

Enterprise Risk Management: Corporate Mind Set Creates Value

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Early Draft[♦]

Abstract

The paper is mingling Wang and Faber (2006) view in addition to that of Brodeur and Pritsch (2008), defining the Enterprise Risk Management (ERM) as “*an offensive discipline of studying the risk dynamics of the enterprise, the interaction of internal/external players and forces, and how players’ actions influence the behaviours of the risk dynamics, with the ultimate goal of improving the performance and resiliency of the system, thus maximize the enterprise value*”.

Therefore, the acquaintance of the ERM fundamentals will be investigated within a selective sample of potential small and medium enterprises in Egypt using survey analytical technique, where a precautionary action is undertaken in advance to prevent the occurrence of any of the seven deadly sins. Consequently, a modified version of the KPMG (2001) checklist is used to draw the scenario through which the ERM premium can stabilize the earning volatility and maximize shareholders value, acting as a concrete pillar in solving for the amount of money that is to be invested, the accepted level of cash volatility and the optimization of the risk/return profile, which in turn is expected to be cross checked by the initial source of finance.

Keywords: Enterprise Risk Management, Top-down Approach, Risk Appetite, Insurative Model

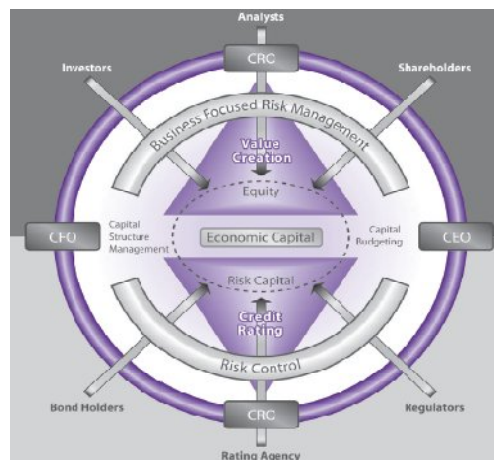
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“Managing a successful project is like walking the high wire, a complex balancing act fraught with competing distractions. The successful tightrope walker has years of practice and starts training on a “low” wire. Much attention is paid to setting the guy wires and support poles to provide a predictable tension to the high wire. Moreover, intense focus is required for the task at hand and to ignore the noisy crowds. A prospective tightrope walker who has not gained competence through experience and who has not properly set up the tightrope environment is sure to fall”, Royer (2000:6)

Introduction

Only recently, *Enterprise Risk Management (ERM)* has grasped the intention of the professionals worldwide from different perspectives depending on the level and type of risk they are exposed to, which consequently has contributed in generating various definitions for the given term with different focal points but complementing each others, so we find The Committee of Sponsoring Organization (COSO) definition highlights the importance of internal controls and organizational infrastructure as the core management tool, The Causality Actuarial Society (CAS) definition identifies the threats ‘risks’ and opportunities ‘short and long term value’, followed by Standard and Poor’s definition which points out the practicum of optimizing risk-adjusted returns, where all has been pooled by Wang and Faber (2006:6) defining it as *“the discipline of studying the risk dynamics of the enterprise, the interactions of internal/external players and forces, and how players’ actions influence the behaviours of the risk dynamics, with the ultimate goal of improving the performance and resiliency of the system”*, where the main objective has been always the maximization of the enterprise value whose strategy has to be designed within the context of trading off between credit rating and value creation as emphasized in figure (1).

Figure (1): Value Creation Landscape



Source: Onartio, Mario (2005), From Compliance to Value Creation: The Evolution of Enterprise Risk Management, Algorithmics, WP1007, p. 4

Wang and Faber (1996:18) emphasized that these risk dynamics should be formulated in forward looking valuation models, whose impacts on people’s behaviour should be monitored with great cautious, thus enabling the firm to quantify and rationalize the risk-return trade-off at both levels the macro and the micro one, Nocco and Stulz (2006:3).

Such a process can be practiced as indicated by Nocco and Stulz (2006:15) starting with identifying the firm's risk appetite – the probability of financial distress – that maximizes shareholders' wealth either by employing a top down approach where the aggregate risk has been determined by the corporate level risk committee or a bottom up approach where each single individual business units and functional areas conduct risk control self assessments which are then aggregated putting into consideration their correlation coefficients, estimating its risk of default to recognize the optimal amount of capital and risk that yield its target rating, then finally such a risk-capital trade off will be decentralized as a path towards optimizing strategic decisions undertaking through the organization.

Despite of the fact that many organizations have been using risk management through the last decade to solve for the following questions: What are the risks which the firm confronts compared to its competitors in the market? What are the sensitivity coefficients of these types of risks to the changes in such a market? What is the firm's risk appetite? How should it be managed? We can still claim that "ERM" is still working on crossing the road between its infancy and maturity even after considering a lot of these models which have been produced recently, such as COSO's 2004 Enterprise Risk Management Integrated Framework, the 2006 Risk Maturity Model for ERM established by the Risk and Insurance Management Society and the 2009 ISO 31000 Standard on Principles and Guidelines on Risk Management Implementation.

