of possibly fragile counterparties. But to be effective, the medicine of capital requirements must be adapted to take fuller account than the Basel Committee has of a firm’s asset-liability maturity mismatch and also to treat a second and more shadowy source of subsidies. This second problem is the way in which regulatory arrangements create safe harbors for managers of undercapitalized institutions that use financial accounting tricks and innovative instruments to hide risk exposures. These safe harbors encourage managers at insolvent firms to adopt long-shot strategies that are likely to accumulate fresh losses and to pursue these strategies as long as they can. Their hope is that, if and when returns continue to turn out disastrously, enough other firms will also be in trouble that they can panic regulators and stampede them into providing indiscriminate life support.

The strength of authorities' politically driven *propensity for rescue* lies at the heart of the taxpayer put that individual institutions enjoy. Where the likelihood of rescue is small, creditors of weak banks face haircuts and excessively risky banks have risk retrenchment forced on them by market and regulatory discipline. Indiscriminate rescues cannot be justified solely on the grounds that disciplinary pressure is likely to lead to a “credit crunch” at troubled firms, because forbearance interferes with credit flows, too. The problem is that *indiscriminate* bailouts provide not discipline, but a commutation of the consequences for exploitive behavior. A zombie firm's
unnatural lease on life leads its managers to eschew healthy positive net-present-value lending business in favor of negative-NPV “gambles for resurrection.”

In good times and in bad, the “taxpayer put” allows elite private institutions to issue the equivalent of government debt and makes ordinary citizens uncompensated equity investors in risky firms. Offering long-lasting credit 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 creates additional damage by incentivizing managers of such firms to waste taxpayer resources by undertaking reckless long-shot investments instead of fostering flows of healthy business and consumer credit.

**Recommendations for reform**

My recommendations for regulatory reform are rooted in the straightforward ethical contention that protected institutions and regulatory officials owe the same fiduciary duties to taxpayers --as implicit equity investors-- that corporations owe to stockholders. The existence of a safety net makes taxpayers silent minority partners in major financial firms. As *de facto* investors, taxpayers deserve to be informed by institutions and regulators at regular intervals about the value of their side of the taxpayer put. Consistent with US and European securities laws, managers of important financial firms should measure and report --under penalties for fecklessness, deception, and negligence-- the value of taxpayers’ stake in their firm on the same quarterly frequency that they report to stockholders. Estimates prepared by individual institutions ought to be vetted by regulators and aggregated within and across countries. To make regulators more accountable for their performance as supervisors, government officials *should be required to examine, challenge, and publicize* any concerns they may have about the
assumptions used by different firms and regulators and to expose themselves to sanctions for defects in the ways in which they acquit these tasks.

Defining systemic risk as taxpayers' side of an unfavorably structured option 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 elite institutions would make regulatory authorities operationally accountable for the quality of their supervisory performance in booms and recessions alike.

Considerable disagreement exists about how to define and measure systemic risk. In reviewing the literature, Bisias, Flood, Lo, and Valavanis (2012) distinguish 31 different ways of measuring this variable. Still, nearly everyone agrees that it arises from mixing leverage with loan and investment strategies that create volatility in financial-institution returns. Most existing measurement strategies incorporate the pioneering perspective of Nobel Laureate Robert Merton (1977, 1978). Studies using his approach show that regulators could have tracked the growing correlation of institutional risk exposures and used it as an early warning system with which to track the increase in systemic risk that resulted in the current crisis. For example, research by Carbo, Kane, and Rodriguez (2011) indicates that at large US and EU banks during 2004-2008 safety-net benefits per dollar, euro, or pound of assets averaged about 15 basis points and that, in the years leading up to the crisis, estimated benefits were significantly higher at banks that eventually received bailout assistance.

Traditional reporting and incentive frameworks are inadequate

The most difficult part of calculating the taxpayer put is to track the changing volatility of a firm’s returns on assets. An effort to increase reporting frequency and expand the format for
collecting information from covered institutions in individual countries is long overdue. Elite institutions ought to be required to report their best estimates of the actual and future variability of their earnings (i.e., the "volatility" of their balance-sheet positions over different horizons) and to certify a bracketed range of values for their taxpayer put. Making this information public could improve the precision of systemic-risk estimates and make officials more accountable for regulatory and supervisory performance.

Current accounting standards for recognizing emerging losses make evidence of an institution’s insolvency inefficiently slow to surface. Moreover, during this and other crises, officials have proved 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 pursuit of tail risks from being adequately monitored and disciplined. The nontransparent role of political, bureaucratic, and career interests in regulatory decision-making is dangerous. It encourages elite firms to demand the right to screen regulatory appointments, to distort regulatory protocols, and to undermine strategies of enforcement.

In a world of derivatives transactions, top regulators need special training to understand -- and considerable mental toughness to discipline abuses of -- the incremental taxpayer exposures to risk that innovative instruments and portfolio strategies might 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 narrowly on measures of tangible capital. They should also develop and report explicit estimates of the intangible value
of an institution's evolving claim on taxpayer resources. To hold themselves accountable for carrying out these tasks conscientiously, regulators and protected institutions must accept a system of ethical constraints that would make them reveal and defend the forward-looking assumptions they use in calculating their enterprise’s share of the taxpayer put.

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


Hull, John, Mirela Predescu, and Alan White, 2005. “Bond Prices, Default Probabilities and Risk Premiums” (published online).


