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"n investigation on the effect of environmental turbulence on dimensions of strategic planning"

Ali Reza Siyavashi[1], Alireza Lavaei[2]

[1] Department of management , Brojed branch , Islamic azad University , Brojerd , Iran
[2] Department of management , Brojed branch , Islamic azad University , Brojerd , Iran

ABSTRACT

The present research is intended to examine effect of environmental turbulence on components of strategic planning that includes these components according to model of Silverblatt and Korgaonkar: (1) establishment of strategic planning; (2) period of plans; (3) centralization; and (4) employing extra organizational advisors, computer, and mathematical models. Researcher added variable of formalization to the studied components for generalization of the model. The methodology of this study is of descriptive- correlation and it was executed as field study. The current research is of applied type that was implemented using structured equations modeling. The statistical population of this study comprised of CEOs from headquarters of insurance companies in Qom Province and totally 100 members out of which 75 participants were designated for this study as statistical research sample by means of accessible sampling technique. Questionnaire method was utilized to collect data. The results of study indicated that as business environment became more turbulent, strategic plans of insurance companies might be shorter but plans became more complete and the companies would emphasize in lack of formalization for developing their plans. These companies use different methods for reducing uncertainty in process of their strategic planning including employing of extra organizational advisors, computer, and mathematical models. No significant relationship was found in this study among perception of directors of insurance companies from environmental turbulence and level of organizational decentralization.

Keywords: Establishment of strategic planning, Perceived environment, Environmental uncertainty, Decentralization, Formalization, Environmental turbulence, Risk- reducing methods, Insurance Companies.

1. Introduction

Insurance industry is assumed as one of the major economic institutions that support from activities of other organizations and enterprises. This industry facilitates trend of construction, advancement, and progress in society by creating security and certainty for servicing and production activities etc. in addition to necessity and importance of insurance industry in economic activities and due to spreading insurance companies and offices in the country, competition becomes more serious and harder in this industry every day. Environmental changes may very efficiently and undeniably on components of strategic planning as well as success or failure of any organization. Many organization that have been profitable and successful have been exposed to bankruptcy and death by change in environmental coordinates and only because of non- accompaniment with these environmental changes and developments. In other words, way of treating with environment and environmental changes (turbulences) is one of the important and effective aspects in orientation of an organization (strategic planning components). Under such a condition, insurance companies should create the best structural and strategic coordination with their environment to acquire highest productivity rate. Thus it can be mentioned that the fast change in customers' taste and necessity for presentation of new products and generally high environmental turbulence in insurance industry caused creation of severe need in insurance companies to acquisition of updated information and also high processing potential and employing data in process of insurance services. Therefore, many insurance companies revised in components of their strategic planning to survive and remaining in competition field. With respect to importance of this subject, the present study is intended to examine behavior of insurance companies by means of the related concepts to the field of strategic management and in addition to checking up the present theories in this regard for the second time to participate even slightly in developing concepts of strategic management in the country and realization of crucial national objectives regarding increase of competitive potential and power of organizations generally and insurance companies particularly.

2. Literature Review

2-1- Environmental turbulence and establishment of strategic planning

Very few studies indicate in management literature that development of strategic plans increases simultaneously as environmental upsetting is added and companies try to reduce such disorder by means of different adaptive methods. In a study on strategic planning, Woodward (1965) suggests that there is relationship between uncertainty factors and planning for production. In another study on planning of their market in six industries of packing of consumer's goods, Stasch and Lanktree (1980) declare that the fluctuations in markets may be related to planning activities (Silverblatt and Korgaonkar, 1987). The study about corporate planning done by Lindsay and Rue (1980) showed that development of corporate strategic planning was positively related to environmental turbulence. Rise of flexibility does not mean the plans with lesser details. Lindsay and Rue (1980) implied that the companies might intend to neutralize uncertainty by making more effort for planning. Lindsay and Rue (1980) and Kukalis (1991)

found that the uncertainty in external environment was positively related to establishment of process of strategic planning (Grant, 2003).

With respect to literature of current research, it is expected in turbulence period to establish strategic planning but the plans are more general and planning is done to coordinate for execution of strategy and not to formulate it. Under these conditions, strategic planning is perceived as an emergent and comparative and learning- based process. Thus, it is assumed:

Perception of directors of insurance companies from environmental turbulence is effective on development (establishment) of strategic planning.

