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**A THEORY OF HOW AND WHY CENTRAL-BANK CULTURE SUPPORTS
PREDATORY RISK-TAKING AT MEGABANKS***

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We know that the “executive culture” values returns for stockholders, which creates problems of social responsibility...Edgar H. Schein (2010)

ABSTRACT

This paper applies Schein’s model of organizational culture to financial firms and their prudential regulators. It identifies a series of hard-to-change cultural norms and assumptions that support go-for-broke risk-taking by megabanks that meets the every-day definition of theft. The problem is not to find new ways to *constrain* this behavior, but to change the norms that support it by establishing that managers of megabanks owe duties of loyalty, competence, and care directly to *taxpayers*.

Recent months have surfaced an intense exchange of top-level finger pointing, both between Congress and the leadership of the Federal Reserve System, between Fed officials and executives in the private sector (McGrane, 2015; Dudley, 2014) and within the Fed between the Board of Governors and the New York Reserve Bank (Hilsenrath, 2015). This intrasectoral in-fighting responds to a growing concern that post-crisis strategies of re-regulation may be increasing regulatory costs in industry and government, without doing much to increase either financial stability or the flow of real investment.

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The analysis presented here interprets the finger-pointing not just as exercises in blame avoidance, but also as evidence of the dysfunctional way in which three intertwined segments of the financial sector “help” one another to carry out their respective tasks. The networks I have in mind consist of: (1) giant financial institutions, (2) federal financial regulators, and (3) advocacy and avoidance intermediaries such as Sullivan & Cromwell and the Promontory Group.

Blending ideas presented in Kane (2006) with those of Schein (2010) and Gladwell (2008), the first half of this paper uses the methods of cultural anthropology¹ to develop hypotheses about deep-seated assumptions that these networks share, assumptions that in some respects incentivize supervisory behavior (such as too-big-to-fail capital forbearance) that conflicts with the espoused missions and goals of federal regulators. The second half offers a plan for mitigating this conflict by codifying and servicing taxpayers’ implicit equity stake in difficult-to-fail organizations.

1. Applying Schein’s Model of Organizational Culture to Executive Cultures in Finance

Organizational cultures are conditioned by the larger national and professional cultures to which their members belong (Aggarwal and Goodell, 2014). According to Schein (2010), any culture should be studied at three levels – the level of its observable artifacts, the level of its professed beliefs and values, and the level of the unspoken beliefs and underlying assumptions that its members share. Although reforms can change the character of the first two levels relatively quickly, shared beliefs are difficult to change because they are drilled into participants until they imbed themselves in the very ways that members conceive of their work.

¹ As Schein explains (2010, p. xii), these methods are highly personal. They rely on close observation, focused inquiry, and critical feedback [something of which I can gratefully say I have had a great deal]. The credibility of the inferences derived is supported at best by a replication-like test of whether it seems reasonable to believe that others would arrive at similar insights if they worked through the same process.

Capital standards, liquidity requirements, and stress tests are observable artifacts – strategic policy instruments– of financial regulatory cultures around the world. Their emergence as important instruments is supported by an irrational belief that advocacy and avoidance specialists will set aside their loyalty to private clients and their culture of value maximization to help them to design policies tough enough to minimize opportunities for regulatee avoidance. For example, having established an effective oligopoly, it would be against the financial interest of the Big Three accounting firms to set standards that could measure mega-institution leverage and other risk exposures accurately enough to allow various balance-sheet ratios to function consistently as reliable proxies for a firm’s risk of ruin.

This paper argues instead that the extent of accounting trickery embraced by any mega-institution must be expected to surge as its risk of ruin increases. The likelihood that regulatory standards will be enforced closely in times of distress is undermined by time-tested assumptions (particularly metanorms of regulator helpfulness and information suppression) that distort the measurement and enforcement of leverage requirements throughout cycle, making regulators slow to discipline industry efforts to innovate around requirements during booms and quick to help firms when they experience problems in rolling over their liabilities during downturns (Kane, 2015).

By playing down the role of regulatory avoidance, government and industry officials are framing the likelihood of future bailouts in an illogical way. Congress trumpets the news that the Dodd-Frank Act has outlawed future bailouts, but refuses to acknowledge that, by painting Treasury and Fed officials as heroes for devising wild and unforeseeable ways to work around statutory restrictions on their bailout authority in 2008-2009, they have strongly incentivized future regulators to engage in similarly creative workarounds during the next crisis. Because

expectations of future bailouts lower the cost of capital for megafirms, this response is exactly the response that megabankers and advocacy intermediaries hope to ensure.

Exhibit 1 shows that, over time and especially in the wake of the Great Financial Crisis, capital standards and other artifacts of the financial regulatory culture have expanded and become extremely complicated, but there is no persuasive evidence that the behavioral norms that underlie supervisory decision-making have changed at all.² Regulatory norms that subsidize megafirms are rooted in the idea that banker claims of bad luck and temporary liquidity shortages deserve the “benefit of the doubt.” The next section seeks to identify the artifacts of financial regulatory cultures and to explain how their use is compromised by incompletely acknowledged regulatory norms.

2. The Components of regulatory culture³

A culture may be defined as customs, ideas, and attitudes that members of a group share and transmit from generation to generation by systems of subtle and unsubtle rewards and punishments. A regulatory culture is more than a system of rules and enforcement. It incorporates higher-order norms about how officials should comport themselves; these norms limit the ways in which uncooperative or even unscrupulous individual bankers can be monitored and disciplined. It includes a matrix of attitudes and beliefs that define what it means for a regulator to use its investigative, rule-making, and disciplinary authority honorably. These attitudes and beliefs set ethical standards for the fair use of government power. Checks and balances that bound each agency’s jurisdiction express a distrust of government power that often traces back to abuses observed in a distant past when the country was occupied, colonized, or run

² See, e.g., Beim (2009), Bernstein (2014 a and b), and Glass (2014).

³ The next three sections draw heavily on Kane (2006).

by a ruthless or incompetent government. Underlying every formal regulatory structure is a set of higher-order norms about how employees are supposed to behave in different circumstances if they want to have a successful career in that organization. These norms penetrate and shape the policy-making process and the political and legal environments within which inter-sectoral bargaining takes place. These underlying standards, taboos, and traditions are normative in two senses. They simultaneously define what behaviors of regulators are deemed to be “normal” and what behaviors regulators should mimic to avoid criticism or shame.