Through the given technical oriented research paper, the author has decided to investigate the existence of an effective enterprise risk management culture in an emerging economy like Egypt, choosing the leather and clothing market to be the field of research, and to keep on the confidentiality of the current situation in such a market from one side and to avoid the seven deadly sins from the other, the author has selected a sample of 50 halved between Small and Medium Enterprises* (SME) potential business leaders who are approaching banks to have an access to loans that are expected to be invested in either of both sectors where the sample is divided between leather and clothing based on 2:3 scale, whose expected supply are only targeting the domestic market atleast through the first five years and exporting is considered as a delayed option. Then, the KPMG (2001) checklist was used as an indirect approach of assessing the potential ERM efficiency, with an emphasis that the outcome of such a checklist should be the basis upon which the bank will be able to crosscheck the following: the expected level of cash volatility, the optimal risk/return profile per enterprise, then identify the amount of money that is expected to be invested, in other words, to accept or not being a partner[†] in such a project.

The paper started by crossing the bridge between the theory and the practicum of the ERM, highlighting the difference between the firm value from the narrow perspective 'shareholders' to the broad one where all other stakeholders are included, then the pre-assumptions upon which the whole analysis have been designed, were embodied in the conceptual framework section after which the survey outcomes have been formatted subjectively in a scientific - professional orientation, and finally a conservative scenario has been proposed for the given SMEs to be adopted in an attempt to secure a safety risk appetite under an evolved holistic risk management approach.

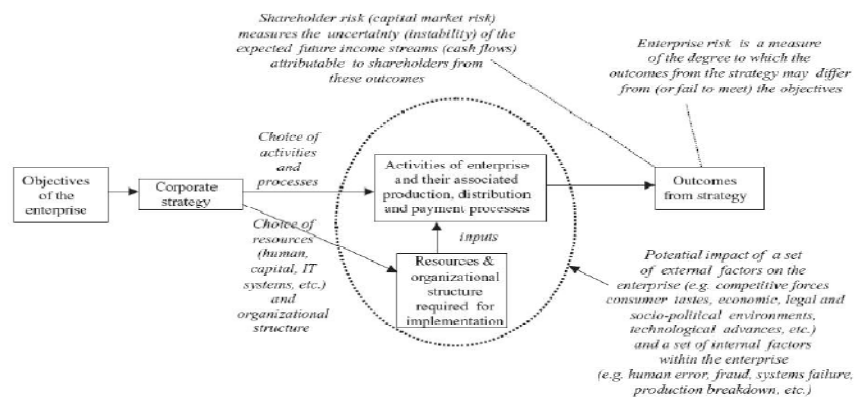
* Small and Medium Enterprises are classified based on the headcount, they are expected to employ <50 and <250 successively, following the new SME definition (2005:14).

† It is worthy to note that the author refers to the word "partner", not as an indirect promotion to the Islamic finance practicing of profit and risk sharing '*Musharaka system*' but under the believe that even in the conventional system the bank is a real partner in all cases, due to the expected enlargement of its risk profile in case of being confronted by an expansion in the percentage of the non-performed loans, which is a logically expected outcome in case of lending a project who is making ERM the endgame.

ERM: from Theory to Practice

The theoretical foundation of the Enterprise Risk Management was introduced in a very basic silo format by 1975, since the earlier version of risk management has been only concerned with managing the enterprise's insurance portfolio, Doherty (1985:4). The paradigm shift towards more holistic strategic approach was a logical response to business scandals (i.e. Enron and WorldCom). Thomson (2007:31) pointed out ten factors that enforce such a demand-driven shift: globalization, emerging markets, consolidation, deregulation, intense competition, product and market innovation, technology advances, information revolution, e-commerce and crisis, highlighting the importance of treating risks dynamically as emphasized by Deloach (2000:42), after which a broader perception was considered to illustrate the interactions from strategic objectives to the corporate strategy outcome as shown in figure (2) designed by Dickinson (2001:362), where the risk is defined as "the deviation of an uncertain results from its expected value", Pausenberger and Nassauer (2001:264), thus, emulsifying the risk and the return as two faces of one coin, where strategic risk management is treated as an instrument to achieve the corporate objectives, in support to Riley (2009:3) definition "risk is the likelihood of failing to meet objectives".