2-2- Environmental turbulence and shorter period of plans

Garrett (2012) expresses that the enterprises that suffered from fear and anxiety during turbulence periods would only execute first order (short- term) projects and the important long run project might be left. Nevertheless, the better method is to execute projects in all three categories (short- term, medium- term, and long- term) but number of project may be reduced in any category. Reduction in quantity of project may relatively create security in any category and for this reason lesser capital will be spent for the projects and such turbulent circumstances it creates barrier against the organization. At the same time, under turbulent conditions, the attention is still focused on future of the organization in the long run.

The study of Lindsay and Rue (1980) in corporate planning showed that the rise of environmental turbulence indicated focus on components of plan more toward short term trend than long tern tendency of importance. Environmental fluctuations and uncertainty may shorten strategic planning horizons for the enterprises; if strategic planning needs to prediction, the uncertainty more about future should shorten planning horizon. Kukalis (1991) found that planning horizons were shorter in unpredictable markets with high levels of innovation and competition.

According to attitude of Silverblatt and Korgaonkar (1987) the companies that compete in a turbulent environment:

- They maybuild short term and medium term quantitative objectives in strategic planning for their marketing instead of quantitative long term goals.
- Probably plans and budgets are devoted to short term activities instead of long term activities.
- It is unlikely to focus more on short term strategies than long term strategies.
- Given literature of present study, it is expected that following to environmental turbulence, quantitative goals, plans, budgeting and organizational strategies to become further short term so that organizational goals to be more focused on sale and income than on growth of investment and market share and plan and budget of organization to be more devoted on activities of promotions and market studies than activities of ownership of other companies and expansion of organization and Research and Development (R&D). Similarly, organizational strategy is more focused on strategies to influence in market, and market and product development instead of diversification strategy. Thus it is presumed that:

Perception of directors in insurance companies from environmental may impact on shorter period of strategic plan.

2-3- Environmental turbulence and uncertainty- reducing methods

As environmental turbulence increases, the company shall try to reduce uncertainty (unreliability) by means of employment of extraorganizational advisors, conceptual- theoretical models, and computerized model (Diffenbach, 1983).

Scholars of strategic management argue that the composition of strategic planning team should constitute intraorganizational directors and extraorganizational experts and advisors in order to formulate effective strategies free from subjective and value- driven of judgments by CEOs in organizations. The organizational directors may play role in improving strategic planning because of their complete and adequate knowledge about organizational problems and experts outside the organization analyze strong and weak points of organization because of their adequate knowledge and expertise without bias and value- driven judgements. On the other hand, whether in dynamic dimension of environment or aspect of complexity of environment this naturally leads to emerging of modern technologies and successful organizations are ones that have potential to use modern technologies in designing of new products. This is not possible regardless of using thinkers and experts. With respect to research literature, as rate of environmental turbulence and changes increases, the companies are more inclined to employ extraorganizational advisors and experts, computer and mathematical models will be also added. Thus it is supposed that:

Perception of directors of insurance companies from environmental turbulence influences in employment of extraorganizational advisors, computers, and mathematical models by them.

2-4- Environmental turbulence and focus on organizational structure

Environmental turbulence may redistribute potential (power) in making decision for strategic planning. The primary done study (Lindsay and Rue 1980; Grinyer, 1986) refers to Environmental turbulence as an encouraging factor for decentralization of power to make strategic decisions from company to the business and reducing role of planning personnel affiliates to line directors (Grant, 2003). Open-end and decentralized organizational structure is another method a company may attempt to use it for becoming adapted to environmental turbulence. Through empowerment of organization open-ended and decentralization systems may give this opportunity to organization to function faster in a closed and centralized system in the given turbulent environment (Diffenbach, 1983).

With respect to literature of current study, as an environment is more complex, structures are shaped further in decentralized forms. Regardless of static and dynamic environment, if there are various and several factors and elements in environment, organization may is more appropriately and better exposed to environmental uncertainties through decentralization. Comprehensive and thorough environmental perception is very complex and difficult for management and there is high rate of information to be processed. Thus, management may assign the powers. Therefore it is assumed:

Perception of directors of insurance companies is influenced by environmental turbulence on level of organizational decentralization.

2-5- Environmental turbulence and formalization of organizational structure

Environmental fluctuations and uncertainty may lead to lesser formalization in planning processes. Organizational theory predicts that the external environments with lesser stability should be related to lesser bureaucracy and more flexible decision-making (Grant, 2003). Regarding strategic planning, formalization is concerned with fixed time intervals for planning cycle and reliance on wide documentations and written reports, use of standardized methods, and development of planning experts. Wilson (1994) found that external instability might lead to further lack of formalization (e.g. lesser documentation and more flexible schedule) and Kukalis (1991) observed that the rising rate of external changes (environmental complexity) has increased flexibility of planning operation. Goldberger (1999) argues that the healthy organizations and personnel possess three common characteristics: productivity, innovation, and flexibility. When systems are excessively ordered potential of prediction becomes high and their flexibility is reduced and such a frequency may be hazardous for organizational health.

