

Working paper 03-04  
September 2003

## **Risk Management and Corporate Governance**

Danielle Blanchard, CGA, Venture Capital consultant  
Georges Dionne, HEC Montréal

### **Abstract**

We take up the question of potential conflicts between the objectives of risk management policies and those connected with maximization of the firm's value. This question is a timely one, since many firms have a special committee devoted to risk management—banks and insurance companies in particular. In the wake of the Enron affair, various proposals have been formulated regarding the composition of the different committees set up by boards of directors. In the financial literature, it is now a widely accepted fact that risk management issues can give rise to conflicts of interest between heads of firms and shareholders, notably when executives are remunerated in stock options. In our opinion, the board's risk management committee must be composed of competent and independent directors who hold no options to purchase the firm's shares.

*Keywords:* Governance, risk management, stock options, board of directors, Enron, independent director.

### **Résumé**

Nous abordons la relation de conflits potentiels entre les objectifs de la politique de gestion des risques et celui de maximisation de la valeur des entreprises. Cette question est pertinente, car beaucoup d'entreprises ont des comités spécifiques dédiés à l'évaluation et à la gestion des risques, en particulier les banques et les compagnies d'assurances. Suite à l'affaire Enron, différentes propositions ont été formulées au sujet de la composition des différents comités au sein des conseils d'administration. Il est maintenant bien connu, dans la littérature financière, que des conflits d'intérêts peuvent se développer entre les dirigeants des entreprises et les actionnaires au sujet de la gestion des risques, notamment lorsque les dirigeants sont rémunérés par des options d'achat d'actions de l'entreprise. Nous sommes d'avis que la composition du comité d'évaluation et de gestion des risques du conseil d'administration doit être réservée à des administrateurs compétents et indépendants, ne détenant pas d'options d'achat d'actions de l'entreprise.

*Mots clés :* Gouvernance, gestion des risques, option d'achat d'actions, conseil d'administration, Enron, administrateur indépendant.

*Text presented at the workshop "The Crisis of Corporate Governance: What's Next?" organized by Mr. Marc Renaud, president of the Social Sciences and Humanities Research Council of Canada, as part of the Montreal Conference held on 7 May 2003.*

*Claire Boisvert and Sybil Denis have greatly improved the presentation of this text. We extend them our thanks. We also thank Thouraya Triki for her comments on a previous version.*

## **INTRODUCTION**

We take up the question of potential conflicts between the objectives of risk management policies and those connected with maximization of the firm's value (or the value of shareholder equity). Any potential conflict would involve corporate governance, since it is the board of directors which is expected to approve the objectives of the firm's risk management policies and to oversee the means employed in achieving such objectives. Among other things, we wonder whether the make-up of the board's risk management committee (or, in certain firms, the one mandated to assess risks) should not be reserved to independent directors. This policy is now the rule for other committees, in accordance with the new rules being discussed or applied in the United States in the wake of the Enron affair.

This question is a timely one, since many firms have a special committee devoted to risk management (in this article, risk management includes risk evaluation, risk assessment and management of risk). However, as we shall see below, most of the documents proposing new rules of governance speak only of regulating the audit committee in matters concerning risk management. This amounts to downplaying the importance of risks in many sectors of activity as well as potential conflicts of governance arising from their management. Moreover, it is not at all clear that members of audit and risk management committees would need to have the same abilities.

## **ENRON AND CORPORATE GOVERNANCE**

Corporate governance can be defined as a control system designed to monitor the firm's operations and the possible conflicts of interests between the different stakeholders. The board of directors is usually considered as one of the most important mechanisms used to achieve such a mission. The principal role of a board of directors is to represent the interests of the firm's stockholders. The board's goal is to maximize the firm's value or the value of its shares. Among other things, the board sees to the recruitment and remuneration of top executives, while also monitoring their activities. Hence, the extraordinary attention focused on the roles of remuneration and audit committees post-2001. The make-up of the board and of its different committees is also the topic of much discussion, for a large contingent of non-independent members on boards or on board committees may affect the way they operate.