Figure (2): The Connection between the Corporate Strategic Objectives and its Outcome:



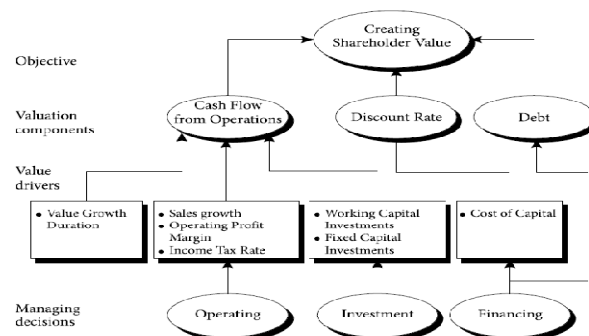
Source: Lennon, N. (2007), "Enterprise Risk Management Incentives and Practices in Three Danish Companies", Master's Thesis in Accounting and Controlling, Aarhus School of Business, University of Aarhus, p.18

From the professional perspective, the given flow of arrows indicates that the starting point should be the identification of the affordable level of risk, which won't adversely affect the corporate objectives, but even maximize the stakeholder's return, thus, magnifying the importance of having an efficient ERM program processed through Lam (2006:5) four stages: ERM foundations, risk identification and assessment, risk measurement and reporting, and finally risk mitigation and management on a portfolio basis with aggregation across risk types and business units, where strategic decisions concerning capital allocations are to be dynamically re-evaluated based on new-risk information, to ensure value creation, Deloitte (2006:12). Therefore, Wang and Faber (2006:6) definition should be adjusted to consider the main objective for ERM implementation 'maximizing the firm value' or 'maximizing stakeholders' wealth' as argued by Brodeur and Pritsch (2008:5), as an indirect measurement to assess the performance of an active ERM program, through managing risk and capital in an integrated, comprehensive, and strategic framework, Abrams, etal. (2006:4-6), whose maturity can be approached through three stages; compliance 'penalty avoidance', improvement 'optimization and sustainability' and transformation 'leverage compliance for competitive advantage' - the third stage - at which the maximization of the stakeholders' value target is guaranteed, outweighing the costs of the first stage.

Here-in appraised the importance of understanding the difference between the broad concept of the ‘stakeholders’ value’ and that of the ‘shareholders’ value’. The former view has been advanced through a sustainable measure to assess the contribution of a company to the following three dimensions: economic, environmental and social as indicated by Figge and Hahn (2000:6), to integrate the non-financial performance indicators in addition to the financial ones, as a path towards capturing the influence of the company’s network of relationships on its capacity to generate sustainable wealth over time, as emphasized by Dyllick and Hockerts (2002: 132), Perrini and Tencati (2006:297). In an attempt to face such a challenge, several tools have been used to manage the sustainability of the firm: ❶ Sustainability Balanced Scorecard, whose process has been formulated by Figgie and Hahn (2002:277) through choosing a strategic business unit for which the level of environmental and social exposure has to be identified with clear determination for their strategic relevance aspects from different perspectives (i.e. Financial, customer, internal process, learning and growth and non-market). ❷ The Sustainability Reporting Guidelines fostered by the Global Reporting Initiatives, whose sections have been expanded by Weber et al. (2005:8) to incorporate the Corporate Governance Performance in addition to the original four GRI sections in the following chronological order: Profile, vision and strategy, economic performance, environmental performance and social performance distinguishing between driver and outcome indicators to analyze the relation between both of them using multiple linear regression analysis. Despite of having too many calibrations in such an area, it has not been practiced except by only few of the largest companies, which implicitly indicates that it will be a huge burden from the SMEs perspective. Therefore, Perrini and Tencati (2006:9) argued that small or medium enterprises should start by constructing their own map of categories, aspects and indicators, whose quality of performance is to be assessed in an ongoing format, due to the expected date limitation if reporting is to be structured regarding GRI (2002:36).

On the other hand, Petravicius and Tamosiuniene (2008:195) argued that “the shareholders’ value is achieved only when the residual measure of (adjusted) profit minus the cost of capital is positive”, which can be estimated using the Market Value Added (MVA) formula to measure the performance of the company’s entire life indirectly indicating the efficiency of the managerial actions since its inception, whose future value is expected to be compared against the Economic Value Added (EVA)[‡], investigating the managerial effectiveness within a given period of time. Putting into consideration the fact that there are many other available measurements to assess the corporate performance, based on the following value drivers shown in figure (3):

Figure (3): Value Drivers of Shareholders Value:



Source: Petravicius, T. And Tamosiuniene, R. (2008), “Corporate Performance and The Measures of Value Added”, Transport, Vol. 23, No. 3, p.195

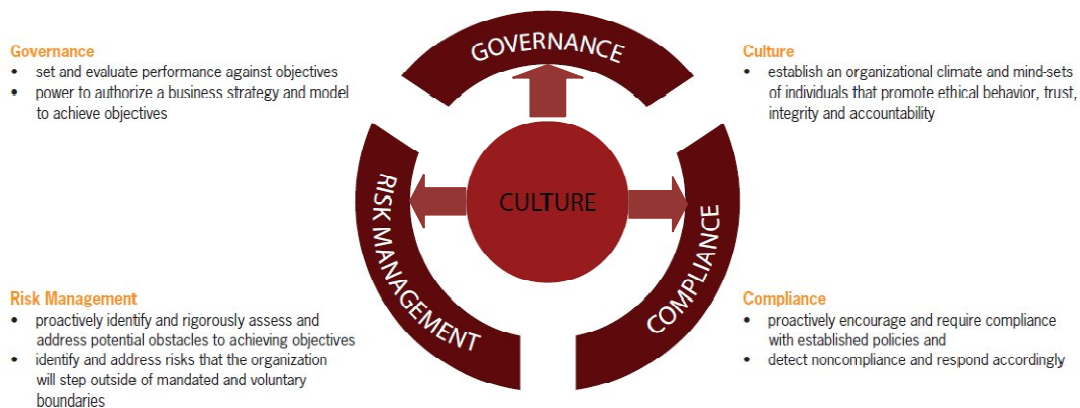
[‡] For more details see Wet (2005).

