

## Corporate Risk Management and Insurance

### إدارة مخاطر الشركة والتأمين

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### Abstract

This study aims to develop a strategy for choosing insurance as one of the important tools of risk management, where insurance belongs to special types of risk transfer, by means of insurance the negative consequences of the risks of an unfavorable situation in the future are transferred to an insurance company, which under the terms of the insurance policy covers the loss or damage, either in whole or in part. Therefore, insurance helps maintain the economic stability of the economic institutions, and protects the company from sudden and unexpected events that lead to financial losses for the institution. Increased costs, the need for credit, insolvency, and the like are the result of reducing risks.

One of the types of insurance system is based on commercial principles of competition. The optimal strategies aim at the best application and balance between risk management and the ability to insure to manage the economic institution by choosing a combination of financial products available in the market such as financial derivatives, and insurance is one of these products that have since ancient times formed one of the effective tools in transferring financial risks to insurance companies.

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#### ملخص:

تهدف هذه الدراسة هو وضع استراتيجية لتحديد التأمين وإدارة المخاطر، حيث ينتمي التأمين إلى أنواع خاصة من نقل المخاطر، عن طريق التأمين يتم نقل النتائج السلبية لمخاطر حدوث موقف غير موات في المستقبل إلى شركة تأمين، والتي بموجب شروط بوليصة التأمين تغطي الخسارة أو الضرر، إما كلياً أو جزئياً ولذلك يساعد التأمين في الحفاظ على الاستقرار الاقتصادي للمؤسسات الاقتصادية، ويحمي الشركة من الأحداث المفاجئة وغير المتوقعة، والتي تؤدي إلى خسائر مالية للمؤسسة. زيادة التكاليف، والحاجة إلى الائتمان، والإعسار، وما شابه ذلك هي نتيجة التقليل من المخاطر. أحد أنواع نظام التأمين -النظام التجاري -مبني على مبادئ تجارية مبنية على المنافسة الحرة.

تهدف الاستراتيجيات المثلى إلى أفضل تطبيق وتوازن بين إدارة المخاطر والقدرة على التأمين لإدارة المؤسسة الاقتصادية وذلك عن طريق اختيار توليفة من المنتجات المالية المتاحة في السوق مثل المشتقات المالية وبعد التأمين احدى هذه المنتجات التي شكلت منذ القدم احدى الأدوات الفعالة في تحويل المخاطر المالية الى شركات التأمين التي لها استعداد لتحملها في حالة وقوعها مقابل أقساط تأمين تدفعها المؤسسة.

**الكلمات المفتاحية:** تكلفة الإفلاس، الديون ذات المخاطر، إدارة المخاطر، التحوط، التأمين.

#### Introduction

The insurance was examined as one of the measures, which can be taken by the management to reduce risk. This study will discuss the strategy of hedging as used in insurance, and other aspects related to insurance. A firm can hedge against risks using some instruments such as insurance, financial futures and options. Hedging may be useful in reducing expected bankruptcy costs; it may be used as a guarantee for risky debts. In general, the owner has an incentive to protect his assets; therefore, he should choose a form of protection, which yields benefits in excess of the costs.

As one of the forms of protection, insurance in its simple meaning is a transfer of costs of a loss from owner to the insurer. On his part, the insurer will ask for compensation and may take action to monitor any loss- protection efforts. A problem may emerge if the insurer is unable to monitor the insurances.

Insurance may stabilize the equity values because the monetary payment made by the insurer in the event of loss should offset the change in equity a value. However, the ability of insurance to create value for a firm does not rest on its facility for reducing risk, insurance may be viewed as one of a number of competing sources of finance.

### **Insurance contracts**

Insurance contracts are purchased by companies in the regular way, statistics show in the USA that more than a half of contracts purchased were those owned by corporations. Looking at finance theory it is often the case that these contracts are nearly always ignored in finance textbooks.

The risk management area in the insurance literature examines corporate purchase of insurance, but the literature assumes the underlying source of corporate demand for insurance is risk aversion.

As far as the systematic risk is concerned stockholders can eliminate insurable risks by diversification.

Therefore, they see that the purchase of insurance by the company will represent a negative net present value project, reducing stockholder wealth.

### **Conflict between managers and owners and purchasing of insurance:**

A conflict of interest exists between managers and owners as each party seeks to maximize their interest.

Jensen and Meckling (1976) demonstrated that incentives exist to write contracts which maximise the current market value of the firm.

The conflict between the two parties can provide a basis for the corporate demand for insurance. A manager's working life is limited by his retirement whereas the firm's life is relatively longer. Thus, the manager will look for the insurance (for the company) which guarantees a great deal of compensation at the time of his retirement, but the owners will anticipate this behaviour of management and will act to adjust the overall compensation. An efficient mechanism to control management is to purchase insurance, therefore firms whose

managers have greater discretion over the choice of hazard-reducing projects will be more likely to purchase insurance. The stockholders and bondholders will respond to the management's behaviour by holding a well-diversified portfolio since they have easy access to the capital market.