We have chosen to discuss the Enron case, but the same conclusions could have been drawn with regard to other cases: the WorldCom case, for example. The Enron case has raised numerous questions regarding corporate governance. The manipulation of information by executives was notably an important element in the evolution of events preceding the 2001 Enron bankruptcy. Enron used several risk management tools, including derivatives. It was even a key intermediary in transactions involving these products.

Even for specialists, it is usually difficult to evaluate a firm's total risk, especially when the financial statements use mark-to-market rather than historical values. It seems that the capital

market as a whole was incapable of detecting the numerous signals which, several months preceding the bankruptcy, pointed to problems with management or disclosure or even foretold Enron's financial troubles.

Quite a lot of blame has been heaped on Arthur Andersen which found itself in a situation of conflict of interest, having assumed a dual role by acting as Enron's auditor while also doing consulting work for the firm. In an attempt to counteract this sort of situation, the United States Congress, via the 2002 Sarbanes-Oxley Act, created, among other bodies, the *Public Company Accounting Oversight Board* (PCAOB) one of whose roles is to register external auditing firms and to establish standards of auditing, quality control, ethics, and independence for such firms.

But in the opinion of several observers (Healy and Palepu, 2003, for example), the Enron board of directors also failed in its role of protecting shareholders, thereby contributing to the bankruptcy of the firm. Several members of the board were privy to information about Enron's management practices—overcompensation of certain executives and board members and disclosure of false statistics on the firm's growth potential to increase the value of shares and options—but chose to ignore this information or not to transmit it to shareholders.

Enron executives were in large part remunerated by a system of compensation based on options to purchase the firm's shares. For example, the CEO of Enron received more than \$140 M in 2000, whereas his base salary was just a little over \$1 M (Demski, 2003). This form of remuneration seems to have been a key factor in distorting the behaviour of managers. In effect, the mark-to-market values of shares are strongly influenced by expected future income. Executives manipulated reports on income to influence the value of shares. They also exaggerated the value of assets and undervalued that of debts.

Researchers have recently used data from 31 countries to show that manipulations of income by managers are positively correlated with the benefits they receive (on manipulations of data by firms see Lev (2003) and the references in this article).

Many authors are astonished to notice just how silent corporate remuneration committee was about the manipulation of data by top executives in the Enron case. Were these directors simply incompetent? Were some of them in conflict of interest owing to expected gains from options or did they have interests in other firms connected with Enron?

Obviously, what the Enron case has put in question is not only the board-mediated relationship between top executives and shareholders. As already mentioned, both the external auditing firm and the internal audit committee have also been called into question. And it is possible that financial analysts and brokers or bankers, lawyers or investors should not be let off the hook either, not to mention regulations which may themselves have introduced distortions. As pointed out by Demski (2003), a general analytical framework including all these players should be used to evaluate the situation more realistically. No such framework as yet exists, but, in our opinion, the distortions produced by board operations are

serious enough to justify the immediate application of corrective measures, even if they are derived from only partial analysis. And the US authorities have, in effect, reacted quickly.

## **NEW RULES OF GOVERNANCE**

Since Enron's bankruptcy in 2001, several rules of governance have been discussed and even applied in the United States (on the New York Stock Exchange, for example).

The Sarbanes-Oxley Act (SOX) signed into law by the president of the United States on July 30<sup>th</sup> 2002, amends the 1934 *Securities and Exchange Act* and enjoins the *Securities and Exchange Commission* (SEC) to comply with the amendments and to issue regulations and controls designed to protect the public and investors in accordance with the new law. This law also created the above-defined PCAOB which is also governed by the SEC. The SEC is currently studying various recommendations submitted to it by the public as well as by diverse organizations and associations (including the NYSE and NASDAQ) in view of establishing new regulations. In this sense, the SEC has ruled on the minimum requirement for the audit committee: that it must be composed exclusively of independent board members. As required by the SOX, the SEC and the United States Auditor General are also continuing their search to rethink and modify the standards required for listing on the stock exchange.