Prudential regulation imposes on regulators a duty to stop potentially ruinous risk-taking, and to uncover and resolve hidden individual-bank insolvencies in timely fashion. Within any individual agency or country, the artifacts of regulatory culture within which this duty is discharged are spanned by six specific components:

- Legal authority and reporting obligations;
- Formulation and promulgation of specific rules;
- Technology of monitoring for violations;
- Penalties for material violations;
- Regulators’ duties of consultation: to guarantee fairness, regulated parties are accorded rights of participation and due process that impose substantial burdens of negotiation and proof on the regulator; and
- Regulatees’ rights to judicial review: Intervened parties have an access to appeals procedures as a way to bond the fairness guarantee.

How these artifacts play out in practice is governed by espoused and unspoken goals and by norms of behavior that are seldom directly observable. Some norms fall under the category of what the French call *le non-dit*, things that people may refuse to admit even to themselves.

For example, leaders of regulatory agencies typically do not broadcast all of their reasons for wanting to expand their agency's budget, turf and prestige. But observers understand that at least a few regulators hope to build a reputation for cleverness, competence, and reliability that will allow them to convert their regulatory experience and valuable governmental contacts into a high-paying career in the banking or advocacy sector.

A principal goal of prudential regulation is to protect society from the consequences of excessive risk-taking, capital shortages, and loss concealment at individual banks. In principle, regulatory activities are efforts by allegedly trustworthy third parties to affect the shaping, pricing, and delivery of banking products in one of three ways: by rule-making (e.g., capital requirements); by monitoring and enforcement; or by detecting and resolving insolvencies (i.e., shortages in bank-contributed net worth).

The norms of a country's regulatory culture co-evolve with popular perceptions of what regulatory problems cry out to be solved. Schein believes that changes in cultural assumptions require substantial expectational shocks. As long as citizens can be convinced that their country's regulatory system is working adequately, it is hard to build a coalition strong enough to win marked changes in regulatory norms, strategies, and tactics. This is why substantial regulatory reforms usually occur in the wake of large-scale crises. In noncrisis times, public-interest lobbying activity can seldom achieve more than marginal adjustments either in the objectives that officials pursue or in the tradeoffs officials are expected to make within the limits of their regulatory culture.

From a game-theory perspective, how particular policy strategies work in practice is co-determined by the *rules* officials promulgate and by regulatees' ability to find and exploit circumventive *loopholes* in the enforcement of these rules. This is what Kane (1988) calls the

Regulatory Dialectic. To the extent that megabanks and regulators work together to privatize profit and federalize costs, the game is rigged against taxpayers. Enforcement issues regularly spill across bureaucratic borders because exploiting loopholes often entails moving activities that one's traditional jurisdiction might tax more heavily or regulate more effectively into the jurisdiction of a more welcoming set of officials.

Shared Beliefs and Assumptions. Exhibit 2 lays out Schein's vision of what he calls the shared assumptions of executive subcultures in the private sector. The idea that CEOs in most sectors see themselves as leading a hierarchical firm into endless "battle" is very enlightening. But to apply the model to executives of *financial* firms, we must expand the battlelines in item 1 to include regulatory and tax avoidance campaigns that are waged with and against government officials.⁴ These campaigns need not always be toxic for taxpayers and smaller institutions. But the Basel and DFA regimes are achieving this result. To understand how regulation becomes predatory, it helps to clarify that advocacy and avoidance intermediaries serve as outside contractors for both industry and government, but are unlikely to serve both sides with equal vigor. Exhibit 3 adds a series of bullet points that encompass my model of the behavioral norms and assumptions that characterize what financial executives, regulators and advocacy contractors take prudential regulators' duty of helpfulness to mean in practice.

The primary assumption is that, to prevent a disorderly run on a bank's liabilities, it is morally "okay" for regulators to help troubled banks conceal unfavorable information about accumulating losses from outsiders. All sides claim to see this as a principal advantage of making it hard for customers and counterparties to uncover adverse information. This is a big

⁴ For example, failing to emphasize the importance of these additional battlelines limits the value of Ho's insightful career-based research (2009).

part of the reason that individual-bank information surfaced in government chartering and prudential supervision of banks and payments systems is usually treated as confidential.

Disclosure regimes place a web of investigative and reporting obligations on bank managers, accountants, and directors. Loopholes in these obligations allow variation in what asset and liability items bank accountants must report values for, what changes in value must be reported (either on the balance sheet or in footnotes), and when and how authorities are to be informed about emerging losses. In all countries, independent external accountants assume a responsibility for reporting accurate information to directors, creditors, stockholders, regulators, and other outsiders, but the managers who hire them may pressure them to allow the firm's books to be cooked in questionable ways. Similarly, bank directors may neglect their duty to review and test audit reports for accuracy or disregard their duty to assure themselves and regulators that the bank is being managed well.

In the multiregulator regime that the US has adopted for commercial banking, an ideal prudential culture would impose sensible and enforceable regulator-to-regulator disclosure obligations all around. When lead regulators receive strong evidence that crippling losses may be emerging at an individual bank, this ideal culture would require them to dispatch a team of forensic analysts to measure the extent of these losses and to inform co-regulators of this action. As soon as this special exam was completed, regulators would be expected to share the findings with the bank's directors. Depending on the depth of the bank's distress, directors might be allowed to request a brief window of time to give them a chance to cure the bank's capital shortage. If sufficient new capital was not in fact raised, the bank would be closed, offered to a new owner, or placed in statutory management. The task of statutory managers would be to decide afresh whether and when to liquidate the bank or offer it for sale.

Exhibit 4 lists the alternative ways that news of crippling losses may first come to light. It also lists the ways that managers, directors, and lower-level regulatory staff members may sugarcoat bad news or temporarily blockade the various paths through which bad news can reach top regulators.

It is important to recognize that policy coordination cannot eliminate within-country (let alone cross-country) incentive conflict in banking regulation. At best, it may establish a loose partnership that supplements—without substituting for—the espoused goals of regulatory discipline in individual venues. Although the Basel Accords call for contact and cooperation between host and parent supervisory authorities, shared assumptions and norms focus banking regulators in every country on narrower clientele interests. Mercantilist-like norms of protecting one’s particular regulatory clientele dictate that regulators design and operate regulatory enterprises with an eye toward expanding or maintaining the earning capacity of institutions under their *aegis*. It goes without saying that government actions that mindlessly favor one class of citizens over all others cannot be optimal.⁵

To stress this point, welfare economist E.J. Mishan (1969) emphasizes that economic policy performance should be assessed in two dimensions. Optimal strategies produce outcomes that are simultaneously Pareto-efficient and “distributionally preferred” (i.e., they help the representative citizen and avoid antiegalitarian effects on the distribution of income). The Mishan criterion reminds us that arrangements to detect, prevent, and resolve bank insolvencies that result in increased loss exposures for ordinary citizens should compensate their citizens for the funding they provide.

