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The Relation between Diversification Strategy and Organizational Performance: A Research on Companies Registered to the Istanbul Stock Exchange Market

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Abstract

The aim of this study is to examine the relationship between applications of diversification strategies and organizational performance realized during the recent economic crisis. Rumelt classifies diversification strategies into concentric diversification, core business-based diversification, related diversification and unrelated diversification. Diversification strategy and organizational performance relationship seems to differ across the developed and developing countries under stable conditions. Studies on this relationship in developed countries carried out by the year 2000 yielded the generally accepted conclusion that the relationship between diversification strategies and organizational performance is in the form of an inverted U curve. It is observed that the researches carried out after 2000 are focused on determinants of the relationship. The result in developed countries is that the relationship between diversification strategies and organizational performance increases up to the medium value then shows a decrease in performance. However, there exist studies with the conclusion that the indicators of the relationship between diversification strategies and organizational performance of developed countries differ from the indicators of developing countries due to the effects of government and business relations, market, production, labor factors, and political economic variables. The universe of the research is determined to be a total of 318 companies listed on the Istanbul Stock Exchange o whose shares got traded in 2007. The dependent variable of the research is organizational performance and the independent variable is the measure of diversification. Rumelt's classification is utilized as a measure of diversification. Financial values of ROA and ROS are used as a measure of organizational performance. With regard to the findings of the research carried out in Turkey, the relationship between diversification strategies and organizational performance varies dependent on the developed countries.

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Keywords: Diversification strategy, organizational perfomance, diversification strategy in the emerging market, Rumelt's diversification measure;

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1. Introduction

Diversification strategy has been the subject of debates for many years. In his article “Product diversification and the public interest” published in Harvard Business Review in 1951, Andrews summarizes this phenomenon as follows "businesses operating in more than one sector will gain an advantage due to their activities among themselves thus creating an undesirable situation of mitigating/hindering competition for the businesses operating in the same industry " [1]. In 1987, as a result of research on 33 companies operating in the United States spanning the years 1950-1986 Porter expressed a contrary opinion: “The revenues of most of the companies are less than expected due to the corporate strategies they have implemented (in terms of diversification strategies) and contrary to the expectations of creating greater economic values, a reversed situation occurs showing decreased values [2].

Although research on the effect of diversification strategy on organizational performance is absent in Turkish literature, international researchers have many contributions on the issue. One of the first researches on this issue is "Diversification Strategy and Profitability,” by Rumelt, [3]. Betis has contributed with his study, “Performance differences in related and unrelated diversified firms” [4]. Porter's work of "Competitive Advantage Corporate Strategy" has also contributed to the diversification strategy [2]. Rumelt [3], Montgomery [6] (1982), Christensen and Montgomery [6], Markides [7,8], Chakrabarti and others in developing countries [9], Chang [10], Khanyanna and Palepu [11, 12, 13], Lins and Servaes [14], Shyu and Chen and many other researchers have examined the phenomenon of diversification strategy and organizational performance. A total of 82 prior researches were subjected to content analysis in a research carried out in 2000 by Palich and others [15]. Prior literature examining the relationship between diversification strategy and organizational performance claims this relationship to be an inverted U-shaped curve. Consequently, a nonlinear relationship between diversification and organizational performance can be deduced, that is, performance and diversification will increase concurrently until the degree of diversification increases up to an optimum level; the level the performance of the company will then start to decrease. Some of the factors such as the market sharing, joint and more efficient use of available resources and capacities, use of a similar product and process technology, production facilities, management capabilities, business programs positively affect the diversification and performance relationship [16, 15, 17,18].

In his research in 1990, Simmonds used ROA, ROE, ROIC for measuring performance, Rumelt’s classification for measuring diversification and SIC codes for the classification of diversification. Supporting the average model, his research suggests that the performance of a moderately diversified company is higher than the unrelated diversified one [19]. Palepu’s research, on the other hand, states that there is not a difference in performance between the related diversified company and unrelated diversified company. However, single business is lower than the others; therefore it is proposed that companies with an average related diversification may be more reliable in terms of company performance [20]. According to the results of the research carried out by Christensen and Montgomery, although difference between diversification groups is not significant, when evaluated in terms of ROA values, single business has the lowest performance level, while the highest value of ROA is associated with related diversified company. The performance value of dominant diversification is higher than the unrelated diversification [6]. On the other hand the findings of Bettis in his study are similar to those of Christensen and Montgomery that there is not any statistically significant difference among all diversification groups and only the average results resemble an inverted U shaped curve model [4].

On the contrary to above mentioned researches, some researchers claim the relationship is in the form of an inverted U curve model. Rumelt’s findings of a research on the 500 largest corporations in US

support this view. In his research Rumelt has used the Standard Industrial Classification (SIC-4 digit) code for related and unrelated diversification, the ROC for performance and his own classification for the degree of diversification. The attained result of the research that performance level of dominant and related diversified company is higher than the unrelated diversified company [3] supports the inverted U curve model.

In the research of Lubatkin and Chatterjee carried out in 1994 in which Stock Return Risk is utilized for performance it is concluded that there is a nonlinear relationship between performance and diversification. Accordingly, similar to Rumelt's findings the potential risk that a concentric company, core business based company and related diversified company may be exposed is lower than those of completely unrelated diversified companies. Conceivably, companies who seek to reduce the potential risk in relation to diversification should keep the diversification ratio in an optimal level [21]. According to the study by Markides in 1992, similar to the findings of Hoskisson and Hitt’s study in 1990, the relationship between diversification and performance is non linear and the performance of optimal diversification is higher than the low-level diversification and unrelated diversification [22].

