

Regulating Risk: Lessons Learned and Rational Reform

Edward Soule^{*}, McDonough School of Business, Georgetown University

The fact is that bankers are in the business of managing risk. Pure and simple, that is the business of banking.

J. Pierpont Morgan¹

Introduction

A dreadful chapter in U.S. commercial history is being written. When complete, it will chronicle institutional carnage of staggering proportions. The casualty list from a single month in 2008 included AIG, Lehman Brothers, Bear Stearns, Fannie Mae, Freddie Mac, Washington Mutual, Wachovia, and Merrill Lynch. Although debates as to the cause of the wider “financial crisis” will continue for years, this much is indisputable: a number of major financial institutions became insolvent—abruptly and without warning. That phenomenon, and what should be done about it, is the focus of this chapter.

Two general claims will be defended: 1) defective risk management practices were to blame for the spate of firm failures; and 2) regulators with ample authority to constrain financial institutions from taking excessive risks did not do so. Aside from increased vigilance, a sensible response to these findings would include innovative regulatory strategies, ones that provide advance warnings of risk management catastrophes. As against these claims, advocates of regulatory reform blame other factors: from the housing bubble to credit default swaps. And rather than the performance of regulatory agencies, they blame the regulatory framework

^{*}McDonough School of Business, Georgetown University (ed.soule@msb.edu)

applicable to the financial services industry. Thus, for instance, the Administration proposes to reconfigure the regulatory agencies that oversee banks and broker-dealers and increase the scope of their authority (see Appendix). As such, it takes aim at the wrong target, offers nothing in the way of novel strategies, and, therefore, is likely to disappoint. Or so it will be argued.

The chapter proceeds as follows. The first section sketches the regulatory framework and dispels the widely shared but misleading belief that the financial services industry was deregulated. The second section argues that the relevant regulatory agencies were sufficiently empowered to discharge their legislative mandates; their failure to avert risk management breakdowns is not an indictment of the laws and regulations in force but the performance of individual agencies. The third section is a proposal for improved regulation of banks and broker-dealers by focusing supervisory attention on their risk cultures. Fostering a culture that places a high priority on risk management is a critical responsibility of management; ensuring that it has been discharged should be a top priority of regulatory supervisors.²

The Regulatory Framework

Among the universe of regulatory targets, the financial services industry is a particularly difficult one to hit. This section provides a brief sketch of the effort. It is not comprehensive but is designed to serve two purposes: 1) to describe the nature and scale of the regulatory project; and 2) to dispel the misconception that deregulation is to blame for the lax oversight of banks and broker-dealers.

The regulatory framework applicable to financial institutions has been erected over the course of nearly a century. Construction began with foundational legislation: the Federal Reserve Act of 1913 for banking and several Depression-era laws for broker-dealers. These acts established the broad contours of financial regulation and delegated implementation and enforcement authority to government agencies. Subsequent market conditions and business trends produced targeted legislation like the Bank Holding Company Act of 1956. More recently, ever-narrower initiatives have produced legislation with titles that include ‘reform,’ ‘improvement,’ or ‘efficiency;’ signifying the remedial nature of laws like the Financial Institutions Reform Recovery and Enforcement Act of 1989 and the Market Reform Act of 1990.

Three government agencies have primary responsibility for the safety and soundness of nationally chartered banks and thrifts: the Board of Governors of the Federal Reserve System (Fed), the Office of Thrift Supervision (OTS), and the Office of the Comptroller of the Currency (OCC).³ The Securities and Exchange Commission (SEC) is responsible for the financial integrity of broker-dealers. The authority of these agencies is delineated in its enabling legislation and is bounded by the purposes and limitations specified therein or in subsequent legislation. Courts tend to defer to agency expertise and to uphold an agency’s actions that have not exceeded its legislative purpose. There are exceptions: “arbitrary and capricious” actions, abuses of discretion, and so forth. But within the limits of reasonableness, regulators enjoy broad power and are given wide berth in using it.

Agencies have two means of bringing the law to bear on financial institutions: regulation and supervision. The former refers to the issuance of regulations, rules, and sundry guidelines and

interpretations. Supervision entails everything else: monitoring, assessing, and enforcing compliance with the rules and regulations. The OCC, OTS, and Federal Reserve subject banks and thrifts to continuous monitoring, targeted examinations, and annual ratings. The SEC and the Financial Industry Regulatory Authority (FINRA), a self-regulatory organization with legislative origins, rely on periodic reports and annual examinations of broker-dealers. In order of importance, the success or failure of the regulatory project turns on supervision. Assiduous supervision can compensate for ambiguous or incomplete regulations but the most comprehensive and explicit rules cannot make up for superficial oversight or feckless enforcement. This dynamic stems from the formidable powers that Congress vested in financial regulators. Those with a reputation for using it command attention and supervision proceeds informally and privately, between agency officials and firm management.

The informal and nonpublic dimension of agency supervision is well-suited for the financial services industry. Rigid rules are inherently imperfect for rapidly changing and inordinately complicated institutions with a propensity to generate lethal risks out of seemingly benign activities. Try as they may, agencies have struggled to craft rules that cannot be interpreted opportunistically or otherwise circumvented. As such, supervision is a rational response to the formidable obstacles to achieving legislative objectives.⁴

From the point of view of most industry participants, there are at least two more layers of oversight: state laws and commissions of banking and securities, and the regulatory schemes of other nations. The cumulative effect is a robust and pervasive framework of laws, regulation, and supervision. Its reach and complexity is evident from the annual reports of major banks and

broker-dealers. For instance, describing the regulatory environment applicable to Goldman Sachs required 6,514 words (Form 10-K: November 28, 2008). Wells Fargo & Company required 4,043 words (Form 10-K: 2007). Combined, they exceed the length of this chapter. In contrast, non-financial firms make passing references to regulation; Proctor & Gamble did so in 162 words (Form 10-K: 2008).

Some prominent and authoritative voices would take issue with the foregoing characterization. Robert Kutner (2007) observed that “this old-fashioned panic is a child of deregulation.” In particular, he cited legislation that repealed “the 1933 Glass-Steagall Act, which prohibited the same financial company from being both a commercial bank and an investment bank.” Joseph Stiglitz (2008) lambasts “the wisdom of leaving markets to themselves” and compares U.S. financial regulation to the Chilean experiment in “free banking” under Augusto Pinochet. A less trenchant version of this criticism was advanced by then-Senator and Presidential candidate Barack Obama in a speech entitled “Renewing the American Economy” (New York, March 17, 2008).

... [W]e have deregulated the financial services sector, and we face another crisis. A regulatory structure set up for banks in the 1930s needed to change because the nature of business has changed. But by the time the Glass-Steagall Act was repealed in 1999, the \$300 million lobbying effort that drove deregulation was more about facilitating mergers than creating an efficient regulatory framework.