⁵ In the words of Andrew Jackson [quoted in Todd (2002)]: “In the full enjoyment of . . . the fruits of superior industry, economy, and virtue, every man is equally entitled to protection by law; but when the laws undertake to add to these natural and just advantages artificial distinctions to grant titles, gratuities, and exclusive privileges to make the rich richer and the potent more powerful, the humble members of society—the farmers, mechanics, and laborers—who have neither the time nor the means of securing like favors to themselves, have a right to complain of the injustice of government (1832).”

As stewards of taxpayer resources, the Mishan criterion implies that in each country financial supervisors and regulators owe four duties to the representative citizen:

1. Vision (maintaining a capacity to recognize risk-taking and capital shortages in timely fashion);
2. Prompt corrective action (being committed to control the value of implicit and explicit government guarantees);
3. Least-cost resolution (efficiently curing insolvencies that corrective action fails to avert);
4. Truth-telling (keeping voters and taxpayers informed about the true distributional and aggregate opportunity costs of regulatory strategies).

In my opinion, during the run-up to the 2008-2009 crisis, these duties were frequently neglected. Inattention to the espoused goal of resolving diverse incentive conflicts in financial transactions at minimum welfare cost to society increased the scale of losses we witnessed. Megabankers and advocacy intermediaries fought against close multiple inspections of multinational banking organizations by repeatedly proclaiming that close supervision by multiple countries would retard improvements in productive efficiency and generate “duplicate and unnecessary burdens.” This view could have been easily dismissed if it had not resonated so strongly with mercantilist norms of clientele protection.

My alternative view is that, especially where megabank risk exposures and capital positions are hard to detect and easy to shuffle across jurisdictions, taxpayer loss exposures in poorly supervised venues will expand over time unless the consequences of such shuffling are closely monitored in parent and host countries alike. To lessen the likelihood of systemic breakdowns that this behavior entails, the second half of the paper argues that society needs to

develop more accurate measures of bank and regulatory performance. But to reorient the cultures of regulation and megabank management, the value of taxpayers' coerced equity stake in megabanks must be incorporated into a more self-enforcing contract structure, one that pays a fair dividend on taxpayers' equity stake and empowers citizens to hold officials accountable for the tradeoffs they make between taxpayer and stockholder interests.

3. Difficulty of Controlling Incentive Conflict

Any system of government generates different costs and benefits for differently situated citizens and corporations. Special interests accumulate political clout so that they can pressure governments to treat *them* more than fairly and to reduce *their* regulatory compliance costs.

In banking, deferential regulators may expose depositors and other outside stakeholders to loss from fraud, leverage, or earnings volatility by preventing them from being adequately informed or compensated for the risks entailed. To reduce their exposure to potentially predatory risk shifting, a bank's counterparties deploy three remedies: (1) they require the bank to bond itself in various ways to behave honestly and fairly; (2) they negotiate a deterrent right to punish opportunistic behavior; and (3) they monitor information on the bank's ongoing performance and condition.

Bonding, policing, and monitoring are not costless. Their costs vary inversely with the transparency provided by the accounting and disclosure regime under which the bank operates. The more transparent the disclosure regime, the more easily and more accurately outsiders—depositors, investors, and supervisors—can estimate the true value of a bank's assets and liabilities. But policing costs are also a function of outside stakeholders' ability to *appreciate* the

implications of the information they receive (i.e., their financial expertise) and their ability to *coordinate* deterrent and punitive responses with others (i.e., their disciplinary power).

In the absence of credible third-party guarantees, financially sophisticated counterparties act as keynoters whose actions put strong pressure on banks thought to be experiencing opportunity-cost losses to adjust their affairs promptly. The market forces that keynoters unleash would require troubled banks to do one or all of three things: shrink their footings, raise more capital, or pay higher interest rates on their deposits and other debt.

In monitoring, disciplining, and resolving banks, the incentives of government officials to act promptly differ from the duties and incentives of private creditors in important ways. In particular, officials do not want to be accused of starting a destructive creditor run. Because official interventions spread adverse information, officials cannot focus only on the *economic* costs and benefits of the intervention. Disadvantaged stakeholders are all too ready to accuse them of creating or escalating problem situations rather than curing them. This makes reputationally minded regulators worry about the political and career ramifications of even the most-dutiful interventions.

Today, observers express considerable dissatisfaction with the impact of the bailouts of 2008-2009 on the level of employment and the distributions of income and wealth. In defending bailouts to Congress and the public, industry and regulatory spokespersons describe the decision to provide unlimited credit support to creditors of zombie firms such as Bank of America, Citigroup, and American International Group (AIG) as praiseworthy and unavoidable. Their slogan is the unprovable claim that not rescuing these firms and their creditors would have imposed greater and irreparable harm on us all. Despite the Dodd-Frank Act's introduction of new strictures against openly bailing out *individual* institutions, future adherence to the age-old

regulatory norms of mercy, rescue, and loss concealment that supported bailouts of megabanks in the past is being reinforced by allegations by former Treasury Secretaries Paulson and Geithner and top Fed officials that massive “no-haircut” bailouts not only were absolutely necessary to avoid a worldwide financial meltdown, but actually “made money for taxpayers.”

Although many commonalities of interest exist, governmental systems for setting and enforcing financial rules are infested with incentive conflict. Even within a country, major conflicts exist between and among:

1. Regulators and the firms they regulate;
2. Particular regulators and other societal watchdogs;
3. Regulators and the politicians to whom they must report;
4. Taxpayers and the politicians and regulatory personnel they put in office.

How a country traditionally approaches and resolves these conflicts is in part hard-wired into its political and institutional structure. To different extents, societies impose bonds of community on individual citizens. Ideally, these bonds restrain corporate and governmental decision making in socially beneficial ways. Communal bonds generate an internally and externally enforced sense of reciprocity that inserts into individual preference functions a concern for one another’s welfare that deters at least some forms of opportunistic behavior. To reinforce these implicit controls, industry and government experiment with various ways for “watchdogs” to fill gaps in the bonding, deterrent rights, and transparency inherent in their particular contracting environments. Over time, these efforts to close gaps in private and government contracting slowly reshape the assumptions imbedded in a country’s *regulatory culture*, but the pace is very slow indeed.

4. Defects in Supervisory Vision

The ostensible goal of all systems for supervising financial institutions is the same: to assure a safe and sound financial environment by protecting creditors and the health of the national economy from destructive forms of financial-institution risk-taking. Ideally, supervision serves to detect losses and imprudent risk exposures and to resolve capital shortages at banks before they become deep enough to risk the ruin of the firm and impose losses on its counterparties.