Conceptual Framework

The sequence of the analysis has been constructed putting in consideration the following pre-assumptions:

First: ERM is an intermediate target – instrument – that is to be used by any enterprise to achieve robust corporate governance[§], influenced by the strategy that is promoted by the Open Compliance and Ethics Group (OCEG), thus, the seven deadly sins; ❶lack of clear vision, ❷building unnecessary organization, function and process, ❸lack of support from leaders, ❹bottom up approach, ❺risk confusion, ❻overly complex risk assessment and ❼making ERM the endgame as argued by Edelblut (2008)**, are expected to be acquired through establishing integrated governance, risk and compliance (GRC) as shown in Figure (3), where all initiates from the core ‘culture’, that is expected to be abide by a clear vision, then the rest of the stages mentioned in the given figure will be followed chronologically in a dynamical virtuous cycle phenomenon.

Figure (3): Integrated Governance, Risk and Compliance (GRC) Strategic Framework:



Source: Grant Thornton (2009), “Enterprise Risk Management: Creating Value in a Volatile Economy”, Corporate Governor Series, p.10.

Second: The types of risk that should be assessed and monitored under the ERM umbrella are: hazard, financial, operational and strategic risks, where they have to be aggregated, managed holistically as part of the firm’s overall risk portfolio not independently in individual risk silos, in support to CAS classification as introduced by D’Archy (2001:2), Liebenberg and Hoyt (2003:37) treating the risk as a mix of upside and downside - threats and opportunities - adopting Damodaran (2007:369) principles of risk management.

Third: ERM requires a top-down approach in compliance with section 404 of the U.S. Sarbanes-Oxley Act of 2002, in an attempt to eliminate the duplication of effort through tracing the interrelations between all of these kinds of risks, where the enterprise will only approach a sound risk-taking to strengthen their corporate governance, which in turn will help setting the right tone from the top of the organization in a bi-directional causality relationship, thus maximize shareholder value, as argued by Bowling and Rieger (2005:6).

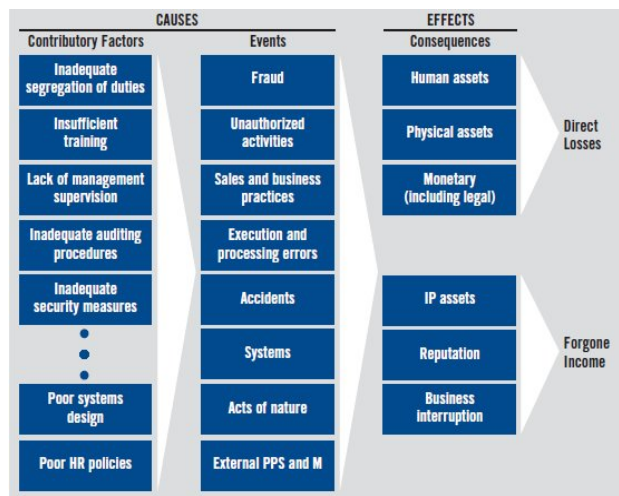
[§] The author defines corporate governance as a separation of ownership and control, in support to Shleifer and Vishny (1997:2)

** Frank Edelblut is the creator of the OREO™ COSO-based ERM methodology.

Fourth: Firms with expected high financial leverage should appoint Chief Risk Officers (CRO) directly reported to the decision taking authority as evidenced by Liebenberg and Hoyt (2003:43). The CRO will be responsible for identifying, and assessing the risk threats and opportunities from an integrated perspective that incorporates the external (i.e. globalization, industry consolidation, deregulation, technological progress, and corporate governance) and internal (i.e. shareholders wealth) forces to be able to recommend the management framework and ensure accountability for good corporate governance, Liebenberg and Hoyt (2003:42).

Fifth: Operational risk represents the major bulk of our sample potential risks, that is to be measured either by using operating leverage models^{††}, scenario analysis^{‡‡} or risk profiling^{§§} models can be applied under top-down approach, Allen, Boudoukh and Saunders (2004:167-169). However, given its complex nature for being a non-quantifiable risk, a modern approach has been processed assuming that every operational failure has three dimensions: contributory factors, events and consequences as shown in Figure (4), where the event dimension is the starting point of the analysis, Samad-Khan (2008:28).

Figure (4): Modern Operational Risk Management Approach: Classification scheme



Source: Samad-Khan, Ali (2008), "Enterprise Risk Management: Modern Operational Risk Management", Emphasis, Volume 2, p. 29.