President Obama reiterated his belief that financial regulation had been “guttled” (Obama 2009). Thus, it is fair to associate him with those who endorse the following line of thought: by

repealing the Glass-Steagall Act, the Gramm-Leach-Bliley Financial Services Modernization Act of 1999 (GLB Act) deregulated the financial services sector and, thereby, created the conditions for the financial crisis. If this “deregulation narrative” is accurate, then reparative legislation is clearly needed. Thus, the veracity of its core tenet warrants scrutiny: Was the Glass-Steagall Act a significant feature of the regulatory landscape before passage of the GLB Act? It will be argued here that it was not.

By way of background, the Glass-Steagall Act (technically, the Banking Act of 1933) introduced safeguards that were intended to restore the integrity of a very battered banking system.⁵ Thus it is reasonable to believe that eliminating those safeguards would weaken the regulatory system, perhaps catastrophically. However, the Glass-Steagall Act was dismantled in stages, beginning with the Depository Institutions Deregulation and Monetary Control Act of 1980 and ending with the GLB Act of 1999. That last installment eliminated provisions that were intended to protect depository institutions by inhibiting them from engaging in securities businesses. But as Jackson (1987:2) notes, “inhibiting” is not the same as “prohibiting.”

Although Glass-Steagall seemed to maintain the barriers between “banking” and “commerce” for half a century, depository financial, industrial, and securities firms have increasingly blended the businesses of banking and brokerage, using “loopholes” in the Act and other tactics... . Since 1982, as a result, banks and the financial arms of non-depository firms have become competitors to some extent (Jackson, 1987: 2).

Or as Barth, Brumbaugh, and Wilcox (2000) explain,

Since the barriers that separated banking from other financial activities have been crumbling for some time, the GLB Act is better viewed as ratifying, rather than revolutionizing, the practice of banking.

Thus, to claim that the GLB Act enabled “broad” or “free” banking, or that it “dismantled” or “gutted” financial regulation ignores prevailing practices at the time of its passage. Indeed, the likes of J.P. Morgan had fully diversified: based on its 1999 annual report, the firm earned less from traditional banking activities than it did from its underwriting, trading, derivatives, and mergers and acquisitions businesses. A better characterization of the GLB Act is that it streamlined the process whereby depository and other financial institutions could operate within a holding company structure. And as former-President Clinton noted in his defense of having signed the Act (Bartirromo 2008), the streamlined process has been a vital tool in combating the financial crisis (e.g., the government arranged takeover of Bear Stearns by JPMorgan Chase).

Historical accuracy aside, the deregulation narrative is at odds with recent events: the comingling of commercial and investment banking has not been a significant factor in the financial crisis. Depository institutions have been seriously or fatally damaged (e.g., IndyMac, Washington Mutual, Countrywide, and Citibank); but the damages stemmed from residential and commercial real estate, quintessentially traditional businesses of commercial banks and thrifts. On the other hand, the damages suffered by investment banks did not infect depository institutions within the same holding company structure. For instance, the losses that jeopardized the viability of Merrill Lynch did not threaten the safety or soundness of Merrill Lynch Bank & Trust Co., FSB. Nor

did the liquidity crisis of AIG threaten the solvency of AIG Federal Savings Bank. Contrary to the deregulation narrative, we have not witnessed a repeat of the toxic mixture of activities that gave rise to the Glass-Steagall Act.

Granted, the GLB Act contains many other provisions, one of which limits the reach of regulatory authority. Another could (arguably) reduce the effectiveness of financial holding company regulation. Those provisions will be examined shortly, and their significance will be discounted. For now, suffice it to say that neither of them created serious gaps or otherwise impaired the regulatory framework applicable to banks and broker-dealers.

In sum, the deregulation narrative is an exercise in exaggeration if not an outright myth. The onslaught of failed financial institutions lends intuitive plausibility to this line of thought, but it does not comport with the facts. When accepted uncritically, the deregulation narrative motivates reform initiatives that seek to fix putative flaws in the regulatory framework, flaws that are cited as reasons for the lax oversight of banks and broker-dealers. A case in point is the Administration's proposal. But if agency authority was adequate then these proposals are taking aim at the wrong target. Such is the claim of the next section.

Adequacy of Regulatory Authority

Whether regulation is adequate or not depends on its intended purpose. Some would argue that it should prevent financial crises, perhaps by targeting market bubbles and other known catalysts of financial dislocations. However, the history of financial crises, well documented by Kindleberger (1996), is a saga of human psychology run amok. There may not be a regulatory

solution to market bubbles but there is a realistic strategy for ameliorating their damages: limit the high-risk activities of major financial institutions. That objective is consistent with the legislative mandate of the agencies with responsibility for financial integrity of U.S. banks and broker-dealers. Thus it will be assumed to be the appropriate objective for these purposes. Insofar as the agencies have fallen so short of achieving that goal, it is reasonable to ask, “What went wrong?”

The answer on offer here is performance: regulatory agencies failed to use their authority to constrain the risk-taking activities of some major banks and broker-dealers. By way of pinpointing the failure, consider that there are two lines of defense against the hazards that can imperil financial institutions. The first consists of internal risk management systems and strategies and the second is agency supervision of that effort. The claim being made here is that regulators failed to intervene in deficient risk management practices. That interpretation is based on the beliefs that the risks were identifiable, that the agencies had adequate authority to constrain them, and that there were no impediments to its use. The following examples are intended to substantiate those beliefs and the claim they support.

Perhaps the most blatant risk management failures were related to subprime and other nontraditional residential mortgages. The blunder was not the mortgages *per se* but the size of the exposure in relation to capital, the financial cushion for absorbing losses. For instance, the OTS-issued Fact Sheet on Washington Mutual Bank (September 25, 2008) indicates that as of June 30, 2008, the organization maintained \$24 billion of capital in support of \$307 billion of assets. Such leverage is not necessarily menacing; but it is downright treacherous when that

asset base includes \$122 of nontraditional mortgage loans.⁶ A 15% decline in the value of those holdings would eliminate the bank's capital. Thus, it is not surprising that on September 25, 2008, the OTS declared the company to be "in an unsafe and unsound condition" and the Federal Deposit Insurance Corporation (FDIC) enlisted JPMorgan Chase to take it over. What is surprising is that the OTS deemed WaMu to be "well capitalized" right up until that time. The only thing that changed between June 30 and September 25 is that depositors became aware of WaMu's precarious condition and many of them withdrew their savings.

IndyMac, another OTS-supervised thrift, presented a similar risk profile to that of WaMu, was accorded the same "well capitalized" designation, and failed in a similarly abrupt fashion. As for the quality of its mortgage loan portfolio, FDIC Chief Operating Officer John Bovenzi commented that "Most of the loans have little or no documentation, including no verification of income" (Speech: October 29, 2008). As was the case with WaMu, unambiguously imprudent banking practices were to blame for the failure of IndyMac.