What is inferred from research literature is that the rate of structural formalization is inversely related to environmental uncertainty. The stable environments shall be led to formalization at higher level because these environments minimize need to fast reaction and economic scale may require for organizations to standardize their activities. In contrast, dynamic and variable environments need to formalization at lower level. Dynamic environment lessens formalization of boundary activities of organizations of course while restively high formalization may govern over other internal activities and functions of organization. Thus, it is assumed:

Perception of directors in insurance companies from environmental turbulence may impact on rate of organizational formalization.

2-6- Model of Silverblatt and Korgaonkar and its generalization

Silverblatt and Korgaonkar (1987) carried out an investigation titled '*strategic planning for market in turbulent business environment*'. In this study, they examined relationship among business environment and strategic planning process. The results of their study showed that as business environment became more turbulent, trend of strategic planning of market would be longer and plans to be more complete while the companies were exposed to this turbulent environment in development of strategic plans for market might emphasize in decentralization. These companies employ different uncertainty- reducing methods in process of their strategic planning for market including use of conceptual models, advisors, and mathematical and computer models. These four components plus variable of formalization are the studied dimensions of strategic planning in the current research. Thus the hypotheses are designated for this study as follows:

1- Perception of directors of insurance company from environmental turbulence may impact on developing (establishment) of strategic planning.
2- Perception of directors of insurance company from environmental turbulence may impact on shorter period of strategic planning.

3- Perception of directors of insurance company from environmental turbulence may impact on rate of organizational decentralization.
4- Perception of directors of insurance company from environmental turbulence may impact on rate of organizational formalization.
5- Perception of directors of insurance company from environmental turbulence may impact on their use of extraorganizational advisors, computer, and mathematical models.

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4- Perception of directors of insurance company from environmental turbulence may impact on rate of organizational formalization.
5- Perception of directors of insurance company from environmental turbulence may impact on their use of extraorganizational advisors, computer, and mathematical models.

Figure 1: Conceptual model (Silverblatt and Korgaonkar)

Figure 2: Conceptual model of study (generalization of model of Silverblatt and Korgaonkar)

2-7- Existing condition of insurance industry in Iran

Recognition of status quo requires for interpretation of favorable condition and formulation of strategies of achievement in planning process. Therefore, in order to conduct any type of study regarding national insurance industry, it necessitates firstly for analysis on current condition of this industry. Using statistical information from performance of insurance industry (years 2003-2012) published by Central Insurance of Islamic Republic of Iran (IRI), the current condition of this industry is examined in this section.

At present, Insurance industry in Iran is composed of a governance institution and 19 insurance service provider companies with 867 branches in Iran. IRI Central Insurance Company plays role of governing institution for Iranian Insurance Market and insurance companies give their services in profit- form and commercial institutes are active at this market. Whereas during 2008-9 stocks of three insurance companies (Alborz- Asia- Dana) were assigned to private sector thus public sector is exclusively devoted to activity of Iran Insurance Company in 2010-12. Iran Insurance Company possesses 46% of shares of national insurance market and non- public companies have 54% of these stocks while before assignment of three aforesaid companies to private sector in 2009, public companies had approximately 75% of national insurance market. IRI Central Insurance is the supervisory reference over insurance industry in Iran. This institute is a public company that started activity since 1971. The mission of this company is to enforce administrative government over insurance industry in Iran in order to support from insured parties and extension of insurance through supervision, guidance, and regulation of insurance

activity in Iran (Iran Central Insurance, 2012). Table 1 shows premium of production by public and non- public companies within different years:

Table 1: Production premium during several years (in billion)

Year	Public	Non-public	Total
2008	30396.8	10164.2	40561.0
2009	24277.5	22160.8	46438.2
2010	27302.1	31859.0	59161.1
2011	40224.2	45867.8	86092.0
2012	59733.9	71362.8	131096.7

Source: Iran Central Insurance Co (2012)