To achieve this goal, regulators must understand that the current regulatory culture strongly encourages megabanks to risk self-destruction, with the result that they expose themselves to potentially fatal risks to a much greater extent than established firms in other industries. This broken regulatory culture sustains gaps in vision and reporting obligations that intensify incentive conflict for regulators and megabanks alike. These gaps reduce society's ability to hold regulators responsible for uncovering the truth about accumulating megabank losses. At the same time, they interfere with regulators' willingness to confront threats of insolvency in timely fashion. This is because the lack of hard data provide a ready excuse for inaction: Replacing the question of *Who should have known?* with the more weaselly question *How could we have known?* Keeping this avenue of blame avoidance open undermines a regulator's incentive both to prevent megabank risk-shifting and to resolve insolvencies efficiently. Knowing that one can explain weak enforcement in exculpatory ways intensifies incentive conflict. It makes it easier in tough times to pursue short-run political and career rewards that top officials can capture by turning a blind eye to instances of economic insolvency.

Position restrictions and confidential government inspections play starring roles in state and federal supervision of US banking organizations. Government supervisors are never going to

know enough about the *motives* for financial innovation to design ratios that can serve as a permanent first line of defense against risk-shifting by distressed banks. The pace of innovation in techniques of risk-taking and risk management virtually guarantees that with every passing day, balance-sheet ratios that predicted failure in the past become less and less reliable measures of a modern bank's proneness to failure. Both in rule-making and in monitoring, the continuing expansion and growing complication of structured and index derivatives keep government supervisors' risk-assessment capabilities lagging behind those of the banks they regulate. However, the second half of this paper argues that many impairments to *regulatory vision* and *verification* can be contracted away (Axelrod, 1997).

As explained earlier, authorities' vision is constrained by leeway in accounting standards and by the protective disclosure regime in which megabanks operate. The rules and enforcement methods by which authorities pursue financial stability ought to be tailored to overcome weaknesses not only in their own vision, but also in the vision of partner regulators and in the bonding, deterrence, and transparency their private contracting environments display.

Summary of the first half of the paper. In the US and indeed in most other countries, inspection-based supervision is a game of hide the cheese. The cheese, of course, is adverse information about a bank's true condition or periodic performance. Loopholes in the rules of the game *incentivize* regulators to tolerate this and incentivize avoidance and advocacy intermediaries and bank directors to help managers to mislead government supervisors and other outsiders.

Managers can hide the cheese with impunity as long as they make skillful use of an evolving set of certified accounting loopholes. Like night-club illusionists, managers and

accountants expect ethically challenged directors and stockholders to admire their proficiency in using smoke and mirrors to make losses and loss exposures invisible to the naked eye.

In effect, regulatory vision falters when it is most needed. This makes accounting insolvency a dangerously weak and unreliable test for winding up the affairs of a troubled bank. Historical experience shows that, combined with the mercy and benefit-of-the-doubt norms, financial institutions' ability to conceal risky transactions and impairments in asset values from outside eyes allows institutional losses to reach costly depths before authorities address them (Honohan and Klingebiel, 2003). Delays in loss detection and regulatory intervention spawned the Great Financial Crisis by enabling insolvent institutions to adopt aggressive risk-taking strategies that—by squeezing industry profit margins—spread insolvency to competing institutions.

Opportunities to defer the accounting realization of economic losses render accounting net worth a lagging indicator of the extent of a troubled bank's capital shortage. When a financial institution's survival is threatened, adverse information becomes harder and harder to detect in accounting reports. To compensate for this predictable decline in acuity, the trigger at which authorities can force stockholders to either recapitalize a troubled bank or surrender their franchise must be set far above accounting insolvency.

But this paper's model of Fed culture predicts that the rule the Fed adopted to implement the Dodd-Frank Act's effort to prohibit emergency lending to zombie institutions would move the trigger in the opposite direction. The Fed's November 30, 2015 rule incorporates a bright-line test for a bank's insolvency in terms of a "failure to pay undisputed debts as they become due during the 90 days prior to borrowing" (Shadow Financial Regulatory Committee, 2015).

Today, as long as they act cleverly enough, it is neither illegal nor disreputable for regulators, managers and directors to assist others in perpetrating illusions that harm taxpayers. To remedy this, directors ought to be required by law to bring to the attention of their lead regulator materially adverse information they happen to come across. To enforce this duty, regulators need to be willing and able to impose substantial criminal and civil penalties on *individual* executives. Variation in the severity of these penalties would serve to calibrate the degree of “shaming” that public exposure of illicit executive behavior is supposed to bring.

5. My plan for De-rigging the Regulatory Game⁶

“ ‘It is possible,’ answers the doorkeeper, ‘but not at this moment.’ “
Franz Kafka *Before the Law*

Currently, megabanks prefer the predatory pursuit of tail risk to acquiescing in a Mishan-type equilibrium. Changing this preference is the problem that prudential reform must solve if it is to be genuinely successful.

My plan is built around the idea that financial markets closely resemble *roads*: roads that are used simultaneously by individuals and businesses. The purpose of building and maintaining a network of financial roads is to allow ordinary citizens and corporations to create and divide wealth fairly and efficiently. Banking is regulated for the same reason that traffic is regulated: to coordinate potentially chaotic activity and to make all drivers behave more safely. But in banking supervision, norms that foster deception and abuse of the public trust have become imbedded in banks’ and regulators’ organizational cultures.

Banking crises occur because bankers routinely abuse the financial rules of the road, knowing that supervisory norms are apt to exempt them from meaningful personal penalties.

⁶ This section refocuses Kane (2015).

Incentives to exempt miscreants are at bottom a problem of inadequate professional ethics. If systems for supervising vehicular traffic flows were as distorted, as elitist, and as slow to respond as those for supervising banks in Europe and the US have become, ordinary citizens would be afraid to venture out of their homes.

The central problem is straightforward: safety nets encourage unhealthy relationships between banks and their regulators and distort the incentives of both groups in ways that harm ordinary citizens. In good times and in bad, regulatory and banking cultures encourage their country's largest banks to take on too high a risk of ruin (i.e., too much tail risk). Existing financial accounting systems fail to identify and record the economic value that these incentives transfer from taxpayers to bankers and their stockholders.

I propose two straightforward and interlinked solutions. First, regulators must explicitly measure and manage the cost of safety net guarantees. Second, regulators must commit themselves to imposing a series of graduated penalties on *individuals* who violate important rules of the road. These two steps would help force megabanks to internalize the costs of safety net guarantees, and would negate the elitist norms that continue to corrupt the culture of regulation in the US and Europe.

