



## Paradox of Writing Clear Rules: Interplay of Financial Reporting Standards and Engineering\*

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### ABSTRACT

Attempts to improve financial reporting by adding clarity to its rules and standards through issuance of interpretations and guidance also serve to furnish a better roadmap for evasion through financial engineering. Thus, paradoxically, regulation of financial reporting becomes a victim of its own pursuit of clarity. The interplay between rules written to govern preparation and auditing of financial reports on one hand, and financial engineering of securities to manage the appearance of financial reports on the other, played a significant role in the financial crisis of the recent years. Fundamental rethinking about excessive dependence of financial reporting on written rules (to the exclusion of general acceptance and social norms) may be necessary to preserve the integrity of financial reporting in its losing struggle with financial engineering.

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Since its introduction in the 1930s, federal regulation has sought to promote orderly, uniform, and comparable corporate financial reporting through pursuit of clear written rules with progressively greater assertiveness and power of enforcement. Committee on Accounting Procedure's *Research Bulletins*, Accounting Principles Board's *Opinions*, Financial Accounting Standards Board's *Standards*, and most recently, International Accounting Standards Board's *IFRS*, have been steps in this direction.

This well-intentioned attempt to write clear rules has pushed U.S. financial reporting further

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away from tried-and-tested practices that constituted more ambiguously defined social norms of business and accounting community. Importance of, and reliance on those norms was reflected in the original meaning of the phrase “generally accepted accounting principles” or GAAP. Over these decades, this term which used to describe a bottom-up evolutionary process has been appropriated for top-down prescriptive written standards ordered by government or private sector regulators.

An unintended consequence of writing clear rules to replace the more ambiguous social norms has been an imbalance of power between financial reporting and financial engineering. While the accounting regulators seek and write down clear rules in their attempt to create order in the domain of financial reporting, financial engineers use the written rules to redesign transactions, instruments, and even organizations, to defeat the regulatory intent. Financial engineers are well compensated for their endeavors to ensure that the appearance of the financial reports serve the interests of their corporate paymasters. Most attempts to clarify the rules and standards serve as a better roadmap for evasion for the engineers, and thus, financial reporting regulation becomes a victim of its own actions. This interplay between written accounting rules and financial engineering of derivative securities to manage the appearance of financial reports had a significant role in the financial crisis of the recent years. Protecting the integrity of financial reporting in this losing battle with financial engineering calls for fundamental rethinking about the premises of regulation of financial reporting.

Financial crisis that started in 2007 had many elements, including (1) volatile stock markets; (2) run up and sharp decline of real estate prices; (3) massive expansion and shrinkage of derivative transactions; (4) freezing of credit markets; (5) enlargement, failures, and further enlargement of major financial service firms; (6) unprecedented transfer of funds to financial service employees; and (7) large government bailouts of banks and economic stimulus. These events continue to reverberate and amplify in difficulties of U.S. and several European governments with their banking, budgets and borrowing. Yet little effective reform has occurred till late-2011. Some important aspects of these crises are rooted in the interplay between financial reporting and engineering which needs close attention and serious rethinking to remedy its consequences.

## **Accounting for Financial Services Industry**

Accounting plays a role in success and failure of all organizations. But it has a special role in financial services. The key resources of organizations in most industries—whether airplanes, clothing, computers, buildings, or food—have a physical existence independent of how they are accounted for. The nature and the existence of these objects do not depend on how they are accounted for. Whether an airplane appears as an asset on the balance sheet of an airline (from an outright purchase or a capitalized lease) or does not appear on its balance sheet (from an operating lease), makes no difference to the existence of the airplane; it still sits on the tarmac of some airport. The same is true of an office building or a car.

In contrast, the key objects of finance, such as stocks, bonds, deposits, and derivatives, are defined by how they are accounted for, and few of them can exist independent of their accounting. A share of stock of a company, for example, is a bundle of rights that include residual interest and some governance. The flow (periodic income) or stock (owners' equity) of residual interest of shareholders in a corporation is determined by applying the chosen methods of accounting to relevant transactions and events. Even within the range of accounting methods permissible in most regulatory jurisdictions, the choice of accounting can significantly alter the measured residual interest.