<table>
<thead>
<tr>
<th>Topics</th>
<th>Number of Times Offered</th>
<th>Planned Dates</th>
<th>Length</th>
<th>Host/Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate risk and asset-liability management (ALM) in banks (Advanced Basel III Seminars)</td>
<td>Two</td>
<td>14-16.02.2012</td>
<td>2.5 days</td>
<td>Eltville</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19-21.09.2012</td>
<td>2.5 days</td>
<td>Eltville</td>
</tr>
<tr>
<td>Stress testing and capital management in banks (Advanced Basel III Seminars)</td>
<td>Two</td>
<td>30.01-01.02.2012</td>
<td>2.5 days</td>
<td>Eltville</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25-27.04.2012</td>
<td>2.5 days</td>
<td>Vienna</td>
</tr>
<tr>
<td>IFRS vs. Basel requirements for Banks (Advanced Basel III Seminars)</td>
<td>Two</td>
<td>20.-22.06.2012</td>
<td>2.5 days</td>
<td>Vienna</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14.-16.11.2012</td>
<td>2.5 days</td>
<td>Vienna</td>
</tr>
<tr>
<td>Negotiating skills for European supervisors</td>
<td>Six</td>
<td>12.-13.01.2012</td>
<td>2 days</td>
<td>Eltville</td>
</tr>
<tr>
<td></td>
<td></td>
<td>02.-03.02.2012</td>
<td>2 days</td>
<td>Eltville</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22.-23.03.2012</td>
<td>2 days</td>
<td>Eltville</td>
</tr>
<tr>
<td></td>
<td></td>
<td>03.-04.05.2012</td>
<td>2 days</td>
<td>Eltville</td>
</tr>
<tr>
<td></td>
<td></td>
<td>06.-07.09.2012</td>
<td>2 days</td>
<td>Eltville</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18.-19.10.2012</td>
<td>2 days</td>
<td>Eltville</td>
</tr>
<tr>
<td>Case studies on the development And review of IRB models</td>
<td>Two</td>
<td>30.05.-01.06.2012</td>
<td>2.5 days</td>
<td>Eltville</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23.-25.10.2012</td>
<td>2.5 days</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>Importance of the liquidity risk management for the stability of individual banks and the financial system</td>
<td>Two</td>
<td>24.-26.04.2012</td>
<td>2.5 days</td>
<td>Luxembourg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.-17.10.2012</td>
<td>2.5 days</td>
<td>Frankfurt</td>
</tr>
<tr>
<td>Risk models in banks</td>
<td>One</td>
<td>07.-09.05.2012</td>
<td>2.5 days</td>
<td>Frankfurt</td>
</tr>
<tr>
<td>Supervisory Colleges</td>
<td>Two</td>
<td>08.-09.03.2012</td>
<td>1 day</td>
<td>Berlin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04.-05.10.2012</td>
<td>1 day</td>
<td>Frankfurt</td>
</tr>
<tr>
<td>Supervision of Credit Rating Firms</td>
<td>Two</td>
<td>26.-27.04.2012</td>
<td>1 day</td>
<td>Frankfurt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26.-27.04.2012</td>
<td>1 day</td>
<td>Bonn</td>
</tr>
<tr>
<td>English &amp; Communication Skills for Supervisory functions</td>
<td>One</td>
<td>23.-25.05.2012</td>
<td>3 days</td>
<td>Prague</td>
</tr>
</tbody>
</table>
TABLE 2
THE FED, SHOWING GREAT CREATIVITY, USED ITS LAST-RESORT LENDING POWERS TO FUND MANY OF THE LARGEST BANKS IN THE WORLD

TABLE 3
SURVEY EVIDENCE ABOUT THE CREDIBILITY OF FINANCIAL REFORMS

Given Moody’s recent downgrades and the passage of Dodd-Frank, Does Too Big to Fail still exist?

Source: American Banker On-Line Subscriber Survey
Survey Questionnaire Was Posted online from 9/25/11 through 10/2/11
TABLE 4


<table>
<thead>
<tr>
<th>Year</th>
<th>Implied Sectoral Capital Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>74</td>
<td>2.0</td>
</tr>
<tr>
<td>76</td>
<td>2.5</td>
</tr>
<tr>
<td>78</td>
<td>3.0</td>
</tr>
<tr>
<td>80</td>
<td>3.5</td>
</tr>
<tr>
<td>82</td>
<td>4.0</td>
</tr>
<tr>
<td>84</td>
<td>4.5</td>
</tr>
<tr>
<td>86</td>
<td>5.0</td>
</tr>
<tr>
<td>88</td>
<td>5.5</td>
</tr>
<tr>
<td>90</td>
<td>6.0</td>
</tr>
<tr>
<td>92</td>
<td>6.5</td>
</tr>
<tr>
<td>94</td>
<td>7.0</td>
</tr>
<tr>
<td>96</td>
<td>7.5</td>
</tr>
<tr>
<td>98</td>
<td>8.0</td>
</tr>
<tr>
<td>00</td>
<td>8.5</td>
</tr>
<tr>
<td>02</td>
<td>9.0</td>
</tr>
<tr>
<td>04</td>
<td>9.5</td>
</tr>
<tr>
<td>06</td>
<td>10.0</td>
</tr>
<tr>
<td>08</td>
<td>10.5</td>
</tr>
<tr>
<td>10</td>
<td>11.0</td>
</tr>
</tbody>
</table>

*Graph showing the implied sectoral capital ratio from 1974 to 2010.*