Risk management blunders were not limited to OTS-supervised thrifts. The Federal Reserve is the umbrella regulator of Citigroup and the OCC and the OTS are the functional regulators of its banks and thrifts, respectively. Thus, any of these agencies could have intervened in the multi-year activities that culminated in the following risk profile on March 31, 2008: \$48 billion of exposure to nontraditional mortgages, \$48 billion of commercial real estate, \$38 billion of loan commitments to highly leveraged borrowers, \$17 billion of private equity investments, \$7 billion of auction rate notes, and a \$34 billion contingent liability to several structured investment vehicles, a now-defunct off-balance sheet scheme that Citibank had pioneered. All told, \$192

billion of hazards bore down on \$127 billion of capital.⁷ No surprise that Citigroup has required so much government support.

These episodes illustrate the nature and magnitude of the risk management failures that destroyed or crippled so many banks and thrifts. As portrayed, the hazards of imprudent balance sheet management and cavalier underwriting were unambiguously hazardous and within clear view. It has been argued that such was not the case with regard to the risks of nontraditional mortgages; and that regulators should be excused for not acting proactively. Such is the stance of John Dugan, Comptroller of the Currency, in his defense of his agency's performance.

Collateralized debt obligations (CDOs) backed by subprime mortgages were the prime example of the need for better efforts here. Despite the inherent risk of the underlying collateral, the industry and regulators were lulled into a false sense of security by the triple-A ratings given to the super-senior tranches of these securities. Some of the exposure [to subprime mortgages] was masked in off-balance-sheet vehicles in ways that clouded the full extent of exposure.

(OCC 2008: 2)

This comment warrants unpacking. First, regulators may have been lulled into a false sense of security by flawed credit ratings but “the industry” was not. In actuality, some banks were misled, some were not, and precious few accumulated lethal levels of exposure to the risks of nontraditional mortgages. Secondly, those with the highest concentrations (e.g., Citigroup) could not have been among the deceived; after all, they were the primary sponsors of CDOs—the same

firms that have been blamed for pressuring the rating agencies and compromising their standards. Third, Dugan ignores the fact that to over-concentrate in an unproven asset is to violate a basic tenet of prudent risk management—regardless of its credit rating. Finally, complex arrangements should not have impeded the OCC’s ability to identify risk. Agencies can specify the format of information; “Enterprise-wide Exposure to Subprime Mortgages” could have been a line item in a mandatory report. Simply put, there is no justification for managers weighing down a balance sheet with nontraditional mortgages; and there is no good excuse for supervisors condoning it.

Dugan concludes his defense of the OCC with the following comment.

Indeed, some senior bank management thought they had avoided subprime risk by deliberately choosing to avoid originating such loans in the bank—only to find out after the fact that their investment banks had purchased subprime loans elsewhere to structure them into CDOs.

This is alarming. A CDO production desk requires specialized personnel, sophisticated systems, and significant capital—nine and ten figure investments are not unusual. It is frightening to consider that an operation of that magnitude could have been initiated without having undergone a rigorous approval process that included a thorough vetting by senior management. The fact that senior management learned of such an operation after the fact is not just a risk management failure, it is a classic sign of a risk management system that had utterly failed. Dugan points to this example as evidence of the inscrutability of subprime mortgage risks, but he should have

chosen an example of an institution that had not lost control of its operations. Better yet, perhaps the OCC should have noticed that the bank Dugan refers to was not conforming to standard risk management protocols and responded accordingly.

As for SEC supervision of broker-dealers, three episodes warrant attention: Lehman Brothers, Merrill Lynch, and Bear Stearns. As with bank and thrift failures, overconcentration in asset classes were factors but the broker-dealers had smaller margins for error. Citigroup supported \$1.251 trillion of assets with \$99 billion of equity capital at December 31, 2007 for an asset to capital ratio of 12.6 to 1. Merrill Lynch supported \$1.020 trillion of assets with \$31 billion of equity, a ratio of 33 to 1. Such extreme leverage entails extreme vulnerability when a firm does not properly align its assets with its liabilities. Such was the case with these firms, each of which was perilously dependent on overnight funding of illiquid and volatile positions. The risk management practices of these broker-dealers were not beyond the purview of SEC constraint. Indeed, they had been anticipated in the applicable law and regulations.

To explain, the SEC reduced the mandatory capital requirements of broker-dealers in 2004.⁸ The increased leverage that ensued would not necessarily have been problematic had the Commission monitored the composition and alignment of firm balance sheets. Doing so required sweeping authority that cut across holding company structures but such powers had been granted by the Market Reform Act of 1990.⁹ And a monitoring plan was developed: the Broker-Dealer Risk Assessment Program, the cornerstone of which was a comprehensive quarterly report of disaggregated nonpublic information. As designed, the SEC was able to assess “the risks...that may stem from affiliated entities, including holding companies and keep

apprised of significant events that could adversely affect broker-dealers...” (SEC IG, 2008: iii). In other words, the Commission was well-positioned to curtail haphazard risk management practices.

Unfortunately, execution left much to be desired. A comment from a 2002 IG audit is revealing: “...the effectiveness of the broker-dealer Risk Assessment Program has been compromised by the lack of a supervisor...” (SEC IG, 2002). The report describes an overburdened group of five accountants, two economists, two support staff, and no leader. To have assigned a staff of nine individuals to such a vital program is telling. To put that in perspective, the OCC has a staff of 467 assigned to the 17 largest banks or an average of 27 examiners and support personnel per bank (OCC 2008:13). But an equally worrisome finding was that firms were filing incomplete information because the SEC had not finalized the applicable regulations.

In the past, underfunding may have explained such a feeble effort. However, that excuse dissolved after the Enron Era corporate scandals and the enactment of Sarbanes-Oxley. As explained by then-Chairman of the SEC, Christopher Cox: “between fiscal 2002 and 2004, the SEC hired more than 1,000 new employees—the largest staffing increase in the agency’s history” (SEC, 2005: 2). Jickling (2004) notes that the SEC budget increased from \$423 million in FY 2003 to \$913 million in FY 2005. And yet, the IG conducted another audit in 2008 and discovered that the regulations were still not finalized and the information was still not being filed. Worse yet, the temporary regulations were not being enforced and “nearly one-third of the firms failed to file [the report] ...” (SEC IG, 2008: v). Of those that filed partial information, the IG noted that six received in-depth reviews but the other 140 were not reviewed at all. As an

indicator of how assiduously the SEC was supervising the risks of broker-dealers, this is damning evidence.