Similarly, important rights of a bondholder, e.g., recall generated by covenants, depend on the methods of accounting employed. It is not possible to define the substance of a share of stock or a bond independent of the accounting system of the firm. This is also true of the more complex securities such as convertibles and derivatives. The rights and obligations associated with the securities have little existence independent of the books of accounts. It would be difficult to conduct transactions in securities without some agreed upon and acceptable books of account to back them up. No accounting means no finance.

Financial crises had multiple causes including poor risk management, ignoring systemic risk of the financial system, proprietary trading by the banks, large cash rewards for positive outcomes of taking risk, insufficient bank capital, and lax oversight by the Federal Reserve Board and other regulatory agencies. I do not delve into these factors. Although accounting is rarely mentioned in lists of root causes of the crisis, I argue that it is one of them, and develop analysis of this link. Examination of that link starts with financial engineering.

## **Financial Engineering**

Although not recognized as an engineering discipline, term financial engineering has come to encompass a broad range of quantitative techniques used for designing and valuing securities (e.g., mortgage-backed securities or MBS), transactions (e.g., sale-leaseback), and organizational forms (e.g., special purpose vehicles) beyond conventional stocks and bonds to serve specified purposes of investment and commercial banks as well as their investor and borrower clients in all sectors of the economy. Structured finance is a subset of financial engineering, described as follows by Jobst of International Monetary Fund:

“Structured finance encompasses all advanced private and public financial arrangements that serve to efficiently refinance and hedge any profitable economic activity beyond the scope of conventional forms of on-balance sheet securities (debt, bonds and equity) in the effort to lower cost of capital and to mitigate agency costs of market impediments on liquidity.” (Jobst 2007, p. 17).

It is worth parsing this carefully-chosen language into common parlance: complex (i.e., difficult to understand) financial deals specifically designed so one can borrow at a lower rate while concealing the debt from view of the readers of financial reports. In absence of such expert help, lenders may not be unwilling to lend, or may demand a higher rate of interest. When one cannot borrow because of questionable creditworthiness, financial engineers can “structure” the deals so they improve the apparent creditworthiness, hide the indebtedness from the view, and lower the interest rate one may have to pay. In other words, structured finance is financial make-up. For a proper fee, structured finance experts can make an ugly duckling of a corporation look like a princess in the lenders’ eyes.

“Structured finance is a broad term used to describe a sector of finance that was created to help transfer risk and avoid laws using complex legal and corporate entities” (Tavakoli 2008).

This risk transfer as applied to securitization of various financial assets (e.g., mortgages, credit card receivables, auto loans, etc.) has helped to open up new sources of financing to consumers. However, it arguably contributed to the degradation in underwriting standards for these financial assets, which

helped give rise to both the inflationary credit bubble of the mid-2000s and the credit crash and financial crisis of 2007-2009" (Lowenstein 2008).

### *Off-Balance-Sheet Financing*

If the balance sheet of a company is supposed list its assets (resources with measurable future benefits) and liabilities (obligations to pay in exchange for benefits already received), the term off-balance sheet financing would appear to be an oxymoron.

"Off-balance-sheet transactions and entities are often used to artificially inflate profits and make firms look more financially secure than they actually are. A complex and confusing array of investment vehicles, including but not limited to collateralized debt obligations, subprime-mortgage securities and credit default swaps are used to remove debts from corporate balance sheets. The parent company lists proceeds from the sale of these items as assets but does not list the financial obligations that come with them as liabilities. For example, consider loans made by a bank. When issued, the loans are typically kept on the bank's books as an asset. If those loans are securitized and sold off as investments, however, the securitized debt (for which the bank is liable) is not kept on the bank's books. This accounting maneuver helps the issuing firm's stock price and artificially inflates profits, enabling CEOs to claim credit for a solid balance sheet and reap huge bonuses as a result. (*Sneaky Subsidiary Tricks Can Cloud Financials* provides insight into how the process works with subsidiaries, and it's not the only trick companies use.)" Downloaded on July 17, 2011 from (<http://www.investopedia.com/articles/analyst/022002.asp#ixzz1SMq5C8Op>).

Operating lease is a common form of off-balance-sheet financing based on the distinction between renting and buying a building or a piece of equipment. Even companies that need equipment (e.g., an airline in need of an aircraft) for long term, would prefer to pretend that they have merely rented the equipment from its manufacturer or the bank so they do not have to show the equipment as their asset, and the obligation to pay the lease rentals as a liability, on their balance sheets. Such arrangements are called operating leases.

