

ENRON AND THE REGULATORY CYCLE

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This thesis is dedicated to my father.

Abstract

This paper attempts to tie Enron's rise, decline and ultimate fall to an economic theory known as the regulatory cycle. The regulatory cycle can be divided into three categories: crisis, regulatory response, and innovation, and will serve as a framework to discuss Enron's insight and mistakes. The emphasis of this essay is on innovation and regulatory response. Enron's innovative ideas that were responsible for its success are reviewed in some detail in the innovation section. Also in this section is a discussion of Enron's questionable activities through the use of Special Purpose Vehicles. The regulatory response section addresses some of the ideas for reform in the wake of the Enron crisis once the framework for effective regulatory response has been established.

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I. Introduction

Imagine a country-club dinner dance, with a bunch of old fogies and their wives shuffling around halfheartedly to the not-so-stirring sounds of Guy Lombardo and his All-Tuxedo Orchestra. Suddenly, young Elvis comes crashing through the skylight, complete with gold-lame suit, shiny guitar, and gyrating hips. Half the waltzers faint; most of the others get angry or pouty. And a very few decide they like what they hear, tap their feet...start grabbing new partners, and suddenly they are rocking to a very different tune.

—Brian O'Reilly, *Fortune Magazine*

The April 2000 *Fortune* article quoted above is neither about Elvis, nor rock and roll, nor even musical innovation—rather it is about Enron. Enron was the Elvis who came in and crashed the party that the inefficient, government-regulated utilities and energy companies were comfortably attending. Enron *shook up* the industry by introducing competition and reducing the inefficiencies that had characterised the energy markets for years. Not surprisingly, the corporation faced hostility from the complacent industries that were threatened by Enron's arrival. One former Enron employee recalls attending a large energy meeting with his colleagues and being the only company representatives not invited to the dinner that followed (Anonymous-1). Nonetheless, the insults and threats failed to deter Enron from pursuing its ambitious goal of becoming a pioneer in creating markets for commodities that no one had ever thought of before. From its birth to its death, Enron challenged the existing system with its innovations and through them became renowned for its insight and drive.

In the months following the Enron crisis these qualities seem to have been forgotten by many journalists, whose attention has turned to scandals and “anecdotal evidence” (Anonymous-1) of which Hollywood movies are made. The Enron story is not just about corruption and “unfettered capitalism,” as many would like to believe. Although these are parts of the story, they are certainly not the focus and should not be dwelt on. The real Enron story is about an aggressive, creative, innovative corporation that did much good but in the end went too far. Despite Enron's disappointing demise, the company was still a financial pioneer, developing instruments that defined markets ranging from energy to plastics; these contributions should not be forgotten. Nevertheless, if one is to learn from Enron's mistakes it is necessary to understand how a corporation with so much potential failed to survive, a concept that can be explained using an economic theory called the regulatory cycle.

The cycle itself is relatively straightforward, and is comprised of three parts: crisis, regulatory response, and financial innovation. With each turn of the economic cycle the rapid growth and subsequent deterioration of large corporations is part of a repeating phenomenon. During the boom periods, the excessive power, influence and investor adulation wielded by large corporations are all too familiar. Similarly, the knee-jerk reaction of regulators when boom turns to bust for these corporations should not come as a surprise. Enron is neither the first nor the last of such market wrenching episodes.

The purpose of this essay is not to denigrate Enron but to demonstrate how regulatory cycles adjust to disruptive market events. I would like to make clear that nowhere in this paper do I attempt to pass judgement on Enron, Anderson, Vinson and Elkins, or any of the parties involved in the crisis. What I have tried to do is come to an understanding of what occurred, and of how these events contributed to a crisis. Therefore, when I make assertions about what “Anderson” or “Enron” did, I intend to be vague about who I mean by these terms, whether it is the senior management, the middle management, or the chairmen of the corporations. The focus of this essay is on the economics behind the transactions, and not on their legalities. Allocating the blame for Enron’s demise is not only beyond the scope of this essay, but also has yet to be determined by the courts. Nonetheless, I will certainly point out the indisputable presence of questionable activity leading to this crisis to the extent that it impacts my analysis and interpretation. The objective of this paper extends well beyond establishing that there is a regulatory cycle, but it is useful as a means to discuss Enron’s innovation, from its creative ideas to its complicated Special Purpose Vehicles; the crisis itself; and ideas for effective regulatory response. We are now at the critical regulatory response section of the cycle, from where we can either allow the cycle to continue and inevitably result in another crisis, or break the cycle entirely. Breaking the cycle is neither easily accomplishable nor predictable, but it is the end toward which regulation must strive. If the cycle cannot be broken, the best regulators can do is pass reforms to assure markets that a crisis in the near future is unlikely.

II. The Regulatory Cycle

Before establishing that the Enron debacle fits this cycle, it is necessary to define what exactly it is. R. Glenn Hubbard, in his textbook, Money, the Financial System and the Economy, devotes an entire chapter to the regulatory cycle as it applies to banking regulation. Using three

historical examples, each dating back to the Great Depression, he establishes a four-part cycle of “financial crisis, regulation, financial innovation, and regulatory response” (384). Perhaps a better way of describing the regulatory cycle is as a three-process cycle involving crisis, regulation and financial innovation, with Hubbard’s “regulatory response” going in the direction from response to regulation. The crisis itself generally involves problems of adverse selection and moral hazard, having “the potential to create instability, which can lead to a crisis in the financial system” (Hubbard, 364).

The battle between regulation and innovation can be extremely complex, but the motivation to innovate in order to overcome hurdles set by regulators is always driven by the same principle: profit. On the Street, the rewards for creativity are huge, and the time available to scrutinise over and discover loopholes in existing regulations is plentiful. In contrast, the regulatory industry is underpaid and understaffed relative to the financial industry. What this means is that it is extremely difficult for the latter to get ahead of the former and prevent financial innovation. An interesting example taken from Hubbard’s text illustrates the theory of the regulatory cycle.

In a section titled “anticompetitive bank regulation” (369-375), the author begins with a response to the crisis of the 1930s and ends with major bank regulation reform. Among the causes of the banking crisis was a loss of faith in the system on the part of the savers and the failure of banks to make wise investments. At the time, there was growing concern that part of the problem derived from too much competition between banks, and that this had driven them to pursue risky activities. The Banking Act of 1933, in which Regulation Q is found, was an effort to make the banking industry less competitive in order to ensure banking stability. The interest rate ceilings imposed on time and savings deposits, as well as the restrictions placed on interest payments on demand deposits considerably reduced bank profitability rather than protect it. These “anticompetitive regulations.... create the incentive for unregulated financial institutions and markets to compete with banks by offering close substitutes for bank deposits and loans” (369).

During the 1960s, when market interest rates rose above the ceiling, savers who previously held deposits at banks looked elsewhere to earn higher rates of return. In 1971 money market mutual funds “were introduced...as an alternative to bank deposits” (370), and the birth of the mutual fund market posed a serious threat to S&Ls, mutual savings banks and commercial banks.

As a result, these institutions innovated in order to restore profitability and attract the customers they had lost. Citibank created negotiable CDs, and mutual savings banks created NOW accounts to “circumvent the interest rate regulation” (372) imposed by Regulation Q. Repurchase agreements, overnight Eurodollars, and automatic transfer systems were also introduced during this period, all for the same purpose of circumventing regulation.

In response to the government’s inability to control interest rates, Congress passed the Depository Institutions Deregulation and Monetary Control Act of 1980 and the Garn-St. Germain Act of 1982. Essentially, these acts called for a gradual elimination of Regulation Q, thereby freeing banks of the anticompetitive restrictions imposed upon them.

What had initially started out as a way to prevent another crisis actually ended up being the root cause of many of the problems that the banking and thrift industries faced in the 1980s, and was a contributor to the S&L crisis. The original regulations imposed on the banking industry may have worked well had banks not innovated in their efforts to make a profit. Anticipating exactly how the financial industry will respond to regulation is therefore of major concern for lawmakers.

III. Enron as Part of a Regulatory Cycle

Now that the regulatory cycle has been illustrated, I will show how the Enron story is part of another recurring regulatory cycle in which “burst bubbles and accounting controversies tend to go hand in hand” (Browning, C1). As found in each of the examples in Hubbard’s text, the accounting issues surrounding the Enron debacle can be traced back to the decade before the financial crisis of the 1930s.

The roaring Twenties, like the boom seven decades later, was a time during which the relative ease with which funding could be obtained encouraged serious risk-taking. This moral hazard contributed to the severity of the ensuing crisis in the decade that followed. Furthermore, there was pressure for these rapidly growing companies to exaggerate their earnings and financial health as they competed with each other. The overconfidence associated with the boom caused few to question these false assertions, which only encouraged corporations to continue to deceive the public. By the time the stock market crash and the subsequent bank failures occurred, many corporations found themselves unable to back the claims they had made about their financial health. “Corporate bankruptcies and unravelling frauds [thus became] among the

hallmarks [of this period]” (Browning, C1). Many of those who did not go bankrupt were still financially weak, and were desperate to stay competitive. The result was a concerted effort to make their situation appear less serious on paper. Out of this emerged financial innovation designed to circumvent the accounting and banking laws of the period. “One accounting trick of that era was to create elaborate webs of holding companies, each helping hide the others’ financial weaknesses, an artifice strangely similar to what Enron did with its partnerships” (Browning, C1). Among the most notorious bankruptcies involved Samuel Insull and his electricity giant, Middle West Utilities, which had succumbed after years of “stock fraud and crooked accounting” (Smith, A1).²

The Middle West Utilities crisis was part of a larger financial crisis of the era, out of which came the regulatory reforms that Franklin Roosevelt enacted. Among these were the Federal Securities Act, which created the Securities and Exchange Commission, the Public Utility Holding Company Act, and the Federal Power Act; these were left largely unchanged for decades. Another regulatory response was the Natural Gas Act of 1938, which regulated natural gas prices for fifty years, until gas shortages and market unrest put pressure on the government to lose some control over prices. The market response to the reform of this Act in 1978 created other inefficiencies that set the stage for Enron’s entry into the natural gas market (Bhatnagar and Tufano, 2). This will be discussed in more detail in the next section.

IV. Enron: Financial Innovation, Both Good and Bad

It is appropriate to introduce Enron at the financial innovation stage of the regulatory cycle. Enron was creative from the start, and many of the ideas that came from its employees and executives were brilliant. There was plenty of good financial innovation that occurred at Enron that not only helped the corporation, but also entire industries and lines of business. Enron challenged other companies by setting a high standard for its competitors in terms of performance and ideas. The good that Enron did should be acknowledged regardless of the

² It turns out that the parallels drawn between this energy company and Enron are remarkable. Like Enron’s former CEO, Kenneth Lay, Insull was a large contributor to political campaigns; his investments did not go unnoticed, for the government ignored much of the business transactions and dealings that occurred over the years. Among the corporation’s largest creditors was J.P. Morgan (Smith, A1 & A6), which suffered quite a loss once Middle West Utilities went bankrupt. It is also interesting to note that a Chicago-based accounting firm, Arthur Andersen, was chosen by the overseeing judge to investigate Middle West Utilities’ books. Only after this investigation did Andersen grow to become one of the world’s largest accounting firms (Spychalski, A23).

number of questionable or dishonest activities in which it was involved. Enron was a great corporation comprising of many gifted, talented and hard-working individuals. The problem was that it went too far and ended up using innovative ideas for bad reasons, namely to deceptively project an image of Enron's financial health. This was accomplished with the help of Special Purpose Vehicles such as the LJM partnerships. The following section has been divided into three sub-sections, each of which discusses particular aspects of Enron's financial innovation. The first and second sub-sections address Enron's use of such vehicles. The last sub-section on financial innovation shows how Enron's Management went too far and used their natural talent and creativity to create a web of Special Purpose Vehicles in order to hide losses and make it easier to report questionable earnings.

A. Financial Innovation from the Beginning: Enron's Birth and Early Years

Enron was born in 1983 when Houston Natural Gas and InterNorth merged (Clifford, 1). At the time, "natural gas and electricity were produced, transmitted and sold by state-regulated monopolies" (Keller, 1). Although this created a sure and safe market for electricity and power, it was inefficient because resources were not used to their full capacity. Tight regulation meant that gas and electricity could not be re-routed and could only be sold to designated utilities.

Enron's first target was the system of pipelines that transported gas across the nation. According to strict regulatory standards, these pipelines could not be considered networks, and functioned on what was known as a "point to point system" (O'Reilly, 3). The natural gas market was clearly inefficient, and its participants were forced to accept the dead weight loss associated with a regulated market. There had been a series of unsuccessful attempts to reform the Natural Gas Act of 1938, which was originally a regulatory response to the crisis at the time and was designed to control gas prices irrespective of supply and demand. The first attempt was with the Natural Gas Policy of 1978, which was a response to the gas shortages that resulted from the below-market prices, and exacerbated by the events in the Middle East. The government forewent control over newly found gas but continued to control gas produced by old reserves. In response to the shortages, "pipeline companies and producers entered into long-term natural gas contracts" (Bhatnagar and Tufano, 2). At the same time, the 1978 Act encouraged greater supply of natural gas, and these two factors contributed to an "oversupply in the mid-1980s and a sharp drop in the price of gas" (Bhatnagar and Tufano, 3). Soon, the pipelines that

had entered into these expensive long-term purchase contracts were unable to sell the gas they received at profitable, above-market prices (O'Reilly, 3). In fact, the system was so inefficient that the entire pipeline industry almost collapsed when oil prices fell in the mid-1980s. Further government reforms in the gas industry stabilised the markets, but because they were still controlled by monopolies, they remained largely inefficient. It was not until 1992 that natural gas deregulation would be complete.