Sixth: Theoretically, the ERM program are expected to positively affect the firm value, however only few empirical evidences are available, where such a positive impact has been proved to be statistically and economically significant accounting for approximately 17 percent of the firm value as shown by Hoyt, Moore and Liebenberg (2008:17).

Seventh: the 50 businessmen leaders should be capable to solve the here-in below the questionnaire, that has been constructed inspired by KPMG (2001:18) for real existed enterprise, since this indirectly

^{††} It measures the relationship between variable costs and total assets regardless non-pecuniary risk effects (i.e. loss of reputation and opportunity costs).

^{‡‡} It has been highly criticised for its subjective assessment of loss severity for each internal operational risk event (i.e. critical system failures, major regulatory changes, losses of key personnel, etc...), without attaching a likelihood estimate to each event.

^{§§} It tracks performance and control indicators changes over time, assuming that they are directly related to target variables (i.e. staff turnover rate), which might not hold, with great concentration on symptoms rather than root causes.

implies that they are capable to manage the risk of the expected project for which they are seeking a loan, and only based on their response the volatility of the expected cash flow, the optimal risk/return profile per enterprise, and the total amount of money that is expected to be invested can be estimated.

- a. Define corporate governance from your own point of view, and to what extent does it matter?
- b. What is the risk appetite of the potential project?
- c. What are the risk types which your firm is expected to face?
- d. Identify the expected dynamics between all of these risks and if they can be assessed?
- e. Determine the responsible stakeholders per kind of risk and if you are planning to have a monitoring system in place?
- f. What is the priority of ERM in the organization?
- g. How do you plan to optimize your firm risk/return profile?
- h. To what extent are you planned to rely on bank loans, and identify the capital structure of the planned project?

Survey Management and Outcomes

It is worthy to note that the given survey has run in an informal format, in other words, no individual interviews has been appointed per potential business leader, where the collected information has been pooled through credit officers in three Commercial Egyptian banks by indirectly interviewing the potential business leaders who are approaching them to find an access to bank loans that are available to be invested in either leather or clothing, and giving them some hints about the core points that have to be enclosed in their feasibility study, through which their understanding to the importance of the ERM is to be captured and to avoid the occurrence of any of the seven deadly sins from early stages. On other hand, questions that reflect point of views like these in (a, f, and h) should be collected on the spot, in the first meeting to ensure credibility and existence of clear vision. Thus, it should be registered that the main limitation of such a survey is its subjectivity, noticing that only active responses for the open-end questions per hypothetical firm, have been re-interpreted in a scientific format as follows:

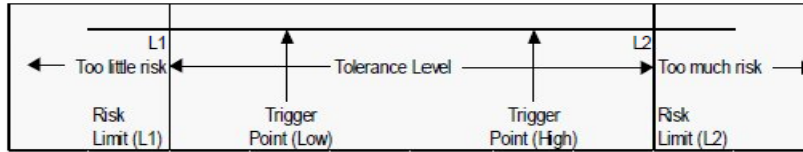
- a. 100 percent of the sample^{***} has defined the corporate governance as the process of protecting the rights of the external suppliers of fund to receive fair return, as emphasised by Fremond and Capaul (2002:1). They are completely acknowledged by the Egyptian Code of Corporate Governance (ECCG) that has been initially introduced in 2005 by the Ministry of Investment and the General Authority for Investment and Free Zone (GAFI), whose guidelines have been implemented in a non-binding format, but only to be considered by the companies who are relying on loans and equities as external sources of finance, to ensure responsibility and transparency. Its coherence has been highly supported by the Capital Market Authority through creating an auditors registry in 2006 and a new code of ethics for them in 2007, where such awareness has been established through the Egyptian Institute of Directors (EIoD). However, only 20 percent understand its positive impact on company performance as empirically evidenced by Lam (2007:4).
- b. 99 percent of the sample confirmed that the acceptable level of risk is null, which means that they are highly risky averse potential investors, only 1 percent defines the risk appetite^{†††} as the aggregate

^{***} It is worthy to note that when I say 100 percent of the sample, it means 100 percent per each of the sup-samples (i.e. leather and clothing according to the above mentioned scale 2:3).

^{†††} For more details see Kamiya, Shi, Schmit and Rosenberg (2007:28), and Oracle (2009:5).

level of risk that the company can tolerate over an extended period of time, without adversely affect the stakeholders' objectives, as shown in figure (5).