According to the findings of recent studies carried out in developed countries such as US, Germany, Britain and Japan, diversification strategies does not augment the company value after the optimal level, on the contrary costs of engaging in diversification strategies start to climb up, exceeding the benefits, after the optimal level. However, in emerging markets, the potential benefits and costs arising from diversification, and also other criteria have an effect on performance level [14]. According to Khanna and Palepu, contrary to developed countries, corporate environmental factors such as gaps in the market in developing countries, business government relations, production markets and labor markets can be effective for businesses that have engaged in diversification strategy [12].

2. Diversification Strategy

Diversification strategy can be defined as “expanding or entering in new markets which are different from the firm’s existing product lines or markets" [23, 3]. Another definition of diversification strategy is "a strategy implemented by the top executives in order to achieve business growth by entering new businesses and attaining above-average returns by taking advantage of the incoming opportunities"[24].

Considered as a growth strategy the rationale of diversification, is for a company to explore new business areas that promise greater profitability. For a company to diversify, it needs to enter/expand in new markets or product lines which are related or/and unrelated to its existing businesses. Diversification strategy can be regarded as a basic growth strategy due to the quantative increase it generates in a company’s business operations [24].

2.1. Types of Diversification Strategy

Classification of diversification strategy in literature is done in different ways. Some authors classify diversification strategy as a growth strategy [25, 26]. On the other hand, while accepting diversification strategy to be a growth strategy, an important part of the literature has also resorted to a separate classification [24, 27, 23, 28]. The fact that the study on diversification has its own scope of research and classification in the literature has led a majority to the reception of diversification strategy as a separate and unique category [23]. Accordingly, there are two types of diversification, namely related and unrelated diversification.

Related Diversification: Can be defined as market expansion into new areas within the sector that comprises, but also differs from, the existing product lines and markets [23]. Related Diversification strategy can be divided into two subcategories: Horizontal and Vertical Diversification.

Horizontal Diversification: is the diversification closely related to firm's core business but is outside of its current market and product line [29]. The new business field may be complementary to an existing product line, a by-product of an existing product or another product that will introduce a competitive advantage for the company [23].

Vertical Diversification: In case when the production process takes place in more than one step, a firm's decision to perform one of these steps with its own facilities can be described as vertical diversification. Each of these steps may be through to the raw materials or to the customer [31]. Vertical mergers between businesses may be forwards or backwards. Within the value chain, the merger with raw materials is called backwards vertical diversification whereas such mergers with the final consumer is called the forward vertical diversification [29].

Unrelated diversification: Is entering in a new market, product line of the business which is not affiliated with the existing one. Though unrelated in terms of production and market, there may be a potential link between the new and existing fields of businesses [30]. Even though the expectation in related horizontal diversification is to generate synergy through strategic management and coherence, the primary expectation in unrelated diversification is the financial investment [29]. Unrelated diversified firms will have the advantages of growing into other businesses through diversification thus reducing the existing risks; being economic on shared services, albeit unrelated, such as the public relations, legal services, financial issues, the internal balance sheets; lowering transaction costs and exploiting the existing company's management skills [30].

3. Unrelated Diversification, Resources, Skills Of A Company And Organizational Performance Relationship

As mentioned above in unrelated diversification, there is not any relationship between the company's strategic business units in terms of technological or market relations. So why do companies prefer an unrelated growth? Can a company create any value by unrelated diversification? [30]. There are five basic factors that can be regarded as answers to such questions:

Risk Reduction: Companies whose products are threatened by the environmental uncertainty or in decline phase of their life curve can prefer to engage in an unrelated diversification to overcome the risk arising from current industries. Expanding its product line and activities to different sectors where the environmental uncertainty is reduced and, profitability is higher, a company may confirm its survival thus will make its cash flow more reliable [32].

Decrease in Transaction Costs: Considering each strategic business units of unrelated diversified businesses as profit centers, and the fact that top executives monitor each strategic unit, the top executives will have the opportunity to access all the available information regarding each independent business unit and the whole of the company at the lowest transaction cost [30]. One of such information is related to the control of the capital. The transaction cost in internal capital control will be less in unrelated diversification than in related diversification. Such as, in need of financial resource by the company or any strategic business unit, executives will be able to transfer it selecting from any of strategic business units of whose information is set to be available to them without any transaction cost [33].

Decrease in Costs of Service: Some activities such as legal services, public relations, the company's case security, internal audit, investment decisions can be performed centrally at company level for all strategic business units. Although there may not be a relation in operational sense, on behalf of the unrelated diversification strategy such activities can be cost-saving benefits [30].

Accessing management skills: Based on the claim, which needs a scientific support, that the executives have skills hard to achieve [30] promotes the idea that the successful executives of companies engaged in unrelated diversification will be successful in new investments [7]. In this perspective an executive that has the skill and knowledge to manage a single company may also have the ability to manage multiple businesses at the same time. This will be an advantage for the diversified business and will contribute to profitability [31].