In 1985, which marked the midpoint of the turbulent and lengthy deregulation process, Kenneth Lay and his colleagues decided to exploit and profit from the changes that were occurring in the vast, inefficient market for natural gas. To do this, however, Lay had to first lobby hard for the deregulation of pipelines, which he did. Having previously worked for the Federal Energy Regulatory Commission (FERC), he was able to access the right people and get them to listen to his sound arguments. He eventually convinced the FERC to “[overhaul] its regulations, letting utilities shop around and buy gas directly from producers. Pipeline companies were suddenly free as well—to find cheap gas, find customers for it, and ship it to them, even over another company’s pipes” (O'Reilly, 3). Once this pipeline deregulation was in the making, Lay hired Jeffrey Skilling from McKinsey to cash in on any potential opportunities that arose at the time.

Enron’s executives also went a step further and decided to use financial instruments that allowed energy supplies to be traded like debt and equity, bringing together supply and demand. The instruments, themselves, were “gas price options and hedges” (O'Reilly, 3) that guaranteed “a steady supply at a predictable price” (Keller, 1), a phenomenon familiar to the Street but one that had not been previously applied to natural gas and electricity. For example, “when a power company in Kokomo need[ed] electricity to cope with a hot spell in August, Enron [could] find another utility or private generator with a surplus of power at the right price an arrange to have it sent to Kokomo” (O'Reilly, 2). What was remarkable about Enron was not that it had entered the market for natural gas and electricity, but rather that they had actually come up with the idea that these resources could be “traded like commodities” (O'Reilly, 2). The fact that Enron profited so much from deregulation shows how inefficient the regulated system was, for a more efficient situation would lead to more people profiting from the extra benefits associated with it.

Enron began to innovate even more than it previously had when electricity began to be deregulated in the early 1990s. The company took on more risk this time because it had enough

customers who used both gas and electricity, and could alternate their consumption if desired. Enron's involvement in the gas and electricity markets became much more complex as they sought to take advantage of virtually any opportunity to make money; contracts were often negotiated at the very last minute in the wake of sudden, unexpected, price fluctuations. To illustrate this point, consider the following example:

[Suppose] Enron agrees to sell a zillion watts of power to Kokomo Electric this summer, confident it has all its sources of supply lined up. But come July it discovers that it could sell that power at a higher price to Tuscaloosa Incandescent. Perhaps Enron can persuade Kokomo to take a zillion units of bargain-priced natural gas instead and make its own power. If Kokomo balks, Enron might ask a power plant near Kokomo to take the gas, make electricity and ship it at a profit to Kokomo (O'Reilly, 4).

Thus, Enron's initial insight and ambition was rewarded with much success, which in turn encouraged more innovative ideas, which led to even better results. By the end of the 1980s, Enron's equity was valued at \$3 billion.

B. Beyond Gas and Electricity: Financial Innovation at its Best

The level of innovation and creativity at Enron was of an extremely advanced level, and it is no wonder that the corporation climbed so high in such a short period. Enron's success with the gas and electricity markets led Lay, Skilling and other top executives to further exploit market anomalies in which there existed potential arbitrage opportunities. These included the backwardation of the forward curve for power, when the futures price is less than the future spot price; and even bandwidth, in which new technology makes the price of bandwidth cheaper in the future. Enron also became interested in revolutionising the markets for other commodities such as, coal, steel, plastics, pulp and paper, and was successful in its endeavours here as well. Simply, Enron created a market for energy where previously there was none, whereby people could buy and sell gas, and later electricity and other goods, to meet their needs or profit from any excess.

A particularly creative idea was the creation of financial instruments known as weather derivatives for the utilities industry. Previously, power-generating companies needed to maintain expensive "peakers," or additional capacity needed in the event of a surge in demand for power. This demand could be caused by extreme cold, or extreme heat, and was therefore relatively unpredictable. Although power was essentially guaranteed to the public, investing in

peakers was not necessarily an efficient use of resources. Since they were only used in the event of extreme weather, in some instances utilities used their peakers for only a few hours during an entire season. The situation was improved greatly when Enron developed derivative products that would revolutionise the power-generating industry.

The utility could use a Heating Degree Day (HDD) index (or a Cooling Degree Day [CDD] index), and if temperatures rose (fell) above (below) this index, Enron would make a payment based on a fixed amount, in dollars, for every degree above (below) this index. They went a step further and made this payment in natural gas, so that the utility could use this commodity to generate power from a cheaper source, such as gas-fired generators. Thus, the utilities benefited from not having to keep idle capacity for the vagaries of the weather. To offset this risk, Enron would find counter-parties with an opposite interest in the HDD or CDD index, such as the agricultural sector. This way, Enron hedged itself, and since they had a unique position in this market, they were able to generate large profits with limited risk. The first weather risk management transaction was done with a Florida utility and was a plain vanilla HDD-CDD swap. Such transactions quickly became more complex and in 2001 the company structured a complex type of cross-commodity product with an East Coast power trader, called a power demand swap, which enabled the utility to hedge against surges in demand in a much more efficient and profitable way (Anonymous-1).

Enron's innovation was not limited to creating new markets and inventing financial instruments. Perhaps its most noteworthy feat was the Internet project that gave rise to EnronOnline, the company's online trading system. Although this may seem rather trivial in comparison to the other ways in which Enron innovated, creating an online trading system for natural gas was riskier and much more complicated than creating a similar system for other commodities. One reason was that the "standard gas contracts bought and sold on the New York Mercantile Exchange are all based on delivery to one place (usually Henry Hub in Louisiana)" (Hamel, 5). This set-up helped hedge against price fluctuations, but was rather inefficient when it came down to actually supplying and delivering natural gas. The implications for EnronOnline were that it would have to resolve likely situations such as supply or demand not coming from Louisiana in addition to handling price differences between gas traded at Henry Hub and elsewhere. Moreover, even if EnronOnline's pioneer, Louise Kitchen, were able to overcome these barriers, had she and her team not been able to convince others that the system could work

well, the project would still have been disastrous. So risky was the project that Skilling himself was reluctant to support it, fearing that “all its complexity meant that the risks of online trading were huge.... If a new online system failed to adequately protect Enron, the company’s losses could be catastrophic” (Hamel, 5).

It took the team seven months to develop EnronOnline into the success that it became. During the time, the system was tested by Enron’s traders themselves, and was then adjusted and tweaked until it was finally ready to face the market. Within seven or eight months, “it would revolutionise the energy-trading business, tallying more than \$1 billion in average daily trading transactions,” contributing largely to Enron’s earnings and sales (Hamel, 5). The development of the new trading system was pivotal because it served as a vehicle through which trading of Internet bandwidth and weather derivatives was made possible.

Innovation at Enron was the driving force behind its success, and this creative, aggressive culture was strongly encouraged. The good ideas that were implemented were not limited to employees in high rankings or with impressive degrees—the inspiration behind some of Enron’s major success stories, such as the development of its pulp and paper trading business, sometimes came from employees without even a high school degree. The corporation clearly functioned as a meritocracy and deserved the attention and recognition it received because of this. The problem arose when innovation went too far and was used to manipulate sales, hide debt and obscure the truth from the markets.

C. Enron’s Use and Abuse of Special Purpose Vehicles

The subject of much controversy and debate concerns Enron and its dealings with what are known as Special Purpose Vehicles (SPVs), also known as Special Purpose Entities (SPEs) or Structured Investment Vehicles (SIVs). The most infamous ones are probably the LJM and the Raptors vehicles because it is through these that Enron was able to inflate its earnings and hide debt to a large extent (these, among other SPVs, will be discussed in detail in this section). Before going into Enron’s specific SPVs, however, it is worthwhile to take the time to understand exactly what these vehicles are and why they are useful.

An SPV is essentially a limited partnership that is “created by an asset transferor or sponsor to carry out a specific purpose, activity or series of transactions directly related to its specific purpose.... [and is primarily used] to access capital and/or manage risk” (Anonymous-a, 1).

Specific transactions could involve the sale or transfer of assets, the exchange of equity for cash, or leasing arrangements. These entities can also be used as a means through which third-party investors can engage in certain transactions with the parent company that they otherwise would not have done. Large companies use these vehicles to transfer low yielding assets from their balance sheets. This allows the companies to book more profitable business on their balance sheets and improve their financial ratios.

The key is to structure them such that their balance sheets can be kept separate from the parent company's balance sheets. What this does is allow the parent company to borrow capital and conduct certain activities without having to worry about the transactions showing up on its balance sheets. This is because the entity achieves "off-balance sheet treatment with respect to the sponsor's financial statements" (Anonymous-a, 1). The separation is accomplished by "a minimum 3% investment [contribution] from an independent third-party investor.... based on the fair value of the financial assets to be sold" (Anonymous-a, 1). Usually in exchange for the investment, the third party is given substantial control and decision-making powers over the SPV—a small price to pay for the benefits that these entities bring to the parent company.

SPVs are also useful for tax purposes: "as a pass-through entity, the SPV is not taxed at the entity level" (Anonymous-a, 2). To allow for the smooth and frequent movement of assets and liabilities between the SPV and the parent company, it is generally set up in a tax haven such as the Caribbean. Another important feature is that the vehicle is designed to be bankruptcy remote. That is, the investors can only sue the issuer, and not the parent company or sponsor, in matters involving transactions associated with the SPV. Therefore, the SPV can go bankrupt without necessarily taking the parent company down with it.

SPVs are used extensively by banks for asset securitisation transactions for large pools of debt, such as home mortgages, credit card receivables, and auto loan financing. In order to compete more effectively in these markets, banks find that it is useful to remove the asset completely from their books and keep the spread from the transaction, allowing them to build up their assets. For example, suppose interest paid on credit card debt (an asset) were 19%. To cover the cost of the loan the bank may have to borrow money (a liability) from another investor. The increase in assets and liabilities is likely to hurt financial ratios and debt ratings, so in many cases the bank is better off creating an SPV, completely removing these assets from their books,

and then have the SPV sell it to another investor at, say, 14%. The bank profits from the spread without having to keep the asset on its balance sheet.

Investors are attracted to SPVs for a number of reasons. The first is that these vehicles are designed by the parent company to be credit enhanced, for in addition to having extensive assets to protect it, SPV debt is also backed to a certain extent by additional collateral. This could be in the form of either cash or a guaranty from a highly rated insurance company or a Letter of Credit from a top tier bank and is therefore considered a relatively safe investment. For this reason, debt ratings on SPVs are oftentimes higher than the debt ratings of the parent company. This has much to do with why SPVs are created in the first place—to enable the parent company to take assets off its balance sheet and fund them with borrowings that do not endanger its credit rating. Thus, SPVs are extremely useful to the parent company because through these partnerships it can access capital at a much lower cost and with much less risk. SPVs could also be used by the parent company because they allow it to attract investors at a lower rate. Since they are safer investments, they do not have to offer higher interest rates (and therefore lower prices) in order to remain attractive to investors.

Another reason investors like SPVs is that they allow for different pools of investors to select bundles of assets in which to invest rather than investing in all of them. That is, upon investing in a company the investor has to assume the average risk of all the assets the company owns. An SPV enables the parent company to bundle an investment with certain characteristics that are more appealing to particular investors. For example, the low risk portion of these assets could be sold to an insurance company and the high risk, to a more risk taking investor. This option is much better than each investor owning the average of all the assets. These bundles can be sold for a premium because they have a higher marginal value and the parent company also benefits from this arrangement. Investing in the entire portfolio of assets can be viewed as a pooling equilibrium, whereas the alternative can be considered a separating equilibrium. Because it is generally the case that a separating equilibrium is more efficient than a pooling equilibrium, we can conclude that investing in an SPV that offers a package of assets is more efficient than investing in all of them.

