Case of Enron: Failure of Measurement System?

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Abstract: - The current financial crisis reminds us about previous economic crisis that have remained in history, as well as of large bankruptcies that were largely debated within trade literature, which themselves also comprise similarity elements with nowadays situation. We therefore couldn't agree more with George Bernard Shaw who used to say that "We learn from history that we learn nothing from history". This hypothesis that would actually be pointless for us to try to validate, being demonstrated repeatedly over time, is even more obvious when it comes to financial markets that seem to have a tendency of learning the same lesson over and over again. This in fact we believe represents one of their most intriguing characteristic.

Key-Words: - Financial Crisis, Accounting Scandals, Fair Value, Enron, Bankruptcy, Financial Instruments

1 Introduction

Financial analysts remark a series of resemblances between the current financial crisis and other great crisis that have remained in history, such as the Great Crisis of the 30s', the 70s' stagflation and also the stagnation of the Japanese economy in the 90s. We are now dealing with a vicious circle within which confidence crisis and financial crisis sustain each other, reminding us about the banking crisis that manifested three generations before us. We have all heard about the "Black Thursday" (October 24, 1929) when the New York Stock Exchange recorded a significant crash, announcing the beginning of one of the biggest worldwide economic crisis. Stockholders within big American companies have lost until the end of the year up to 40 billion dollars, listed shares loosing 60% - 70%, considerably reducing industrial activity, while set rights took until 1933. Numbers that were left behind sound scary even today: industrial production was reduced by 46% in the US during the crisis, 24% in Great Britain, 41% in Germany and 32% in France. In 1933, the number of unemployed workers reached 30 million within the 32 developed countries, among which 14 millions just in the US.

For many economists the most relevant parallel is when comparing the current financial crisis with the 70s' stagflation that mixed economic stagnation and inflationist tensions. Back then, the central bank was promising to keep inflation under control but actually had to redirect its efforts on growth. For Peter Morici, economist at Maryland University, the recent American economic crisis looks much alike with the long stagnation that was also experienced by Japan after the long recession in 1989. Banks have nowadays created more and more complexes financial products in their attempt to raise profits, without also controlling for the involved risks, therefore generating a structural problem within the banking system, as it also happened in Japan.

2 Bankruptcies and Fair Value Accounting for Derivatives

Before the current financial crisis that brought the bankruptcy of a significant number of financial institutions with international renown, three of the largest bankruptcies in the history of the US – WorldCom, Enron and Global Crossing –have taken place during the December 2001 and July 2002 period, having significant effects on investors' confidence. These had more in common than their timing and dimensions, all involving the use of the largely debated and little understood derivative financial instruments [13].

Similar to current reactions, during the following periods trading derivatives was presented very often as representing a true abuse. The BBC reporter Emma Clark stating that "if we are to analyze any financial scandal close enough, we usually discover a derivative or two to blame". The famous investor Warren Buffet also warned that derivatives bring a serious threat to the global financial system, stating the following within the annual report of Berkshire Hathaway for 2002: "We view them as time bombs, both for the parties that deal in them and the economic system … derivatives are financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal".

Unlike Warren Buffet, Sir Julian Hodge issued the apocalyptic warning four years before the first scandals were to take place around derivative, in cases such as Metallgesellschaft, Orange County, Sears Roebuck and Proctor & Gamble in 1994, and then Daiwa and Barings in 1995, still without any of them, individually being close to worst the global financial system. The closes to this performance, until recent events, was the hedge fund LTCM (Long-Term Capital Management), went bankrupt in September 1989, requiring massive intervention from other banks and investment funds. A more current case is that of Societe Generale in March 2008, also a victim of massive fraud that generated a 4.9 billion EUR loss.

A rational attitude when confronted with difficult situations would be to take the necessary time and look within the past from which, most certainly we will have something to learn. By doing so, we once again notice that the current financial crisis does not represent a first in blaming the fair value paradigm for the result of a series of aspects that were either neglected or manipulated, therefore generating results that are still remembered in history [5].