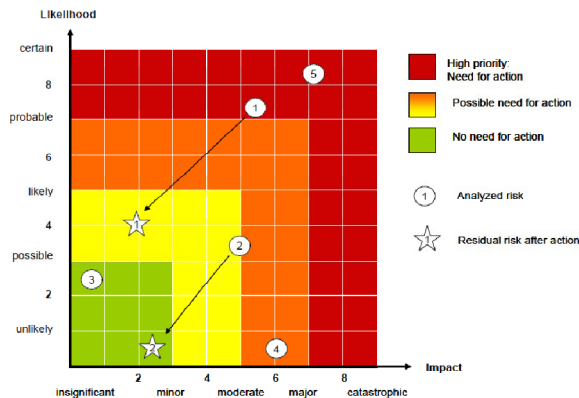
Figure (5): Risk Appetite – the Tolerance Level



Source: Tavan, F (2005), "Risk Tolerances and Risk Metrics", 2005 SOA ERM Symposium, p. 17

- c. 70 percent of the sample only recognize the hazard risks and the financial risks, 20 percent refer to the operational risks in addition to the other types excluding the strategic risks, and only 10 percent categorize the risks which they are expecting to face into two types similar to that of Delloitte (2006:8) taxonomy: Quantifiable (market/price risk, credit/default risk, modelling/valuation risk, financing/financial risk, business continuity risk, financial reporting risk, environmental risk); and non-quantifiable (strategic/franchise risk, operational risk, staffing/organization risk, regulatory risk, political risk, technological risk, legal risk), where the non-quantifiable is expected to have the higher influence.
- d. The majority can't figure out the risk dynamics, only 35 percent of the sample admit the existence of inter-relations among risks and propose the copula model as one of the most flexible tools that derives the joint distribution function from marginal distribution ones to capture the dependence structure among risk, supported by Rosenberg and Schuermann (2004:14). However, the starting point should be to assess the non-quantifiable risk with regard to their impact and likelihood on both an inherent and residual basis, using qualitative measures for both, where the likelihood can be categorized as certain, likely, unlikely or alternately based on a given percentage and frequency, then mapped in relevant to a scaling process of 1 to 9 whose criteria is (9-catastrophic; 7-major; 5-moderate; 3-minor; 1-insignificant), through a clearly defined time horizon, estimating the risk exposure by multiplying the impact with the likelihood score following Ryu (2004: 22-24) methodology as shown in figure (6):

Figure (6): Mapping the Risk Matrix based on Impact and Likelihood

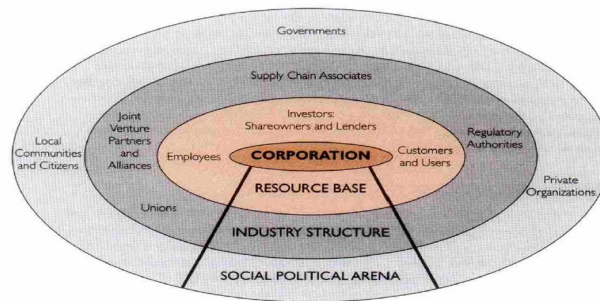


Source: Ryu, C. (2008), "Enterprise Risk Management and Firm Value", Magistra der Sozial-und Wirtschaftswissenschaften, Diplomarbeit, Universität Wein, (November), p. 24.

- e. 98 percent define the stakeholders perfectly in consistent with Post, Preston and Sachs (2002:3) as "individuals and constituencies that contribute either voluntarily or involuntarily,

to its wealth-creating capacity and activities, and who are therefore its potential beneficiaries and/or bearers”, whose view of any corporation can be summed as shown in figure (7), where some of them will have their own risk structure, whose impact will be transferred indirectly to the firm (i.e. suppliers) and others will have direct effect such as regulatory bodies including rating agencies (non-quantifiable risk) through promoting the development of good governance inside the given corporation and government (quantifiable risk) by imposing direct income tax and indirect sales tax, etc... However, the rest 2 percent only stick to the narrow definition in small closed economies, where the stakeholders are the suppliers of the raw material or semi-finished products, inputs of the final products. Consequently, 35 percent of the former emphasized that those stakeholders should be managed in an integrated value based framework by cultivating a culture of awareness inside the enterprise where every member will be queued in the same direction to achieve the following objectives: “minimizes friction, aligns incentives and encourages value-enhancing decisions and behaviours”, as discussed by Segal (2005:4), where a CRO should be appointed from day one mainly to proactively address low-frequency, high impacts risks, and manage critical risk interdependencies successively in an evolutionary non-stop basis providing timely information on control forces, Deloitte (2005:4)

Figure (7): Stakeholders View of the Corporation



Source: Post, J., Preston, L., and Sachs, S. (2002), “Managing the Extended Enterprise: The New Stakeholder View”, California Management Review, Vol. 45, No. 1, p.10.

- f. In complementing to the response in (e), the 98 percent admits that the ERM is of high priority, where 35 percent of them only highlights the importance of hiring a Chief Risk Officer who will be responsible for identifying, assessing and mitigating the company’s expected risk, which should be over sighted by the board member regularly to ensure its compliance with the company’s risk appetite, and only 2 percent claims the ERM can be established at later stage, in their own words “it is too early to think about ERM, at the time we are searching for an external source of finance. Risk management is one of the banking system duties, not ours”, in other words, they can’t figure out that the former might be a prerequisite for the later to be facilitated.
- g. The response of the majority was highly vague, only 35 percent of the whole sample was able to figure out that the optimization of the risk will be achieved during the development process of the expected ERM program through the company, whose role in the initial stages will be mainly safeguarding the enterprise value through compliance, risk mapping and mitigation, where the risk management culture between the rest of the staff was semi-active/passive, then only at its maturity level, it will be a value based program, capable to undertake core strategic and operational decision, functioned by the skilled staff whose capacity has been maximized

during the process of spilling over a proactive culture and ethics, thus, only focus on few key risks, if disregarded will have catastrophic influences, as analyzed by Brodeur and Pritsch (2008:5), and Deloitte (2006:12).