Enron's primary motivation for using SPVs was to enable the Management "to enter into transactions that it could not, or would not, do with unrelated commercial entities" (Powers, 4). Moreover, the transactions were not intended to hedge risk or to achieve a more efficient

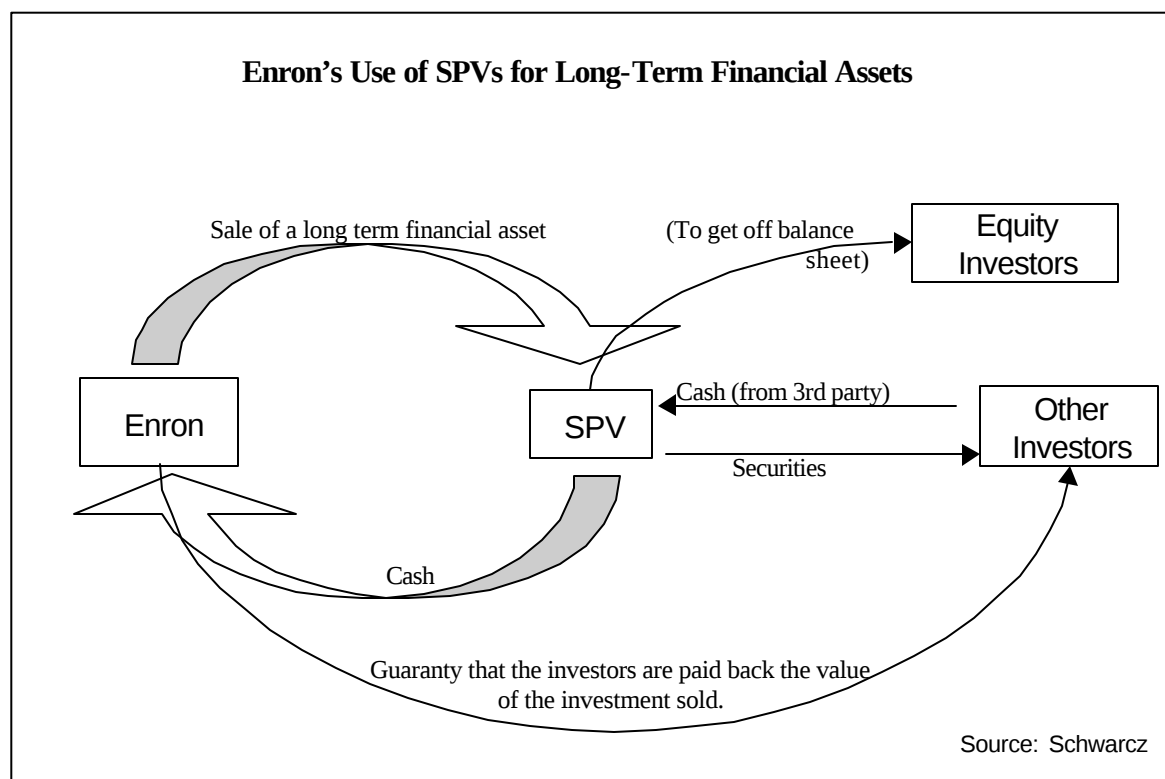
outcome. Rather, they were designed to create the illusion that Enron's merchant investments were hedged in order to offset the losses from these investments and book a profit. As it turns out, these hedges were not economic hedges at all because Enron, and not a third party, was ultimately responsible for the very risk it said it had hedged (Powers, 4).

By the late 1990s Enron faced a problem. Many of the projects in which it had invested throughout the decade were long-term projects that were not going to generate revenue for the corporation for many years to come. The fact that Enron had taken on substantial debt that had not yet yielded any returns put a strain on its finances and on its ability to invest in further projects. At the time, Enron placed a high emphasis on its credit ratings and financial ratios, and there was a lot of pressure for the corporation to do whatever it could to continue to be profitable, at least on paper. Issuing new debt or equity posed significant balance sheet and economic constraints for the corporation, and was therefore undesirable. If Enron were to issue debt to finance its investments, its credit ratings would likely be hurt; "[m]aintaining Enron's credit ratings at investment grade was vital to the conduct of its energy trading business" (Powers, 36). Moreover, there was the question of whether Enron could afford to service its larger debt burden with the little cash flow it was already receiving. The alternative, issuing stock, was even less desirable because it would cause dilution, or a reduction in earnings per share.

Enron worried about its debt ratings and about its earnings numbers, decided to create an array of SPVs to enable it to continue to invest indirectly in long-term projects and reap the rewards later on. The entities themselves would "borrow directly from outside lenders, although in many cases a guaranty or other form of credit support was required from Enron" (Powers, 36-37). If Enron were to achieve off-balance sheet treatment with its SPVs, it would not have to adjust its financial statements to reflect the SPV borrowings because they would be treated as entirely separate entities. This way, the Enron reassured investors and analysts that it was still strong and worthy of investing in, and it had its financial statements to prove it. As I will illustrate later, Enron's problem was that it went too far, and used its SPVs to hide debt and to report up to \$1 billion higher in earnings from the third quarter of 2000 to the third quarter of 2001 than it should have (Powers, 4).

The figure below illustrates Enron's use of SPVs to structure their long-term financial assets. The SPV in this case was created to take Enron's financial assets off its books. To

ensure that the vehicle received off-balance-sheet treatment, outside equity investors with a 3% stake in the total value of the investment were found. In addition, to purchase the long-term assets, the SPV had to get cash from a third party (“other investors”) by issuing securities. Implicit in the sale of these securities was a guaranty that Enron would provide the difference should the financial asset sold to the SPV (i.e. the long-term assets) yield insufficient cash to pay back the investors. This guaranty was essentially a hedge, and investors were assured (or so they



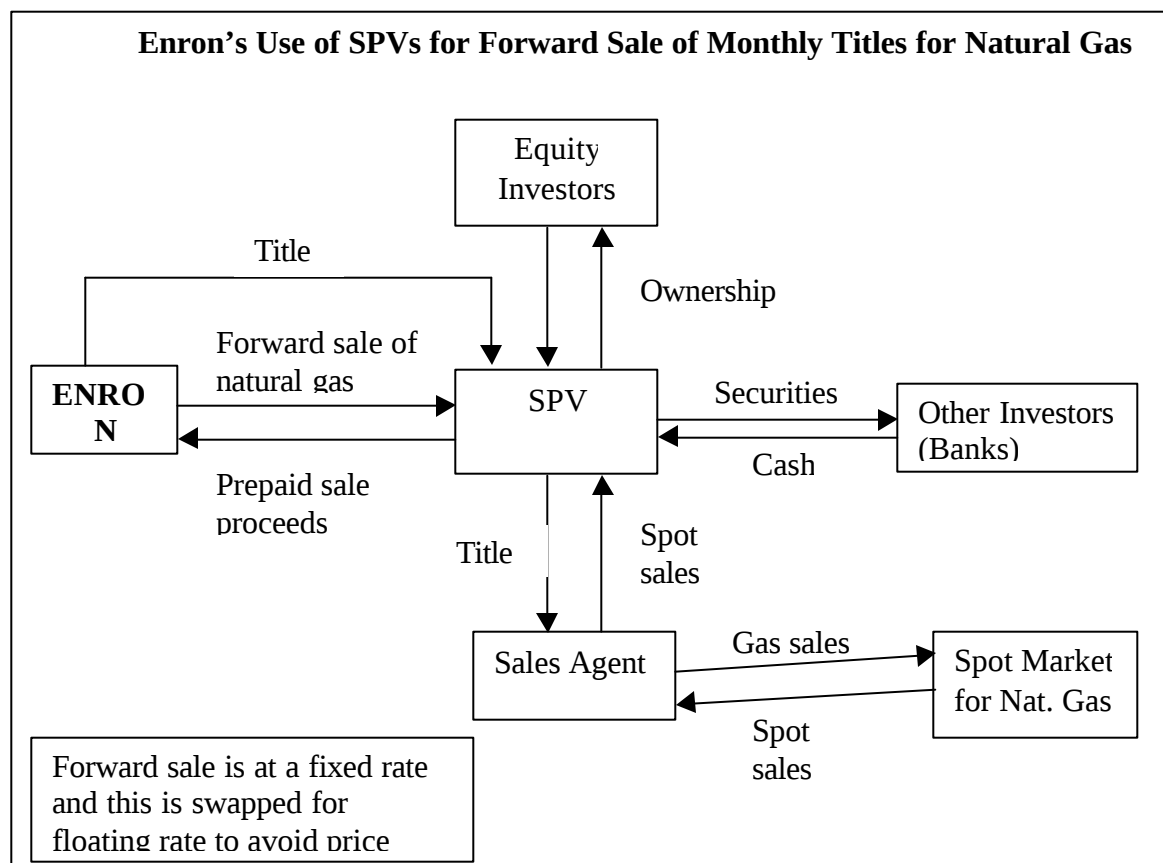
thought) that their investments would be profitable. Enron also over-collateralised the SPV debt by issuing stock, thereby making an investment in the SPV even more attractive.

The cash received from the third party was then transferred to Enron, which reported this final transaction as revenue. This, in turn, boosted its stock price and kept its credit ratings strong, with no fundamental change. The corporation went a step further to project that future costs would decrease, and predicted a handsome future profit also reported in their current earnings. Thus, what Enron did was estimate this future sale and book the entire amount as revenue without showing the liability side of the transaction. The company treated these future prices as if they were certain, and assumed that they would be lower over this long-term period.

Other corporations, such as IBM, had also used SPVs of this sort, but they completely separated both profits and losses of their SPVs once they booked the sale of the assets the

vehicles acquired. That is, once IBM sold their assets to the SPV, they were kept completely separate from the rest of IBM's assets. Profits as well as losses were treated as non-recurring charges; Enron treated losses as nonrecurring charges while consistently booking profits. It follows that Enron's use of SPVs was questionable, not because they were created to securitise these long-term financial assets, but from an accounting standpoint. By tying these contracts to the SPVs and only booking profits, Enron was able to dramatically alter their accounting statements by reporting the future sale of their financial assets as current revenue.

An example of a similar type of transaction involved the forward sale of monthly titles for natural gas (illustrated below). This time, however, what Enron did was take the use of SPVs to an extreme, and found a way to take its debt and convert it to revenue. The trading company wanted to recognise future payments from the sale of natural gas prematurely as well as record



transfers from the SPV as if they were true sales. Enron did this by selling these titles short, obligating it to find and deliver natural gas in the future, since it did not actually have ownership of the commodity itself. These titles ought to have been considered a liability, since they were essentially loans that had to be repaid by future sales of natural gas which Enron had either

contracted to purchase or had title to gas from pipelines or gas fields where they had an interest. The figure shows how the corporation used SPVs for this specific type of transaction.

Essentially, Enron conducted a forward sale of these monthly titles to their SPV(s) (for example, 1 Million BTUs of gas per month for 60 months). The SPV, in turn, made a prepaid sale to Enron from the money it generated by selling notes to other investors less fees and costs. In this case, banks such as JP Morgan Chase were the “other investors.” In fact, this is where banks that had a large stake in Enron lost the bulk of their investments. When Enron received this prepaid amount from its sale and reported it as current revenue, there was something clearly wrong with the transaction. The sale should have been recorded as debt, since it was still tied to the monthly titles. The only profit they would make would be after they deducted the cost of acquiring the natural gas that they had pre-sold.

Thus, Enron was able to access cash and other assets by selling its titles to the SPV, which in turn sold them to another agent. The agent could then use the titles to make a profit in the spot market over time. Although it may have appeared otherwise, Enron’s executives were not interested in removing the monthly titles from their balance sheets as much as they were interested in using innovative techniques to make their debt look like revenue. The combination of higher revenue (which translates into higher P&L ratios) and lower debt (which affects ratings) made Enron appear financially stronger than it really was.