3. Methodology

The methodology of this study is of descriptive- correlation type and it has been conducted as field study. This study id assumed as applied type in terms of goal that was carried out by means of structured equations modeling and with respect to small statistical sample size, Smart PLS Software has been utilized. Statistical population of this study includes headquarters of insurance companies locating at Qom Province. There are twenty insurance headquarters in this province with five directors each of them manages a group of 100 personnel in statistical population in current research. Statistical sample in this study comprises of 75 CEOs from insurance headquarters at Qom Province. Given the sampling technique is a type of available sampling technique, out of total questionnaires that were sent to CEOs in industry headquarters at Qom Province, 75 questionnaires were completely filled out and the rest 25 questionnaires were not filled out because of non-cooperation by the given directors. Method of questionnaire was employed for data collection in this study. As a result, initially a questionnaire with 50 questions was administered and used according to Likert five-scale {very low (1) to very high (5)} and after review of reliability of questionnaire, 15 questions were deleted to enhance reliability and final questionnaire was extracted including 35 questions. It should be noted that Question-7 as well as Questions 26-33 are listed inversely (reverse order) in Table-3 and 5 was devoted to choice of Very Low and 1 was allocated to choice of Very High. After coordination of variables with research statistical population, the article was used for design of the given questions about environmental turbulence, establishment of strategic planning, period of plans, and uncertainty-reducing methods extracted from study of Silver blatt and Korgaonkar (1987) given by them regarding market strategic planning in turbulent business environment. The questions about variables of formalization and centralization were used and extracted from PhD treatise given by Rojooei (2011) under title of '***Analysis on marketing trend preconditions and consequences in Iranian insurance industry: Developing a conceptual model***'.

Reliability is concerned with this point that how much measurement tools may give the same results under the same conditions. Reliability coefficient varies from zero to one. As this coefficient approaches more to one, reliability of questionnaire will be greater. Method of Cronbach alpha coefficient has been used to determine reliability of test in this study. This technique is utilized to calculate internal consistency of measurement tool that measures different traits. If alpha coefficient is greater than 0.7, it denotes good reliability and if this figure varies from 0.5 to 0.7 the rate of reliability is at average level. Results of reliability of questionnaire are given in Table 2.

Table 2: Results of reliability for questionnaire

Variables (constructs)	Number of items	Cronbach alpha
Environmental turbulence	7	0.734
Developing (establishment) of strategic planning	4	0.834
Shorter period of strategic planning	8	0.866
Longer period of strategic planning	6	0.845
Organizational decentralization	4	0.840
Organizational formalization	4	0.784
Uncertainty- reducing methods (employing advisors etc.)	2	0.718
Sum of variables	35	0.879

With respect to Table 2, Cronbach alpha coefficient has been derived greater than 0.7 for all variables in the questionnaires and this indicates good reliability for research questionnaire.

Two types of construct validity and convergent validity are used for measurement of validity of questionnaire in Smart PLS Software. Construct validity denotes how much measurement tool measures a construct or trait with theoretical basis (Sarmad et al. 1999). In order to find what items express the given constructs (factors) (construct validity) in the current study, confirmatory factor analysis was utilized by the aid of Smart PLS Software. As rate of factor loading is closer to one in confirmatory factor analysis, in fact it denotes that the questions (items) of questionnaire have stronger relation to hidden variables and if rate of standard factor loading is zero this indicates lack of relation among question of questionnaire with hidden variable. Negative factor loading shows reverse relation in effect of question of questionnaire on hidden variable. If rate of factor loading is less than 0.4 it is assumed as small quantity that should be omitted (Bonitos et al. 2002).

The given results from confirmatory factor analysis are shown in Table 3.

Table 3: Results of confirmatory factor analysis for validity of questions in questionnaire

Variable	Item No	Items	Factor loading
Environmental turbulence	1	How much do requirements and requests of insurance agents vary in your company?	0.568
	2	To what extent competition exists between agents in your company?	0.729
	3	How much does competition exist for acquisition and attraction of customers in your company?	0.865
	4	How much are technological skills effective on organizational performance in your company?	0.753
	5	How much are present managerial skills inside organization of your company needed for future occupational tasks considered as important?	0.461
	6	To what extent different are units of your organization dependent on each other for advancement of goals in your unit?	0.521
	7	How much are organizational short term and long term objectives defined in strategic planning for your company?	0.414
Developing (establishment) of strategic plan	8	How much have you utilized a formal system for written planning during three past years?	0.693
	9	How much have used quantitative goals in your planning during three recent years?	0.772
	10	How much have you used of this parameter to measure your objective during three past years?	0.888
	11	How much have you utilized from formal procedures for auditing of your strategic planning during three past years?	0.887
Shorter period of strategic plan	12	To what extent do goals of your strategic planning emphasize in profitability in your company?	0.585
	13	To what extent do goals of your strategic planning emphasize in rise of sale in your company?	0.667