Narrower Lessons from which these Proposals Arise

1. Safety nets can and often do cause financial fragility. Safety-net subsidies to under-supervised forms of risk taking by financial institutions create strong and enduring incentives for managers to search out *proudly* --and to exploit aggressively—legally permissible ways of putting institutional survival and taxpayer funds at risk.

To stop this, society needs to make subsidy extraction a source of disdain, rather than admiration. This will not happen until and unless regulators and supervisors strip out from reported profit flows the embedded value of the taxpayer credit support a megabank receives. Much of this value comes from norm-based government delays in recognizing and resolving insolvencies. Extending accounting principles to highlight taxpayers' stake can force regulators and auditors to focus specifically on whether and to what extent particular market extensions and financial innovations reduce the effectiveness of prudential policies.

Official definitions of systemic risk leave out the role that regulators' propensity to *assist* rather than to *resolve* insolvent institutions plays in generating it. The norm of *helpfulness* leads policymakers to act as cheerleaders for innovative forms of contracting and the norm of *giving troubled banks the benefit of the doubt* supports a proclivity for absorbing losses in crisis situations. The deference these norms elicit intensifies incentive conflict within the supervisory culture. To restore faith in the diligence, competence, and integrity of officials responsible for managing national safety nets, governments need to rework executive training programs, redesign information and reporting systems, and jettison the unhealthy cultural norms my model identifies.

2. *Fragility is rooted in conflicted incentives.* Far from having purely altruistic motives, both in the private and the public sectors, managers have identifiable private interests. Because top government officials have to be reappointed by each new administration, they are effectively short-timers. This reinforces the norm of helpfulness by keeping them interested in ensuring opportunities for their own re-employment in future governments or through the "revolving door" into the sectors they regulate. This interest expresses itself in policies that tend to favor industry interests at the expense of ordinary citizens and, as a *quid pro quo*, enlist industry

lobbying support for legislative initiatives that enhance an agency's prestige, budget, and jurisdiction in the short run.

3. *Dangerous incentive conflicts could be reduced if safety-net subsidies were measured conscientiously and compensation schemes paid managers and taxpayers in better ways.*

Although officials claim otherwise, it is no accident that they repeatedly fail to foresee the emergence of crisis pressures and respond to them in an *elitist* fashion.

4. *These conflicts lead to regulatory capture, and regulatory capture expands implicit and explicit government guarantees that become part of the **equity funding structure** of too-big-to-fail (TBTF) banking organizations. As a matter of fair play, contingent taxpayer support deserves to be recognized as an equity claim both in company law and in financial accounting.*

Financial safety nets *coerce* taxpayers into becoming disadvantaged suppliers of loss-absorbing equity funding. To provide legal protections parallel to those that explicit shareholders enjoy, legislation is needed to establish two things: to insist that managers of TBTF firms owe enforceable fiduciary duties of loyalty, competence, and care *to taxpayers* and to criminalize aggressive and willful efforts to transfer value from taxpayers to shareholders and managers.

Characterizing bailout support as owners' equity leads us to look at taxpayer positions in TBTF institutions as a portfolio of trust funds. This way of thinking casts regulators as trustees and opens up the possibility of installing carefully recruited teams of private parties to serve as co-trustees. The formal establishment of such trusteeships would lead officials to judge regulatory performance in terms of its effects on the value of taxpayer equity positions and exposures to ruin. It would also require regulators *and* protected institutions to re-work their norms, information systems, and incentive frameworks to support this effort.

5. *Incentive conflicts lead TBTF firms' creditors and internal and external supervisors to short-cut and outsource due diligence.* I believe that post-crisis strategies of reform do not adequately acknowledge these conflicts or the patterns of “deferential regulation” they sustain. To lessen these conflicts, governments need to rethink the informational obligations that insured financial institutions and their regulators owe to taxpayers *as de facto equity investors* and to change the way that information on industry balance sheets and risk exposures is reported, verified, and used by supervisors. Without reforms in the practical duties imposed on industry and government officials and in the way these duties are enforced, financial safety nets will continue to expand and their expansion will undermine financial stability.

6. *TBTF guarantees are more than a form of bond insurance on outstanding debt.* The coverage of TBTF guarantees are richer than insurance on outstanding debt because, as long as regulators forbear from resolving its insolvency, a truly TBTF firm can acquire additional coverage simply by issuing more debt.

7. *Every guarantee contract has two components.* The first allows the guaranteed party to *put* responsibility for covering losses that exceed the value of the assets of the banking company to the guarantor. The guarantor is conceived as writing the put. But the put is not the whole contract. No guarantor wants voluntarily to expose itself to unlimited losses on a put option.

For this reason, all guarantee contracts incorporate a stop-loss provision that gives the guarantor a *call* on the assets of the firm. Ordinarily, the stop-loss kicks in just as insolvency is approached or breached. The risk exposure a guarantor assumes from simultaneously writing a put and holding a call is the economic equivalent of an explicit equity position.

Efforts to exercise the government's call are termed prompt corrective action. We did not see much prompt *corrective* action for TBTF institutions during the Great Financial Crisis of 2008-9. The policy actions we did see have helped the world's TBTF banks to become bigger and more politically powerful than ever before.

Why and How Safety-Net Guarantees Lower and Distort the Funding Cost of TBTF Firms

In good times and in bad, being too big to fail simultaneously lowers both the cost of a firm's debt and the cost of its equity. This is because too-big-to-fail guarantees lower the risk that flows through to owners of both classes of securities. Guarantees chop off bondholders' and stockholders' losses at a specified point and direct the flow of further losses to taxpayers.

When regulatory norms of helpfulness and mercy prevent the government's call on assets from being exercised, guarantees shift exposure to ruinous losses away from creditors and stockholders. It is as if TBTF banks' profit flow moves through a pipeline with a Y junction in it. Insolvency exists when an institution is unable to cover its debts from its own resources. When a TBTF firm such as Bank of America or American International Group (AIG) becomes effectively insolvent, a political switch is thrown that channels further losses to taxpayers until and unless the firm manages to recover its solvency again.

Deeply insolvent banks are zombie institutions. They can avoid having their creditors force them into bankruptcy only because creditors perceive the zombie's debts to be backed by the black magic of implicit government guarantees. The most important part of zombification is a passive policy of norm-based capital forbearance, which allows institutions that are insolvent not only to roll over -- but actually to expand-- their debt.

By definition, the government's right to take over a firm's assets will never be exercised against a financial institution that is truly too big to fail. Nonexercise cedes the value of the government's loss-stopping rights back to the institution's stockholders and creditors. The value that forbearance gives away becomes taxpayers' responsibility.