If the duration of the rental contract is a few days or months, treating it as an operating lease does not seem to be unreasonable provided that the economic life of the rental equipment extends well beyond the contract, when it may be rented out to other customers. However, when the rental contract covers most or all of the economic life of the equipment, a non-cancellable lease contract is economically indistinguishable from a purchase of the equipment with borrowed money to be paid back with interest in the form of periodic lease payments. Normally, if a company borrows money to buy a property, its balancesheet must show its amortized cost as an asset, and the present value of the obligation to pay back the loan with interest as a liability. Borrowers with debt-laden balance sheets would rather not do so, and hire financial engineers to devise a way of borrowing so the debt does not show up on their balance sheets.

The financial engineer proposes that purchase be treated as if it were a rental transaction. Over the past half-a-century, accounting rule makers have known this, and have tried to write rules to draw the line between leases that they would permit to be treated as short term rentals (operating leases) and recorded as assets and liabilities on the lessor's balance sheet (capital leases). Note that accountants classify leases into two discrete categories on the basis of terms written in the lease documents presented to them, and accounting rule makers try to identify an effective set of criteria and thresholds in their attempt to separate routine short-term leases from long term ones which are

to be treated as purchases.

In 1976, the Financial Accounting Standards Board, after years of careful deliberation, chose two primary criteria to make the distinction: if either the present value of (non-cancellable) lease rentals exceeded 90 percent of the market value of the leased property, or if the term of the lease exceeded 75 percent of estimated economic life of the asset, the lease had to be treated as a capital lease, and had to appear on the lessor's balance sheet. This accounting standard (FAS 13) replaced the judgment-based treatment of leases in the older APB Opinions 7 and 27 by a clear threshold with the expectation that the treatment of lease accounting in financial reports would improve. The idea behind the rule is not that 90 or 75 percent is *the* right boundary because it would be difficult to defend them against, say, 91 and 74 percent respectively. Instead, accounting rule makers try to set a reasonable but specific boundary in the hope of inducing uniformity and comparability in financial reports.

This is where the financial engineer walks in and dashes the accountants' hopes. He sees the multidimensional space of lease contracts to be essentially continuous. Some of its dimensions may not have been considered by the accounting rule makers, giving him countless options to work with. The two or three class discrete space created by the accounting rule is hardly a challenge for him, because he can tweak any of the numerous lease terms, or introduce new ones, so the proposed lease would fall on the operating side of thresholds specified by a given set of rules. He could, for example, miss the 90% and 75% thresholds by, say, 1 percent and radically change the classification of the lease without making much difference to its substance in the continuous space he operates in. The lease, which the accounting rule makers spent years to put on the balance sheet, goes off the balance sheet after being reengineered. Since accountants have a say only on how to account for a lease, and no say on the terms of the lease itself, it is always possible for the financial engineer to skirt the intent of the accounting rules through redesign of transactions, instruments, and even the organizations. What is remarkable about this process is that it has continued for half-a-century and not much has changed except accumulation of a very thick rulebook on lease accounting.

Look at what Enron did:

The sudden collapse of energy-trading giant Enron Corporation caught regulators, politicians, lenders, analysts, and the public by surprise. In large part the surprise resulted from the billions of dollars of debt the company had been able to hide by using off-balance-sheet financing through hundreds of partnerships. The hidden liabilities allowed Enron to maintain the appearance of a rapidly growing but financially stable company until near the very end, when bankruptcy was imminent. Enron's financial arrangements were complicated and sometimes entailed transferring overvalued assets to partnerships which it had a controlling interest in but was not required to include on its own balance sheet. The partnerships, with minimal equity capital from outside investors, raised most of their capital from loans using Enron stock, transferred assets, or pledges from Enron as collateral. Although Enron used aggressive accounting methods, many of the accounting techniques it employed were not illegal. For this the accounting profession was called to task. (<http://financial-dictionary.thefreedictionary.com/Off-Balance-Sheet+Financing> downloaded on July 17, 2011).

Credit markets are not continuous; a bond that qualifies, though only by a hair, as investment grade is worth a lot more than one that just barely fails to make the grade. As with a would-be immigrant sneaking across the border, so with financial reporting, there is a huge incentive to get over the line.