We consider that performing an analysis on what fair value really meant in the case of Enron would be helpful also when analyzing it within the context of the current financial crisis. Moreover, any information taken from the past always has its role in helping us perceive the present, and if this perception is inspired maybe, it will even help us anticipate elements within the future, as others before us used to consider.

3 Enron: Education from the Recent History

In our intention of closely analyzing the Enron case, we must start by admitting that there were actually many causes for the collapse, as well as mistakes made by the auditors, management' fraud, banks offering the possibility of inadequate financing, but also inappropriate valuation of financial instruments [10, 12]. Generally, we could say that Enron is just one of the examples of entities believing that they can develop a product through simple use of the Internet for downloading information and movies for the users. Furthermore, they created a financial instrument that assumed revenues being generated through this service yet inexistent.

Enron, afterwards valuated this financial instrument with support from the auditors, based on the current value of future generated cash flows, all calculations, assumptions and valuations being based on level 3 inputs, assessed by the entity. Using these internal valuations, they were actually generating values that were recognized within the profit and loss account, based on the asset being recognized within the balance sheet, namely the derivative being recognized at fair value. Of course, those once the company started having problems these assets were proven not to worth a dime, the IT project not even being implemented.

After Enron's collapse, some observers of the accounting scene reached the conclusion that, one of the factors allowing the entity to "window dress" its financial statements, was the acceptance of some financial instruments being valued based only on internal estimations, made by the entity, without any external confrontation coming on behalf of the market. In order to stop this type of abuses from taking place in the future, FASB, together with SEC, instituted new regulations, meant to be less allowing.

The declared objective of the new regulations is one actually hard to be disputed. This would be to make sure that all fair values being recognized within entities' balance sheets are in fact derived from information provided by the market itself and not from assumptions made by the reporting entity thinking of its own interests. Categories of instruments such as those created by Enron would have for sure found a segment of the market being interested by that product, or at least willing to involve in creating a corresponding trading market for it [10].

The market for financial instruments developed quickly during the last 10 years, the number of new instruments being developed through the financial ingeniosity of those passionate in this field actually being endless. This made it even more obvious that a general standard was needed so that we could keep pace with these innovations, while also eliminating the image of fair value as an opportunity for creative accounting.

If WorldCom, Inc and Enron Corp. were top of the list with great bankruptcies, the current financial crisis unfortunately also changed this situation by bringing in 2008 Lehman Brothers Holdings Inc. and Washington Mutual Inc. on the top positions. At the time of Enron's bankruptcy (2001), the new paradigm of fair value accounting was gradually being incorporated within the American accounting referential with the purpose of serving together with the well-known historical cost accounting. However, as nowadays, the disaster reached in the case of Enron involved abuses of both paradigms.

As proven later, accountants within the entity (having Andersen's approval) have used a series of accounting settings in order to rather report trading cash flows and cover overvaluations and losses generated through fair values used on certain projects by managers whose payment was based on fair values [3].

Enron represents a largely debated topic, a series of analysis being performed within trade literature, with results not pointing fair value as a culprit. Moreover, it was documented that the lack of an appropriate, efficient and well projected internal control system was what created opportunities for abuse and manipulation of fair value accounting [1]. Even in this particular case, the obvious advantages regarding the relevance of information provided through fair analysts recognize value, but once again, the idea of developing a hybrid system is argued. This would involve using both historical cost accounting and fair value accounting which actually meanwhile produces a distortions within the coherence of the reporting system, opening the doors for income management and window dressing of financial statements, therefore canceling the efficiency of the existent internal control systems [1].

Although a series of critiques are brought to the mix attribute [8], the merits of fair value accounting are not yet canceled through them. We even consider it actually enhances the need for a correct approach of fair value accounting, together with its fundaments, but also the importance of its adequate implementation in order for it to work as designed at conceptual level, this of course involving aspects related to control systems and audit standards.

Papers approaching Enron form a true reference point, regardless if we consider trade research literature or professional literature. Aspects related to elements that are comprised within financial statements and income measurement become extremely eloquent within the context of such a case study regarding the use of mark-to-market accounting, the subject being approached even nowadays and even reconsidered after so many years passed since Enron's collapse.