	19	To what extent does strategic planning of your company emphasize in promotions?	0.820
	20	To what extent do goals of your strategic planning emphasize in market researches in your company?	0.865
	21	To what extent do goals of your strategic planning emphasize in strategy of influence in market in your company?	0.909
	22	To what extent do goals of your strategic planning emphasize in market development strategy in your company?	0.826
	23	How much do you emphasize in product development strategy in corporate strategic planning?	0.515
	24	How much do you emphasize in diversification strategy in corporate strategic planning?	0.429
Longer period of strategic plan	14	To what extent do goals of your strategic planning emphasize in growth of capital in your company?	0.523
	15	To what extent is it emphasized in in rise of market share in strategic planning of your company?	0.456
	16	To what extent is it emphasized in purchase of other companies in strategic planning in your company?	0.724
	17	How much is it emphasized in corporate development in strategic planning of your company?	0.82
	18	To what extent is it emphasized in research and development (R&D) in strategic planning of your company?	0.618
	25	How much do you emphasize on a great strategy in corporate strategic planning that is composed of market influence, market development, product development, and diversification strategies?	0.782
Organizational decentralization	26	To what extent is someone hindered if s/he wants to make decision for his/ her own in this regard?	0.631
	27	How much are even partial decisions referred to higher person to acquire final answer?	0.914
	28	To what extent have you to ask your boss for permission for doing a task?	0.884
	29	How much have you to receive your boss's confirmation for making any type of decision as well?	0.742
Organizational formalization	30	To what extent can someone in your company make the related decisions without monitoring by others?	0.808
	31	How much is method of doing of tasks assigned to a person who does that job?	0.666
	32	How much are corporate personnel allowed to do most of tasks based on their own viewpoints?	0.814
	33	To what extent do corporate personnel enact the relevant rules and regulations for their tasks?	0.800
Uncertainty- reducing methods	34	How much do you use extraorganizational advisors in process of formulation of strategic plan for your company?	0.890
	35	To what extent do you utilize computer and mathematical models in process of formulation of strategic plan for your company?	0.876

Based on results of Table 3, it is identified that the quantities of factor loadings are greater than 0.4 for all of items relating to studied constructs and they are adequately important for measurement of their constructs so that one can rely on the given results by means of these questions.

Likewise, convergent validity is also used other than construct validity to confirm validity of measurement tools in Smart PLS Software (convergent validity). The convergent validity refers to this principle that the parameters of any construct are highly correlated to each other. AVE criterion is used for determination of convergent validity. The quantity of this coefficient may vary from 0 to 1 in which the quantities greater than 0.5 are accepted. The results of convergent validity are given in Table 4.

Table 4: Results of convergent validity

Construct (variables)	AVE
Environmental turbulence	0.504
Developing (establishment) of strategic plan	0.663
Shorter period of strategic plan	0.523
Longer period of strategic plan	0.511
Organizational decentralization	0.669
Organizational formalization	0.6
Uncertainty- reducing methods (employing advisors etc.)	0.78

With respect to results of Table 4, it can be concluded that the parameters of any construct are highly correlated to each other. Thus, the level of convergent validity is favorable for measurement tools.

4. Finding

4-1- Evaluation of structural model

The determination coefficient (R^2) is the first key criterion used in Smart PLS Software. Determination coefficient measures the relevance among described variance for a hidden variable compared with the total variance of that variable. Quantity of this variable also varies from 0 to 1 where the greater quantities of this variable are more favorable. The results of the given determination coefficients are shown in Table 5. It requires noting that determination coefficient is not proposed for independent variable of environmental turbulence and determination coefficient is only reported for dependent variables.

Table 5: Results of determination coefficient

Construct (dependent variable)	R^2
Developing (establishment) of strategic plan	0.147
Period of strategic plan	0.183
Organizational centralization	0.016
Organizational formalization	0.102
Uncertainty- reducing methods	0.087

Given the results of Table 5, it is identified that about 15% of variance are expressed for dependent variable of developing (establishment) of strategic planning by independent variable of environmental turbulence. Similarly, determination coefficients can be also interpreted for the rest of dependent variable.