The challenge to investment banks is to design securities that just meet the rating agencies' tests. Risky mortgages serve their purpose; since the interest rate on them is higher, more money comes into the pool and is available for paying bond interest. But if the mortgages are too risky, rating agencies such as Moody's will object. Banks are adroit at working the system, and pools like Subprime XYZ are intentionally designed to include a layer of Baa bonds, or those just over the border. "Every agency has a model available to bankers that allows them to run the numbers until they get something they like and send it in for a rating," a former Moody's expert in securitization says. In other words, banks were gaming the system; according to Chris Flanagan, the subprime analyst at JPMorgan, "Gaming is the whole thing" Lowenstein (2008).

## **Financial Reporting Environment**

Interplay of financial reporting and financial engineering takes place in an environment populated by individuals with varied interests, organizations and markets. A brief review of some features of this environment may help us appreciate the consequences of clarifying the written rules of accounting.

### *1. What is Risk?*

Of the many definitions of risk in economics and other social sciences, we focus on two better-known approaches. The first concerns objective or subjective uncertainty, often measured as dispersion of the possible outcomes of a process. The return on a share of stock over a given month may have a 90 percent chance of being in range from +20 to -20 percent. Dispersion of outcomes, measured by variance, range or other such statistics, captures this concept of risk. The second, and more common, concept of risk concerns the possibility of harm or undesirable outcomes. These two are, obviously, quite different.

The first is symmetric in losses and gains, and emphasizes uncertainty of outcomes. It is used in portfolio theory, and can be reduced through diversification. The second is concerned with the magnitude and the chance of losses only, and is used in insurance, credit, medicine, engineering, etc. It can be reduced by screening but not much by diversification. It is not meaningful to prefer this kind of risk, because if you do, it cannot be harmful which is an essential part of this meaning of risk. In many contexts, specification of the intended meaning is left out, leading to avoidable confusion in specification of rules of financial reporting.

### *2. Motivating Managers with Compensation beyond Salary and Benefits*

What is the theory of white collar compensation and the rationale for the current practices? We assume that people are motivated to work by promise of pecuniary and non pecuniary compensation. Higher and certain compensation is more desirable than lower and uncertain amounts. To induce them to work more and better, we should promise additional compensation linked to their measured performance, in the form of bonuses, stock options, etc.

Compensation of bricklayers and carpenters is often based on their measured performance. Can this piece wage approach serve well for managerial work? Perhaps not; even cashiers and clerks who may have no managerial functions are salaried. What happens to quality of work when a significant part of the compensation is based on measured performance? When the quantity and quality of output are measurable, and the measurements are not subject to significant control of the employee,

performance-contingent compensation may induce them to work harder. But what are a senior executives supposed to do in exchange for salary and benefits? Are they expected to hold back some of their effort, imagination, and creativity until they are promised additional performance-contingent bonus? Senior managers exercise a significant degree of control over how their own performance is measured. Transferring large amounts of money to them by encouraging them to take risky bets at the taxpayer or stockholder's expense is a key part of the current compensation theory. There is little evidence that such compensation induces them to operate organizations efficiently to generate more wealth for any stakeholders others than themselves. Use of financial reports generated under accounting rules to promise large contingent rewards to senior executives offers them strong incentives to hire financial engineers to serve their personal interests.

### *3. Limits to Organizational Transparency?*

What is the meaning of transparency and how far can it be fruitfully pursued in financial reporting to serve the interests of organization's participants. There are good reasons to choose the financial reporting system of a corporation so it would better inform the investment decisions of the investors. But that is only one of many objectives sought through financial reporting. Certainly, financial reporting should serve the shareholders as a legitimate class of users. But even for this class of users, we must ask how transparency serves their interests.

Although it is often argued that greater transparency is necessarily better, total transparency is neither feasible nor desirable after considering the reactions of the people whose actions are sought to be made more transparent to others. There are good reasons why few people wish to live or work in a fish bowl.

The problem is that in social contexts transparency is not a free good. If a 10-minute nap in mid-afternoon refreshes you for another few hours of productive work, it may be a good thing for the individual as well as the employing organization, as long as it is done privately behind closed doors. There will be no nap in a glass-walled office, no matter what its individual and organizational benefits may be. Beyond certain limits, greater transparency simply diverts more resources into posturing and manipulating appearances (see Arya et al. 1998, 2003).