Foreseeing Potential Environmental Opportunities (Exploiting inefficiencies in the market's valuation of companies): From time to time opportunities may arise for companies. These opportunities in some cases, are detected with rationale while in some cases may be based on intuition. An executive that feels he has enough knowledge may capture the opportunity of high profitability by investing in a new field by intuition [30]. Unrelated diversification can teach corporate executives how to create economic values in different product lines and markets. For instance, an executive of an unrelated diversified company who has sufficient environmental information can buy out another business which he considers as being profitable then re-structures and re-sells it so as to attain the expected profit [34].

3. Related Diversification, Resources, Skills Of A Company And Organizational Performance Relationship

According to Craig and Grant, a competitive advantage of related diversification will be possible only with sharing of non-physical and physical resources, proliferation of some management skills into the strategic business units [30].

3.1. Sharing Physical Resources

In related diversification there are two ways in which effect of performance based on physical resources is felt. First, the potential relationship between strategic business units can be identified and the utility of the resource can be enhanced so as to be utilized collectively by all the strategic units. Second, especially during the production process, already existing products which are complementary to each other can be commonly used. In both cases, the collective use of physical resources can help to provide cost savings for strategic business units [35]. In related diversified companies, advantageous physical resources refer to the resources such as the production area and technical equipment that have the flexibility to be used in common. For the common use of these resources the industries needs to be related or similar to each other [36].

3.2. Sharing Intangible Resources and Transfer of Skills

In this section it is claimed that even a simple transfer between the units of a related diversified company would benefit all of its strategic business units; and here the sharing of nonphysical resources and transfer of skills will be examined.

Brand and Reputation: Since the customers are already familiar with the products manufactured by the existing strategic business unit [37], the company's well-known brand value contributes positively to the performance of strategic business units. Reputation, independent of brand, refers to people’s awareness of the firm’s quality, etc. The expansion of a company with a reputation in the related field will contribute to company’s competitive advantage [30].

Technology: It refers to the evaluation of the company’s existing technological capabilities so as to contribute to its growth and competitive advantage. The companies aware of their technological superiority can invest in new areas after analyzing where and how to use their superiority[38]. In particular, the method applied by the Japanese technology companies such as Canon, Matsushita, Fujitsu, Toshiba, Sony, and such giant companies set the examples. Canon is noteworthy among these firms as it has realized large proportion of growth in the last two decades by using its technological ability [39].

Marketing Capability: Companies may transfer their brand name as well as their marketing capabilities. Companies diversified in their ability of marketing research, distribution channel management, and new market access can gain competitive advantage. For instance, Philip Morris' diversification from tobacco products to beer, soft drinks (Seven Up), and processed food (Kraft and General Foods) is based on strong brand management, international marketing and market segment [30].

Operational Capability: It refers to the transfer of the capability of production of strategic business units to some other diversified business areas; more precisely that is the ability that one of the strategic business units has can be used by other units where the production process is similar [40]. For instance, with the effect of the transfer of the operational capabilities owned by units in Canon (Digital camera, camera, copier, and printer) significant increase in performance could be announced [39].

3.3. Sharing General Management Skills

In case of transfer or share of resources and capabilities among strategic business units of diversified companies some technical or market relatedness is needed. The capabilities transferred are not only functional skills but also are in relation to general management skills. Top executives can make some suggestions to business units regarding the general management skills and such suggestions do not necessitate a close relation or in other words a related diversification between strategic business units in terms of customer or in technical sense. General management skills encompass the idea that similarities in management skills are possible due to the collective use by corporate and strategic business unit managers [30].

4. Risks and Disadvantages Of Diversification Strategy

The risks and disadvantages of corporate diversification strategy will be examined as follows.

4.1. Bureaucratic Costs

One of the reasons for the failure of corporate diversification strategies stands out as the bureaucratic costs. It is possible to examine bureaucratic costs under two main headings. These are the number of businesses in portfolio and costs of coordination between businesses [33].

Number of businesses: Increases in the number of businesses in the company's portfolio may result in top executives' loss of control over the whole of the company thus deteriorations in performance happen. The main reason for the loss of this control appears to be the concept of limited rationality which refers to not having all the data required for rational decision-making. Increases in the number of business in the portfolio will have a mitigating effect on top executives' having substantial information to make rational decisions concerning all units of the company [41]. Without the necessary information required top managers can not allocate resources as needed by each separate unit. Transferring an extra resource to one of the strategic business units while another unit is in deficit set an example to such phenomenon [33].

Coherence between Businesses: Another bureaucratic cost is the coordination and coherence problem between the businesses. As mentioned in the sources section, sharing and transfer of resources, and the concept of content economy, are advantageous for businesses. Transfer of resources between the strategic business units requires an effective coordination system. Since the processes will be filled with bureaucratic procedures, increasing number of businesses in company's portfolio has an obstructive effect on determination, transfer and share of resources required by the units. Perhaps the most problematic point in this process is while the purpose is to determine the resources and utilize content economy; a contrary result that such process may result in the minimum utility from the mentioned resources may arise [33].

Other routine activities are also encountered as a cost element in the bureaucratic processes and procedures. Routine activities and procedures in a growing majority of organizations appear as an element of cost, and the difficulty of changing these processes can result in deteriorated business performance. For instance, in case that changes in the processes, strategy, product, innovation, creativity and structure require alterations in the basic level of operational activities of strategic business units, that will bring a unique coordination problem [41] and the effect of these fundamental changes may lead to problems deeper and more complicated [33].