Exhibit 5 portrays the behavior of AIG's stock prices before, during and after the 2008 crisis. The only time AIG's stock price approached zero –and it did so twice—was when the possibility of a federal government takeover fell under active discussion. This discussion made the probability of stockholders' continued rescue fall. As soon as nationalization was ruled out, the stock price surged again because TBTF policies handed the value of the stop-loss back to AIG's stockholders.

Exhibit 6 presents estimates that Armen Hovakimian, Luc Laeven and I prepared to track the value of the average quarterly dividend (in basis points) that US taxpayers ought to have been paid by large banking firms during 1974-2010. The value of this dividend shows a cyclical pattern. But by looking across the cycles, we can also discern evidence of cumulative learning about how to benefit from safety-net guarantees and a growing exploitation of these guarantees by megabank managers. With each successive recession, more benefit is extracted by large institutions. I fear that far greater and more-dangerous subsidy flows will reveal themselves in the next crisis.

How to Think About Guarantees

I see implicit government guarantees as a short-term cure that generates bad incentives and new rounds of instability in the long run. Avoidance and advocacy intermediaries have managed to lure the press and the electorate into the trap of thinking of bailout expenditures as

either loans or insurance payments. To grasp the mischief in this, it is important to understand the difference between guarantees, insurance, and loan contracts, to explore the differences in the ethical duties each normally imposes on the contract's counterparties.

Emergency government guarantees can't be insurance because no insurance company would double and redouble its coverage of drivers who reveal themselves to behave as recklessly as TBTF firms did during the housing bubble and who appear to be permanently addicted to daredevil antics.

Similarly, subsidized lifelines provided to an underwater firm cannot properly be thought of as low-interest loans. Loans at low rates and without strings are simply not available to firms that are in a moribund condition that transfer most of the firm's future earnings to the rescuing party.

To change incentives, something must be done to punish the reckless pursuit of subsidies at TBTF enterprises. Exhortations are not enough. The executive culture of Wall Street is inherently predatory (Ho, 2009). To change that behavior, society must condemn the deliberate exploitation of too-big-to-fail guarantees as a form of criminal theft and develop ways to punish not only individuals who engage in it directly, but also any higher corporate officials who can be shown to have tolerated or encouraged it.

Need for Individual and Not Just Corporate Punishments

I believe the way lawyers and economists frame problems is critically important in policy making. Legal systems must make it crystal clear that recklessly increasing a bank's risk of ruin is a form of theft from what can be interpreted as a taxpayer trust fund. Rules of the financial game must acknowledge that it is wrong for individual managers to adopt risk-management

strategies that willfully conceal and abuse taxpayers' equity stake in megabanks. These behaviors deserve to be sanctioned explicitly by both corporate and criminal law and not be excused by insurance law as inevitable moral hazard.

I have stressed that, as the net value of two options, the risks incurred in backstopping TBTF firms cannot be calculated and priced as a straightforward product of loss intensity and loss probability in the way that loss exposures on bond or insurance contracts can. The first step in reform is to recognize bailout support as loss-absorbing equity funding provided to a zombie firm at a time when no insurer would underwrite its survival and no rational investor would advance it a nickel.

In my view, aided and abetted by a deferential regulatory culture, US and European megabankers have committed crimes against the public that deserve to be characterized as *theft by safety net*. The victims are current and future citizens. The criminals are willful or complicit managers and supervisors. In recklessly risking their firms' survival to gain subsidies from playing chicken with their regulators, managers impose needless costs and dangers on other users of financial roadways.

Banking supervisors have let society down in two ways: (1) by not setting up the equivalent of radar systems and helicopter surveillance to track excessive speed and aggressive driving and (2) by not developing a penalty structure that punishes unruly behavior in a meaningful and timely fashion. Effective regulation and supervision must establish disincentives that can dissuade bankers who are tempted to drive at perilous speeds or to undertake dangerous maneuvers. To improve megabank driving habits more than marginally and temporarily, miscreants must be identified and risk shifting must be rendered *personally* unprofitable for them.

The analogy between regulating banks and regulating vehicular traffic suggests that, country by country, the penalty structure and burdens of proof in cases of safety-net theft could be designed to parallel those used in traffic courts. Most states combine: (1) fines for minor violations, (2) a point system which hikes the penalty for repeated or more-serious violations, and (3) procedures for transferring particularly consequential cases (such as vehicular homicide or extreme drunken driving) to ordinary criminal and civil courts. In the US, we already have administrative procedures for enforcing regulatory findings in hearings that resemble those of traffic courts. What we don't have is bright-line rules for limiting prosecutorial discretion when safety-net abuse rises to the level of highway robbery.

Major Takeaways

No matter what regulators finally do with statutory tools such as stress tests and capital and liquidity requirements, if they do not set up sanctions that punish *individuals* for acts of willful or complicit safety-net theft, we are bound to get more safety-net abuse in the future.

Between 2008 and late 2013, fines levied for bad behavior on the ten largest US and European banking firms amount to roughly 157 billion pounds sterling (Bryant and McCormick, 2014). I believe that genuine reform would require authorities to prosecute publicly *individuals* in banking organizations whenever they have compelling evidence of costly forms of common-law fraud. I believe there is substantial value in documenting egregious violations and pursuing violators in open court. Settling violations of banking law by corporate fines negotiated out of court shames the *firm*, but tends to conceal embarrassing details of regulatory and ethical failure and reckless risk-taking whose revelation promises to deter other *individuals* from engaging in similar behaviors in the future. The public needs to understand how much reckless managers

benefit when the burdens of the corporate fines and admissions of guilt they do or do not negotiate serve principally to punish *shareholders* instead of naming and sanctioning individual managers.

The artifacts of a culture may change quickly, but the norms of a culture resist change fiercely. The observed default risk premia for megabanks and Greece in various crises and their aftermaths evidence creditors' belief in the resilience of central-bank bailout and rescue incentives. Recognizing taxpayers' implicit equity stake implies that individual politicians and regulators on the one hand, and megabank directors and senior management on the other owe: (1) fiduciary duties toward *taxpayers* and (2) a fair dividend on the value of taxpayers' stake.

Violating these fiduciary duties entails an abuse of trust that today is overly hard to prove in court. Post-crisis memoirs of agency leaders praise themselves for keeping a lid on information about the size of bank losses so as to permit rampaging zombies to exist. The wealth transfers from taxpayers to zombie creditors, managers, and stockholders are thefts that deserve to be made easily punishable by civil and even criminal penalties (i.e., by fiduciary law).