4-2- Evaluation of model dispersion parameter

In order to measure the model and rate of fitness, parameter of model fitness is examined. The primary objective designated for use of modeling of structured equation is to find a theoretical model that statistically significant with theoretical and applied concept. The general criterion that has been designated for partial least squares technique is called goodness of fit parameter. Overall, this parameter determines how much a predetermined model is fitted for the derived data from sample and it indicates if the suggested model is fitted to the sample at best or not. The quantity of this parameter varies from zero to one where if it is equal or greater than 0.5 it shows fitting of model (Homan 2008). Goodness of fit index shown in Table is 0.52 that denotes fitness of model.

Table 6: Rate of goodness of fit index for fitting of structural model

Value of Goodness of Fit Index (GFI)	
Absolute index	0.52

4-3- Analysis of hypotheses

Structured equations technique has been employed as statistical method in this study in which research hypotheses were analyzed using goodness of fit model of structural equation. Path coefficients were initially calculated for analysis of hypotheses and then significance of these coefficients was examined by t-test statistic. If value of t-test statistic is greater than 1.96 (critical value at level 0.05) then the path and path coefficient are significant at confidence level 95% otherwise the given path coefficient will not be significant. It is noteworthy that value of path coefficient indicates power and potential of impact and its signs shows type of effect (direct or reverse). In order to examine research hypotheses, structured equation model was fitted in Diagrams 1 and 2 where the given details are shown in the following.

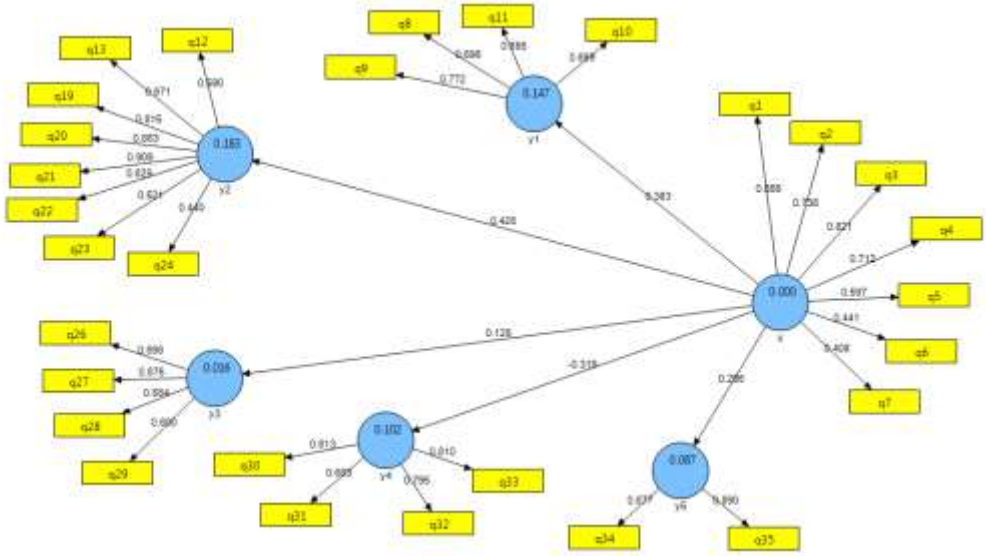

Diagram 1: Factor coefficients and path coefficients of model in research hypotheses

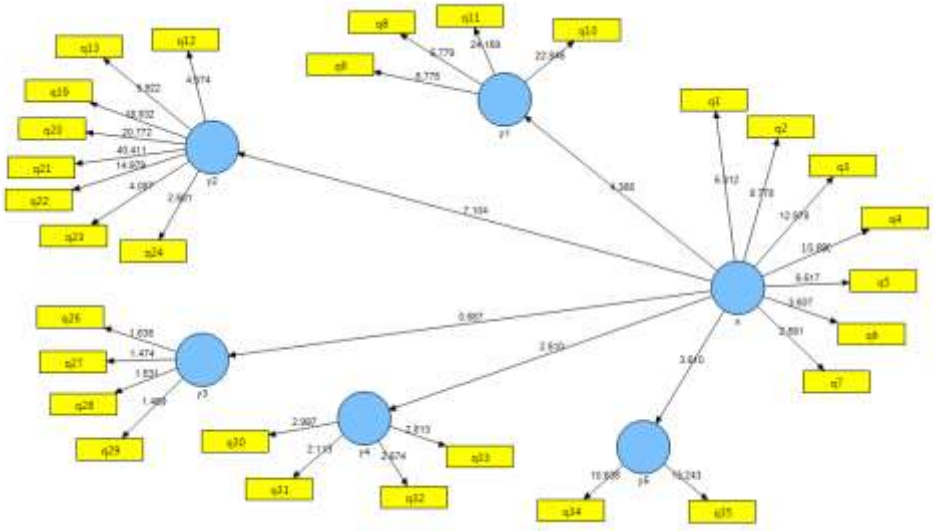

Diagram 2: Values of t-test statistic for model of research hypotheses

Where, in this model*Y1* denotes developing (establishment) of strategic planning, *Y2* expresses shorter period of strategic planning, *Y3* implies organizational decentralization, *Y4* as

organizational formalization, *Y5* is uncertainty- reducing methods (employing advisors etc.), and *X* is the environmental turbulence.