4.2. Agency Problem

One of the foresights of this theory is that managers when not observed closely focus on selfish behaviors. In this case, the board of directors or shareholders will wish to control the managers for their own interests, whereas, with the delegation of power the directors will stand against this control. With increasing number of business units due to the corporate diversification strategy, it will be hard for the top executives and shareholders to control these units. Reasons for this power attorney based problem can be summarized briefly as follows. First, the managers and shareholders each will want to augment their own interests. In fact, the problem will arise at this very point. For instance, the manager who is accountable to shareholders could present the company more profitable, may prefer short-term benefits rather than the strategic benefits and exercise immoral behaviors so as to fulfill his individual interests. So, structure of

corporate ownership is an important problem. Researches show that the ownership structure is effective on the diversification strategy; however diversified companies with delegation problem have experienced problems in performance [42, 43].

4.3. Stock Return Risk

The findings of the prior research suggest that related diversification yields significant performance advantages and that related investments are relatively less risky and highly profitable to unrelated diversification [44]. However, this fact should not be inferred as related diversification always bears the outcome of low risk level and high profits since some researchers suggest related diversification can also generate undesirable results [4]. In each diversification strategy regardless of being related or unrelated diversified, albeit at different rates there is the problem of return risk. Differences in risk-return rates will vary depending on the sector, the company size, the number of businesses within the company and the degree of related diversification [45].

One of the reasons for bearing potential risks in diversification strategy is that some companies base their diversification strategy on with inaccurate rationale. Executives who decide for diversification strategy make their analysis on false grounds, like ignoring the curve of product life, which may lead to failure of the diversification strategy [33].

5. Relationship Between Diversification Strategies And Organizational Performance In Developing Countries

According to Khanna and Palepu, unlike in developed countries, corporate environmental factors such as gaps in developing country markets, business government relations, production, markets, labor market can be effectual for companies that have engaged in diversification strategy [12]. The possible effects of this strategy of diversification in developing countries and other environmental factors on organizational performance relationship can be expressed as follows.

Political and Economic Systems: Each country's political and economic systems and regulatory decisions will affect how that country operates in the economic sense, market structure, and the capital markets. For instance, in China, wage levels could be affected since workers in China can not establish independent trade unions and form an organized struggle. South African government supports the transfer of resources from their own country strongly as never before [46]. In Turkey, recent privatization policies are an example of the situation. Acceleration on the privatization policies in Turkey creates an opportunity for businesses who want to invest in new areas. After all, a profitable public enterprise can be sold regardless of being related or unrelated to a company’s current industry.

Faults in the market: The concept of market faults which implies the issue of what trouble buyers and sellers face in obtaining three basic informations has been debated for a long period of time. These 3 basic informations are: First, the communication infrastructure in developing countries is not sufficiently reliable, fast and developed. Second, manufacturers experience the problem of forwarding relevant information with regard to products they produce to the customer. Lastly mechanisms for the customers to check the accuracy of the information delivered about the products are not sufficient [12]. The fact that in developing countries conditions of perfect competition is not constituted may be a factor in steering businesses into unrelated diversification rather than related diversification. Underdeveloped sectors will

create advantageous conditions for unrelated diversification instead of making use of advantages associated with related diversification.

Government-Business Relations: There are differences in various applications of government policies that affect the relationship between diversification strategy and organizational performance across developed countries and developing countries. Laws and regulations in developing countries following a similar path to Turkey in privatization period can now and then be encouraging, compelling or deterring for companies to expand into new areas. Thus companies wishing to invest in an area review their investment decisions. On the other hand, relations with the government can be important in developing countries to overcome bureaucratic problems and facilitate relations [12]. Incorporation of the requests of large group of diversified enterprises into government economic programs or using their priorities for allocation of resources can be types of government and business relations.

Financial Markets: In Turkey, as well as in developing countries, inadequate financial controls and delusive financial statements will affect diversification and performance relationship. In addition, firms choose investments they have control over since the intermediate elements such as effective financial analysts in markets, mutual funds, investment banks, and venture capital firms are inadequate in developing countries. In this case, the appropriate conditions raise the option of related or unrelated diversification [11]. Such factors arising from underdevelopment of financial markets is regarded to have a deterring effect on generating effective venture capital conditions in developing countries and on new entries to the market ([47].

Labor Market: In developing countries, another factor that may affect the relationship between diversification strategy and organizational performance is the labor market. In developing countries difficulties in finding well-trained employees needed for businesses appears to be a negative factor in diversification. On the other hand high employment rates (not necessarily facilitating finding qualified employee) may result in decreased costs of unqualified employee. The absence or impotence of the law regarding the labor market may affect factors such as unemployment insurance, job security, employee wages which consequently will have an obstructive effect on finding qualified employee needed by growing businesses, and because of the inadequate or ineffective legal regulations and applications the continuity of labor will be problematic [12]. On the other hand increased young population in Turkey enables employee wages and conditions to be in favor of the companies. Although the problems in finding qualified employees exist, when evaluated in terms of production costs young people inevitably will be a factor in lowering the costs. This situation will lead the companies to invest in business areas, though unrelated, that does not need qualified workforce.