On 13 February 2002, the SEC asked the New York Stock Exchange (NYSE) to revise its policies with regard to the standards and requirements of governance for firms listed on the exchange. On 1 August 2002, the board of the NYSE approved a number of measures, including the following:

1. Boards of directors must be composed mostly of independent directors.
2. The appointment/governance and remuneration committees must be composed entirely of independent directors.
3. All listed firms must have an audit committee composed exclusively of independent directors and counting at least three members.
4. All listed firms must have an internal audit function.
5. All listed firms must adopt minimum standards of practice and issue directives concerning their corporate governance.

The notion of independence is quite technical and requires a long definition, which, for lack of space, we shall not go into here. We refer the reader, instead, to the NYSE 2003 entry in the bibliography. But even this reference has nothing specific to say about risk management procedures, except that the audit committee must discuss risk management policies. We here interpret the way different players such as the NYSE perceive the place and purpose of policies for controlling risk evaluation and risk management.

In this interpretation, risk management is the responsibility of the firm's management. Management must evaluate and oversee the firm's exposure to different risks. The audit committee must discuss the policies and directives governing the process for evaluating the main risks to which the firm is exposed and the measures to be taken to monitor and control this exposure.

In monitoring and approving their risks, a number of firms (especially financial ones) replace the audit committee with other mechanisms such as the risk management committee. In such cases, the audit committee is no longer obliged to be solely responsible for evaluating and managing risks, but must still discuss the risk evaluation and risk management processes. In other words, the process set up by these firms is to be reviewed but not replaced by the audit committee.

## **RISK MANAGEMENT AND GOVERNANCE**

Risk evaluation and risk management instruments are difficult to use and monitor. Understanding them often requires a good grasp of mathematics and statistics. It is, consequently, not clear that audit-committee members without specialized training would be up to monitoring the in-and-outs of coverage and even speculations presented to them, often in rapid and very summary fashion. For example, at the meeting of the Enron audit committee on February 12<sup>th</sup> 2001, nine important points were included on the agenda, two of which were linked to risk evaluation and risk management. The meeting lasted eighty-five minutes! Even if the committee was composed of leading experts in management and university research (the list of points discussed and of the committee members present is discussed in Healy and Palepu, 2003), it is unlikely that all these items were explored in depth, particularly those linked to transactions which could have appeared suspicious or tinged with conflict-of-interest concerns.

It is now a well-known fact that risk management issues can give rise to conflicts of interest between corporate executives and shareholders, notably when executives are remunerated with their firm's stock options (Smith and Stulz, 1985).

Take the example of the risk management of gold mines, which, for several years, has been a topic of detailed study (Tufano, 1996; Dionne and Garand, 2003). The principal random variable linked to the financial risk of firms in this industry is the selling price of an ounce of gold. The three main questions repeatedly asked by the executives of mining companies are the following:

- Should the selling price be hedged against future fluctuations?
- If yes, in what proportion?
- And with what instruments?

It is now established that one of the main goal of risk management is to maximize the firm's value or shares. But risk management can also serve to maximize the well-being of executives and this second objective can be in conflict with the first, especially when the executives in question are remunerated to a significant degree with stock options. This type of conflict can produce problems of governance. Indeed, Tufano (1996) has observed that, in the North American gold mining industry, executives remunerated in stock options undertake fewer risk management activities that those who are not (also see Dionne and Triki, 2003, who obtained similar results with an update of data and different econometric specifications, as well as Rogers, 2002, for the same conclusion drawn from another data base).

This finding can be explained by the fact that the value of executives' options will increase with the volatility of shares or with the volatility of the firm's value. Even if managers are risk averse with respect to their own wealth, they are risk-leaning (have convex preferences) towards the firm's value when they hold stock options in the firm they manage. This is what explains their decisions to engage in fewer risk management activities, since such activities would reduce the volatility of the firm's value and, thus, the value of their options.