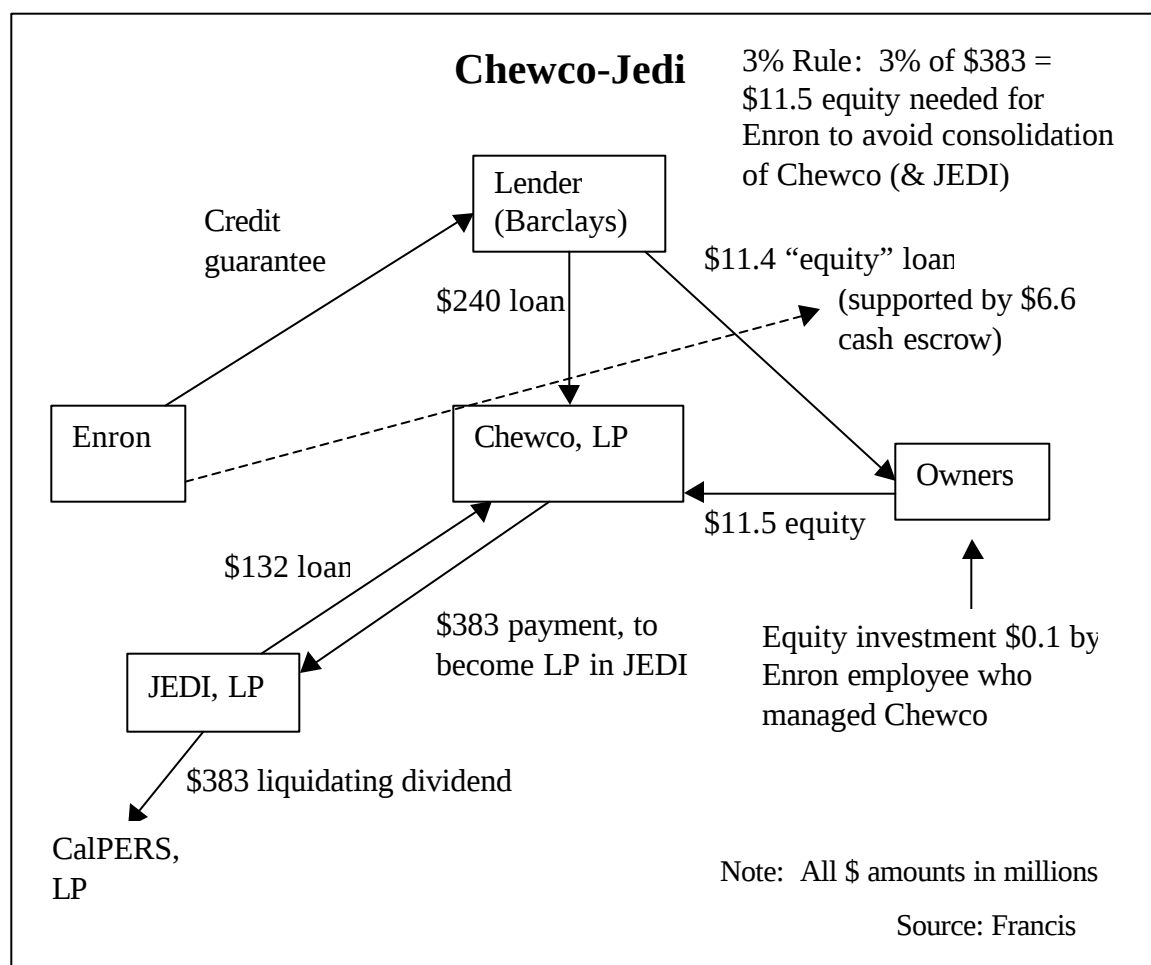
It appears that Enron’s executives ensured that many of their dealings were technically legal. They accomplished this by thoroughly researching current laws and petitioning for legislation where the corporation’s activities were not in line with the rules and regulations. Their hard work paid off, and they were able to justify their questionable activities. For example, under FAS 140, which addresses the sale of financial assets with recourse, the company was able to achieve off-balance-sheet treatment with the SPV. Furthermore, Section 541 of the bankruptcy code permitted the transfer of long-term financial assets into sales, and Enron petitioned FASB and the Emerging Issues Task Board to allow for the immediate recognition of future payments. In fact, the EITB eventually approved this accounting standard and allowed Enron to book its future earnings prematurely (Schwarcz). Simply because Enron’s transactions were legal, however, does not mean that they were not dishonest or questionable.

Now that the general structure of Enron’s vehicles has been discussed, the corporation’s specific SPVs can be addressed. One important SPV was Chewco, LP (after the Star Wars

character Chewbacca) because it marked the first time that an SPV was “run by an Enron employee to keep a significant investment partnership outside of Enron’s consolidated financial statements” (Powers, 41). In 1993, Enron and the California Public Employees’ Retirement System (CalPERS) jointly invested in a \$500 million partnership, the Joint Energy Development Investment Limited Partnership (JEDI, also taken from Star Wars). This joint control allowed Enron to keep JEDI’s debt off its balance sheets while it “[recorded] its contractual share of gains and losses from JEDI on its income statement and [disclosed] the gain or loss separately in its financial statement footnotes” (Powers, 6). The partnership was so successful that Enron wanted to enter into another partnership with CalPERS, called JEDI II. This one would be worth \$1 billion, and to persuade its partner, Enron agreed to “redeem [CalPERS’] limited partnership interest for \$383 million” (Powers, 44). Had Enron simply carried out this transaction itself it would have had to consolidate JEDI into its financial statements, and to get around this hurdle, it created Chewco.

The figure below is taken from an Enron symposium at of the Fuqua School of Business and illustrates the details of the transaction, while keeping it as simple as possible. The most important task in the creation of Chewco was to ensure that satisfied the 3% SPV rule, otherwise Enron would have to consolidate not only Chewco, but also JEDI. This amounted to \$11.49 million, which had to come from third party investors (shown in the figure as “owners”). Other elements in Chewco’s capital structure were a “\$240 million unsecured subordinated loan to Chewco from Barclay’s Bank PLC, which Enron would guarantee,” and a “\$132 million advance from JEDI to Chewco...” (Powers, 49). Thus far, Chewco appeared to satisfy the rules for non-consolidation of its SPVs and did not appear to be committing any egregious accounting mistakes. Unfortunately, there were two questionable activities that cast doubt on the off-balance sheet treatment of Chewco. The first concerned the \$6.6 million cash escrow in the form of a cash collateral with which Enron provided Barclays. Upon completion of the transaction, the \$11.4 million loan was essentially reduced to \$4.8 million—this, plus the \$0.1 million summed to \$4.9 million, which was well short of the requirement for the 3% rule. Even if Enron had not provided the \$6.6 million cash collateral, the 3% rule was still violated because \$0.1 million was provided to the outside investors came from an “Enron employee who managed Chewco” (Francis), namely Michael Kopper (Powers, 49). This should not have counted as part

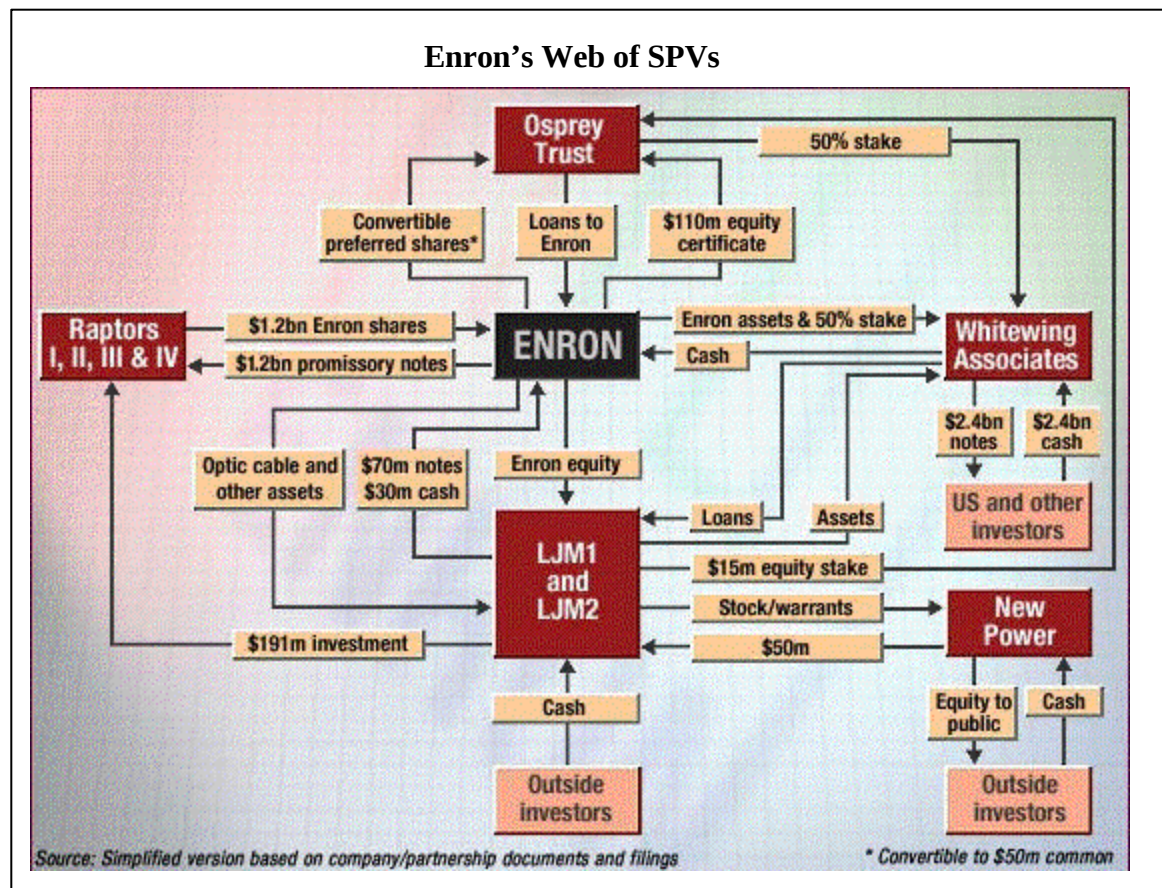
of the outside ownership of the SPV, which left the 3% rule just shy of \$90,000. It was not until November 2001 that Anderson and Enron discovered this mistake, and the corporation was



forced to restate both earnings and debt since 1997, this time consolidating Chewco and Jedi with its financial statements. This will be discussed later in the section titled, “Crisis.”

A large part of the problem was that estimating future sales and using them to boost current revenues could not continue indefinitely, and Enron found that it had to create SPVs for their existing SPVs so that they could still report high earnings (detailed below). In fact, the system became so complex, and so few were able to successfully question Enron’s books, that the corporation was able to create earnings and hide much of their debt. People who questioned Enron’s financial statements were met with hostility and derision by Skilling, and this certainly

contributed to the belief that the corporation's web of SPVs was too complicated to understand (Fortune). To illustrate how complicated and entangled these relationships were, the Financial



Times published an interesting chart showing the relationship between Enron and its major SPVs.

The fact that the chart is a “simplified version” of the transactions that took place between Enron and its SPVs is an indication of the level of complexity that was achieved. What is interesting is that Enron not only issued shares, but also actually received its own shares after they had been filtered through the web of SPVs. More specifically, Enron sold shares to Osprey Trust, New Power and LJMs 1 and 2. At the same time, Raptors I, II, III and IV sold Enron back \$1.2bn of its own shares in exchange for promissory notes. The system was complex for a reason: the opaqueness allowed Enron to boost its earnings and enhance its credit ratings with little opposition because few outsiders knew where to start or what to ask. For years, the corporation was able to continue to report large revenues and watch its stock price soar as the financial industry watched in awe. Some investigators and researchers have suggested that the

number of SPVs that Enron created was well into the hundreds: if anything, the sheer number of SPVs was enough to suggest that Enron was using them to take on more risk than was wise. What the corporation's executives had begun to do was to bet on their hedges, a risky strategy that is not uncommon. In fact, this is where many people draw parallels between Enron and the fallen hedge-fund giant, LTCM, because both took on bets that would have been profitable in every scenario except in the one that occurred.

These specific SPVs are worth going into in some more detail, for they are the source of much of the debate concerning Enron's violation of accounting principles and standards. The LJM partnerships were created within four months of each other. LJM1 arose out of Skilling's concern over a major Enron investment in Rhythms NetConnections, Inc., "a privately-held internet service provider for businesses using digital subscriber line technology" (Powers, 77). Enron's investment in Rhythms stock had gone from \$10 million to \$300 million from March 1998 to May 1999. Although the return on this investment was spectacular, Enron's position was extremely risky for a few reasons. First, because "Enron accounted for the investment as part of its merchant portfolio, it marked the Rhythms position to market, meaning that increases and decreases in the value of the Rhythms stock were reflected on Enron's income statement" (Powers, 77). One option would have been to sell the stock, but Enron was not able to do so until the end of 1999 by the terms of the original investment, which created additional risk to Enron's position in the stock. A good alternative strategy that would also hedge this volatility risk would be to create an SPV that would bear this risk: LJM1. The partnership was designed to ensure that the profit Enron had made in its Rhythms deal would not decrease in value if the Rhythms stock were to fall. LJM1 was created June 18, 1999; shortly thereafter, Enron created the desired hedge that would offset any losses due to a decline in the value of Rhythms stock. First, LJM1 received forward contracts of Enron stock worth \$276 million, which it exchanged for a note. Another SPV, Swap Sub, was created for receiving a put option on 5.4 million shares of Rhythms stock with a strike price of \$56 per share and an exercise date of June 2004. In order for Swap Sub to afford to purchase the option, LJM1 transferred 1.6 million Enron shares in addition to \$3.7 million in cash to the SPV. Thus, LJM1 (using Swap Sub) and Enron essentially hedged each other against decreases in the price of either Enron or Rhythms stocks, and the SPV's role was later expanded to include certain other investments as well (Powers, 78-81).

As long as Enron's stock was not highly correlated to the value of the investments in the vehicles, there were few reasons to worry, since LJM1 and Enron essentially hedged each other. Since LJM1 had significant Enron stock, the value of its assets increased with the rise in the parent company's stock price. The arrangement, however, did not safeguard against a decline in the value of both Enron stock and the Rhythms investment from which LJM1 derived its value. In this situation, LJM1 would have insufficient funds to fulfil its contractual obligations to Enron. The corporation did not think that this possibility was a risk they needed to worry about. Its executives bet that Enron's stock price would continue to rise and that it would therefore never have to take any losses on its hedges involving the SPVs. Essentially, Enron bet on its hedges—a widely used, but not necessarily wise strategy. The situation went awry when both Enron stock and the investment put into the vehicles simultaneously decreased in value. At the time that the Rhythms stock went down in value, Enron found that its stock price was also falling. The vehicles no longer had the assets to satisfy the hedge, and Enron discovered that its hedge really had not been a hedge, after all.