Because of the conditions such as different levels of diversification of businesses in Turkey, diversification practices in line with government policies, macro-economic indicators, interest rate due to country risk, inflation policies and the fact that research covers the period of crisis suggest that a relationship outside of the general trends exists. Building on the fact that Turkey is a developing country; following hypotheses for the diversification and performance relationship are claimed after the theoretical examination.

H1: there is a significant difference between the types of diversification strategy and organizational performance measures of ROA (Return On Asset),

H2: there is a significant difference between the types of diversification strategy and organizational performance measures of ROS (Return On Sales)

6. A Research On Companies Listed On Istanbul Stock Exchange

6.1. Aim and Universe of the Study

Aim of this research is to determine whether there is a significant difference between types of diversification, i.e. concentric diversification, core business based diversification, related diversification and unrelated diversification, and performance values, i.e. ROA, ROS, and ROE. For this purpose, performance values of companies listed on ISE, and their diversification measures will be analyzed.

The research universe is the 359 companies listed on the Istanbul Stock Exchange Market and whose shares got traded in period of 2005-2009. The reason for the selection of companies listed on ISE is the opportunity that the balance sheets, ownership information and diversification levels required for their ROA, ROE and ROS calculations can be obtained reliably. Thus, the universe is designed to accommodate many industries. A sample group is not selected for the analysis; but full counting is carried out. Although shares of 359 companies were traded as of 2009, total data of 342 companies listed on ISE were analyzed since the 17 of them are excluded because of their fund traits.

6.2. Variables and Measurement Methods of the Research

The independent variable of the research is measure of diversification and dependent variable is organizational performance.

Diversification Measure: In this research Rumelt's classification is used for measuring diversification. According to Rumelt’s measure of diversification; *Specialization Ratio-SR*: The ratio of the strategic business unit or group with the highest revenue to total revenues of the company, *Relationship Ratio (Related Ratio-RR):* denotes to, analyzing the amount of revenues, the status of interrelatedness of the areas of the strategic business units that make up this amount; Rumelt's Measure of Diversification; Concentric Company (SR ≥ 0.95), Core business-Based Company (0.95> SR ≥ 0.70), Related Company (SR <0.70 and RR> 0.70), Unrelated Company (SR <0.70 and RR <0.70).

Data regarding the ownership of the companies, sectors of activity, field of activity is obtained from www.kap.gov.tr. In the light of this data, taking primarily ownership of companies into consideration the strategic business units in the same group were determined. The distinction between the designated categories of related and unrelated strategic business units is made within the framework 4-digit and 2-digit SIC code. According to this distinction the companies which are associated with a 4-digit were considered related and 2-digit ones considered unrelated. As stated earlier, in majority of prior studies (Rumelt, 1982; Palepu, 1985; Markides and Williamson, 1994; Markides, 1995; Busija and Zeithaml, 199; Chakrabartive al, 2007) SIC code within Rumelt’s classification is used for the related-unrelated discrimination.

Organizational Performance: Analysis to measure organizational performance, financial measures utilized and reasons for using these measures are summarized below.

Researches in which Performance is measured by ROA (Return on Assets); ROA is accepted as an important indicator to measure the effectiveness of management by the researchers that measure organizational performance by ROA value only. In addition, external shareholders and business managers who need the performance of the business organization express that ROA is a sufficient criterion to evaluate the performance of organization [48, 49, 50, 51, 33]. On the other hand, according to Rumelt, Christensen and Montgomery ROA is a standardized measure of performance [49]. This rate shows to

what extent the assets are used effectively in other words how much revenue can a company make over its assets.

Researches in which Performance is measured by ROS (Return on Sales); the reason that researchers use the ROS value only or with other financial measures for organizational performance is that the ROS ratio is calculated after deducting taxes and other expenses. The ROS value is accepted as an important factor in measuring the efficiency of operational activities [20, 8, 7, 17].

6.3. Frequencies for Diversification in period of 2005-2009, ROA and ROS Values

At Table 1, the frequencies according to the extent of diversification, operating frequency in each measure of diversification and indicators of the average performance in each measure of diversification of the enterprises within the research, are presented. As table illustrates, in the 2005-2009 period, 99 companies of the total 128 listed on ISE are concentric diversified with encompassing 101 businesses, 15 of the total 128 are single business with encompassing 52 businesses, 5 of the companies are related diversified with 14 businesses and 9 companies of the total 128 are unrelated diversified including 59 businesses. Based on the data, concentric diversified companies, total of 101, have the highest ratio of 77.3% among the groups.

Table 1. Frequencies for Diversification in 2005-2009 period, ROA, ROS values

Diversification Measure	Company level		Business level		Performance Indicators	
	Frequency	Percentage	Frequency	Percentage	ROA	ROS
Single	99	77,3	101	44,69	,0199	,0238
Dominant	15	11,7	52	23,0	,0382	,1155
Related	5	3,9	14	6,19	,0807	,1282
Unrelated	9	7,0	59	26,1	,0628	,0679
Total	128	100	226	100	-	-

6.4. 2005-2009 period Diversification Measures, ROA, ROS Relationship

The relation between the measure of diversification and ROA, ROS, ROE can be seen in Figure 1 for the period 2005-2009. The vertical axis shows the average values of ROE, ROS, and ROA while the horizontal axis shows the measure of diversification.