Advocates of regulatory reform could concede that lax supervision was a factor in the demise of financial institutions, but excuse it or downplay its importance based on factors beyond the control of regulatory agencies. Two often-mentioned items, products of the GLB Act, are the unregulated status of credit default swaps and putative gaps in the supervisory coverage of financial holding companies. These items can be dismissed as excuses for dismal performance by examining the episode that culminated in the government takeover of American International Group, Inc. (AIG). Following is a brief synopsis of what transpired at AIG.

A subsidiary of AIG, AIG Financial Products Corp. (AIGFP), had initiated a large volume of credit default swaps (CDSs), a form of insurance on debt instruments. Although issuers of CDSs do not maintain reserves as would a traditional insurance company, they agree to maintain collateral over the life of the contract. The amount of the collateral is based on a number of factors, all of which went against AIGFP in late 2007. The resulting demands for additional collateral exceeded the liquid resources of AIGFP and its parent, AIG. If not for government intervention, AIGFP would have defaulted; and its counterparties, including several major financial institutions, would have realized losses of a potentially destabilizing magnitude.

As for the status of CDSs, the fact that they are unregulated means that the parties to a CDS can contract as they see fit. But if one (or both) of them is a bank or a registered broker-dealer, then a regulatory agency can specify the accounting treatment of the transaction on the books of the

regulated entity, the method for computing the carrying value of the “insured” security, and, thereby, its impact on regulatory capital. Thus, while CDSs are beyond the purview of regulation, the risk they pose to banks and broker-dealers is not. This is not to say that CDSs should remain unregulated, that is a separate matter. It is to say that there is ample authority to limit their risks to banks and broker-dealers.

As for alleged gaps in the coverage of financial holding companies, AIGFP did not evade regulatory oversight. Since the creation of AIG Federal Savings Bank in 1999, AIG has been subject to regulation by the OTS. As described in the company’s Form 10-K, this authority extends to “enforcement authority over AIG and its subsidiaries,” and it “permits the OTS to restrict or prohibit activities that are determined to be a serious risk to the financial safety, soundness or stability of AIG’s subsidiary savings association, AIG Federal Savings Bank.” Nonetheless, there remains an entrenched impression that “AIG exploited a huge gap in the regulatory system.” That quote is from a question that Senator Tim Johnson had posed to Donald Kohn, Vice Chairman of the Fed.¹⁰ Asked to elaborate on the gap, Kohn stated that “...no one was responsible for the whole company...and there was a piece of the company, Financial Products that wasn’t being supervised and regulated by anybody.” At the conclusion of his comments, Scott Polakoff, the then-Acting Director of OTS, set the record straight:

...it’s time for OTS to raise their hand and say, “We have some accountability and responsibility here.” This entity [AIG] was deemed a Savings and Loan Holding Company and we were deemed the acceptable regulator for both US domestic and international operations. The segment, this AIG Financial Products

was an unregulated, as that term is defined, subsidiary of AIG but part of the overall consolidated regulatory responsibilities of OTS.

It is beyond the scope of this chapter to explain why the supervision of financial institutions was so disappointing. Nor is there sufficient evidence to conclude definitively what went wrong within specific agencies. However, a recent GAO examination of the banking agencies reported a common refrain: officials admitted that “they did not fully appreciate the risks to the institutions under review” (2009: 4). If, after further study, that explanation holds, then the performance breakdowns can be chalked up to errors in judgment. While every supervisory protocol is vulnerable to human error, those employed by financial regulators would appear to be overly susceptible. The failure to appreciate the precarious condition of major financial institutions was not a minor oversight. Nor is there reason to believe that a reconfiguration of agency authority would have made a difference: none of the agencies acted proactively with regard to momentous risk management failures. Instead, novel supervisory strategies warrant consideration. One possibility is introduced in the next section.

Regulating Root Causes

Losses from imprudent lending, reckless trading, and ill-conceived investments are unavoidable facts of life in the financial services industry. However, they rarely incapacitate firms in which risk management is embedded in the culture: when risk is a top-of-mind consideration for traders, investment bankers, lending officers, and other employees in risk-prone positions. On the other hand, debilitating losses and outright failures are lively possibilities when those employees have little concern for the “downside” of their conduct. Thus, the effectiveness of

risk management is not a function of the sophistication of the systems or the rigor of regulatory oversight alone. Rather, it turns on an intangible factor, the culture in which those systems are situated.

This relationship between formal controls, organizational culture, and performance is well supported by scholarly research; Treviño and Nelson (2004) and Treviño and colleagues (1999) are two good examples. It is also supported by studies: the Ethics Resource Center (2007) has conducted multiple examinations of workplace conduct. The upshot of this work is that culture tends to trump controls in terms of how members of an organization behave. This was borne out in previous research (Soule, 2005) on the corporate scandals from earlier in the decade. Deviant conduct was not deterred by an array of internal controls and a vast number of external gatekeepers; nor did threats of civil and criminal sanctions alter the course of events. Post-hoc examinations of Enron, WorldCom, and other scandal-ridden companies revealed what scholarly research and empirical studies would have predicted: the offending conduct was the manifestation of corporate cultures that valued short-term profitability, regardless of how it was generated. In short, internal controls and external constraints were no match for the values, beliefs, and attitudes of the people doing the work.

Although the literature and studies are focused primarily on ethical conduct, the findings are germane to risk management. Both are compliance efforts. In the case of ethics, the objective is conduct that meets the ethical expectations of society, as expressed in a code of conduct or otherwise communicated. In the case of risk management, the objective is conduct in conformity with principles of prudential risk management, as expressed in operational directives and

compliance documents. Based on this alignment, it would follow that if employees believe that risk management is one of those things that “really matters around here,” then it will. Losses would still be incurred, but the chances of catastrophic damage would be minimized.

Alternatively, if employees believe that risk management is not taken seriously, or if it is of secondary importance to short-term profits, then potentially lethal losses are lively possibilities. Following is a side-by-side illustration of this phenomenon.

As previously discussed, Citigroup was hobbled by the cumulative effect of a long list of imprudent activities. JP MorganChase (JPM), a similarly configured firm with overlapping businesses, avoided them. The company had a small exposure to subprime mortgages and none to the more exotic varieties. JPM did not sponsor structured investment vehicles and did not participate in esoteric structured finance products. And the JPM balance sheet was conservatively managed: capital and liquidity levels were above industry averages and funding sources were properly aligned with its assets. The contrast with Citigroup could not be more striking. In terms of damages sustained, JPM has preserved \$160 billion of market capitalization while Citigroup is valued at only \$45 billion.¹¹ JPM grudgingly accepted funds from the Troubled Asset Relief Program (TARP) but repaid them within six months. Were it not for U.S. Government support, including \$45 billion of TARP funds, Citigroup would be insolvent.