Whitewing L.P. was “a partnership created by Enron that invested in energy-related projects in Europe and South America, including an electric distribution company in Brazil.” The SPV had been extremely successful at raising money—as much as \$2.4 billion—from large institutional investors, and was one of Enron's oldest vehicles. Before March 1999, Enron was unable to remove Whitewing from its balance sheets because the entity was still technically controlled by its parent company. Osprey Trust was created to allow Enron to cleverly succeed in achieving a partially off-balance sheet relationship with Whitewing. Once the new SPV was created, it was awarded joint ownership of Whitewing with Enron. The parent company then used this information to argue “that since it was owned jointly by Enron and Osprey it no longer belonged in Enron's reports.” Once Whitewing became a non-consolidated SPV, it became particularly valuable to Enron because the parent company was able to book cash from the vehicle's investments while at the same time not consolidating its debt. Simply because Enron was able to do this, however, does not mean that its dealings with Whitewing were not questionable or perhaps even illegal.

Osprey Trust also provided Whitewing with sufficient liquidity and engaged in a series of transactions involving Enron's and other SPVs' assets. The trust was also involved in a number of rather shady negotiations, such as not reporting to the SEC some private placements to

institutional investors. (Morgenson, 1). It is interesting to note that LJM1 became involved with Osprey Trust as well, having purchased certificates from the SPV to provide it with the necessary financial support to undergo transactions with Enron and Whitewing (Powers, 70).

Like many of Enron's SPVs, LJM2 and Raptors I, II, III, and IV were closely linked to each other, and therefore need to be discussed together. LJM2 was created in October 1999, and "was intended to be a much larger private equity fund than LJM1" (Powers, 71). With plans of raising at least \$200 million, and with Enron's CFO, Andrew Fastow, essentially controlling the entity, the vehicle would be able to easily purchase assets from Enron with few transaction costs. Many investment banks such as Merrill Lynch, J.P. Morgan, Citicorp, Deutsche Bank and First Union became heavily involved in LJM2, and it was through this SPV that they lost a tremendous amount of money. LJM2's involvement with Enron was also extremely complicated, and was said to have had a significant impact on Enron's balance sheets. "The transactions between Enron and LJM2 that had the greatest impact on Enron's financial statements involved four SPVs known as the 'Raptors'³" (Powers, 97). Again, these SPVs engaged with Enron in accounting hedges rather than economic hedges because they were contingent on the value of Enron's stock price. They functioned in much the same way that LJM1 did, except that this time the Raptors were hedging against a portfolio of investments rather than just one. What Enron's executives were trying to do was ensure that the company would not have to report any future losses on its portfolio of merchant investments. The transactions between the parent company and these SPVs were extremely complicated and involved the use of highly sophisticated hedges and derivatives to achieve success at covering up Enron's bad investments. To illustrate just how effective the Raptors were, in the five quarters beginning with the third quarter of 2000, the vehicles enabled Enron to hide just under \$1 billion in losses on its merchant investments (Powers, 97-99).

Raptors I, II and IV served the same general purpose of entering into "hedging" transactions with Enron for the sole purpose of hiding losses. Each owned Enron stock and depended on it for their financial health. Raptor III, however, played a slightly different role. Its primary purpose was to protect a "single, large investment in The New Power Company" (TNPC) and it did this, not by owning Enron stock, but by holding TNPC stock (Powers, 114).

³ Each Raptor's SPV had its own special name. In order, these names were Talon, Timberwolf, Porcupine, and Bobcat (Powers).

Raptor III's involvement with TNPC had a high element of risk associated with it, since holding the stock was like doubling-down on a bet on the company. This was true because a decline in New Power stock would not only increase Raptor III's obligation on its hedge to Enron, but would also reduce the vehicle's ability to pay Enron at the same time. Raptor III's structure was intentionally different from the other vehicles because at the time Enron Management wanted to bypass asking the Board for new Enron shares, which would have diluted Enron's stock. The alternative, using Enron's TNPC shares instead to over-collateralise Raptor III, although riskier, allowed the Management to achieve the same end without affecting Enron's shares. LJM2 also eventually ended up undergoing transactions worth approximately \$30 million with Raptor III (Powers, 114-118).

As for TNPC itself, or "New Power" in the FT figure, it was "a residential and commercial power delivery company Enron created as a separate entity" (Powers, 115). Enron made enormous gains on sales, but still assumed most of the risks associated with these rewards. This was because Enron had decided to report higher earnings by selling some of its holdings in TNPC to another of its SPVs, Hawaii 125-0. After recording the gains from this sale, Enron "entered into total return swaps [with Hawaii] under which Enron retained most of the economic risks and rewards of the holdings it had sold" (Powers, 115). Enron's reasons for involving Hawaii in the first place are unclear, but the result was that "Enron bore the economic risks and rewards of TNPC, and would have to reflect any gains or losses on its income statement on a mark-to-market basis" (Powers, 115). TNPC was therefore initially not publicly traded, for volatility in its stock would in turn affect Enron's financial statements. Nonetheless, having an IPO for TNPC stock would allow the parent company to report substantial earnings, making the offering too beneficial for Enron to overlook. The problem was similar to the one that Enron's executives had for Rhythms stock, and the solution was also similar: create another SPV, Raptor III, to indirectly "hedge" its position in TNPC through further transactions with the total return swaps (Powers, 114-118).

The discussion of these specific Enron SPVs raises two issues. These are the partial consolidation of SPVs, and the profits from hedging transactions that are not really hedges at all. Clearly, non-consolidation of an SPV applies to both earnings and losses; reporting earnings and ignoring losses is a true violation of the purpose and meaning of non-consolidation. Although Enron's executives may have been able to find ways to legally accomplish their goals, the fact

remains that their intention was to deceive the public, and this violates the very essence of the nation's financial system. The accounting hedges from which Enron reported huge earnings had no purpose other than to make Enron appear to be performing much better than it actually was. Using complicated swaps and derivatives, Enron succeeded in reporting current or future profits on its financial statements without mentioning any losses. In addition, the company "recorded hedging gains to offset losses in the value of merchant investments on Enron's quarterly and annual income statements" (Powers, 14). Because Enron had provided its SPVs with the bulk of the capital with which they would pay the parent company, ultimately Enron was still accountable for the risk associated with its investments.

The evidence that Enron's intentions were questionable is glaringly obvious as the details of its dealings with the SPVs unfold. For example, "near the end of the third and fourth quarters of 1999, Enron sold interests in seven assets to LJM1 and LJM2" (Powers). After the end of the quarters, Enron bought back five of these assets, which is an indication that the corporation merely wanted to boost its financial statements for those quarters. Second, the SPVs also made profits on every asset sold back to Enron, even when the market value of the assets declined; this does not make any sense if one is to apply proper accounting standards. Finally, total earnings from these transactions alone accounted for over \$229 million, or over 40% of Enron's reported pre-tax earnings. The numbers alone demonstrate Enron's abuse of LJM1 and LJM2, just two of the many SPVs Enron used for similar purposes.

Thus, although an SPV is an innovative tool that has many good uses for a corporation, Enron's primary use of these vehicles was to hide debt and book revenue that really did not exist. Using hedging transactions that were not really hedges in addition to complicated and obscure accounting, the corporation was able to portray a financially strong and healthy image for a while. The questionable treatment of SPVs and obscure accounting revealed itself once the web of vehicles began to collapse. When the worst-case scenario actually occurred and the system was unable to support itself, Enron's demise was certain.

For much of the public, Enron's transactions and SPVs were considered too complicated to understand, and were therefore largely overlooked. This is not to say, however, that no one knew about the company's abuse of accounting standards and regulations at all. One noteworthy example that illustrates this point involves the Treasury, the SEC, the IRS and, of course, Enron.

In this situation, the Treasury recognised a flawed use of SPVs and an asset known as Monthly Income Preferred Shares (MIPS), but was unable to do anything to fix the problem.

Invented by Goldman Sachs & Co. in 1993, MIPS arose out of the Management's desire to improve its debt ratings from triple B to single A without necessarily cutting back on its debt. The problem was the same as before: Enron had invested in a lot of long-term projects, which were affecting its current credit ratings. MIPS were designed to help lower Enron's debt ratios and therefore give the corporation the appearance of being financially healthier.

The most important aspect about these particular shares is that they could be treated simultaneously as debt or equity. In order to accomplish this goal, an SPV, Enron Capital, was created, but this time it was not used to shield Enron from losses on its merchant investments, nor did it receive Enron stock. Rather, Enron Capital issued \$214 million in MIPS to outside investors, and used Goldman Sachs as the intermediary. The annual dividend payment on these MIPS was at an annual rate of 8%, which would be paid in monthly instalments to the investors. The SPV then took the \$214 million and lent it to Enron, and here is where the twist occurs. What Enron did was essentially take on Enron Capital's debt and pay interest on it, which amounted to a reported \$24 million from 1993 to 1994. From the Treasury's standpoint, Enron should have reported the \$214 million that it acquired as debt (which it was) and the interest payments as interest paid on debt. This would have been equivalent to Enron borrowing \$214 million directly from outside investors and paying them an 8% dividend. In reality, Enron made interest payments to Enron Capital so that it could pay its investors, and recorded this as interest payments on debt. What it then did with the \$214 million was report this as "preferred stock of subsidiary companies" on its financial statements when it should have been called debt.

By presenting the \$24 million as debt to the "tax man" and the \$214 million as equity to its investors and rating agencies, MIPS allowed Enron to use debt as an asset and a liability. This use of MIPS, although perfectly legal, was blatantly deceptive and dishonest. As the former chief accountant of the SEC described the creation of MIPS, "This is a very good example of how the professional community, including underwriters, attorneys and auditors, was trying to find ways to structure things to get around the rules" (McKinnon and Hitt, A1 & A8).

Even more interesting than the financial innovation involved in the creation of these instruments was the way in which Enron and other MIPS users ensured that they would be able to continue to use them. This was a legitimate concern, for the Treasury had immediately caught

on to how these MIPS were going to be used. Voicing their disapproval of these securities, the department made “repeated attempts to curtail their use” (McKinnon & Hitt, A1).

At first, the Treasury communicated directly with Wall Street, admonishing the use of these questionable securities and asking for support from the SEC in its efforts to prohibit them. The following year the department appealed to Congress, urging them to act quickly to prohibit the use of MIPS and close the loopholes in the law that allowed them to be invented in the first place. The IRS eventually joined the Treasury’s protests and demanded that Enron’s tax deductions be refused.

Ideally, both the SEC and Congress should have applauded the Treasury’s efforts, setting out immediately to undergo major changes to the system and threatening to punish corporations and banks such as Enron and Goldman Sachs & Co. should they try to defy the law again. In reality, however, the SEC’s reaction was far from ideal yet probably not surprising to those who understood the system well enough. While the Treasury was revealing the mockery of the system that MIPS were making, the financial sector did not remain idle. “The backers of MIPS and other trust-preferred securities assembled a flotilla of well-connected lobbyists to fight the Treasury.... Enron itself reported lobbying expenses—not counting campaign contributions—of \$530,000 for 1996 and \$1 million in 1997 on ‘budget and tax legislation’ including ‘corporate welfare’” (McKinnon and Hitt, A8).

As is generally the case, money talks. The House and the Senate tax-writing committees eventually issued statements announcing “their opposition to the Treasury proposals; [the SEC] “did little except recommend that companies change the way they describe their securities” (McKinnon & Hitt, A8). Without the co-operation of Congress and the SEC, there was little that the Treasury and the IRS could do to affect the markets. Although the IRS actually refused to permit tax deductions, Enron appealed to the US Tax Court. It was only a matter of time before the IRS would fold under pressure from the Street and concede, ““Enron Capital is a valid entity that is separate and distinct from Enron for federal income tax purposes”” (McKinnon and Hitt, A8). Thus, the sad conclusion of the MIPS story (at least until the collapse of Enron) was that neither Congress nor the SEC sided with the Treasury and the IRS, and the financial markets continued to use MIPS.

This aspect of the story fits in perfectly with the regulatory cycle, for the lobbying that Enron and other corporations conducted is known as regulatory arbitrage. Also as a response to

regulation, this version takes place before the regulatory response becomes law. By appealing to a higher authority such as the SEC, Enron was able to avoid any credible threats posed by the Treasury and the IRS to its use of MIPS—an excellent strategy. In fact, contributions to Washington, which totalled \$6million, are said to have “paid off better than most of its other investments” (Keller, 3).

Financial innovation for Enron, therefore, comes in many forms. From the creation of financial instruments to the use of SPVs to regulatory arbitrage, people who worked for and with Enron were constantly trying to come up with new ideas that would help the company succeed. Financial innovation is good to a certain extent because it can drive economic growth. The invention of weather derivatives and the creation of EnronOnline are two examples of how financial innovation contributed to greater efficiency and progress in financial markets. Regrettably, Enron’s misuse of its SPVs shows how creativity can actually take advantage of the inefficiencies and loopholes in markets and use them to fool the markets. This can go on for years, but eventually a crisis is inevitable, and everyone in these financial markets is affected.