Figure 1 illustrates that ROA, ROS, and ROE values of the unrelated diversified group and the concentric business are close to each other during 2005-2009. The fact that the ROS value is relatively better than other performance indicators of ROA and ROE in core business based diversification and related diversification groups consequently leads to the conclusion that the core business based diversification group is relatively successful in operational activities in the 2005-2009 period.

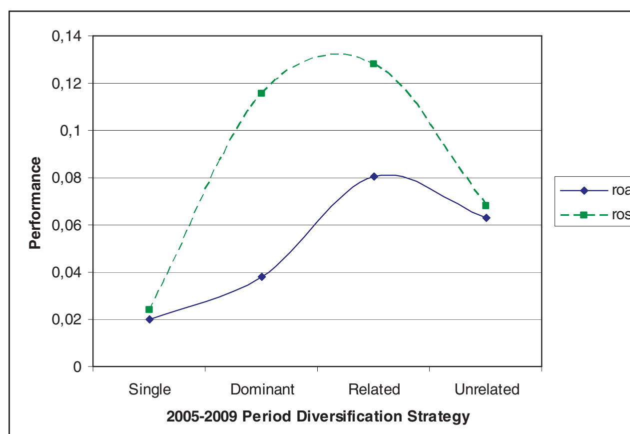

Figure 1. 2005-2009 Diversification Measures and ROA, ROS Relationship

6.5. Diversification Strategy and Return on Assets (ROA)

According to the results of Kruskall Wallis analysis applied to test Hypothesis 1, the 5% error margin return on asset diversification strategy showed significant difference (Chi-Square = 9,871, p = 0.020). According to the results of the research in which Hypotheses 1 is partially confirmed there is a significant difference between measures of diversification strategy and active profitability. Accordingly, the related diversification of businesses have the highest return on asset, businesses concentrated has the lowest return on assets. When diversification measures are evaluated by the subcategories, there is a significant difference in performance only between unrelated diversification and concentric diversification that is the performance level of unrelated diversified companies is higher than concentric diversified companies.

Table 2. 2005-2009 Period Diversification Strategy Return on Assets (ROA)

Diversification Measure	Frequency	Percentage	Mean Rank	ROA	Kruskall Wallis	
Single	99	77,3	59,61	,0199	Test Statistics[a,b]	
Dominant	15	11,7	71,27	,0382	Chi-Square	9,871
Related	5	3,9	89,40	,0807	Df	3
Unrelated	9	7,0	93,22	,0628	Asymp. Sig.	0,020
Total	128	100		-	a. Kruskall Wallis Test	
					b.Grouping Variable:ROA	

6.6. Diversification Strategy and Return on Sales (ROS)

According to the results of Kruskall Wallis analysis applied to test Hypothesis 2, the 5% error margin return on asset diversification strategy showed significant difference (Chi-Square = 10.237, p = 0.017). According to the results of the research in which Hypotheses 2 is partially confirmed there is a significant difference between measures of diversification strategy and active profitability.

Table 3. 2005-2009 Period Diversification Strategy Return on sales (ROS)

Diversification Measure	Frequency	Percentage	Mean Rank	ROS	Kruskall Wallis	
Single	99	77,3	58,83	,0238	Test Statistics[a,b]	
Dominant	15	11,7	83,13	,1155	Chi-Square	10,237
Related	5	3,9	83,40	,1282	Df	3
Unrelated	9	7,0	85,33	,0679	Asymp. Sig.	0,017
Total	128	100		-	a. Kruskall Wallis Test b.Grouping Variable:ROS	

Accordingly, the unrelated diversified businesses have the highest return on sales while concentrated businesses have the lowest return on sales. Dual Comparisons of Diversification strategy measures were analyzed by Mann-Whitney test. According to the results of this analysis the height of profitability of sales by core business-based diversified enterprises over the concentric enterprises is statistically significant while a statistically significant relation among the other groups could not be identified.

7. Conclusion

Hypothesis 1 that describes the relationship between measure of diversification and organizational performance is partially supported when the findings of this research were evaluated in terms of ROA. However, when evaluated by the subcategories, it is revealed that the only significant difference in performance is between unrelated diversification and concentric diversification, and that performance level of the unrelated diversified company is higher than those of the unrelated diversified company. On the other hand, Chakrabarti, and others, examining six countries in Asia has elicited that the relationship between organizational performance and the diversification strategy differ in terms of countries. According to this research, a positive correlation between performance and diversification exits in India, a negative relationship exists in Korea and Japan and that this relationship is found to be statistically significant in three countries. On the other hand, results of the same research suggested that in developing countries of Malaysia and Thailand, corporate environmental factors such as the national income and sectoral ROA affect this relationship. In Singapore, the fact that the existence of such relationship is not statistically supported is revealed [9]. Another research supporting the findings of not eliciting significant results in researches carried out in developing countries, by Chakrabarti and others is an analysis made in Taiwan based on Tobin's q. According to this research there is not a statistically significant difference between each diversification strategy and organizational performance measures [52].

Hypothesis 2 that claims the presence of statistically significant differences between the measures of diversification and ROS is partially supported, but only one of the binary comparisons for the sub-hypotheses were found to be statistically significant. In the light of these results, sales profitability is higher in core business based diversified companies than in concentric companies. Examining on average, although ROS values of related and unrelated diversified companies are higher than the concentric diversified companies, statistically significant results could not be attained.