3.1 Brief History of Enron Case

Some of the first reactions in the Enron case were pointed, when considering the accounting perspective, towards the company's excessive use of Special Purpose Entities (SPEs) in order to keep a significant part of its activities outside the balance sheet; towards aspects related to the use of these SPEs in supporting incomes that were recognized by Enron, through creating options that achieved would have protected the company assets' value; and towards the opportunity offered by SPEs and their connections with Enron, for personal enrichment of some employees at high levels within the company.

Afterwards, the perspective became more comprising and balanced as for where the true dimensions of accounting manipulations being done at Enron were concerned. We must underline the contribution being brought by [9] who besides framing relevant aspects within the contextual and theoretical frame with a broader aim, also analyze, in a more detailed manner than any other previous study, the nature and qualitative level of proofs being used by Enron in order to support the recognized valuations. [9] focuses mainly on materials comprised within the Goldin's report (2003) which received less attention in trade literature when compared with the Batson reports. The objective is to find more details on how Enron reached those valuations being used, but also on the role third parties played both in generating these values, but also in supporting and raising the credibility of valuations being incorrectly, internal generated by the company.

Since the story of Enron and its collapse is today familiar to most of us, a detailed presentation won't be necessary, but only a synthesis of events, while focusing on those aspects related to financial instruments and fair value. Before its monumental bankruptcy, Enron was one of the corporations with the fastest ascension and highest success in the US. Established in 1985 through the merger of a number of companies, its core business was then the transportation of gas by pipeline, therefore creating the biggest distribution system in the US. By the end of the '80s and '90s, the company started to take advantage from the deregulation within the utilities industries, participating within and promoting markets for the supply of gas and oil, and therefore extending its activity at global level, in South America, UK, Europe and India. By the end of the '90s, the main generator of development and apparent profitability within the corporation was what they called in their financial statements as "wholesale services". This assumed not only purchasing and selling contracts for energy supply, but also developing strategic investments, either through the establishment of entities, either through acquisitions, in the energetic and technologic sector, or other connected to it. Incomes from wholesale services raised with 133% in the 1998 – 2000 period, reaching from 968 million dollars to 2260 million, while incomes from transportation of gas and supplying electricity, calculated cumulated have raised with 15 %, from 637 million to 732 million [9].

High competition on the futures market and the lack of success for many of the projects that were initiated overseas started to create tension on the company. Even if the quick appreciation of many of its „hi-tech" investments allowed Enron to hide the lack of success in other parts of the company, the consequences were also significant when the IT crisis burst. Enron's share value, that reached 90 dollars in august 2000, kept dropping because of the doubts on the quality of earnings being reported and of the balance sheet's credibility. Senior executives selling their stock only accentuated this downward trend in Enron's share value [9].

In August 2001, the CEO of Enron was resigning and in October 2001, the company reported a quarterly loss of 618 million dollars. Soon news came out that SEC was investigating possible conflicts of interests and in November 2001 an overstatement of profits with 600 millions was recognized. Bad publicity associated with all these events affected the trading of its contracts. Therefore, having no cash available, Enron first tried to merge with its smaller competitor in Houston, Dynegy. Having no success in this direction, Enron declared bankruptcy in the US on December 2, 2001 [9]. A series of trials took place, ending with Enron's management being convicted. Among them were the CFO (Skilling) and the Chairman (Lay).

Activities developed by this corporation were the subject of many investigations done by a series of parties, including internal investigations initiated by Enron, comities of the US Senate, but also analysts of the bankruptcy. A significant number of papers were written, articles and research papers, analyzing different aspects of the collapse. The movie „The Smartest Guys in the Room" was also done on this highly debated subject, starting from [11].

Coming back to details on Enron's accounting practices we believe it would be safe to say that the Goldin's report is the most detailed as in regards to its focus, offering a series of supplementary information regarding the manner in which some valuations have been done in order to sustain fair value accounting and market based values. Enron's bankruptcy was due to a series of causes, both direct causes (recognizing some significant false accounting information) and proximal caused (more complicated mechanisms among which we will further focus on those related to financial instruments). Still, there are sufficient proofs indicating the fact that using level 3 inputs in order to apply fair value accounting played a significant role in this said story [3], as it also did nowadays.