V. Crisis

The crisis part of the Regulatory Cycle is the fall of Enron itself. The Senate investigation on the energy giant’s interactions with the Bush administration, Congress and the SEC are indicative of a full-blown crisis. The Enron scandal has also spread quickly to other industries, making them part of the crisis as well. The company’s former auditor, Arthur Anderson LLP, continues to lose major clients and is about to undergo significant internal restructuring; many large corporations have begun to carefully review their financial statements lest they fall prey to the next scandal, as some already have.

Even more interesting than the details of the crisis itself is the speed with which it has unravelled. Enron’s stock price began to deteriorate when Skilling assumed the position of CEO in February 2001, and never fully recovered for the rest of the year. As early as March of the same year, *Fortune* magazine had expressed growing concerns about Enron’s inflated stock price and obscure business activities (McLean, *Overpriced*). Then, in August, Skilling’s unexpected resignation as CEO just six months after he had begun the job led many to believe that something was awry at Enron.

The situation worsened in October, beginning with Enron's announcement of its third quarter earnings of 2001 on the 16th. After careful review of its the SPVs, Anderson and Enron realised that some of its SPVs did not qualify as separate entities; the company reported a \$533 million after-tax charge against earnings and a reduction in shareholders' equity by \$1.2 billion. Enron cited that its transactions with LJM2 were the primary cause of this, and there was a major shorting of Enron's shares that day (McLean, *Cards*, 2). On the 22nd, the SEC requested information about Enron's dealings with LJM2 in response to the recent announcement in its earnings report, and Enron's stock price sank even further. Then, on the 24th, Fastow took a leave of absence, triggering the formation of a Special Investigation Committee. On November 8th, Enron announced that it would have to adjust some of its old annual and quarterly reports beginning with its 1997 annual report. Once again, Enron's SPVs, namely LJM1 and LJM2, were the source of these adjustments (Powers, 30-31).

Enron and Anderson also revisited Enron's Chewco transaction in late October and early November, and this time both parties concluded that Chewco, and therefore JEDI, should have been consolidated into Enron's balance sheets. The following table, taken from Francis' presentation at the Enron symposium, shows the effect that the consolidation of the Chewco-JEDI SPVs had on Enron's balance sheet. As the table below illustrates, consolidating Chewco and JEDI resulted in huge restatements in Enron's income and debt, which would not have occurred had Chewco satisfied the 3% requirement for non-consolidation of SPVs.

Effects of Consolidating Chewco/JEDI		
	<u>Income as originally reported by Enron</u>	<u>Effect of Chewco-JEDI restatement</u>
1997	\$105 million	(\$28 million)
1998	\$703 million	(\$133 million)
1999	\$893 million	(\$153 million)
2000	\$979 million	(\$91 million)
	<u>Debt as originally reported by Enron</u>	<u>Effect of Chewco-JEDI restatement</u>
1997	\$6,254 million	+\$711 million
1998	\$7,357 million	+\$561 million
1999	\$6,152 million	+\$685 million
2000	\$10,229 million	+\$628 million
Source: Francis		

Although Enron's troubles were quite serious up to that point, the worst came when Standard and Poor's, and then Moody's downgraded Enron's debt from just above investment-grade to below investment-grade on 28th November, right after its failed merger with Dynergy (McLean, *Geeks*, 1). The rating agencies claimed that they had waited to see if the merger would go through or not before deciding whether to adjust Enron's debt ratings. This is what Enron had feared all along, for the downgrade of its on-balance-sheet debt triggered the immediate repayment of \$4 billion of its off-balance-sheet debt through its SPVs. Bankruptcy was inevitable because Enron simply did not have the resources to make payment on its debt. Finally, on December 2nd, Enron filed for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code (Powers, 32).

Thus, in a matter of months Enron went from being one of the nation's largest and most influential trading companies to becoming a bankrupt corporation under investigation. In 2001, Enron's stock price fell by roughly 60% from January to August and then fell another 60% between early September and early November (McLean, *Cards*, 1). There are lessons to be learnt from Enron's escalating rise and crashing fall, and as the details unfold regulators will have to come up with what they deem appropriate responses to the crisis.

VI. Regulatory Response

There is no way that regulators could have anticipated exactly how Enron would use financial innovation to bypass rules and regulations; once again, regulators find themselves in the midst of a crisis and are expected to react to it by implementing new rules and regulations. This section addresses and discusses some of the more widely discussed needs for reform that have come out of the Enron crisis.

I would like to emphasise that there is nothing that regulators can do to prevent people from committing outright fraud. If someone is intent on perpetuating fraud, they can fool the most transparent system but will be ultimately discovered by common sense checks and balances. The best that regulators can do is impose stricter punishments to serve as a deterrent, or enforce greater transparency to the extent that it will be much more difficult to fool at least the professional investors. This idea is not new to the markets or the regulators. In recent years the Department of Justice and the SEC have expressed growing concern over the increase of fraudulent activity. Even in January 2002 the SEC chairman, Harvey Pitt, warned, "We have

had far too many financial and accounting failures. The commission cannot, and in any event will not, tolerate this pattern of growing restatements, audit failure, corporate failures and investors' losses.'” He then called for “a tougher regulatory regime... paying greater attention to punishing unethical behaviour” (Michaels et al., 2).

Every crisis wreaks havoc that extends far beyond the specific industry from which it came; everyone in contact with financial markets is affected as these markets adjust and respond not only to the crisis itself, but also to what it anticipates the regulatory response will be. Meanwhile, regulators face the rather daunting task of implementing effective regulatory responses for each aspect of the crisis. Ultimately, the goal should be to end the cycle entirely, thereby permitting the financial industry to develop and improve both smoothly and efficiently. Regulators must approach their rôle carefully because the difference between a regulatory response and an effective regulatory response could in turn mean the difference between only preventing another identical crisis (which is highly unlikely) and actually breaking the cycle. Although it is not possible to say with certainty which responses will prove to be more successful than others, it is not unreasonable to establish a set of criteria that are thought to lead the industry in the right direction.

In establishing this set of criteria, it is important to understand that innovation should not, and cannot, be hindered. Innovation itself is often a driving force for the progress and success of a market or system. Good, creative ideas can be said to lower both information and transaction costs in financial markets, making them more efficient and therefore closer to reflecting the truth than they were before. Recall the good ideas that came out of Enron, from the creation of a market in which to trade energy to the success of an online trading system. It would be unjust to discredit the good that came out of Enron's innovative ideas simply because of its use of poor judgement later. Innovative ideas do not always have both good and bad counterparts to them, and much of the innovation that occurs in markets today is of the good kind and should be rewarded, not penalised.

Even if regulators wanted to control the level and degree of financial innovation that occurs in markets with respect to rules and regulations alone, they simply would be unable to do so. The industry has an over-abundance of people who have more time and resources than regulators do to scrutinise over existing laws and try to come up with ways of circumventing them. The financial rewards to overcoming hurdles to either make or save money are lucrative, and money

is the driving force behind financial innovation. It should not come as a surprise, therefore, that as long as there is a profit to be made, the industry will try everything it can to find ways to capitalise on it. Regulators are no match for the financial industry when it comes to one outmanoeuvring the other, and if the SEC or other regulators were to take this approach to regulatory response, it would always lose.

In spite of the drawbacks that regulators face, there are ways in which they can exert considerable influence over financial markets. Co-operating with the markets rather than working against them can accomplish having some kind of authoritative control. This regulatory strategy could work very well because the markets themselves have many self-regulating powers that ought to be taken advantage of. As effective as self-regulation can be, however, it has limitations that can be offset by the presence of a regulatory power. In a self-regulated market, rewards and punishments are limited to changes in price and quantity, which are useful only to a certain extent. These market responses are ineffective and not appropriate for phenomena such as market failures and crimes like fraud; regulators, if they are to be most effective, should therefore allow latitude for self-regulation, but stand ready to intervene whenever necessary. For example, consider the bond market, which is an entity that is largely left alone, although it is ultimately accountable to the SEC. This is because the SEC itself allows the bond market to self-regulate through the Bond Market Association (BMA), an SRO with limited authority to make some rules and carry out disciplinary actions. This self-regulation is limited to the extent that the SEC always stands over the BMA and can therefore bypass it, as it deems appropriate. Another example of the financial industry's ability to self-regulate is in the market for commercial paper (CP), in which the instrument itself is generally exempt from SEC registration. Since registration is among the primary ways in which the SEC regulates markets, the CP market is largely unregulated. Despite these apparent causes for concern, the CP market functions well because only the highest quality investors are allowed to issue the instrument and a single default is enough to bar re-entry into the market. The CP market is thus a good example of how the markets can effectively self-regulate with minimal to no intervention by regulators.

Of course, a certain degree of transparency is important because it provides markets with the necessary information to make informed decisions. Transparency can be in the form of more detailed disclosure, which facilitates market regulation, but it only has limited use if the information provided is not easy to understand for the investor. The market has no use for

esoteric details that investors do not understand, and regulators should make sure that the information that is disseminated is intended to be understood. This ties into accountability to shareholders, for corporations are ultimately responsible for making sure that their shareholders are well-informed and that decisions carried out by the management are done with the interests of these shareholders in mind. For example, the SEC has been rather successful with the strategy it has used for its 10-Ks, which has been to establish and adhere to a plain English format that is easily understood by the public.

Whereas not enough disclosure hurts investors, too much disclosure discourages good ideas and creativity. Disclosure is good up to the point at which proprietary information from which corporations derive their comparative advantage is interfered with. As a consequence, regulators should be wary of not over-reacting to the crisis by demanding too much from the financial markets. Ultimately they should aim to achieve a standard of disclosure under which a reasonably educated, informed investor can make a good investment decision given the information at hand, and they have the authority to interpret what that means. After all, former SEC chairman, Arthur Levitt, once pointed out that regulation “was to put protection of individual investors at the top of the SEC’s priorities as to encourage the country’s equity culture” (Anonymous-d, 2).

Apart from the idea of transparency to allow the market to self-regulate, there is the idea of incentive-compatible regulation. This entails aligning the incentives of the regulators with the incentives of the markets, and has been discussed in a series of papers published by the Federal Reserve on bank regulation. These papers are worth discussing if one is to fully understand how incentive-compatible regulation works. The idea behind incentive compatibility in bank regulation arose as a way to address some of the problems with the proposals by the Basel Committee on Banking Supervision. The primary source of dissatisfaction was with how capital requirements for banks were determined. In 1993 the Committee decided on a standardised approach, in which trading book assets were separated into different risk classes and then assigned capital requirements accordingly. The problem with this approach was that it did not “take advantage of the banks’ detailed knowledge of asset and financial markets” (Marshall and Venkataraman, 1). Specifically, the risk classes could not account for any dynamic, innovative trading strategies designed to control risk and also had the potential to tempt banks to assume the most risk possible within a given risk class. In 1995 the Basel Committee responded by

proposing an “internal-models” approach, in which banks were allowed to come up with their own risk assessments and would give regulators a value based on the probability of loss. The regulators would then multiply this figure and use it to assign capital requirements for banks. Although an improvement, there were two problems with this new approach. The first was that it created an incentive for banks to design their financial models to suit regulators rather than to manage risk, stifling good innovation in financial markets. The second problem was that there was no incentive for banks to use these models for their own assessments. It was highly likely that banks would have two sets of models—one designed to minimise capital requirements, and another created for their own purposes, which would render the internal-model approach ineffective (Marshall and Venkataraman, 1-2).

In response to the problems with the standardised approach and the internal models approach to bank regulation leading economists, most notably Paul Kupiec and James O’Brien of the Federal Reserve Board, devised a new approach altogether, called a “precommitment approach”, that focused on incentive-compatible regulation. Under this proposal, banks were allowed the freedom to determine how much risk they had assumed and how much capital they wanted to hold against that risk, based on the maximum sustainable loss. As long as banks did not go over this precommitted capital level, regulators would not intervene. If, however, these banks had losses that exceeded this level, regulatory penalties would be imposed. The precommitment approach does a good job of aligning the incentives of the regulators with those of the banking industry because it is in the best interests of both parties for banks to have adequate capital reserves to offset risk. At the same time, under the proposal good financial innovation is not discouraged or hindered, thereby giving markets the freedom necessary to improve and develop. I hope that this example has helped solidify not only what incentive-compatible regulation is and how it can be applied, but also how effective it can be when applied correctly (Marshall and Venkataraman, 2-3).

Thus, transparency, co-operation with the market and incentive-compatible regulation ought to be the groundwork for setting and applying effective regulatory reform. The SEC has emphasised “tough enforcement, greater transparency, full disclosure and spirited attacks on conflicts of interest” (Anonymous-d, 2) both before and after the Enron crisis, so it is already headed the direction of effective reform. Incentive-compatible regulation is arguably the most effective form of regulatory response and therefore has the most potential to break the cycle.