With respect to Diagrams 1 and 2, a summary of the given results of fitted model is shown in Table 7 where the research hypotheses are tested by means of results of this table in the following.

Table 7: Review on significance of path to test hypotheses

Hypotheses	Path	Path coefficient	Standard error	t-value (statistic)	Result of significance
First	Environmental turbulence → developing (establishment) of strategic planning	0.383	0.087	4.365	Significant
Second	Environmental turbulence → shorter period of strategic planning	0.428	0.06	7.104	Significant
Third	Environmental turbulence → organizational decentralization	0.126	0.182	0.687	Insignificant
Fourth	Environmental turbulence → organizational formalization	-0.319	0.122	2.61	Significant
Fifth	Environmental turbulence → uncertainty-reducing methods	0.295	0.081	3.61	Significant

As it observed, those paths are significant in which t-test statistic is greater than 1.96 in them. Thus, effect of variable of environmental turbulence on establishment of strategic plan, shorter period of plans, organizational formalization, and uncertainty- reducing methods was confirmed. The t-value statistic is smaller than 1.96 therefore effect of variable of environmental turbulence on organizational decentralization was not verified. The sign of path coefficient is positive in first and second hypotheses; namely, variable of environmental turbulence directly impacts on establishment of strategic planning, shorter period of plans, and uncertainty- reducing methods. Path coefficient is negative in fourth hypothesis; in other words, environmental turbulence inversely impacts on organizational formalization.

Result of testing first hypothesis:

Perception of directors of insurance companies from environmental turbulence may impact on developing (establishment) of strategic planning.

Testing of the given conducted hypothesis shows that environmental turbulence is directly related to establishment of strategic planning. Pursuant to finding answer to this question that 'is perception of directors from environmental turbulence effective on strategic tasks of construction companies?' Phua (2007) started his research and results of research have confirmed effect of perceived environmental turbulence by CEOs on types of strategic activities or tasks in companies. Therefore, impact of perceived environmental turbulence on establishment of planning is confirmed and it is consistent with the result derived from this investigation. The effect of variable of establishment of formal planning was not verified in study done by Rössler and Schneider (2010) under title of 'considering of a turbulent environment in strategic planning in organization: empirical analysis on strategic planning techniques in aeronautics industry' but coordination in execution of strategy was determined instead of long term strategy as the major role of strategic planning in turbulent environment. Strategic planning was perceived as an emergent, comparative, and learning-based process under uncertainty conditions so this is not

consistent with the results of this study. Silverblatt and Korgaonkar (1987) conducted a study titled 'strategic planning in turbulent business environment'. The results of study indicated that as business environment became more turbulent, plans would become more complete where it was consistent with the given result in this study. Ryder (2005) carried out an investigation called 'perceived environmental uncertainty: perception of concepts for strategy development process in PLC Barkley Bank' where the results of that study suggested overlooking of environment and in other words lack of effect of perceived turbulence and uncertainty on developing strategy and plans and this was inconsistent with result of this study.

Results of testing of second hypothesis:

Perception of directors of insurance companies from environmental turbulence may impact on shorter period of strategic plan.

Testing of the given hypothesis in this study shows that environmental turbulence has direct (positive) impact on shorter period of strategic plan. Silverblatt and Korgaonkar (1987) conducted a study titled 'Strategic planning of market in turbulent business environment'. The results of that study showed that as business environment was more turbulent, the trend of strategic plan of market became longer. Namely, higher turbulence is led to tendency of longer period of strategic planning so this was not consistent with the result of this study. Grant carried out a study about strategic planning in turbulent environment and concluded that plans became shorter by rise of turbulence and this was consistent with the result of this study. Looking for an answer to this question that 'if perception of directors from environmental turbulence was effective on strategic tasks of construction companies' Phua (2007) started his researchand found that it did not seem the companies were constantly more focused on strategic tasks such as long term planning process and research and development activities even when the rate of perceived environmental uncertainty is high so this might confirm second hypothesis of this study. In study done by Rössler and Schneider (2010) under title of 'considering of a turbulent environment in strategic planning in organization: empirical analysis on strategic planning techniques in aeronautics industry' they concluded that the short term outlooks might be more addressed so this is consistent with the result of this study.