Given the size and sophistication of these two firms, it is safe to assume that their internal control and risk management systems are equally sophisticated. So, what might account for their disparate performances? In his 2008 shareholder letter, CEO Jamie Dimon offered the following explanation of JPM’s performance:

Our culture of strong risk management (proper due diligence, documentation, auditing, among other measures) is consistent with our philosophy of putting clients' interests first and has enabled us to avoid many of the negative developments that surfaced last year. (JP MorganChase, 2009: 7)

Tett (2009) confirms the veracity of this comment. It is also borne out by Cisafulli (2009), a study of Dimon that includes a chapter entitled, "Never, Ever Forget the Downside." As for Citigroup, the equivalent letter from CEO Vikram Pandit does not mention of culture, except in a reference to his determination to build a "culture of meritocracy" (Citigroup, 2009: 3). However, there is a reference to "risk culture" in the body of the 2008 annual report.

Significant focus has been placed on fostering a risk culture based on a policy of "Taking Intelligent Risk with Shared Responsibility, without forsaking Individual Accountability." (Citigroup, 2009: 51)

One expects to encounter a © sign at the conclusion of that slogan. Instead, it is followed by a legalistic definition of terms:

"Taking intelligent risk" means that Citi must carefully identify, measure and aggregate risks, and must fully understand downside risks."

"Shared responsibility" means... [And so forth]

It is jarring to consider that someone in a position of authority in the nation's largest bank thought it was necessary to spell out the meaning of these terms. To have done so in such

uninspiring text is evidence that risk management was probably not an entrenched, top-of-mind consideration for Citigroup traders or bankers.

Another example of a culture that promotes conservative risk management is the Royal Bank of Canada (RBC). As the largest of the so-called “Big Five” Canadian banks, RBC has been virtually unscathed by the financial crisis. That performance cannot be attributed to its location insofar as banks headquartered in London, Paris, Zurich, and elsewhere around the world suffered severe damages. Nor can it be attributed to its size or activities. RBC is engaged in the same businesses as other global banks. And with a market capitalization of \$82 billion at the end of 2007, it was larger than many of the banks that suffered severe damages. But the following excerpt from the RBC 2008 Annual Report is illuminating.

Our management of risk is supported by sound risk management practices and effective enterprise risk management frameworks including capital management and liquidity management. The cornerstone of these frameworks is a strong risk management culture, supported by a robust enterprise-wide set of policies, procedures and limits which involve our risk management professionals, business segments and other functional teams. (RBC, 2009: 83)

Finally, consider a study of the eleven largest financial institutions by senior regulatory officials of the U.S., the U.K., France, Germany, and Switzerland. Through interviews and analysis, the group identified factors that account for successful risk management performance. Primary among them was the following:

An overarching difference is apparent in the balance that senior management achieved between expanding the firms' exposures in what turned out to be high-risk activities and fostering an appropriate risk management culture to administer those activities. (Senior Supervisors Group, 2008: 7).

The report containing this finding goes on to explain what "an appropriate risk management culture" entails. With a few modifications for context, it could have been abstracted from a study of ethical culture: hands-on leadership involvement, enterprise-wide communication, elevating the importance of minimizing risk, and so forth.

Granted, anecdotes do not constitute data. But the foregoing illustrations provide compelling reasons to anticipate a corollary to the connection between the ethical performance of an organization and its culture: that an organization's propensity to manage risk is a function of its culture. At a minimum, the role of organizational culture should be a pressing concern to regulatory agencies.

As against this emphasis on the role of culture, there are alternative accounts of what went wrong and what warrants regulatory attention. However, their plausibility is in doubt. The more compelling of them violate a basic principle of social science: a universal condition does not explain aberrant phenomenon. Following is an example of this flawed reasoning.

Rebonato (2007) faults the use of statistical risk models (e.g., value at risk or VaR) for risk management failures. Taleb (2007) agrees. But since virtually every large bank employed VaR, the casualties should have been nearly universal. Why did just a subset of banks experience catastrophic breakdowns? RBC management explains that “VaR is a risk measure that is only meaningful in normal market conditions. To address more extreme market events, stress testing is used... .” (2009: 183). Likewise, Nocera (2009) reported that Goldman Sachs disregarded its statistical models during periods of market turmoil. Since the inherent flaws of statistical risk models were well known at the time, what inclined the managers of RBC, Goldman, and many other firms to abandon the models while others slavishly followed them? A satisfactory answer to that question must refer to some distinguishing characteristic(s) of the firms that successfully managed risk. Organizational culture is a lively possibility because unlike the use of VaR, it is a firm-specific factor.

Jickling (2009) assembled a list of 26 other explanations of what went wrong. Next to each entry is a synopsis of the argument in support of it; and next to that is a reason why the account is not plausible. Like the above illustration, each explanation cites a general market condition or practice that would have applied with more or less equal force to all similarly situated firms (e.g., the glut of inexpensive funds) or practices that were in widespread use (e.g., securitization and credit default swaps). The list was comprehensive when published and remains exhaustive.

Suffice it to say that it would behoove regulatory supervisors to concentrate their efforts on the risk cultures of banks and broker-dealers. Indeed, unlike many performance metrics, insight into the culture of an organization can provide advanced warning of calamitous developments. For

instance, consider New Century Financial Corp., a critical organization at the bottom of the subprime mortgage feeding chain. The company originated \$56 billion of loans in 2005 (2005 Form 10-K). As the economy softened, portfolio losses mounted. Additional losses were incurred when the company was required to repurchase underperforming loans that had been sold to investment banks. To compound matters, New Century was unable to renew its lines of credit. On April 2, 2007, the company petitioned for bankruptcy protection. Although New Century was not subject to banking regulation, it was publicly traded and, therefore, subject to SEC disclosure requirements and the internal control provisions of Sarbanes-Oxley.

New Century's abrupt demise was not foreseeable from any of its publicly disclosed information. But what is not evident from any public disclosure is a complete disregard for prudent lending practices. Such qualitative information would have emerged from an assessment of New Century's culture, a process that would have involved structured interviews with "employees in the know," as Treviño and colleagues (1999) and Treviño and Nelson (2004) dubbed them. Consider this excerpt from an interview with a New Century appraiser.

Maggie Hardiman cringed as she heard the salesmen knocking the sides of desks with a baseball bat as they walked through her office. *Bang! Bang!*

"You cut my [expletive] deal!" she recalls one man yelling at her. "You can't do that." *Bang!* The bat whacked the top of her desk. As an appraiser for a company called New Century, Hardiman was supposed to weed out bad mortgage applications. Most of the mortgage applications Hardiman reviewed had problems, she said. But "you didn't

want to turn away a loan because all hell would break loose,” she recounted in interviews. When she did, her bosses often overruled her and found another appraiser to sign off on it. (Cho 2007)

If that episode was representative of New Century’s underwriting practices, then the company’s risk culture was utterly corrupt—vital information for gauging the firm’s viability. A competent assessment of the culture in several new Century loan production offices would have revealed more about what was in store for New Century stakeholders than all of its financial and operational disclosures combined. Indeed, it would have signaled that those disclosures should not be relied upon. Unfortunately, accurate assessments of the culture of an organization or a business unit do not simply emerge. The degenerate situation at New Century evaded detection by KPMG in the course of its audits; notwithstanding the increased scrutiny of a SOX mandated audit of internal controls. And it evaded detection by a court-appointed examiner (Missal 2008) whose report notes minimal irregularities in the company’s practices. The history of these episodes suggests that unless the culture of an organization is the target of a systematic assessment, it will be largely if not entirely overlooked.