This type of response, however, is also the most difficult to come up with, and there might not necessarily be room for much incentive-compatible regulation in the Enron cycle. Breaking the cycle may be the ultimate goal, but it is certainly not the only one that regulators should aspire to attain. If the cycle cannot be broken, it ought to be reformed in such a way that it is considerably slowed down. This can be accomplished by devising new rules that channel innovation towards beneficial innovation and away from detrimental innovation. That is, these rules ought to make bad innovation around regulation extremely difficult and painstaking, while allowing for and leaving room for positive innovation. The idea behind regulation is not to stifle all innovation, but certain types of innovation, which is consistent with incentive-compatible regulation. By encouraging creativity and expediency in financial markets while at the same time punishing them for pursuing activities that are designed to deceive investors, regulators have a much better chance of aligning their incentives with those of the markets.

With this general framework for thinking about regulatory response in mind, we can now look at a few proposals for reform that have come out of the crisis. The ones that are most applicable to this essay are those that apply to financial markets, such as accounting and auditing standards in addition to investors' issues. Others, such as politics, pensions, and stock options, while interesting topics, are beyond the scope of this essay and will therefore not be discussed.

A. Accounting and Auditing Standards

One question that many are trying to understand is why Enron's accountants and lawyers permitted the Management to conduct its questionable activities. After all, they were consulted every step of the way when Enron made decisions regarding its balance sheets and its SPVs. Part of the reason has to do with the fact that the rules are too rigid and can therefore provide a framework around which the financial industry can innovate, and part of it is that there is a conflict of interest that was created out of the close relationship between the corporation and its accounting agency. I examine each of these in detail below.

i. Explicit vs. Broad Rules and Regulations in Accounting

As mentioned at the beginning of this essay, the cycle to which Enron belongs has already experienced two crises, one in the 1930s and the other in the 1990s. The response in the 1930s was to create an explicit set of rules and regulations that would serve as the basis for further

restrictions in the years to come. The regulatory response was effective, at least for a while, and the second crisis in the Enron cycle occurred over six decades after the first one.

While explicit rules may be an excellent temporary solution to the problem, they cannot do much for the regulatory cycle: the financial industry is bound to eventually find ways to circumvent these rules, just as it did with the old rules. The Financial Times eloquently affirms this point: “[b]y spelling out in excruciating detail what auditors, directors, bank managers and other responsible parties must do, they create the possibility of observing merely the letter of the law” (Anonymous-e, 14). As the quote implies, as long as the explicit rules have been abided by, a corporation can get away with engaging in even the most flagrant activities, which clearly were not the intentions of the regulators who initiated the regulatory response.

In the US, the accounting standard by which all corporations must abide is the Generally Accepted Accounting Principals (GAAP), which was created by the Financial Accounting Standards Board (FASB), a self-regulated organisation (SRO). As an accounting standard, it has been criticised for focusing on form over substance—that is, having rules that are too detailed and complex to be truly effective at ensuring that corporations are acting in a manner that is both fair and appropriate to investors and shareholders. The Enron scandal has only strengthened this belief in the financial markets. That is not to say, however, that detailed laws are not important, because they are. “But,” the Financial Times states, “very detailed prescriptions about how transactions should be treated have led to an accounting quagmire” (Anonymous-k, 1). One only needs to look at how Enron used requirements and disclosure rules under GAAP such as FAS 57, on related party disclosure, and the 3% rule for non-consolidation of SPVs (discussed below) to verify the validity of this statement.

Lately, the FASB has been widely criticised for its 3% rule for SPVs, in which the vehicles were given off-balance-sheet treatment, provided that outside investors owned 3% of their total value. This widely cited “standard” originated as a FASB ruling on a very specific SPV involving sale-leaseback transactions. Three, as opposed to five or six percent, was enough for independence because the risk of these particular SPVs was not considered by the FASB to have a default risk of more than this amount (Schipper). Since the probability of default was less than or equal to 3%, if outside investors bore this amount of risk the FASB allowed the parent company to treat the vehicles independently. This number makes sense in a very low-risk transaction such as a sale and leaseback. In time, however, this standard began to be applied to

for riskier projects in which 3% may not have been adequate, and indeed appears to have become the de facto standard. This was an unintended consequence that the FASB had not anticipated, and although the Board may not have created this rule intentionally, they certainly did not intervene to stop its adoption as a standard.

That the 3% rule needs to be reformed is indisputable, and lately there have been a number of proposals for reform. A comparison of a couple of the suggestions for reforming this rule illustrates the difference between standards that focus on form and ones that are truly substantive. Changing the 3% rule to a ten percent rule, which the FASB has proposed, does not help the situation because it may be too much for harmless SPVs and still too little for the riskiest ones. A better solution is to step away from these somewhat arbitrary numbers altogether and let the parent companies determine how much outside equity is necessary to protect their SPVs, and hold them accountable. One good regulatory response that the FASB is considering is making the primary beneficiary of the SPV consolidate the vehicle with its books. This gets around the idea of hiding the SPVs balance sheets altogether, and creates the incentive for the parent company to create vehicles that better manage risk.

Another problem with GAAP is that the rules were made for a different industry than the one encountered today. Although GAAP is the FASB's creation, the accounting standard's principles are "rooted in the old economy," which is another cause of the decreasing ability of GAAP to provide "the financial information needed to properly allocate scarce capital resources in the new economy" (Grimm, 2). The old accounting standard has become increasingly incompatible with today's accounting purposes. For example, under GAAP R&D spending is "expensed right away" when it should be treated "more like an investment in an asset generating wealth over" a period of time (Condon, 1). Pharmaceuticals tend to suffer the most from this discrepancy because of the large proportion of their resources that are devoted to R&D, which supposedly creates assets. Corporations can also take advantage of GAAP by using "'aggressive accounting' to boost reported earnings." This is manifested in pro forma accounting, in which items such as "stock write-offs, special transactions, interest charges or depreciation" are omitted to produce strong numbers, or even in "the accounting treatment of stock options" (Anonymous-i, 2). Thus, GAAP certainly has its limitations, both because of its prescriptive approach and because of its obsolete rules.

The International Accounting Standards Board (IASB), on the other hand, has been said to be more applicable to today's markets primarily because of its emphasis on substance over form. Furthermore, under the IASB's rules Enron would have been forced to consolidate its SPVs and would consequently not have been able to use the vehicles to boost earnings and hide debt to the extent that it did without the public knowing. Because of these beliefs, one popular proposal has been to convert bookkeeping in the US from GAAP to IASB standards when constructing financial statements and reports. International co-ordination of accounting standards is the next big step in regulatory reform, but the timing is not yet right, and the process is too slow and political to have any immediate effect on financial markets in the US. Consider the Basle Accords of 1988 as a leading example of the difficulties of international co-ordination. Even today, there are many disagreements between countries concerning the details of the Accord, and reform is still needed but has been slow to come.

Ultimately, it is in the best interests of the US to embrace international co-ordination in accounting practices. At present, however, it is highly unlikely that the SEC will delegate this rules-making authority to an international organisation over which it has no regulatory authority. Thus, the FASB should not be done away with nor should it be given less authority because its members are directly involved in the financial industry, making it an effective intermediary between regulators and the financial markets. A better solution to the problem might be to direct the FASB to reconcile US GAAP more to International Accounting-type standards, in which the emphasis is on the spirit of the law rather than the letter.

An accounting standard that has an emphasis on principles, whether it is the IASB standard or a revised GAAP, is desirable because it puts pressure on corporations to provide markets with more transparent disclosure. Corporations, accountants and lawyers would have to do more than simply prove that their actions are legal or show that the laws are vague when explaining their decisions to the markets. They would have to provide clear, convincing reasons for their actions to both markets and regulators who would decide for themselves whether these actions are appropriate and acceptable. Incentive-compatible regulation in accounting and auditing may not be feasible, since there will always be an incentive for corporations to emphasise the good and de-emphasise the bad. The focus should therefore be on achieving a greater degree of transparency and disclosure, which is precisely what a more general accounting standard will accomplish.

Of course, there are reservations about the substance over form-approach to accounting because it “assumes auditors will act properly” (Anonymous-k, 2). Compared with the prescriptive approach, in which loopholes will always be discovered, however, this approach appears to be a better choice. The Financial Times agrees, claiming that “a traditional response to Enron would...generate more rules, more bureaucracy, higher transaction costs, less economic efficiency and more scandals” (Anonymous-k, 2). In other words, it would simply send us on another loop through the regulatory cycle. Thus, despite the drawbacks to the IASB substance over form approach, it still has more potential than the current GAAP approach to regulation. Now is a good opportunity for the SEC and THE FASB to seriously consider changing their approach to regulatory response.

ii. Consulting, Auditing and Accounting

The second problem with accounting and auditing standards arises from the conflict of interest that accounting firms face when they are not completely independent of the corporations they audit. Since corporations tend to be owned by shareholders but run by an elected board, the principal-agent problem is always a concern. To combat this problem shareholders are supposed to hire accounting firms to conduct independent audits (Anonymous-h, 2). The firms necessarily need to be detached from the corporation if they are to provide accurate, unbiased assessments of the financial condition of their clients. When the accounting agencies audit they are merely assisting in the series of checks and balances that exist to make the system work well, and should be independent in order to be effective. If accountants were directly involved with their clients' activities, they may be less inclined to question or probe specific transactions. The system of checks and balances fails in this instance, and the true value that the audit adds to the principal-agent problem is undermined.

One of the biggest controversies in the aftermath of the Enron crisis is the corporation's tight relationship with its accounting firm, Anderson, which provided not only auditing and accounting services, but also consulting advice. This dual accountant-consultant role is not necessarily bad in and of itself, but the problem is that it creates the potential for a conflict of interest because the accountant has an incentive to maintain a friendly relationship with its client.

Anderson had served as Enron's accounting agency since 1983 (Anonymous-i, 2), and in 2000 alone made approximately \$25 million for accounting and auditing services. In that year the firm made an additional \$27 million in consulting services that included helping set up

Enron's SPVs (Anonymous-c, 2). The potential for a conflict of interest situation certainly did exist, for if Anderson strongly disapproved of Enron's balance sheet transactions in its rôle as auditor it might have lost its consulting privileges. Moreover, many of Enron's top financial executives and managers were former Anderson employees, which only contributed to the over-familiarity between the two companies.

Reforms in auditing and accounting are definitely on their way, and many of the proposed reforms are aimed at formerly separating accountants from their clients. Pressure to separate the two businesses began before the Enron crisis. Ernst & Young and KPMG LLP sold their consulting arms in 2000 and 2001, respectively, in response to growing concern over the dual role that accountants played. In addition, in 2000 Anderson "separated from its management-consulting business, now called Accenture, in an acrimonious split" (Anonymous-g, 1). To an extent, accounting firms were responding to self-regulating pressures in the market.

In the aftermath of the Enron crisis legislators may be able to take regulation further and call for the separation of auditing from consulting services. Levitt tried hard during his tenure to achieve this goal, but was unsuccessful in the face of intense lobbying (Anonymous-d, 2). Proposals have included a more defined separation of auditing from consulting and mandatory rotations of the accounting firms themselves every two or three years. Banning accountants from providing consulting services eliminates the incentive to please their clients. Since shareholders are supposed to choose accountants as a means to combat the principal-agent problem, the firms will not be in danger of losing their clients and will be able to do their job with minimal interference. The mandatory rotations also prevent accounting firms from becoming too familiar with their clients, since every few years these firms will be assigned different corporations to audit.

Although these proposals directly deal with the independence of the accounting firms, they also raise some concerns for the industry. The first is that consulting fees constitute a large percentage of total earnings for these accounting firms and are an incentive for talented individuals to join them in the first place. Jobs at accounting firms are regarded by many as a stepping-stool to a more lucrative job, such as at the top of a corporation's financial team. Former accountants are usually the most qualified for these top positions, because of their experience, talent and exposure, and therefore add more value to a corporation than most other candidates typically would. Without their consulting arms, firms may be unable to attract the

right kind of people and will be left with sub-par auditors who will inevitably lower the standard for the industry (Anonymous-c, 5-6)⁴. The second concern is that accounting agencies argue that these rotations are rather disruptive because it takes time to fully understand a corporation's accounts.

I have a response for each of the two concerns regarding the separation of auditing and consulting. First, the fear of a talent drain may not be as serious as some may think it to be, and the reason is that an auditing experience may still be a necessary stepping stone for a more lucrative career in financial consulting. All the accounting industry may see, therefore, is a higher turnover rate at the lower levels, but not necessarily a decline in the quality of auditing. The talent drain may be more of a concern at the higher levels, which may lead to a downsizing of the auditing side of financial markets. Despite this possibility, there may still be no need for much concern because the market will determine what the right price is for auditing services and will compensate people who are good at auditing, accordingly.

In response to the second concern, that rotating auditors is inconvenient because of the time it takes to become comfortable with a client's finances, accountants are not supposed to get too comfortable with their clients because they ought to be objectively auditing them. Moreover, if accounting firms have difficulty understanding a new corporation's balance sheets, the solution should be to make the system more transparent and easier to understand. Greater transparency and less complexity will not only help the firms that audit the corporations, but also provide the financial markets with information that they can understand and interpret.

There are other proposals regarding auditing, such as not permitting corporations to hire their former accountants and creating an oversight committee to audit the accounting firms, but now the temptation is to revert to a system of explicit rules for every situation. Disclosure might be the best solution in these cases. Corporations may be less inclined to hire their former accountants if they fear that the markets will react unfavourably. Likewise, if accounting firms are answerable not only to each other but also financial markets themselves, there will be little incentive to do a poor auditing job. Here, the target of reform is to align the incentives of the industry with those of the regulators through transparency and disclosure.