Corporations purchase insurance for the same reasons as individuals and, for other reasons.

David, and Smith, (1982) in their paper "**On the corporate demand for insurance**" argued that the corporate demand for insurance derives from the ability of insurance contract to achieve the following objectives:

- 1) To allocate risk to those of the firm's claimholders who have a comparative advantage in risk bearing.
- 2) To lower expected transaction cost of bankruptcy.
- 3) To provide real-service efficiencies in claims administration.
- 4) To monitor the compliance of contractual provisions.
- 5) To bond the firm's real investment decisions.
- 6) To lower the corporation's expected tax liability.
- 7) To reduce regulatory constraints on firm.

They believe that each of these incentives is relevant for insurance purchasing by corporation.

### **Debt insurance**

Insurance may be directly purchased by investors or it may be purchased by the municipality at the time of initial offering, because it is believed that insurance will lower the new issue borrowing cost after adjusting for the cost of the insurance premium.

According to Kidwell, Sorensen and Wachowics (1987) in the United States in 1985 approximately 30% of all new issues were insured. Bond insurance is used almost exclusively in the tax exempt market as opposed to the corporate bond market. The question here is whether the purchase of insurance will provide a benefit to the issuer or not?

Fobers and Hopwell (1976) argued that only little or no benefit at all is given to issuers who purchased bond insurance.

Thakor (1982) argues that from investors' viewpoint there are direct and indirect consequences of insurance:

- 1) Insurance coverage increases the expected value of the coupon and maturity payments, thus reducing the perceived default risk of the bond issue.
- 2) Insurance coverage may act as a third party signal to investors that reduces their uncertainty about the market ability of the issue.

### **Bond insured**

Municipal bond insurance is purchased by state and local governments in order to lower default risk. The premium is paid in full at the time of issue and the coverage of default extends to the new owner in case of selling the bonds issued to a third part.

American Municipal Bond Assurance Corporation: (AMBAC) was the pioneer in bond insurance issuing. Its first guaranty was in 1971. During the 70s only one other corporation entered the competition this was Municipal Bond Insurance Association (MBIA) (1973). In the 80s new competitors entered the field, in the year 1983 the:

Financial Guaranty Insurance Company (FGIC), and in 1984 the:

Bond Investors Guaranty (BIG). These four companies underwrite 96% of municipal bond insurance.

### **Bond rating agencies and bond insurance**

Until recently Moody's investor service did not recognize the presence of bond insurance. Moody's responsibility was to rate the underlying credit worthiness of the issuing municipality not the default risk characteristics of the insurance company. But in 1984 in began considering the unconditional and irrevocable pledge of a third party insurer. The bonds insured by MBIA, FGIC and BIG are considered to be of the highest quality and are rated AAA, but it has not issued a rating on bonds insured by AMBAC.

STANDARD and POOR's have always recognized the improved credit position provided by the purchase of bond insurance. It rated bonds insured by AMBAC as AA, whereas the bonds insured by the other three companies as AAA because of additional credit backing by their reinsurance program. However, in 1979 Standard and Apoor's upgraded the credit rating of bonds insured by AMBAC to AAA.

### **Why insurance exists?**

Tahkor (1982) evaluates the decision to purchase insurance in competitive markets that are characterized by asymmetric information.

Investors are unable to fully determine the default risk characteristics of the uninsured issuers; therefore insurance has some impact on of the debt:

- 1) The insurance reduces the default risk and thus lowers the yield on the bonds.
- 2) The coverage serves a signal because a third party has provided insurance.

The third party provides information by the act of providing insurance protection against default.

**Bond insurance benefit:**

Pricing of bond insurance is affected by the presence of bond insurance in three different ways:

- 1) Yield should be lower than otherwise because of the reduced default risk.
- 2) Insurance serves as a signal to the market and reduces information asymmetry, which should improve the marketability of the issue resulting in a lower net borrowing cost to the issuer.
- 3) The net benefits of bond insurance may not be homogeneous across issuers.

**Asymmetric information:**

The use of collateral has been ignored in the credit market literature until recently.

Scott (1977) has an interesting analysis showing that bankruptcy costs are reduced with the use of secured credit which leads to the increase in the value of the firm. However Smith and Warner (1979) criticise Scott and offered the well-known moral hazard element as explanation for the use of collateral, which means preventing - the borrower from getting involved in "asset substitution" or the form of "consuming" lead as a means of financing a project. This type of secured loan will lead to the borrower recognizing the expected loss of the collateral in negotiating the credit contract, and deals with the sorting role of the collateral in an asymmetric informed environment.