- h. The whole sample is planning to rely on bank loans completely in establishing the expected new investment, which means that the capital structure will be 100 percent for loans and zero percent for equities.

Proposed Scenario

Based on the survey outcomes, since the given firms are planning to rely completely on loans, they are expected to be highly leveraged, where the leverage is measured as the ratio of long-term debt to total firm value, Liebenberg and Hoyt (2003:43), thus, a CRO is expected to be appointed from day one to ensure the firm's commitment to an integrated value based ERM program through an evolving process. The lack of awareness which quite appraised in the above responses considering the risk types, enforce us to search for an alternative scenario for those firms to have an access to finance. The given scenario introduces the bank as a coordinator to ensure efficiency in resources allocation, where the bank will pool the enterprises into groups according to their competitive advantage, then negotiate a deal with famous multinational companies with international trade mark, those who are dealing with all lines of fashion industry, then encourage them to establish their industry in the local market, not to deal with the Egyptian market as a distributor for finished products in Singapore, Indonesia or Malaysia for instance, by providing the international corporation with the loans, but under the condition of being used in supporting the small and medium enterprises as follows:

The international corporation receive the loan, after signing a contract that guarantee the transmission of these loans to the pools of firm (i.e. a pool for producing casual wear, another for producing formal wear, other for night dresses, one for high heels, and other for sports shoes, etc....), where the production is to be distributed through the international corporation channels^{†††}, thus, eliminating all types of risk which are confronted by the small and medium enterprises excluding that concerning the operational risk, which is even expected to be supervised by the former to ensure the quality and the CRO role will be just safeguarding the enterprise in the initial stage. At this stage, the retained earning per firm will be equal to its share in the net income of the pool, after deducting its share in servicing the debt to the international corporation in addition to a fixed margin determined in advance by the later. By then, the firm starts having an internal source of finance that can be reinvested, and is capable to start diversifying its capital structure, seeking an alternative source of finance at lower cost (equities), against which they will be committed to distribute dividends in the next stage, then, the virtuous cycle of growth initiates in parallel with a positive expectation concerning the value per firm taken Tobin's Q as a proxy to reflect the future expectation per investor as argued by Hoyt, Moore and Liebenberg (2008:11)^{§§§}, that is to be estimated using the following formula:

$$\text{Tobin's Q} = \text{Firm Value} = \{ \text{equity market value} + \text{book value of liabilities} \} / \text{book value of assets.}$$

On other hand, the efficiency of the ERM program and its maturity can be traced indirectly through the positive trend of the firm value in relevant to the above mentioned justification in its capital structure, or tracing the expected trend of the Net Present Value (NPV) of the firm through different

^{†††} However, the local distribution will be the responsibility of the Small and Medium Enterprises, only the exports in case of being targeted will be the international corporation responsibility.

^{§§§} For more details see Cummins, Lewis and Wei (2006).

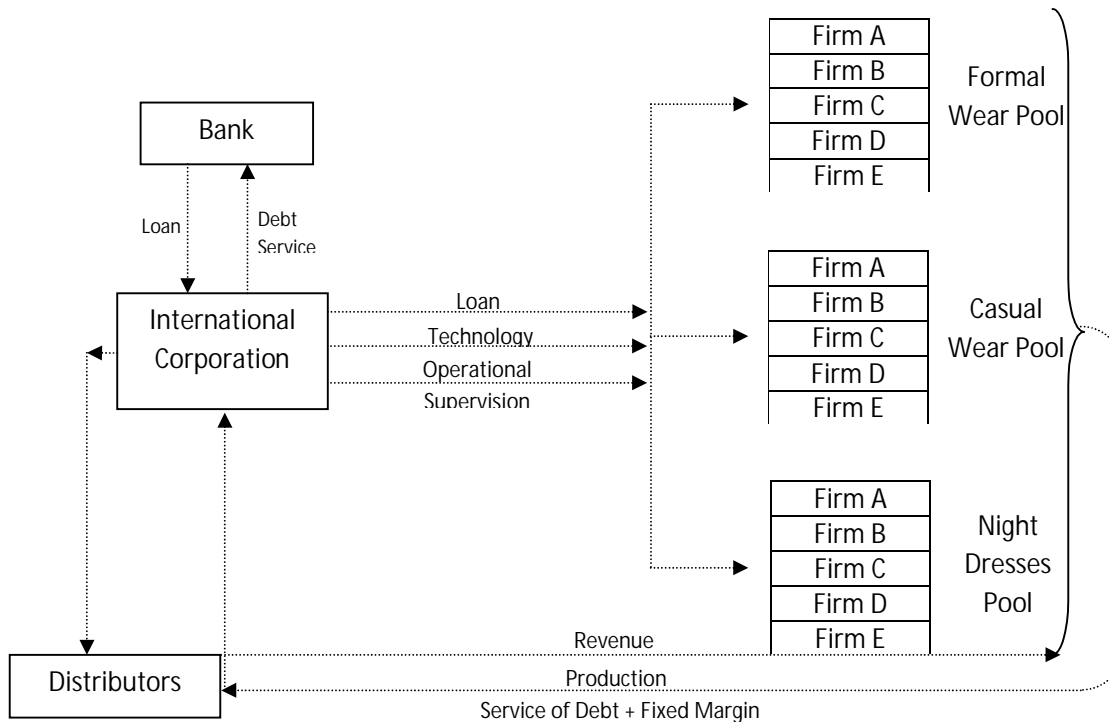
stages, where the net present value is to be estimated by discounting the expected cash flow at the Weighted Average Cost of Capital (WACC), or to be discounted at the Total Average Cost of Capital (TACC), as an indirect approach to capture the risk dynamics as well, using Shimpi (2001:13) popular insurative function:

$$\text{Total Average Cost of Capital (TACC)} = \text{Cost of Debt} \times (\text{Debt Value}/\text{Firm Value}) + \text{Cost of Equity} \times (\text{Equity Value}/\text{Firm Value}) + \text{Cost of Insurance} \times (\text{Insurance Value}/\text{Firm Value})^{****}$$

Consequently, by the end of the fifth year, the long term debt will be fully serviced, and the pool per line of industry will be able to act independently in the local market, after building an internal skilled culture and vision of responsibility, where they might take the decision to unionize and be a large corporation holding a well reputable franchise in the Middle East, that motivate the micro-projects to repeat the given scenario domestically. On the other hand, an incentive should be always self-generated to enrich the communication between the domestic corporation and the international original one.

The given scenario facilitates the process for both the bank and the small and medium enterprises, since the identification of the amount that is to be invested per firm: the acceptable level of cash volatility and the optimal risk/return will be interpolated based on the international corporation financial statements since their production will represent a given percentage whose assets and liabilities book value are already known, where the expected cash flow can be estimated with a negligible marginal probability of error. Here-in appraised the importance of summarizing the flow of the whole process in the following depicted figure:

Figure (8): The Flow of the Proposed Scenario during the First Five Years^{††††}:



**** For details concerning the inclusion of insurance as capital, where equity, debt and insurance are used to cover the firm risk exposures within its risk tolerance, see Shimpi (2004).

†††† It is worthy to note that the given scenario is to be copied for the sake of the leather line of production, noticing that the firms per pool are organized in a descending order based on the expected size of the firms starting by the medium firm and ending by the small ones.

Conclusion

The given technical oriented paper has been designed in a very simple format to act as the first step in launching the ERM culture targeting the potential business leaders in the Egyptian market, whose majority are not expected to have a business educational background, or familiar with statistics, and as a road map for responsible policy makers that gives hint concerning the objectives of hypothetical negotiations whose anticipated gains will spill over positive growth rates through the whole economy, putting into consideration the fact that it paves the road for activating the micro projects, formalizing the informal sector by expanding the given scenario to incorporate sub-pools that can work in service for the SME's in the future after getting united into one large domestic corporation.

On the other hand, it introduces the steps and the methodology that can be adopted in forthcoming researches either that cover the field survey or the theoretical part, concerning the expected outcomes through the evolving process of the ERM per industry, per pool, per firm, in case of processing similar scenario, whose benefits can be quantified as follows: eliminating the types of risk which face the firm at its early stages, and only to focus on compliance with the international standards of production under direct supervision from the international corporation, having enough information concerning the required data set for conducting scenario analysis, crossing the risk management culture gap, since the international corporation will be keen to govern its own historical image, and the role of the in-house ERM office will be just to safeguard the compliance to their standards.

It demonstrates the investigation of the efficiency of value based strategic ERM program, through tracing the growth in the value of the firm with regard to changes in its capital structure, using the insurative model through which different debt/equity mix can be calculated, and only the optimal risk within the tolerance level is to be chosen to ensure good governance. Thus, the added value will be estimated during the first five years of the enterprises' life cycle from the stakeholders' perspectives based on a self-constructed map of indicators.

Despite of the immature level of acquaintance from the potential business leaders' perspective, still we can claim that they are capable and eager to learn, which is more than enough for our "learn by doing" proposed scenario, under negligible risk conditions.

Indeed, dozens of research papers and academic case studies are expected to be implemented to practically evidencing the expected outcome, but we are seizing the chance to introduce the idea for all interested stakeholders; academics, policy makers, governments, and professionals to indirectly test the acceptance of the proposed scenario, to be able to start estimating the hypothetical gains either on the institutional micro level, or on the macro level.

“The ocean of thoughts is not where you should sink, but is the arcane of aspire to the port of glory”,
Nevine Eid (2009).

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