Also, one must not confine analysis to the interests of shareholders. The life and work of managers is defined by their accounting and control environment, to which they are highly sensitive. Encouraging them to do what is right after considering the interests of all the stakeholders (i.e., to fulfill the respective expectations of all, not just of the shareholders), is a useful way of looking at functions of accounting. Is that possible by pursuing transparency as the goal, or as an instrument of achieving better financial reporting? A great many accounting rules, that make financial reporting more susceptible to financial engineering, are justified by little more than the pursuit of the presumed benefits of greater transparency.

### *4. Discipline*

Accounting and control need to be able to enforce discipline through effective constraints on organizations. Disciplining managers is a difficult challenge in any organization because, being at the procedural hub of organizations with preferential access to information, they exercise significant control over accounting, the boards of directors, governance, and the auditors. Instruments of accounting control are written standards consisting of words of a given language. Liability, for example, is defined in so many words. Any definition of a word must be precise enough to exclude from its scope elements which we would prefer to keep out and yet broad enough to include most

if not all elements we would like to keep in. The more precise a definition is, fewer of the unwanted elements would qualify but more of the wanted elements would be left out. The reverse is true of expansive definitions. This inclusion-exclusion or precision-breadth dilemma applies to definition of cars, shirts, assets, and revenues. There is a limit to the precision of meaning of words. Eliminate all ambiguity of meaning and words cease to be useful as a means of communication.

This general characteristic of meaning of words in natural languages is especially problematic when we try to write rules to impose constraints and discipline on managers of organizations, especially in the financial services industry. Instruments, transactions, and organizations can be and are redesigned by engineers to ensure that the application of the existing accounting rules yields financial reports with the desired features. They may raise or drop income, and get the debt off the balance sheet so they do not show up as a liability. It is always possible to get around any set of written accounting standards because the rules cannot be made perfectly precise in the presence of transactions designed to evade them. If nothing else works, bankers pressure the standard setters, and the politicians to achieve their ends. Even a fraction of the compensation of the CEO of a large company can buy considerable political influence by legally financing elections.

We can examine the history of banks' positions on asset valuation. In 1938 the banking industry pressured the Federal Reserve chair Eccles, and the Treasury secretary Morgenthau for the infamous Uniform Agreement to force the Federal Deposit Insurance Corporation, Office of Controller of Currency, and the Federal Reserve Board to substitute "intrinsic" in place of market values. In the late 1930s towards the later part of the Depression, they went from market value to fundamental values. In the mid 70's, the bankers forced the SEC to back down on the market based valuation of distressed real estate investment trusts. In the late 70's, they forced the Financial Accounting Standards Board to back down on the restructuring of troubled bank loans. In 1991, they forced President George Bush and Treasury secretary Nicholas Brady to ease up on valuation of troubled loans to give the "benefit of doubt" to bankers. In the 1990s, they kept zombie savings and loan associations open, increasing the cost of bailouts and, more recently, after 2000, financial accounting standard FAS157 and International Financial Accounting Standard 39 switched to mark-to-market accounting under the label of fair values.

"Fair values" is a comforting, phrase, but has little to do with fairness. When prices were going up, bankers wanted their assets to be written up to market values, so their bonuses and compensation too would increase, and they will be able to loan out more money. This created a positive feedback loop and accountants, through Statement 157 in the United States and IFRS39 in Europe under mark-to-market accounting, complied. Bankers have always been able to get the accounting rules they want over the past 70 years. They demand and get accounting rules that serve their interests of the moment. In 2009, after pushing for mark-to-market accounting from the mid-90s to about 2007, they forced the accounting standards boards to back down from mark-to-market accounting when the prices had gone down. This does not inspire confidence in the ability of government or accounting standard setters to regulate banks in the future.