A theoretical counter-argument has recently been presented in the literature by Carpenter (2000). According to this author, holding options has two consequences for the wealth of executives. The first is the one reported above: The wealth of managers will increase with the volatility of options because the value of the latter will increase accordingly. The second argument is that the value of the options portfolio will drop when shares fall in value because the probability of exercising the options will also decline. We thus have an ambiguous relationship between holding options and risk management, but the empirical results mentioned above seem to confirm the dominance of convexity of preferences among managers and the source of conflict of interests between executives and shareholders.

Finally, another study shows that firms most active in hedging against risks are those that have the largest number of external directors on their board (Borokhorich et al., 2001); however, these authors did not check whether or not these directors were independent.

These results call into question the composition of risk management committee appointed by boards, since more than a few directors may also hold the stock options of firms on whose boards they sit. This is a key question, since general risk management policies must be approved and monitored by the board of directors. In our opinion, the risk management committee should also be composed of competent and independent directors and, above all, of directors who hold no options to purchase the firm's shares! It is not obvious that simply regulating the composition of the audit committee will suffice to curtail potential conflicts of interest linked to risk evaluation and risk management, especially in firms with a committee dedicated to these tasks.

## CONCLUSION

We have documented the fact that risk management policies can give rise to conflicts of interest between shareholders and executives when executives are remunerated in stock options. Some have suggested simply eliminating remuneration in stock options, but there is no guarantee that growth firms will make this a short-term choice, even if Microsoft has recently decided to abolish its program remunerating managers in stock options. (*The Economist*, 13 July 2003; see also Hall and Murphy, 2003).

We have also seen that the composition of the board of directors does have an influence on the risk management policies of firms. The greater the number of external directors on the board, the greater is the number of risk hedging activities undertaken by the firm.

These different observations lead us to conclude that firms wishing to maintain their policy of remunerating their executives with stock options should make sure that their board's risk management committee is reserved to competent and independent directors who hold no options to purchase the firm's shares.

## REFERENCES

- Borokhovich, K.A., Brunarski, K.R., Crutchley, C.E. and Simkins, B.J. (2001) "Board Composition and Corporate Investment in Interest Rate Derivatives." Working Paper, Oklahoma State University.
- Carpenter, J.N. (2000) "Does Option Compensation Increase Managerial Risk Appetite?" *The Journal of Finance* 55, 5, 2311-2332.
- Demski, J.S. (2003) "Corporate Conflicts of Interest." *The Journal of Economic Perspectives* 17, 51-72
- Dionne, G. and Garand, M. (2003) "Risk Management Determinants Affecting Firms' Values in the Gold Mining Industry: New Empirical Evidence." *Economics Letters* 79, 1, 43-52
- Dionne, G. and Triki, T. (2003) "On Risk Management Determinants: What Does Really Work?" mimeo, Risk Management Chair, HEC Montréal.
- Graham, J.R. and Smith, C.W. (1999) "Tax Incentives to Hedge." *The Journal of Finance* 54, 6, 2241-2262
- Hall, B.J. and Murphy, K.J. "The Trouble with Stock Options." *The Journal of Economic Perspectives* (forthcoming).

- Healy, P.M. and Palepu, K.G. (2003) "The Fall of Enron." *The Journal of Economic Perspectives* 17, 3-26.
- Lev, B. (2003) "Corporate Earnings: Fact and Fiction." *The Journal of Economic Perspectives* 17, 27-50
- NYSE, "Amendment no.1 to the NYSE's Corporate Governance Rule Proposals"  
<http://www.nyse.com/listed>.
- Rogers, D.A., (2002) "Does Executive Portfolio Structure Affect Risk Management? CEO Risk-taking Incentives and Corporate Derivatives Usage." *Journal of Banking & Finance* 26, 2, 271-295
- Smith, C.W. and Stulz, R.M., (1985) "The Determinants of Firms' Hedging Policies." *Journal of Financial and Quantitative Analysis* 20, 4, 391-405
- Tufano, P. (1996) "Who Manages Risk? An Empirical Examination of Risk Management Practices in the Gold Mining Industry." *The Journal of Finance* 51, 4, 1097-1137