It seems like initially, these estimations were used without any intention of misleading investors, but rather to motivate and payback managers in correspondence to the economic benefits they were generating in favor of the stockholders. Trade literature assesses different degrees of quilt to the assembly of factors that generated Enron's collapse. For example [7] underlines the inadequate behavior of those who are supposed to be the gatekeepers of the accounting world – external auditors and even lawyers, but we will further focus on financial instruments and fair value accounting related aspects.

In 1990 Jeffrey Skilling, former Enron consultant, decided to enter the company, soon proving his innovative spirit through the development of a method that involved trading gas contracts called Gas Bank. Skilling becomes president and CEO of the new division, Enron Finance, with the purpose of implementing this new method, for which he was also going to be generously rewarded in "ghost" equity (he was rewarded in accordance to Enron's share value raising on the market). His innovation consisted in advance payments for gas producers, therefore making them sign contracts for supplying gas on long term. Skilling insisted on using a market based valuation (actually a fair value valuation since there was yet no market for those contracts) when accounting for the profit of his division. In 1991, Enron's management, the internal audit committee as well as the external auditor, Arthur Andersen, approved the use of these values.

Despite the US strongly arguing for some time in favor of historical cost accounting, SEC not even allowing revaluation when the value of tangibles grew [14], during the 90s mark-to-market accounting already became largely used, as a consequence of the direction taken through the conceptual framework. Enron, and especially Skilling, the one who in his quality of CEO was consider being the author of the masterpiece that was going to transform the company from a pipe and energy operator, militated for the right to use mark-to-market accounting in valuating energy contracts.

Therefore, on June 1, 1991, Enron was sending a letter to SEC announcing their intention regarding the use of mark-to-market accounting in its trading activity, together with a detailed memorandum that motivated the adequacies of this treatment, claiming that trading energy futures is similar to trading futures that involve securities, therefore requiring for the same accounting treatment. The memorandum also emphasized the development of some spot and forward markets for gas futures that were in their opinion capable of ensuring a market-based valuation. Letters from Arthur Andersen and Ernst & Young accompanied their memorandum.

Although the letter initially generated worries within SEC's staff, Skilling's change, or maybe after the events therefore generated it would be more appropriate to say bad luck, was that in January 1992 Walter Schuetze became Chief Accountant of SEC. Schuetze, a Texan with significant experience in auditing gas and oil companies, but most importantly, a convinced and passionate believer in fair value accounting, significantly contributed to the letter Enron was going to receive from SEC on January 30, 1992. The letter was saying SEC was not going to object on Enron's use of fair value accounting for its gas trading activities. Even if SEC's approval was initially received only for contracts that were initiated in 1992, Enron also applied the accepted accounting treatment for the 1991 financial statements that were not yet filled (once again without SEC objecting). This helped them report a 242 million dollars profits [4]. From here on, Enron recorded earnings from signing contracts, based on estimations of gas prices projected a few years into the future (10 to 20 years).

Apparently, with no further consultation with the SEC, Enron extended mark-to-market accounting to other contracts in the field of electric power, coal, paper and pulp and even non-energy commodities in the 1999 – 2000 period. Even if in 1998 applying mark-to-market accounting for energy contracts was mostly "accepted" by accounting standard setting bodies, and assuming that necessary conditions were met by the entity applying it, this does not justify several of other cases.

While Enron was using fair value accounting for shares within some new companies that were established by the company itself or in which the company invested, these shares were not traded or only recorded a few transactions, as also in energy contracts' case, fair values were not based on real market values since there were no markets to begin with. An example of income recognition related to trading a standard contract, but in, which Enron was actually participating on both parties, is the one related to supplying gas for the Cuiaba station in Brazil in the future. Meanwhile Enron owned 65% of Cuiaba.

In this particular situation, Enron avoided consolidation by selling 13% to LJM 1 (whose manager was Enron's CFO) once with the right to appoint one of the four directors (right that was obviously not used by LJM 1). This allowed Enron to argue that it did not have the right to appoint the majority of directors, therefore losing control over Cuiaba and avoiding consolidation. After avoiding consolidation, the shelled shares were re-bought at a price that generated a certain profit for LJM 1. This avoidance of consolidation allowed Enron to recognize, by using fair value in evaluating the contract, a 34 million dollars income within the third quarter of year 1999 and 31 million dollars for the fourth quarter, without mentioning the fact that the corresponding station and pipes necessary for providing gas were not finished.