##### *5. Information for Markets or from Markets?*

Fifth, the accounting system of the corporations is supposed to provide information for the market participants, to assist them in making informed decisions, so markets can set prices based on what participants learn from accountants and other sources. An alternative is for the accountants to learn what they should report depending on where the stock market is. Is accounting going to be a source of information for the markets, or should it be a carrier of information from the markets



to the investors? Accounting and accountants cannot be an efficient means of conveying market information to investors and others. Since accountants prepare their reports once in a quarter or so, while markets move by the second, investors have far more efficient ways of accessing market information than financial reports prepared by periodically by corporations and their auditors. Is financial reporting an input to the markets or is financial reporting a reflection of events in the market? In the former case, markets cannot possibly be efficient because they would depend, at least in part, on what the accounting system tells the market, and the efficient market theory cannot hold in its extreme form.

If we take the latter position, (accounting from the markets because they are efficient, or at least have more information than historical costs have) then what is the point of financial reporting or accountants? We can get rid of accounting and save billions of dollars. If the market capitalization of a corporation changes by \$2 billion from January 1 to December 31, it can report that change in market value as its income for the period. What could this market value be based on? What information will the market have to set the stock prices if we create financial reports to be a reflection of market events, not as an input to markets?

### *6. Neutrality and Reflexivity*

Neutrality or reflexivity concerns the relationship of financial reporting to the world it reports on. We can see and try to shape financial reporting as a neutral unobtrusive observer of the world and its events on which it has little discernible influence. A satellite camera, for example, orbits hundreds of miles above the earth, and candidly records and reports images without influencing them in a significant way. This neutrality perspective on financial reporting often appears in the conceptual frameworks published by organizations entrusted with the task of writing rules of financial reporting.

Reflexivity, on the other hand, emphasizes an active engagement between accounting, accountant and the agents whose activities it records and reports on. The relationship between a model and the photographer, for example, could be described as a reflexive one. Unlike the satellite camera scanning the terrain, there is active interaction between human beings on either side of the lens in the second example. The photographer records not simply the appearance of the model as it is in fact, but actively engages with the model to produce images that serve the purposes of both. When the camera points to the model, the model smiles; as the camera is put down, the model relaxes.

Should we think of financial reporting as if it is a neutral eye in the sky, or as if it engenders a reflexive interaction exemplified by a model and the photographer? If we choose the former perspective, can we get the accounting system to record and report the way things really are when, in fact, there is active interaction—reflexivity—between managers and accountants not only in preparing the accounts, but also in the actions and events being accounted for. In the presence of active financial engineers, financial reporting risks its own irrelevance by ignoring the reflexivity in its environment.

## **Accounting and Finance**

We can now return to interaction between accounting and finance. Corporate financial engineering designs transactions to optimize some specified objectives. Since organizations are contracts among a large number of agents with divergent interests (Sunder 1997), it is not always obvious that these objectives necessarily serve the organization as a whole. For example, if some

obligations of the corporations are engineered to be kept off the balance sheet to make it appear more credit worthy than it is, the creditors who may be misled into making loans to the corporation, or charging a lower interest rate, are not served well. Even the current shareholders who may benefit from massaging the appearance of the balance sheet may benefit in some circumstances but get hurt in others. Since the decisions to engage in such engineering are taken by corporate executives, it is perhaps reasonable to think that such engineering is designed primarily to serve their own interests.

The objective of financial reporting, presumably, is to provide information useful for investment and other decisions by various agents in the economy. Does the interplay between accounting and finance and between the conflicting objectives of financial engineering and reporting yield a stable equilibrium? If yes, what is that equilibrium? If no, what are the consequences of this interaction?

Most social phenomena can be analyzed at multiple levels, and at each level and across these levels, social phenomena exhibit interaction among agents. This multiplicity of social science makes it difficult to identify laws and relationships which are stable relative to their discovery. We can look at the interaction between financial reporting and financial engineering from this point of view. The following quote is a typical description of financial engineering programs in universities: "Financial engineering concentration encompasses the design, analysis and construction of financial contracts to meet the needs of the enterprises." These needs include, for example, restructuring so it doesn't show up on the balance sheet—not reduce the debt obligation itself, but to deploy methods so the obligation doesn't show up on the balance sheet as a liability. Or, show an increased income by either reducing expenses or increasing revenues that are shown on the income statement. This is achieved, not by changing the substance but the form of transactions so the financial reports look the way management wants them to appear.

According to the International Finance Corporation (a private sector arm of the World Bank), securitization is<sup>2</sup>:

- A form of off-balance sheet financing which involves the pooling of financial assets.
- Risk transfer mechanism that allows loan originators to optimize balance sheet management.
- Allows highly rated securities to be created from less credit worthy assets.