Results of testing of third hypothesis:

Perception of directors of insurance companies from environmental turbulence may impact on rate of organizational decentralization.

Testing of conducted hypothesis in this study shows that perception of director of insurance companies does not impact on rate of organizational decentralization. Similar investigations have been carried out in this regard as follows. In a study titled analysis of effect of environmental uncertainty on structure of insurance companies, Austin (1999) concluded that despite of believing of directors of insurance organizations in placement in turbulent environment, they design a structure proportional to static environments i.e. they do not consider turbulence in designing of their structure. This finding is consistent with the result of this study. Also in a study titled analysis on relationship among environmental uncertainty and organizational structure of IRI Commercial Parent Company, safari (2011) concluded that environmental

uncertainty might directly and positively impact on centralization, formalization, and general strategies of organization. Namely, as turbulence is at higher level, decentralization became smaller. This finding is not consistent with the result of this study. Silverblatt and Korgaonkar (1987) conducted a study under title of 'strategic planning of market in turbulent business environment'. The results of that study showed that as business environment became more turbulent, decentralization is greater and this finding is not consistent with the result of this study. Grant (2003) conducted a study regarding strategic planning in turbulent environment and concluded that decentralization became greater as turbulence rose. This finding was not consistent with the result of this study. Hammad, Jusoh, and Ghazali (2013) carried out a study with title of 'decentralization, perceived environmental uncertainty, performance of management and information of management accounting system in Egyptian hospitals' and the results of the given study express decentralized structure in turbulent period.

Results of testing fourth hypothesis:

Perception of directors of insurance companies from environmental turbulence may impact on rate of organizational formalization.

Testing of the given hypothesis indicates that environmental turbulence has reverse (negative) impact on rate of organizational formalization. Similar studies have been conducted in this field as follows. Grant (2003) carried out a study regarding strategic planning in turbulent environment and concluded that the rate of formalization became lesser as turbulence increases where this finding is consistent with the result of this study. In an investigation under title of 'considering of a turbulent environment in strategic planning in organization: empirical analysis on strategic planning techniques in aeronautics industry', Rössler and Schneider (2010) concluded that formalization has been reduced in favor of flexibility in strategic planning processes where this finding is consistent with the result of this study. Mufudza, Jengeta, and Hove (2013 conducted a study under title of 'profitability of strategic planning in a turbulent economic environment as a case study in Zimbabwe during years 2007-2009' in order to determine feasibility of strategic planning in periods under turbulent economic conditions and they concluded that it is very difficult to progress strategic planning process under turbulent economic conditions although there are some necessary aspects in this process. The organizations can survive without serious persistence in execution of their strategic planning during period of serious turbulence of economic environment and this means reduction of formalization and this finding is consistent with the result of this study.

Results of testing fifth hypothesis:

Perception of directors of insurance companies from environmental turbulence may impact on their use of extraorganizational advisors and mathematical models and computer.

Testing of the given hypothesis in this study indicates that environmental turbulence has direct (positive) impact on directors' use of extraorganizational directors, mathematical models, and computer. Silverblatt and Korgaonkar (1987) carried out a study under title of 'strategic planning of market in turbulent business environment'. The results of their study showed that as business environment became more turbulent, directors used conceptual models, advisor, and

mathematical models and computer in process of strategic planning for their market. This finding is consistent with the result of this study. Similarly, Ouye, Kramer, and Douglas (1990) conducted a study about planning models for strategic facilities to turbulent environments under title of 'planning for unplanned cases' and concluded that use of computerized models might be effective in turbulent environment.

5. Discussion & Conclusion

With respect to noticeable growth in insurance industry in Iran and the given good performance during the studies years, strategic coordination of this industry with environmental uncertainties is comprehensible as a successful organization. Unlike other domestic and foreign industries, Iranian insurance industry has maintained organizational centralization under conditions of environmental turbulence. Given reduction of formalization, centralization is maintained by determination of macro goals, policies, and general guidelines of activities and missions. Among the similar previous researches, only Austin (1999) has dealt with analysis of effect of environmental uncertainty on structure of insurance companies and concluded that the directors do not consider turbulence in insurance organizations and they design structure with high centralization so this finding is consistent with result of this study. Results of other similar previous studies are not consistent with this result and it necessitates for conducting further research to use this coordination model in other organizations.

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