Overall analysis of the research reveals that the performance averages only by the developing countries seems to have similar characteristics. However, it is observed that the performance indicators of related diversified companies are not statistically significant from performance indicators of other

diversified companies. As emphasized by the researches mentioned above concerning the developing countries, the reason for such insignificance appears to stem from conditions that are thought to be differentiated in Turkey. The relationship between diversification and performance is thought to be affected by factors such as some of the privatization policies in Turkey, working conditions, crises conditions that coincide with the period of research, absence of perfect competition conditions markets in Turkey, some sectors in developing countries being at the end of product life cycle curve while being at point of entry in Turkey. Within the framework of the results emerging from this study, the following recommendations are proposed to researchers and executives: Results of this research can stimulate new researches into.

Validation of any significant difference in the relationship between organizational performance and the diversification measures regarding the developed and developing countries including Turkey.

Causes of the high ROA value in unrelated diversification compared to ROA in concentric companies, Causes of high ROA and ROS values in related diversified companies than other diversification measures, and causes of being statistically insignificant in countries such as America and Great Britain,

References

[1] Andrews, Kenneth R. (1951), 'Product Diversification and Public Interest', Harvard Business Review July: 91-107.
[2] Porter, Michael E. (2001) 'From Competitive Advantage to Corporate Strategy', Harvard Business Review May-June 1987:35-66.
[3] Rumelt, Richard P. (1982), 'Diversity and Profitabilit', Strategic Management Journal 3(4):24-36.
[4] Bettis, Richard A. and Vijay Mahajan (1985), Risk/Return Performance of Diversified Firms, Management Science 31(7):785-99.
[5] Bettis, Richard A. (1981), 'Performance Differences in Related and Unrelated Diversified Firms', Strategic Management Journal 2:379-93.
[6] Christensen H. Kurt and Cynthia Montgomery (1981) 'Corporate Economic Performance: Diversification Strategy Versus Market Structure', Strategic Management Journal 2:327-343.
[7] Markides Constantinos C. (1995), 'Diversification, Refocusing an Economic Performance', Strategic Management Journal 16(4):76-89.
[8] Markides Constantinos C. (1995), 'Diversification, Restructuring and Economic Performance', Strategic Management Journal 16(2):101-118.
[9] Chakrabarti, Abhirup, Kulwant Singh and Ishtiaq Mahmood (2007), 'Diversıfication and Performance: Evidence From East Asian Firms', Strategic Management Journal 28:101-120.
[10] Chang, Juichian (2007), 'International Expansion path, Speed, Product Diversification and Performance Among Emergin-Market MNEs: Evidence from Asia-Pacific Multinational Companies', Asian Business&Management 6:331-53.
[11] Khanna, Tarun and Krishna Palepu (2000), 'Is Group Affiliation Profitable in Emerging Markets? An Analysis of Diversified Indian Business Group', The Journal of Finans 55(2): 867-91.
[12] Khanna, Tarun and Krishna Palepu (1997), 'Why Focused Strategies May be Wrong For Emerging Markets' Harvard Business Review July-August: 41-51.
[13] Khanna, Tarun and Krishna Palepu, (2000), 'The Future of Business Groups in Emerging Markets: Long-Run Evidence From Chile' Academy of Management Journal 43(3): 268-285.
[14] Lins Karl V and Henri Servaes (2002) 'Is Corporate Diversification Beneficial in Emerging Markets?', Financial Management 31(2):5-31.
[15] Palich, Leslie E., Laura B. Cardinal and C. Chet Miller (2000) 'Curvilinearity in the Diversificationperformance Linkage: An Examınatıon of Over Three Decades of Research', Strategic Management Journal 21:155-174.
[16] Nayyar, Praveen R. (1992), 'On The Measurement of Corporate Diversifıcation Strategy: Evidence From Large U.S. Servıce Firms', Strategic Management Journal 13(3):219-35.
[17] Markides Constantinos C. and Peter J. Williamson (1994), 'Related Diversification, Core Competences and Corporate Performance', Strategic Management Journal. 15:149-65.
[18] Markides Constantinos C. and Peter J. Williamson (1996), 'Corporate Diversification and Organizational Structure: A Resource-Based View', Academy of Management Journal.39(2):340-67.
[19] Simmonds, Paul G. (1990), 'The Combined Diversification Breadth and Mode Dimensions and the Performance of Large Diversified Firms', Strategic Management Journal 11(5):399-410.

[20] Palepu, Krishna (1985) 'Diversification Strategy, Profit Performance and the Entropy Measure', Strategic Management Journal 6:239-255.

[21] Lubatkin Michael and Sayan Chatterjee (1994), 'Extendig Modern Portfolio Theory Into The Domain of Corporate Diversification: Does It Apply?', Academy of Management Journal 37(1): 109-36.

[22] Markides, Constantinos C. (1992), 'Consequence of Corporate Refocusing: Ex Ante Evidence', Academy of Management Journal. Vol:35(2), 398-412.

[23] Johnson, Gery, Kevan Scholes (2002), Exploring Corporate Strategy Text and Cases, Edinburg: Pearson Education Press.

[24] Ülgen, Hayri ve S.Kadri Mirze (2004), İşletmelerde Stratejik Yönetim, İstanbul, Literatür Yayınları.

[25] Eren, Erol (2000), İşletmelerde Stratejik Yönetim ve İşletme Politikası, İstanbul;.Beta Yayınları.

