Making index for financial risk and measuring

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Abstract: financial decisions are one of important competitive zones for preparing optimal financial resources for surviving in commercial turbulent environment. In this research, according to subject importance, we try to identifying important dimension with concentration on financial risk, designing theoretic model for measuring financial risk optimally. In this way, financial risk categorization model and its measuring indexes, is a result that derived from current research.
[Jaber Jamalsirat. **Making index for financial risk and measuring.** *J Am Sci* 2012;8(7):371-373]. (ISSN: 1545-1003). http://www.jofamericanscience.org. 56

Keywords: financial risk; measuring indexes; categorization of risk; profitability structure

1. Introduction

Competition in commercial environment needs commercial company's ability for attracting optimal limited research such as customer, competent human resources and financial optimal resources. Optimal usage of these resources is second agent that have effective rule in achieving competitive advantage for companies. In this way, despite of programming and consideration that is done by experts and companies technicians in this way, but there is some of agents that are out of control, with different degrees of probability can increase not achieving to each of this operational objectives. In this way, probability of not achieving to this pre defined objectives, is determined according to risk. According to objectives that is influenced by risk and also, according to effective agents on probability of achieving to different groups, such as financial risk, commercial risk, systemic risk and etc. in this research , we try to survey first categorization of resulted commercial risk and then financial risk dimension ,completely. In second stage, we try to identify and introduce essential indexes for measuring financial risk. Risk definitions and concepts according to different scientific references, are identified different definitions of risk. Of course, each of them presented different definition according to their point of view. In management dictionary, risk is: "everything that threat present or future of property or income power of institution or organization."Nickels considered risk conception in different dimension and categorized it in two categorization conceptually. He believed that risk pointed to loss probability, degrees of probability and criterion loss probability. In this way, risk involve loss probability and benefit probability and danger probability and although net risk involves loss probability and doesn't involve benefit probability, like fire incidence probability (Nickles, 1999). So, according to above definitions, we can define risk as below:

"Risk is a changing probability in forecasted benefits and advantages for a decision, an event or a state in future."

Our mean about this probability is uncertainty about changes, although we have enough confidence to changes.

Confidence changes are covered in benefit frames and predicted advantages, although impossibility of predicting derived from probability in changes, transform it to benefit and advantages.

Changes points to every decline or increase in benefit. It means that changes aren't unsuitable that is covered in risk frame. Also, favorite changes are in this frame.

Decision, event or state points to being voluntary or involuntary of conditions that governs risk. It's possible that if decision is voluntary, assess its benefits or advantages and governs special risk on its benefits and advantages. On the other hand, it is possible that an event or state happen involuntary in future and benefits and advantage change are parallel with change probability.

1.1. Presented categorization of risk:

In theoretical studies, different categorization of risk is presented. In this section, we try to consider different points of views. In this case, risk that govern political projects in John Choiken points of view: in this categorization presented analyzing , help to decision maker and their consultants to rate effective factor on accepting or denying decision choices. In this model, effective factors on categorization are pointed as risk factors. Risk rating technique in this model, is presented to help decision maker with comprehensive insight assess technical, economical, social and political dimension of risk that govern political activities. (Choiken, 1994). "Choiken" in other rating of risk , points to country level of risk that in its assessing , presents different factors on national economic , broad economic , economical debts status and political _ social status that govern country conditions. Banking risk analyze pattern in Greuning point of view. Greuning and et.al. This categorization, despite of risk assessment in banks but is applicatory about subject and content for other institutions and commercial organization. (Greuning , 1999). Related works for making free, becoming universal, and on the other hand increasing competition and variety, put banks in abundant dangers and challenges. New condition needs continuous innovation in existent methods for company's management and related risk to have essential benefits in competitive environment. Market oriented increasing in banks have abundant effects on regulating and banks supervision. New condition emphasizes that management quality in banks and especially risk management quality, is a key in confidence of security and stability in bank and bank network. Greening in presented a model that points to exposure risk that considers positive and negative changes meaning in future benefits. He categorized effective risk kinds on commercial activities to four financial risk, operational risk, commercial risk and event risk. Risk exposure categorization in Zuckerman point of view:

"Zuckerman presented his risk management model for designing risk management learning program in business faculty of Temple University. In his points of view, risk involves net income, risk property, debt risk, employees risk, financial risk and operational risk that named indefinable risk. (Zuckerman, 1998)

2.1. Final risk categorization:

According to presented categorization compound about risk, we can reach to total model that derived final model about this research presented risk in three international, country and corporation and financial projects level

3.1. Financial risk and its measuring factors:

Presented categorization show different kinds of risks that is determined for assessing changing profitability in future benefits in different zones related with commercial environment. In this research, we present different kinds of financial risk and then present its measuring indexes.

Risk is a result of balance sheet structure consists of properties, properties structure and properties management and debt. in this section, we pay to this subject that how is different compounds of existent properties in balance sheet. Or in the other words, if composition is for properties that their value changing probability is more in future or above value, they have essential stability on most of existent properties in above composition.

Fixed properties to current properties ratio, financial properties to physical properties ratio, financial properties volume are some assessment indexes of this kind of financial risk.

4.1. Resulted Risk from income and profitability structure:

Financial company's profitability is an index that determines better competitive state and management power. In addition to company profit that is a clear base for profit, companies profit and loss compound determine risk of this companies.

5.1. Capital efficiency risk

Usually different dimension of risk in financial companies is influenced by capital cost and asset scale directly or indirectly. Capital is one of key agents in determining financial institutions security level. Enough capital in financial companies is considered as security tool for other risk dimensions in commercial activities duration. Probable weakness of capital attracts other financial dimensions. So, capital is a base for preserving financial supporter of companies.

6.1. Turnover rate risk

Turnover rate risk is change in bonds value resulted from changes in turnover rate. (Leea, 2000). On the other hand, turnover rate points to canges in future receive resulted from selling a bonds and also inability to paying profit in it. (Greuning). About securities like companies stock, turnover rate resulted from bond change affected other financial and nonfinancial risk. Production power, changes in demand and competitive condition, changes in national risk and economical structure, political risk can affect companies profit and so profit paying power. It is clear that turnover of stock is a ooze of operations of company in continuous presentation inside of company and its environment, as all of probable changes in commercial events, affect stock risk. Standard deviation of derived profit percent, stock price standard deviation, total profit standard deviation , faults of determining varying rate, without rate financial resources and asset , correctness or faultiness of turnover rate predicts are some of measuring indexes of turnover rate risk.

7.1. Market risk

Is a assess los (declining asset value) because of changes in usual stock price. This change is considered as market risk when created according to some agents. Main characteristic of this agent isn't under control of company and not only they don't affect only a special company but also they affect profitability state of companies in a special industry.

It clear that market risk responsibility isn't for company and most of this agents are out of control.

Measuring factors of this section of this risk are some of national risk like economical micro and macro agents, social and political agents and etc that there isn't probability for their surveying in this essay.

8.1. Liquidity risk

Last improvement in financial literature emphasized on market and micro structures effect on estimated securities. Liquidity is considered as one of main agents for defining securities (stock) price. Stock liquidity is "easiness of stock transaction in a special market." Liquidity is analyzed in cost and time mould. Transaction of one stock may spend more time for finding the other part of transaction. On the other hand, it may have more costs. Taxes and transaction cost are considered other kinds of liquidity risk that have latent nature. Totally, we have three resources for liquidity risk. (Nicole Beiner, 1999)

1. Selling and buying order time may be different.
2. Clear regulation may be created for securities transaction.
3. There is less demand for transaction and exchange.

9.1. Money risk or exchange rate

Exchange rate risk is probability of losing main asset and sub asset, because of declining money buying power. On the other hand, inflation increases interest rate. This may cause declining securities value.

2. Discussions

After stating a definition of risk, three model of categorization of risk is reported and according to this, we present certified model of this essay. According to above model, eight kinds of financial risk is identified. In this way, by using different measuring indexes and factor resource of risk kinds is suggested to some extent. Above model can be considered as a base and according to this, we can assess risk that governs companies.

6/11/2012

Acknowledgements:

Author is grateful to persons for support to carry out this work.

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