To be clear, New Century was not subject to regulatory supervision. But based on the IndyMac episode, it is not clear that an OTS examiner would have focused sufficient attention on cultural factors. Not to single out the OTS, culture is simply not a priority from a regulatory point of view. Case in point: Fed examiners are instructed that “the CEO should establish and communicate a corporate culture that promotes safe, sound, and prudent business practices.” That quote is from the Federal Reserve Bank Holding Company Supervision Manual

(3070.0.1.4), on page 731 of a 1,661 page tome in which “culture” appears only 9 more times (ignoring those instances where it is preceded by “agri”). The OCC Examination Handbook includes references to culture but none of them treat it as an attribute worthy of evaluation. And the OTS Examination Handbook contains no references to culture. The impression that culture is not a priority for any of these agencies is confirmed by the absence of a protocol for assessing it.

The failure to systematically assess the risk culture of financial organizations is a grievous oversight but a promising opportunity. And it is not farfetched; the importance of culture has crept into at least two regulatory regimes. Following is a sketch of each.

The first requires a little background. The U.S. Sentencing Commission issues guidelines for use by Federal courts in determining fines and prison sentences. In the case of businesses, the Federal Sentencing Guidelines for Organizations (FSGO) specifies a basic fine that considers the nature of the misconduct and the damages inflicted. Courts can increase or decrease it, depending on a variety of considerations that are expressed numerically as a Culpability Score Multiplier (CSM). A troubling realization emerged in the wake of the scandals of 2001-02: Enron and WorldCom—poster children of corporate malevolence—would have earned favorable CSMs by dint of their sophisticated compliance and ethics programs. In response, the Commission amended the Guidelines so that simply installing and maintaining these programs would no longer qualify. In the future, they would have to be effective. The section that defines “effective” reads in pertinent part as follows:

To have an effective compliance and ethics program...an organization shall...promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law. (FSGO, §8B2.1(2))

The second example involves the Public Company Accounting Oversight Board (PCAOB), the agency that supervises auditors of publicly traded companies. Its Chairman, Mark Olson, explained a key consideration in the inspection of public accounting firms in testimony before the House Committee on Financial Services (September 19, 2006):

PCAOB inspections begin by looking at the professional environment in which audits are performed and focuses on the influences – both good and bad – on a firm’s audit practice. These influences include a firm’s culture and the relationships between the firm's audit practice and its other practices, as well as between engagement personnel in field or affiliate offices and a firm's national office.

The U.S. Sentencing Commission does not specify how to determine whether an organization has fostered a culture that encourages ethical conduct and the PCOAB does not publicize its methodology for assessing the culture of public accounting firms. However, models are available, and one in particular warrants mention. The U.S. Chemical Safety and Hazard Investigation Board (CSHIB) conducts “root cause investigations” of industrial chemical accidents. Insofar as the root cause of the most serious industrial accidents are defective organizational cultures, the Agency’s methodology is a case study in how to rigorously assess

the operative values, beliefs, and attitudes of employees in risk prone areas of organizations. Following is a sketch of one such exercise.

The CSB investigated the explosion of a BP refinery on March 23, 2005, that claimed 15 lives and injured 180 people. The investigation uncovered equipment malfunctions and operator errors, but focusing on what took place on the morning of March 23 “misses the underlying and significant cultural, human factors, and organizational causes of the disaster that have a greater preventative impact” (U.S. CSHIB 2007: 19). The underlying cause was described as follows:

The Texas City disaster was caused by organizational and safety deficiencies at all levels of the BP Corporation. Warning signs of a possible disaster were present for several years, but company officials did not intervene effectively to prevent it. The extent of the serious safety culture deficiencies was further revealed when the refinery experienced two additional serious incidents just a few months after the March 2005 disaster. (U.S. CSHIB 2007:18)

That conclusion is based on the results of a systematic assessment of the BP safety culture. As detailed in the Report of the BP U.S. Refineries Independent Safety Review Panel (January, 2007), 700 in-depth interviews were conducted with current employees and retirees at all levels of the organization. Additionally, an extensive and thoughtfully designed survey was administered to 10,348 refinery employees and contractors; 7,450 or 72% of them responded. Many of these workers were not from the Texas City refinery and served as a control group for questions like the following: “In my work group, process safety concerns are secondary to

achieving production goals.” In one refinery, 82% of the operations personnel disagreed with that statement, but in the Texas City refinery only 7% did so. Not surprisingly, the results of this study were not disputed by BP.

Industrial safety would appear to be unrelated to the safety and soundness of financial institutions. But the disasters that occur in each domain are of the same category: they are wide-scale organizational failures or, to put it less abstractly, management failures. As such, it is not surprising to find a common denominator between chemical plant disasters and catastrophic bank failures. Such was the finding of a 1988 study by the OCC Administrator of National Banks. Contrary to the perception that external factors (e.g., economic conditions) cause banks to fail, the Administrator examined 171 bank failures and discovered that they were the result of “poor management and other internal problems.” (OCC 1988).

In summary, there are ample reasons to focus supervisory attention on the risk management culture of banks and broker-dealers. For these purposes, “focus attention” would entail a formal protocol specifying the manner and frequency of assessments. The assessment need not be as extensive as the CSB assessment of the BP disaster but two aspects of it warrant inclusion. First, it is proactive. Employees are not inclined to use anonymous whistleblower hotlines, but they are responsive to surveys and very responsive to interviews. The CSB approach does not passively await information but harvests it from the only credible source. Secondly, the CSB engaged outside experts to design and administer the data gathering process. The results speak for themselves: the questions are carefully worded and the results are unambiguous.

The CSB is an obscure federal agency with a budget of less than \$12 million, a fraction of the cost of operating a financial regulator (e.g., \$749 million for the OCC in FY 2008). Ideally, the expertise of that mini-agency would also be resident in its colossal cousins. But unlike the CSB, financial regulators have the ability to act before disasters strike. Periodically assessing risk cultures provides advanced warnings but the process stands to alter the course of events. To increase the transparency of an organization's culture is to increase the chances that it will be assiduously managed in line with legislative intent and regulatory objectives.