Corporate-level fines do not challenge regulators' anti-egalitarian norms. But prosecuting and even jailing bad-apple executives and regulators could create the kind of shock that cultural research tells us is necessary to challenge longstanding regulatory norms of mercy and deference and replace them with values that can better align incentives with ethics in the financial services industry.

To transform a predatory culture into a prudential culture requires institutionalizing individual and prosecutorial –not corporate—accountability and responsibility both at the bank and central-bank levels. This begins with setting up systems to measure, test, price, and respond to changes in the value of megabank subsidies as financial arrangements evolve through time.

UK law has made a start in this direction (see Halliday and Carruthers, 1996; Brown 2010). For corporations generally, the Insolvency Act of 1986 defines a crime called “insolvent trading.” Directors who know their zombie firm is insolvent and add to the debts of their company anyway can be made personally liable for company debts and disqualified from serving as a director of other UK corporations for a number of years. The purpose of the law is to encourage directors to enter into a creditor-liquidator agreement that would prioritize the interests of the creditors and the creditors’ guarantors.

Moreover, the UK’s Financial Services (Banking Reform) Act of December 2013 created a new criminal offense of reckless misconduct leading to the insolvency of a bank and an expedited burden of proof that would have required senior bankers to prove that they took every reasonable step to prevent regulatory breaches in their areas of responsibility. Guilty parties are subject to unlimited fines and up to 7 years in prison.

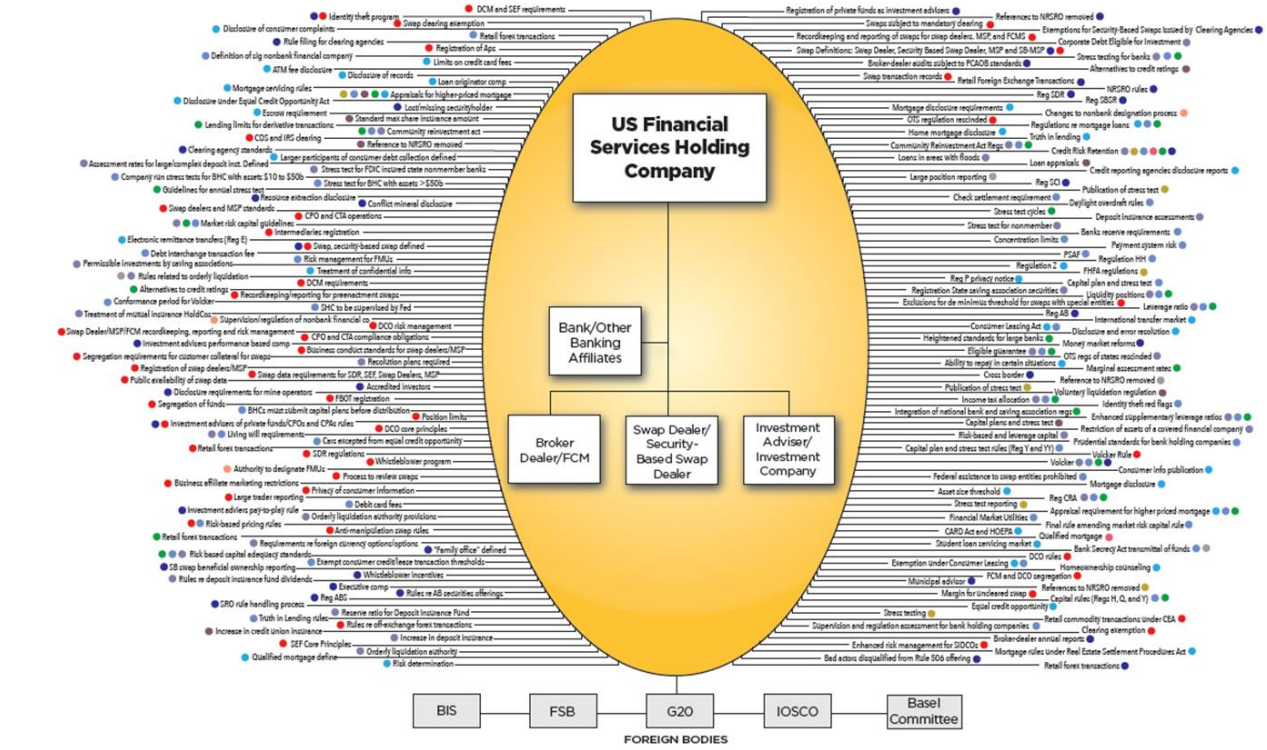
The toughened burden of proof that the UK’s 2013 law sought to establish was scheduled to apply to banking firms beginning in March, 2016. My cat-and-mouse model of regulatory and bank cultures predicts that regulators would prefer not to enforce anything like the letter of this law.

Indeed, on October 18, 2015, the newly elected Conservative government introduced a “statutory duty of responsibility” for *all financial-services firms* designed to supersede both the 2013 law’s expedited burden of proof and its sharp focus on punishing managerial acts that lead to insolvency (Treanor, 2015). The proposed new burden of proof turns on a general requirement for prosecutors to be able to show that an individual failed to take steps that were reasonable for a person in his position to take to prevent a regulatory breach from occurring.

The root problem is that painting leaders of the Fed, B of E and ECB as heroes reinforces their mercy norm and conditions future regulators' to continue to treat no-haircut credit bailouts as an emergency Plan B. Because central-bank norms stubbornly resist change and operate below the public's radar, current efforts to strengthen the observable tools of prudential regulation and supervision end up misleading and victimizing the public down the line. In the US and EU, authorities continue to neglect their and megabank managers' fiduciary duty to taxpayers and to *mischaracterize* the costs that ordinary citizens and competitors experience from keeping zombie financial institutions in play.