[26] Thompson, John L (2003), Strategic Management, Thomson Learning, Fourth Edition.

[27] Mintzberg, Henry and James Brian Quin (1992), 'The Strategy Process Concepts and Contexts', Prentice Hall International Press.

[28] Dess, G. G., Lumpkin, G. T. and Taylor, Marilyn L. (2004), Strategic Management: Text And Cases, New York; Mcgraw-Hill, International Edition.

[29] Wright, Peter, Mark J. Kroll and John A. Parnell (1998), Strategic Management Concepts and Cases, London:Prentice Hall.

[30] Craig, James C. and Robert M. Grant (1993), Strategic Management, Kogan Page Limited, London.

[31] Miller, Alex and Gregory, G. Dess (1996), Strategic Management, The Mcgraw-Hill Companies, Second Edition.

[32] Tihanyi, Laszlo Richard A. Johnson, Robert E. Hoskisson and Michael A. Hitt (2003), 'Institutional Ownership Differences and International Diversification: The Effects of Boards of Directors and Technological Opportunity', Academy of Management Journal 46(2):195-211.

[33] Hill, L.Charles and Jones, Gareth R. (1998), Strategic Management – An Integrated Approach, MA: Houghton Mifflin Company, Boston.

[34] Hill, L.Charles and Jones, Gareth R. (2007), Strategic Management – An Integrated Approach, MA: Houghton Mifflin Company, Boston.

[35] Farjoun, Moshe (1998), 'The Independent and Joint Effects of The Skill and Physical Bases of Relatedness in Diversification', Strategic Management Journal. 19:611-630.

[36] Chatterjee, Sayan and Birger Wernerfelt (1991). 'The Link Between Resources and Type of Diversification: Theory and Evidence', Strategic Management Journal 12(1):33-48.

[37] Cohen, Jeffrey (2005), Intangible Assets;Valuation and Economic Benefit, Canada;John Wiley &Sons.

[38] Chiu, Yi-Chia, Hsien-Che Lai, Tai-Yu Lee and Yi-Ching Liaw (2008), 'Technological Diversification, Complementary Assets and Performance', Technological Forecasting & Social Change 75:875-92.

[39] Watanabe, Chihiro and Jae Yong Hur, Kiyofumi Matsumoto (2005), 'Technological Diversification and Firm's Techno-Economic Structure: An Assessment of Canon's Sustainable Growth Trajectory', Technological Forecasting & Social Change 72(1):11-27.

[40] Helfat, Constance and Eisenhardt, Kathleen (2004), 'Inter-Temporal Economies of Scope, Organizational Modularity, and the Dynamics of Diversification', Strategic Management Journal 25:1217-32.

[41] Hoskisson, Robert E. , Michael A. Hitt and Charles W. L. Hill (1991), 'Managerıal Risk Taking in Diversified Firms: An Evolutıonary Perspectıve', Organization Science. 2(3):296-317.

[42] Lane, Peter J., Albert A. Cannella, Jr., and Michael H. Lubatkin (1998) 'Agency Problems as Antecedents to Unrelated Mergers and Diversification: Amihud and Lev Reconsidered', Strategic Management Journal 19:555-578.

[43] Denis, Davıd J., Dıane K. Denis and Atulya Sarın (1999), 'Agency Theory and the Influence of Equıty Ownershıp Structure on Corporatedıversıfıcatıon Strategıes', Strategic Management Journal 20:1071-76.

[44] Chiu, Yen-Chen (2007), 'Corporate Dıversıfıcatıon and Rısk Management: Methodologıcal Approach' Joumal of Financial Management and Analysis 20(2):1-6

[45] Chang, Yegmin and Howard Thomas (1989), 'The Impact of Dıversıfıcatıon Strategy on Rısk-Return Performance', Strategic Management Journal 10: 271-84.

[46] Khanna, Tarun and Krishna Palepu, (2005), 'Strategies That Fit Emerging Markets', Harvard Business Review June:63-76.

[47] Mishra Anurag and M. Akbar (2007), 'Empirical Examination of Diversification Strategies in Business Groups Evidence From Emerging Markets', International Journal of Emerging Markets 2(1):22-38.

[48] Tihanyi, Laszlo Richard A. Johnson, Robert E. Hoskisson and Michael A. Hitt (2003), 'Institutional Ownership Differences and International Diversification: The Effects of Boards of Directors and Technological Opportunity', Academy of Management Journal 46(2):195-211.

[49] Dubofsky, Paulette and P. "Rajan" Varadarajan (1987), 'Diversification and Measures Of Performance: Additional Empirical Evidence', Academy of Managewent Journal 30(3):597-608.

[50] Kim Hicheon, Robert E. Hoskisson, and William P. Wan (2004), 'Power Dependence, Diversification Strategy, and Performance in Keiretsu Member Firms', Strategic Management Journal. 25(7):613-36.

[51] Ravichandran, T. Yu Liu, Shu Han, and Iftekhar Hasan (2009), 'Diversification and Firm Performance: Exploring the Moderating Effects of Information Technology Spending', Journal of Management Information Systems 25(4):205-240.

[52] Y-Ching Chiao, Chow Ming Joseph Yu, Yi-Chuan Chen (2008) 'Sunsidary Size, Internationalization, Product diversification and Performance in an Emerging Market', International Market Review 25(6):612- 633.