Conclusion

The finding that culture can trump compliance implies that the safety and soundness of any given bank or broker-dealer could be impervious to conventional supervisory strategies. Simply put, the arsenal of techniques is ill-suited for large complex organizations whose leaders accord so little importance to risk management that traders, loan officers, and investment bankers have little concern for the “downside risks” of their conduct. That sad reality flies in the face of the conventional approach to the supervision of financial institutions. But it is consistent with the history of the financial services industry: a chronicle of prominent institutions abruptly imploding in a maelstrom of recklessness.

This is not to say that traditional supervisory approaches should be abandoned. They are formidable forces in fostering and maintaining a healthy risk culture. The ideas advanced here would add a supervisory protocol: one that places risk management culture on the same footing as operational and financial metrics. At present, the latter receive great attention but the former

is not even measured. This proposal would elevate the importance of culture to the point that it would be systematically assessed and transparent, just like any other indicator of the performance and condition of federally supervised financial institutions.

In closing, the core idea of this paper was expressed by John Stumpf, CEO of Wells Fargo & Company. The setting was a hearing before the House Financial Services Committee on February 11, 2009. Representative Melvin Watt asked whether there is a need for “an even more aggressive regulatory framework for larger banks or other institutions that have systemic risk potential.” Stumpf responded as follows: “I think success and failure is more a condition of culture and leadership and values than it is [a matter of] small or large. In our case, we have a strong culture; we are able to buy a firm, merge with a firm, using our own money.”

Unfortunately, the Congressman cut him off at that point. Had he listened carefully and taken to heart what Stumpf had to say then he would have left the hearing with a deeper understanding of what has gone wrong, and the futility of trying to right it by passing another law.

APPENDIX

As this chapter goes to press, the Administration's proposal for regulatory reform is in a state of flux. However, there appears to be a commitment to the ideas advanced by Fed Chairman Ben Bernanke (2009). This modified form of consolidated regulation would increase the scope of the Fed's authority to include "all firms that could pose a threat to financial stability, even those that do not own banks" (*Financial Regulatory Reform: A New Foundation*: 3); and the OTS and the OCC would be merged into a new agency, the National Bank Supervisor. These changes may yield marginal improvements but they carry some risks that have not received attention. Following is a brief discussion of the potential benefits and risks of consolidated regulation.

It is important to stipulate that consolidated regulation would not create any new authority with regard to the supervision of banks or broker-dealers; it would simply concentrate it in the Federal Reserve and expand the universe of entities subject to regulatory oversight. Insofar as the most severe risk management failures transpired within banks and broker-dealers, increasing the scope of regulatory authority would not have averted the institutional breakdowns on display lately. Thus, any improvements from consolidation are limited to the increased efficiency and effectiveness of vesting authority for all systemically important organizations with a single agency.

As for the efficiency of consolidated regulation, size and complexity are the bane of agency performance, and the Federal Reserve stands to be a significantly larger organization with a considerably more complex mission. It would seem to be a more streamlined approach, but the

benefits of consolidation could be confounded by the nature of what would be consolidated. Realistically, it is not feasible for a single group of professionals to supervise every type of financial business, the work is too specialized. Rather, a discrete staff with expertise in broker-dealers will be needed; another for banks; and another for commodities and futures. The result is likely to resemble a mini-SEC, a mini-OCC, and a mini-CFTC. Whether a regulatory conglomerate would be more efficient than the current configuration of stand-alone specialized agencies under an umbrella regulator is anyone's guess. Granted, interagency rivalries would be eliminated; but interdepartmental conflicts can be equally counterproductive.

Likewise, the effectiveness of consolidation is questionable. Most significantly, the recent performance of the Federal Reserve in supervising bank holding companies does not inspire confidence in its expanded role; a span of authority that would make the Federal Reserve way too big to fail. Nor does the performance of what advocates of consolidation hail as "the world's premiere consolidated agency" (Jackson, 2008:1), the British Financial Services Agency (FSA). In 2008, the Agency's tenth year of operation, Northern Rock, plc was nationalized. Shortly thereafter, two diversified banking concerns, the Royal Bank of Scotland Group and Lloyds Banking Group, were bailed out. Finally, a £400 billion (\$692 billion) bailout plan for a group of large U.K. banks was announced on October 8, 2008 (BBC, 2008). More recently, the program has been enlarged. This scenario should seem eerily familiar to American observers. And it should dampen enthusiasm for consolidation.

This is not to say that consolidation is a bad idea. The Canadian regime is consolidated, and according to a study by Porter and Schwab (2009), its banking system was ranked first in

soundness by global business leaders. The point is that consolidated supervision has been billed as an elixir for what ails the US regulatory system. Based on the findings of this study, advocates of consolidation must assume that reconfiguring the agencies will improve their performance. Insofar as examples of such success are difficult to find, that assumption would appear to be an exercise in wishful thinking.

Bartiroma, M. “Bill Clinton on the Banking Crisis, McCain, and Hillary.” Business Week. Sept. 24, 2008

<http://www.businessweek.com/print/magazine/content/08_40/b4102000409948.htm>

Barth, J., Brumbaugh, R., and Wilcox, J. (2000) *The Repeal of Glass-Steagall and the Advent of Broad Banking*. *Journal of Economic Perspectives* 14 (Spring 2000), 191-204.

Board of Governors of the Federal Reserve System. (2007) Annual Report.

<<http://www.federalreserve.gov/boarddocs/rptcongress/default.htm>>

BBC (2008). “Rescue plan for UK banks unveiled”

<<http://news.bbc.co.uk/1/hi/business/7658277.stm#chart>>

BBC News: last updated at 16:58 GMT, Wednesday, 8 October 2008 17:58 UK

Barth, J., Caprio, G., and Levine, R. (2006) *Rethinking Bank Regulation: Till Angels Govern*. Cambridge, UK: Cambridge University Press.

Bernanke, B. 2009. Speech to the Council of Foreign Relations. Washington, D.C. March 10, 2009.

Bernanke, B. 2008. Speech to the Federal Reserve Bank of Kansas City's Annual Economic Symposium, Jackson Hole, Wyoming August 22, 2008

Bloomberg, M. and Schumer, C. “Sustaining New York’s and the US’ Global Financial Services Leadership”

<[http://schumer.senate.gov/SchumerWebsite/pressroom/special_reports/2007/NY_REPO RT%20_FINAL.pdf](http://schumer.senate.gov/SchumerWebsite/pressroom/special_reports/2007/NY_REPO_RT%20_FINAL.pdf)> Issued January 7, 2007

Buder, S. 2009. *Capitalizing on Change: A Social History of American Business*. Chapel Hill, NC: The University of North Carolina Press.

Cisafulli, P. 2009. *The House of Dimon*. Hoboken, NJ: John Wiley and Sons.

Cho, David. 2007. Washington Post May 7; A01

Eichenwald, K. 2005. *Conspiracy of Fools: A True Story*. New York: Broadway Books.