In order to trade its derivatives that extended beyond the fuel of gas and energy to contracts with metals, paper and pulp, credits and other commodities, Enron developed a trading system with the help of internet called Enron On Line – EOL, that allowed it to dominate a series of markets. Enron was often the one establishing prices within these markets, prices that were afterwards used in establishing its transactions' fair values.

We must not forget that Enron's brokers were awarded based on the profit they obtained through the trading activity. Meanwhile, reported profits or losses were based on estimations brokers made in determining current (fair) values for the derivatives that often covered periods of several years. It is therefore obvious that brokers were tempted in manipulating the methods and estimations they used in the valuation process, so that they reached their own interests.

There were also situations when brokers under valuated profits or postponed their reporting using "prudential reserves". This practice allowed them to postpone profit towards future periods and was applied when brokers have already reached their maximum bonuses [3].

Implicitly, a real valuation of the degree to which Enron's brokers brought benefits for stockholders is not possible. [6] still concluded that during negotiations with Dynergy regarding a possible merger, an analysis was also performed on Enron by Dynergy, concluding that despite the values being generated through the EOL system Enron was still losing liquidities within its commercial activities.

[9] interestingly express the paradox of mark-to-market accounting, namely the fact that it is very probably that it would be more "precise" under circumstance that are less useful, such as the case of complete markets being so difficult to find in practice. [2] states that the role of accounting information within incomplete markets that are characterized through uncertainty are alike that of loud communication. The above-mentioned examples also suggest the fact that under certain circumstances, the "loud" party might weight more the informational content itself [9].

We must also not forget the finality of things, and that is that from user's of financial information point of view, the result is the same. Providing inadequate information, which they used in grounding their investment decisions, was not going to be different regardless if it was the result of theoretical faults or failure in practice application. Enron personifies the case of failure in practice application, mostly determined through management's role and also the problematic issue of using independent external agents in order to provide some valuations that are of great significance for mark-to-market accounting.

Therefore, through its great dimensions, the Enron case made us think about using level 3 inputs when reported information are not well grounded through relevant market prices ten years ago. These are issues raising the interest of standard setting bodies even nowadays. Once the corporation was allowed to use fair values for its energy contracts, it extended the treatment to a larger growing range of assets, both within external reporting and internal purposes of assessing employee's performances and their corresponding rewards.

The result meant overestimating incomes and net profits, and creating complicated structured transactions that enhanced the inappropriate use of fair value. Establishing rewards based on fair values stimulated the employees to develop new projects that were afterwards overestimated, all these rather generating high exploitation expenses than successful projects. The losses therefore generated only made more space for accounting creativity until the corporation's final collapse.

4 Conclusion

Standard setting bodies' efforts in creating financial reporting standards that could guarantee high quality financial statements are fully justified and sustained. Introducing fair value within financial reporting naturally generated reactions on behalf o standard setting bodies wanting to get involved within the conceptualization process. This objective is quite a difficult one if we are to consider the complexity of economic realities trying to be captured. As a consequence, the process of finalizing the fair value concept and, most importantly, all necessary guidance related to its practical implementation under several demanding circumstances for a concept with high ambition is far from being closed.

We dear say that economic realities characterizing our every day compel us to undertake some measures trying to keep pace with these evolutions. In the particular case of fair value, we believe there is no magic solution able to simplify the anfractuous road we still have to cover in order to reach the proposed objectives. The financial system therefore seems to be repeatedly teaching us necessary lessons to be dealt with on this road. Despite the series of measures necessary to be taken under crisis circumstances, all debates surrounding fair value should at one time bring us closer to financial realism even if it is a difficult road having high prices to be paid.

Acknowledgement

This paper is one of the research outputs of projects GA402/08/P024 registered at Czech Science Foundation (GACR) and CNCSIS 2571/2009 registered at Romanian Science Foundation.

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