EXHIBIT 1

SEC Commissioner Daniel M. Gallagher Rules Applicable to U.S. Financial Services Holding Companies Since July 2010



Relevant Regulators Not Depicted

- US SRCs (e.g., FINRA, MSRB, NFA)
- Foreign country regulation of domestic activity
- US States

LEGEND	
• SEC-Securities and Exchange Commission	• NCUA-National Credit Union Administration
• CFTC-Commodity Futures Trading Commission	• FSOC-Financial Stability Oversight Council
• OCC-Office of the Comptroller of the Currency	• FHFA-Federal Housing Finance Agency
• FDIC-Federal Deposit Insurance Corporation	• FRB-Federal Reserve Board of Governors
• Treasury-Treasury Department	• HUD-US Department of Housing and Urban Development
• CFPB-Consumer Financial Protection Bureau	• FIEC-Federal Financial Institutions Examination Council
• OFR-Office of Financial Research	• FinCEN-Financial Crimes Enforcement Network

EXHIBIT 2: Schein's Model of Shared Assumptions in the Executive Subculture

1. Financial Focus
 - Without financial survival and growth, there are no returns to shareholders or to society
 - Financial survival is equivalent to perpetual war with competitors
 2. Self image: The embattled lone hero
 - The economic environment is perpetually competitive and potentially hostile; “in a war you cannot trust anyone.”
 - Therefore, the CEO must be “the lone hero,” isolated and alone, yet appearing to be omniscient, in total control, and feeling indispensable.
 - You cannot get reliable data from below because subordinates will tell you what they think you want to hear; therefore, the CEO must trust his or her own judgment more and more (i.e., lack of accurate feedback increases the leader's sense of rightness and omniscience).
 - Organization and management are intrinsically hierarchical; the hierarchy is the measure of status and success and the primary means of maintaining control.
 - Though people are necessary, they are a necessary evil not an intrinsic value; people are a resource like other resources to be acquired and managed, not ends in themselves.
 - The well-oiled machine organization does not need whole people, only the activities they are contracted for.
-

Source: Schein (2010, p. 61)

EXHIBIT 3
**MY MODEL OF BELIEFS AND SHARED ASSUMPTIONS IN THE PRUDENTIAL
REGULATORY CULTURE FACING US MEGABANKS**

1. Focus

- Prudential regulation seeks to protect society from the consequences of dangerous risk-taking, capital shortages, and loss concealment at megabanks.
- US Megabanks are in a gentlemanly war with foreign megabanks and prudential regulators must be careful not to handicap them in these battles. This implies a duty to be helpful.
- The financial industry needs a disclosure regime that makes it hard for outsiders to observe adverse information in a timely manner.

2. Self-Image: An embattled and often-scapegoated team of heroes that has been assigned contradictory goals.

- Organization and management is inherently hierarchical. Dissent may be expressed, but is seldom welcomed.
- The extent to which staff members rise in the hierarchy depends on their ability to perceive and conform to a series of behavioral norms. In the text, these norms are described as:
 - Mercantilist norms of clientele service and protection
 - Mercy and benefit-of-the-doubt norms that dictate sympathy, help and lenient discipline for distressed client firms.
 - Loss-concealment norms that demand that regulators must not only hold adverse client information confidential, but misrepresent this information when this is thought to promote the common good.
 - Performance standards that honor executives for not rocking the boat and sometimes for “solving” immaterial problems of their own invention.
 - Blame-avoidance norms that urge staff members to protect the professional reputations of team leaders by not admitting mistakes even to themselves.
- Respected veteran employees who are uncomfortable with some or all of these norms may be allowed to try in subtle ways to reshape the conscience of the enterprise.

EXHIBIT 4
PATHS BY WHICH BAD NEWS MAY REACH TOP REGULATORS

Ways in Which Crippling News Surfaces	Initial Source of Corrective Pressure	Ways in Which Bank Management Can Challenge or Stifle Bad News	Ways in Which Regulators Can Lessen the Call to Action Generated by the Bad News
1. Government-Initiated Path	Government examiners discover irregularities in loan underwriting, documentation, or loss reserves during an ordinary bank examination	Exercise rights to appeal examiner writedowns	Higher-ups may modify an on-site examiner's "pencil report"
2. Bank-Initiated Paths	A conscientious internal whistleblower provides evidence to either: a. the bank's external auditor b. the bank's board of directors c. regulatory staffmembers.	a. Auditors may be persuaded to ignore or marginalize the evidence b. Boardmembers may be persuaded to ignore the evidence c. Managers may succeed in demonizing the whistleblower	a. Not applicable b. Not applicable c. Regulators may treat the whistleblower as a mean-spirited troublemaker
3. Auditor-Initiated Path	Auditor finds irregularities and either quits, is fired, or issues a qualified report	Managers concoct a persuasive cover story for the impasse.	Regulators may ignore the audit impasse
4. Creditor-Driven Path	News about auditor issues, leaks, or autonomous rumors undermine depositor confidence or the confidence of suppliers of interbank loans	Managers may collateralize and/or pay very high interest on large deposits or interbank loans	Central bank may replace private funding with discount-window loans

EXHIBIT 5

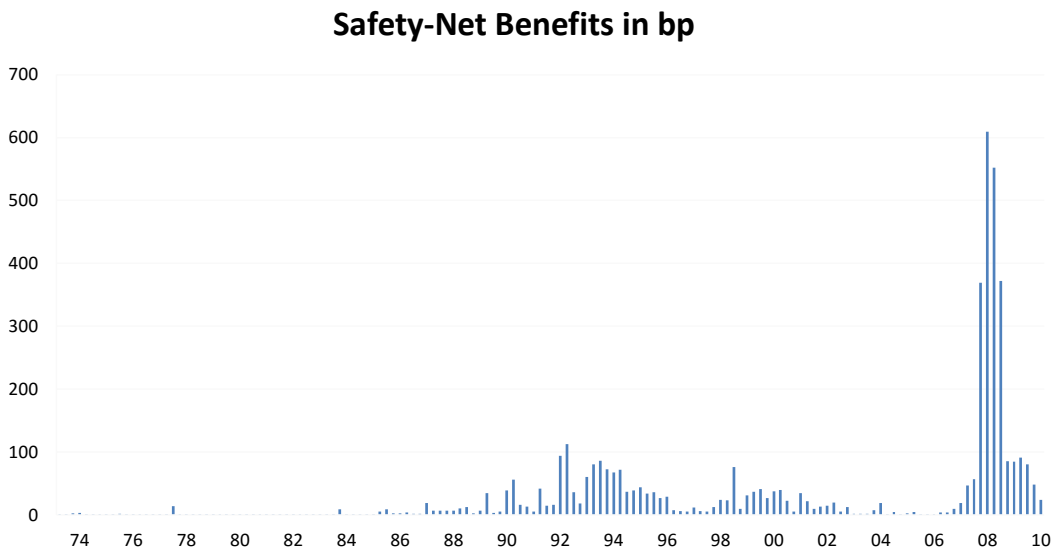
AIG Stock Never Became Valueless



EXHIBIT 6

Mean Annualized Value of Safety Net Benefits Per Dollar of Liabilities, 1974-2010

This figure reports quarterly average values of Hovakimian-Kane-Laeven annualized estimates of fair percentage return to taxpayers for safety-net risk, using Merton model and assuming dividend continue to be paid. Averages are computed across a sample of U.S. bank holding companies over the 1974-2010 period and reported per-dollar of debt quarter by quarter in basis points. Financial statement data are from the Compustat database for U.S. banks and daily stock returns are from CRSP.



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