Ethics Resource Center. 2007. National Business Ethics Survey. Ethics Resource Center: Washington, DC. <<http://www.ethics.org/research/NBESOffers.asp>>

GAO, 2009. Financial Regulation: Review of Regulators’ Oversight of Risk Management Systems at a Limited Number of Large, Complex Financial Institutions. GAO-09-499T
Washington, D.C.: March 18

Jackson, Howell. (November 12, 2008). "A Pragmatic Approach to the Phased Consolidation of Financial Regulation in the United States." SSRN working paper:

<<http://ssrn.com/abstract=1300431>>

Jickling, M. 2009. "Causes of the Financial Crisis." Congressional Research Service

<<http://fpc.state.gov/documents/organization/116693.pdf>>

2004. "Barriers to Corporate Fraud: How They Work, Why They Fail." Congressional

Research Service <http://assets.opencrs.com/rpts/RL32718_20041227.pdf>

Kindleberger, C. 1996. *Manias, Panics, and Crashes: A History of Financial Crises*. New York:

John Wiley & Sons.

Kutner, R. 2007. "The Bubble Economy." The American Prospect. September 24, 2007.

<http://www.prospect.org/cs/articles?article=the_bubble_economy>

Missal, M. 2008. Final Report of Bankruptcy Court Examiner. In re: New Century TRS

Holdings, Inc., a Delaware corporation, et al., Debtors. February 29, 2008

Nocera, J. 2009. "Risk Mismanagement" New York Times Magazine, January 2, 2009, MM24.

Office of Office of the Comptroller of the Currency. 2008 Annual Report. Washington, DC:

Office of Office of the Comptroller of the Currency.

<<http://www.occ.treas.gov/annrpt/annual.htm>>

1988. “Bank Failure: An evaluation of the factors contributing to the failure of national banks.” Washington, DC: Office of Office of the Comptroller of the Currency

<<http://www.occ.treas.gov/bankfailure.pdf> >

Obama, Barack. 2009. Speech to joint session of Congress. Feb. 24, 2009.

<http://www.whitehouse.gov/the_press_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Cong>

2008. “Renewing the American Economy.” New York, March 17, 2008

<http://www.barackobama.com/2008/03/27/remarks_of_senator_barack_obam_54.php>

Porter, M. and Schwab, K. 2008. “The Global Competitiveness Report: 2008–2009.” Geneva: World Economic Forum.

Rebonato, R. 2007. *Plight of the Fortune Tellers: Why We Need to Manage Financial Risk Differently*. Princeton, NJ: Princeton University Press.

Royal Bank of Canada. 2009. 2008 Annual Report. Toronto: Royal Bank of Canada

SEC Joint Testimony (SEC 2009). (Committee on Financial Services, Subcommittee on Capital Markets, Insurance and Government-Sponsored Enterprises Concerning Investor Protection and Securities Fraud Wednesday, February 4, 2009

Securities and Exchange Commission . 2005. Performance and Accountability Report Washington, D.C.: SEC. <<http://www.sec.gov/about/secpar2005.shtml>>

Securities and Exchange Commission: Office of Inspector General. 2008. SEC's Oversight of Bear Stearns and Related Entities: Broker-Dealer Assessment Program. 9-25-2008 Report No. 446-B

2002. Broker-dealer Risk Assessment Programs Audit No. 354. August 13, 2002 <<http://www.sec.gov/about/oig/audit/354fin.htm>>

Senior Supervisors Group 2008. Observations on Risk Management Practices during the Recent Market Turbulence. <http://www.newyorkfed.org/newsevents/news/banking/2008/SSG_Risk_Mgt_doc_final.pdf>

Soule, E. 2002. *Morality and Markets: The Ethics of Government Regulation*. Lanham, MD.: Roman & Littlefield Publishers.

Soule, E. 2005. Embedding Ethics in Business and Higher Education: From Leadership to Management Imperative. Washington, DC: Business-Higher Education Forum

Squires, S., Smith, C., McDougall, L., and Yeack, W. 2003. *Inside Arthur Andersen: Shifting Values, Unexpected Consequences*. Upper Saddle River, NJ: Prentice Hall.

Taleb, N. 2007. *The Black Swan*. New York, Random House

Tett, G. 2009. *Fool's Gold: How the Bold Dream of a Small Tribe at J.P. Morgan Was Corrupted by Wall Street Greed and Unleashed a Catastrophe*. New York: Free Press.

Toffler, B. 2003. *Final Accounting: Ambition, Greed and the Fall of Arthur Andersen*. New York: Broadway Books.

Treviño, L. and Nelson, K. 2004. *Managing Business Ethics*. Hoboken, NJ: John Wiley and Sons.

and Weaver, G., Gibson, D., and Toffler, B. 1999. “Managing Ethics and Legal Compliance: What Works and What Hurts,” *California Management Review* 41 (Winter 1999): 131–51.

United States Department of the Treasury. Blueprint for Modernized Financial Regulatory Structure (March, 2008). <<http://www.treas.gov/press/releases/reports/Blueprint.pdf>>

¹ Quotation from Buder (2009: 143)

² The scope of this investigation is limited to the safety and soundness of depository institutions (i.e., banks, thrifts, and savings associations) and securities broker-dealers (i.e., brokerage firms and investment banks). Thus, references to ‘financial institutions’ will not include insurance companies nor government sponsored enterprises (GSEs) such as Fannie Mae and Freddie Mac.

³ The safety and soundness of state chartered banks and thrifts that are not a part of the Federal Reserve System are supervised by the Federal Deposit Insurance Corporation (FDIC). Insofar as these institutions have not figured prominently in the financial crisis, the agency is not germane to this study.

⁴ These observations were informed by a decade of personal experience as a senior financial manager in the financial services industry.

⁵ But as Barth, Brumbaugh, and Wilcox point out, subsequent studies dispute the assumption upon which Glass-Steagall was enacted. Benston (1989) and Puri (1996) reject the notion that the securities businesses of commercial banks was to blame for the bank failures that ushered in the Great Depression. And Kroszner and Rajan (1997) cite evidence indicating that co-mingling the two businesses was beneficial.

⁶ The balance included \$16 billion of subprime and \$53 billion of payment-option adjustable-rate mortgages plus \$53 billion of home equity lines of credit.

⁷ This data was included in Citigroup’s First Quarter 2009 Earnings Review dated April 17, 2009. It can be downloaded from: <http://www.citigroup.com/citi/fin/qer.htm>

⁸ Alternative Net Capital Requirements for Broker-Dealers That Are Part of Consolidated Supervised Entities (17 CFR Parts 200 and 240)

⁹ I have previously extolled the virtues of the SEC in Soule (2003).

¹⁰ The setting was a hearing before the U.S. Senate Committee on Banking, Housing, and Urban Affairs on March 5, 2009.

¹¹ As reported by the Wall Street Journal on August 18, 2009.