Chan and Kantas in 1985 showed that collateral is useful when the credit applicants default risk is privately known or when the applicant and lender have benefits concerning the applicant project. In other words the applicant (borrower) benefits through the lower interest rate on secured debt but suffers from the potential loss of collateral when

the project's returns are low. With a high probability of default the cost of secured debt (the expected loss of collateral) outweighs the benefits, but with a high quality project the benefits from a lower interest rate outweigh the relatively small expected costs. Therefore when a lender has less information and a lower assessment of a project's value, a borrower can signal the investment's true worth by offering collateral.

Chan and Kantas (1987) assumed the existence of both adverse selection and moral hazard and examined the form of the optimal secured loan contract.

There is no recognition of the borrower's alternative to secured credit or of the origin of the substantial transaction costs that are observed to be associated with secured credit.

The secured contract's transaction costs result from the monitoring of the borrowers and lenders with regard to maintaining the value pledged assets.

Concerning moral hazard there are two explanations: the first is that moral hazards exist independently of collateral and the second is that the moral hazard element originates from the use of collateral.

Physical assets and accounts receivable can be used as alternatives to secure credit because they function as collateral. These assets are subject to moral hazard element.

Pledged assets can be viewed as being sold by the firm but retained for continued use at price equal to the loan amount and the firm holds a call option on them with an exercise price equal to the face value of the debt.

The use of collateral is a result of priori asymmetric information between lenders and borrowers, therefore the existence of informational differences complicates contracting between agents. If information is a prior asymmetric, then firms in the lowest credit quality range are pooled and given unsecured credit."

As long as the cost associated with either secured debt or rented asset exceeds the cost from being undervalued, undervalued firms with the lowest credit quality range in accept unsecured debt. Alternatively, informational symmetries can lead to more complex contracts that are designed to address the problem of secured credits. However Kazuhiro and Kantas (1990) in their paper argued that if information is prior symmetric bank credit dominates self-finance and no collateral is used. Because when the additional cost associated with

collateral is known, it is efficient for a loan contract in this environment to exclude collateral and the price of the borrower's default risk entirely in the loan rate.

### **CONCLUSION:**

Risk management attempts to eliminate, minimize, or transfer the risk of all anticipated bad outcomes. Insurance can be important for the stability of financial systems mainly because they are large investors in financial markets, because insurers are safeguarding the financial stability of firms by insuring their risks.

It was stated that half of the insurance contracts are purchased by corporations in the USA. This is an indication of how insurance is becoming increasingly an important tool in modern financial management, and how it is becoming an efficient mechanism to control management by shareholders. We have noticed that insurance is involved in new bond issues in order to eliminate default risk. Insurance is becoming a very useful tool for different sectors of in the firm in order to lower the risk associated with any activity.

### **References:**

Jensen, Michael c. and William H, Meckling. (1976)

**"Theory of the firm, managerial behaviour, agency cost, and capital structure"**

Journal of financial economics, 3, (1976), pp 305-360.

*David. M, Clifford W. Smith, Jr. (1982)*

**"On the corporate demand for insurance"**

Journal of business, vol. 55, No. 2, 1982, pp 281-296.

Kidwell, David S. & Sorensen, Eric H. & Wachowicz, John M., 1987.  
"Estimating the Signaling Benefits of Debt Insurance: The Case of Municipal Bonds,"

Journal of Financial and Quantitative Analysis, Cambridge University Press, vol. 22(3), pages 299-313, September

*Forbes, R.W., and M.H. hopwell. (1976)*

**"Private municipal bond insurance, a theoretical and empirical analysis"**

Paper presented at the western economic association meeting, San Francisco, CA (1976).

*Thakor, A. v. (1982)*

**"An explanation of competitive signalling equilibria with third party information production: the case of debt insurance"**

Journal of finance, 37, (June 1982), pp 717-737

*Scott, J.h., Jr. (1977)*

**"Bankruptcy, secured debt, and optimal capital structure"**

Journal of finance, 32, (March 1977), pp 1- 19.

*Smith, c.w., Jr., and J, B Warner. (1979b)*

**"On financial contracting: an analysis of bond covenants"**

Journal of financial economics, 7, (june 1979b), pp. 117-161

*Chan. Y. S., and G.Kantas. (1985)*

**"Asymmetric valuation and the role of collateral in loan arguments"**

Journal of money, credit, and banking, 17, (Feb 1985), pp 84-95.

*Kazuhiro Igawa and George Gantas. (1990)*

**"Asymmetric information, collateral, and moral hazard"**

Journal of financial and quantitative analysis. vol. 25, No 4, (Dec 1990), pp 469-490.