⁴ My interpretation from what I have read is the talented people they hire to consult also have accounting responsibilities.

Perhaps the most effective regulatory response would be to ban accounting agencies from consulting to those companies they audit while having mandatory rotations every two or three years for both consulting and auditing. This way not only would auditors be independent, but they would also be of a high calibre, even at the higher levels. As with the case for establishing appropriate accounting rules and regulations, the focus for effective regulation has been on transparency and greater disclosure, for they are often the means through which incentive-compatible regulation, and self-regulation, can be achieved. Allowing the markets to align incentives and self-regulate (within certain parameters) in response to the crisis should prove to be far more effective than instituting specific rules that can only respond to specific situations.

Another solution to the conflict of interest problem is getting rid of the peer review system in which the Big Five accounting firms, Anderson, Deloitte & Touche, Ernst & Young, KPMG and PricewaterhouseCoopers, took part. The recently dissolved Public Oversight Board (POB) was responsible for review and oversight of these firms, and did not have the authority or the power to be very effective, being “a self-regulatory body appointed and financed by accountants” (Anonymous-i, 2). The POB was not alone in the blame for the Enron debacle; the SEC also took some responsibility for failing to properly review Enron’s balance sheets.

Irrespective of how to allocate the blame for the crisis, a more pertinent issue now is how to create a better oversight committee for the accounting firms. Both the FASB and the SEC admit that they are understaffed and therefore incapable of effectively regulating the entire market. Pitt is opposed to the creation of an auditing committee under the SEC and has voiced his preference for private regulation, which he believes “presents major advantages, in both quality and control.” Direct government regulation of the accounting profession would be slow, inefficient and rigid. Levitt agrees: “Of one thing I am certain. People who are unhappy with audits today will be downright despondent if the government were to undertake the job” (Labaton, 2). Rather than give direct oversight and regulatory responsibilities over the accounting industry to the SEC, the Commission should create another SRO under its jurisdiction. This time, it will report directly to the SEC and will have more authority and clout, “including,” Economist adds, “the power to ban or fine auditors for misdeeds” (Anonymous-i, 2). Thus, the regulatory structure that existed can be improved by creating a new, independent SRO that is accountable to the SEC and has authoritative powers over the accounting industry.

Another solution to the peer review system may be to have corporations pay to have another accounting firm challenge audits of their competitors. The SEC should then prioritise any doubts that these other accountants may have and conduct thorough reviews of those corporations that are under suspicion of rules violations. To control the volume of reviews the SEC and the FASB will have to conduct, it may be necessary to impose fines on corporations that set off too many false alarms. Yet another idea has been to “let CEOs take responsibility for their own numbers and make a credible audit something of competitive value” (Anonymous-j, 2). This is a completely self-regulatory solution that has the potential to be very effective. These proposals, in addition to the mandatory rotations, ought to pave the road for incentive-compatible regulation in accounting and auditing because they both attempt to align the incentives of the industry with those of the financial markets.

B. Investors’ Issues

Here, issues such as the role of ratings agencies, bank regulation and regulation of energy trading can be discussed because they share a common theme—especially given the reforms above, there is little need for a regulatory response because the self-regulating forces of the market will suffice and ought to be encouraged.

i. Ratings Agencies

The two ratings agencies, Moody’s and Standard and Poor’s, have been criticised for not warning investors in advance of the state of Enron’s finances. After all, they not only rated Enron but all its SPVs as well. Had these agencies warned investors well in advance, they may not have lost so much so quickly. Another concern is that these ratings agencies had the power to drive Enron into bankruptcy simply by changing the corporation’s debt ratings. In the wake of the Enron crisis there has been talk of reducing the power that these ratings agencies possess in addition to making them more accountable for their actions. New legislation could include random government audits of these ratings agencies to ensure that they are not abusing their privilege and influence over the markets (Oppel, 1-2).

These concerns are not unreasonable, but regulators do not need to impose new rules in order for a response to occur. The reason is that ratings agencies’ greatest asset is their reputation. The financial industry is not required to follow the suggestions and heed the advice of these institutions, and premises its reliance entirely on trust. When a crisis emerges and

fingers are pointed at the ratings agencies, their reputation is at stake. It is very possible that investors will simply look to other companies or evaluations in determining the financial health of a corporation if they choose not to rely on Moody's or Standard and Poor's ratings. If they want to stay in business they have to regain the respect and trust of investors by making sure that they do not repeat their mistakes. Thus, regulators can be assured that they do not need to create new rules for ratings agencies in order to prevent another Enron-type crisis. The ability of the market to self-regulate is enough to ensure that these agencies will be more careful about rating a corporation's debt. Already Standard and Poor's, Moody's and Fitch (the Big Three) "now [intend] to pay more attention to the role that triggers play in a company's financial outlook" (Wyatt, 2), referring to the triggers in some of Enron's debt contracts for immediate repayment of loans if its debt ratings fell to junk status.

What the SEC does need to do, however, is introduce some competition for these ratings agencies. The Commission has the authority to determine which ratings agencies but has not approved of any new ones since 1992, and has created what has essentially become a barrier to entry. If the SEC were to "certify more new rating agencies that can demonstrate they have competence and expertise in predicting bond defaults," the current ratings agencies would be forced to compete with these new agencies and therefore improve their standards (White, 2).

ii. Bank Regulation

Banks were heavily involved with Enron, for they were the ones who provided the funding for the majority of Enron's long-term investments. The amount that they lent to the corporation is not in the tens or even hundreds of millions, but in the billions of dollars. The argument for stricter bank regulation is that they should be held more responsible for their bad decisions, for if Enron had not had access to these loans, the crisis may never have occurred. The problem with this argument is that it appears to assume that Enron was the only corporation to lose in the end. Every bank involved with Enron lost, since the trading giant defaulted on their loans in the end. Giving money to Enron was clearly a poor investment decision, but banks do make bad decisions from time to time, just as they often make very good ones.

A legitimate consideration is how close banks were to taking on more risk than they could handle. This issue was of major concern during the fall of LTCM in 1998, during which banks had extended loans to the hedge fund without even considering the possibility of default.

"Fearing the spread of a banking crisis if LTCM were to default on its debt on the major U.S.

and European banks who had so generously lent to it, the Federal Reserve Bank of New York coordinated a meeting in which 14 “major financial institutions” organised a \$3.6 billion bailout” (Naib, 2). Rather than respond to the banking industry’s failure to do due diligence by restricting lending, a better answer would be to focus on capital adequacy regulation, the details of which have been discussed at the beginning of this regulatory response section.

There is no need for further regulation because banks make loans to corporations with the intention of making a profit. In this case, the same logic applies—Barclays, JPMorgan Chase, UBS Warburg and Citibank, among other banks, all expected to reap the benefits of financing Enron’s investments. The financial loss that these banks have suffered will surely cause them to adjust their lending strategies in the future; incentive-compatible regulation can only reinforce this lesson.

iii. Regulation of Energy Trading

Enron was able to grow and profit at such a rapid pace because it pushed hard for deregulation. Now that a crisis has emerged, many are wondering whether energy and commodity trading ought to have been regulated. The argument is that “energy trading – and other unregulated professional and electronic markets” should be regulated by the Commodities Futures Trading Commission, which Enron had lobbied successfully to escape regulation (Anonymous-f, 15). In order to assess the validity of the argument for regulation of these markets, both in the US and abroad, one simply needs to look at these markets today. All of them are still thriving, even without the presence of its major participant, and this should be a clear indication that these markets do not need to be regulated. More importantly, consumers were not affected because these markets were “professional-to-professional markets” (Anonymous-f, 15).

Simply because there is no need for deregulation does not necessarily imply that there is no need for improvement in energy trading; once again, the problem was not that there was not enough regulation, but that there was not enough transparency. There are lessons on energy trading that can be learnt from the Enron crisis. One is that Enron should have been forced to disclose the results from its trading activities in the same way in which investment banks did, since they were both conducting the same types of transactions. This ought to have occurred, despite the fact that Enron was not a depository institution or a stockbroker. Had such a rule been in place, Enron would not have been able to record the total value of its trades as revenue

and the crisis may have been prevented. Another lesson is that energy deregulation in its current state is a disaster, since it involves both the state and the federal governments. One possible solution is to give the federal government authority over the energy deregulation process in order to allow for a better-organised process that can be co-ordinated among all states. Thus, as the Financial Times asserts, “[Enron’s] collapse does not require government supervision of all unregulated trading companies, though their results should be published in a more revealing format” (Anonymous-f, 15). Deregulation was not a contributor to the Enron crisis, and should continue to proceed in its wake.

Investors’ issues, although important, do not necessarily require major reforms if they are to be resolved. Given the proposals for reform under auditing and accounting and the incentive-compatible regulation described at the beginning of the section, all that is needed is more disclosure and, where applicable, greater competition. Concerning those areas in auditing, accounting and banking that do need improvement, the reforms with the greatest potential for success are those that attempt to align the incentives of the regulators with those of the financial markets while at the same time emphasising substance over form.

VII. Summary and Conclusions

The Enron crisis fits well in the context of the Regulatory Cycle, beginning with the Middle West Utilities in 1932 and completing a full circle with the Enron crisis in 2001. Throughout the Enron cycle, whether in the regulatory or the innovation part, there is a common theme: regulation can never catch up with the innovation of the markets, and regulators would be foolish to try to think otherwise. It follows that when dealing with the financial industry, regulators’ best bet is to co-operate with the markets rather than try to fight them in what will become an ever-losing battle.

The regulatory response that the government imposed after the first crisis was in the form of sweeping reforms that lasted for many decades. Although many of the reforms were appropriate at the time, eventually financial innovation of the detrimental type was enough to render these laws ineffective at accomplishing their goal of protecting the markets from another crisis. In Enron’s case, much of this detrimental innovation resulted from the corporation’s ability to take existing regulations, such as the 3% rule for non-consolidation of SPVs, and interpret them in ways that may have enabled them to violate the spirit of the law without

necessarily violating the letter. Despite the fact that at Enron there existed plenty of innovation that may have been designed to deceive the markets, much of the innovation that occurred was of the good form. Enron's entry into the market for natural gas, and the creation of EnronOnline are merely two of the many examples of how Enron was able to take good ideas and dreams and convert them to realities. The good that Enron did should not be obscured by the events leading to the crisis or by the conclusions drawn from the interrogation.

The Enron crisis is unique in many respects, and it is highly unlikely that another corporation will be able to use exactly the same tactics to fool investors again. There are, however, some broader lessons that ought to be applied to financial markets that regulators need to address if they are to prevent other corporations from continuing to innovate around their rules. Among these are greater disclosure and transparency in accounting and auditing, in addition to a better standard of capital requirements for banks. These proposals have the potential to not only reform, but also to break the cycle, since they are attempts at incentive-compatible regulation—that is, setting new standards that align the incentives of regulators with those of the financial markets. Of course, there is no guarantee that these incentive-compatible regulatory responses will actually break the cycle if implemented, but because they do not create the desire for detrimental innovation around regulation the probability of success is high. Moreover, incentive-compatible regulation can also be applied to other themes in the Enron debacle, such as campaign finance reform. Here, transparency and disclosure may be the best ways to deal with the problem, since bad publicity is what politicians fear the most.

Although incentive-compatible regulation is always desirable, it is usually very difficult, and in some cases practically impossible, to come up with because the incentives of regulators and the financial markets are often at odds with each other. In situations in which there is no room for incentive-compatibility, at the very least a substance over form approach to reform should be taken. The more complex the rules, the easier it will be for financial market innovation around these rules, and the less effective the regulatory response will be. Regulation that emphasises ideas while taking advantage of the self-regulating forces of the market will be a good alternative where there is no room for incentive-compatible regulation. A regulatory response that delays another crisis for a long time or decreases the severity of another similar crisis ought to be considered effective, and simply because a cycle cannot be broken does not imply that there is no potential for an effective regulatory response.

No matter which form of response regulators choose to adopt, they should be careful not to overreact in a way that hinders good innovation because of the potential to “indiscriminately restrict value creation...that comes with business and financial innovation” (Schwarcz, 85). If markets are to develop and progress, its participants need to be given the freedom and encouraged by regulators to innovate in ways that are good for these markets. Creativity and good ideas are perhaps among the greatest assets that financial markets possess, and any regulatory response that successfully addresses bad innovation but is so restrictive that it also suppresses good innovation should never be considered effective.

There is no doubt that Enron will always be remembered in the financial markets, and that its demise will be a reminder to all of the excesses that often consume corporations. With appropriate guidance, the self-regulating forces of the market in conjunction with the right kind of regulatory response will prevent another crisis of this scale for years to come while not stifling good innovation. But hopefully Enron will also be remembered as a great corporation with an unfortunate end. Its ability to create markets where previously there were none and revolutionise already existing ones ought to serve as an inspiration to financial markets for many years to come.

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