Recall that off-balance sheet financing is financing whose obligation to pay to others does not appear on the balance sheet of the debtor. A large part of financial engineer's work consists of playing this game with accountants. Because they can redesign transactions and instruments as well as organizations, accounts are guaranteed losers in this game. The special purpose entities (SPEs) of Enron fame were about this game of financial engineering in frustrating the intent of written accounting standards.

It is an asymmetric game which the accountants cannot win. Accountants take years to write new rules and financial engineers take minutes or hours to find a way around them. The net effect is that financial reporting standards serve as relatively weak or nonexistent constraints on what businesses can do. Even after some 700 pages of rules, it has not been possible to close the door because newer derivatives can always be designed to get around any new accounting rules. This non-cooperative game between financial engineers and accountants has not led us to a socially efficient outcome.

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<sup>2</sup> [http://www.ifc.org/ifcext/treasury.nsf/AttachmentsByTitle/SF\\_Securitization\\_PD/\\$FILE/Securitization2.pdf](http://www.ifc.org/ifcext/treasury.nsf/AttachmentsByTitle/SF_Securitization_PD/$FILE/Securitization2.pdf) (downloaded on April 28, 2011).

Over the past eight decades accountants have increasingly come to rely on “clear” written rules as opposed to their judgment and social norms of their profession. These clarifications appear in various forms under labels such as staff bulletins, interpretations, and guidance. Financial engineers on the other hand consider it their own professional duty to design whatever instruments will best serve the interests of their clients so the social norms play a diminishing, if any, role on either side. Is it possible that some part of the blame for systemic failures of the recent years can be linked to this diminishing role of judgment? A large part of securitization had to do with getting debt obligations off the banks’ balance sheets.

The same U.S. Securities and Exchange Commission that has the wisdom to refuse to clarify the meaning of non-public information for the purpose of enforcing insider trading laws has failed to see the wisdom of ambiguity in accounting rules. Lang and Wambach (2010) analyze the advantages of ambiguity in the context of preventing fraud to force people to use their judgment.

Shiller (2005) writes: “Many schools now offer a course in business ethics, and some even try to integrate business ethics into their other courses. But nowhere is ethics seen as the center piece or even integral part of the curriculum. And even when business students do take an ethics course, the theoretical framework of the core courses tends to be so devoid of any moral content that the discussion of ethics must seem like some side order of overcooked vegetable”. The role of ethics and moral code has been discussed often but never really integrated into our business programs. Having taught accounting for many years, I don’t see a way of accountants being able to get around this problem of financial engineering by writing and trying to follow increasingly “clear” written rules. As Catanach and Ketz (2011) point out:

“It is not enough for principles to be better than rules. Principles-based accounting produces value only when managers and their advisers are principled men and women. Unfortunately, the past decade contradicts such a presumption. Yes, there are some honest business people, so we do not wish to indict everybody, but there are far too many dishonest CEOs and dishonest CFOs and dishonest advisers to dismiss this point. IFRS that are supposedly principles-based will not solve the fundamental accounting problems of society until and unless the vast number of managers become principled individuals. Sadly, hundreds and hundreds of restatements and many SEC litigation releases and scores of lawsuits and plenty of criminal cases prove that society does not have enough principled managers to make it work.”

Accounting and finance originated as a single discipline but have diverged during the recent decades. Separation of reporting standards from financial engineering has created a new kind of interaction between them with special consequences. Are there any remedies? How do we think about financial reporting? Perhaps 360 degree accounting, which will take care not only of trying to measure income from corporation to the shareholders but also to other stakeholders including employees, suppliers, and customers, etc., as I have proposed in Sunder (2008).

To conclude, I don’t see a way of dealing with this confrontation between finance and accounting by writing more “clear” accounting rules and standards. Ultimately, we shall have to go back to some ethical and social norms of the business and accounting community. In the “roaring” 1920s days of go-go accounting, business adopted mark-to-market valuation. That led to the great market crash of 1929. They gave up mark-to-market accounting. Eighty years later, we did exactly the same thing, albeit under the “fair value” label, and we find ourselves in a similar situation. Of course, history never repeats itself exactly the same way. The next time you think about financial crisis, it may be worth

sparing a thought for its accounting roots.

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