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The Effects of Family-Business Related Characteristics and Strategic Planning on Corporate Entrepreneurship

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Abstract

This study investigates the relationships between family-business related characteristics, strategic planning and corporate entrepreneurship in family firms. The effects of four characteristics (willingness to change, generational involvement, perceived technological opportunities, competitive aggressiveness) one of which (competitive aggressiveness) that has not been considered before is examined. Findings suggest that all the factors, except for generational involvement have a positive effect on corporate entrepreneurship. Willingness to change is found to have the most important effect on corporate entrepreneurship. Also strategic planning found to have a positive effect on corporate entrepreneurship.

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Keywords: Family-business related characteristics, willingness to change, generational involvement, perceived technological opportunities, competitive aggressiveness, strategic planning, corporate entrepreneurship

1. Introduction

In the literature on entrepreneurship, corporate entrepreneurship is well-defined concept that has been widely studied in the last few decades (Casillas and Moreno, 2010) and it is seen as an important concept that effects a firm's long term competitiveness and innovation (Hitt et al., 1999).

The relationship between family-business characteristics has been explored and positive effect of some factors such as willingness to change and perceived technological opportunities on corporate entrepreneurship has been found. In this study, according to Weismeier-Sammer (2011) and Miller (1983) suggestions, competitive aggressiveness is also added to the research model. Also the effect of strategic planning on corporate entrepreneurship is examined.

Kellermanns and Eddleston (2006) examined how generational involvement, willingness to change and perceived technological opportunities impact corporate entrepreneurship. Their results revealed

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statistically significant positive relationship between willingness to change and perceived technological opportunities on corporate entrepreneurship. Generational involvement seemed to have no significant positive effect on corporate entrepreneurship. They also showed that strategic planning exhibits a moderating effect on this relationship.

In their study, which is the replication of Kellermanns and Eddleston's (2006) study, Weismeier-Sammer (2011) also found support for the same results, except for the moderating effect of strategic planning. As a result of her findings Weismeier-Sammer (2011) suggests that the moderating effect of strategic planning should be investigated.

This study aims to test this suggestion and compare the results with Kellermanns and Eddleston (2006) and Weismeier-Sammer (2011) findings. Thus in this study the relationship between four family-business related characteristics one of which (competitive aggressiveness) that has not been considered before and corporate entrepreneurship is being examined.

Another contribution of this paper is to test this relationship in a different culture and enhance generalization of results. Weismeier-Sammer (2011) points that it is very important to test same research models on different cultures, both for generalizations of results and to overcome the prevalence of U.S. based samples.

In line with these suggestions our research model is presented below;

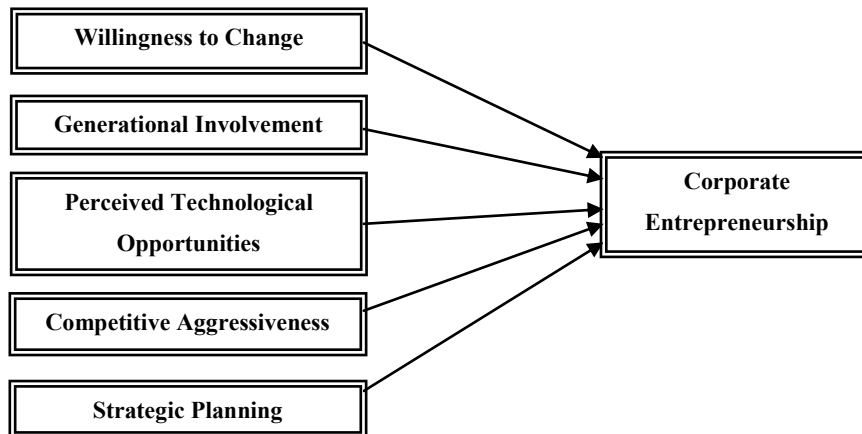


Figure 1: Research Model

2. Literature Review and Hypotheses

2.1. Corporate Entrepreneurship

Corporate entrepreneurship has emerged as a major concept within both strategic management and entrepreneurship literatures (Lumpkin and Dess, 1996).

Borch et al.(1999) defines entrepreneurial firms as “firms that have strategies related to innovation and growth, characterized by risk taking.” He also concludes that an understanding of a firm’s entrepreneurial posture can be studied through a corporate entrepreneurship approach and it is the firm behavior perspective that it uses to understand the innovation and entrepreneurship. Also he adds that firm behavior is more easy (than individual) to measure and is more manageable. Therefore it is more appropriate to consider firm behavior perspective while studying strategy.

Miller (1983) explains corporate entrepreneurship with product-market and technological innovation, risk taking and proactiveness. In line with Miller (1983); Kellermanns and Eddleston (2006) and

Weismeier-Sammer (2011) use these three dimensions to explain corporate entrepreneurship.

Kellermanns and Eddleston (2006) and Weismeier-Sammer (2011) examine willingness to change, generational involvement and perceived technological opportunities as antecedents of corporate entrepreneurship.

In this study, we also consider these three variables. In addition in line with Miller's suggestion that is the "...the leader can set the tone for competitive aggressiveness..." we also add competitive aggressiveness in our research model.

In this study, in line with Kellermanns and Eddleston (2006) and Weismeier-Sammer (2011), Miller's (1983) scale will be used, which contains seven items on corporate entrepreneurship.

2.2. Family-Business Related Characteristics

2.2.1. Willingness to change

Willingness to change is defined as culture that is open towards innovation and change. It is also seen as a crucial component of staying competitive (Weismeier-Sammer, 2011).

Family firms are recognized as a major source of technological innovation. Yet over time some family firms are observed to become conservative and unwilling to take risks associated with entrepreneurial activities (Zahra, 2005). Therefore it seems crucial for family firms to overcome the risk aversion, so they may stay competitive. In this study willingness to change is measured with 4 items which was adopted by Kellermanns and Eddleston (2006).

Since entrepreneurial firms are defined as "*firms that are characterized by risk taking...*" "willingness to change" degree of a firm is supposed to contribute to its corporate entrepreneurship. Therefore;

H1: Willingness to change is positively associated with corporate entrepreneurship of the firm.

2.2.2. Generational Involvement

Generational involvement refers to number of family generations simultaneously involved in the management of firm (Chirico and Sirman, 2010). Martin and Lumpkin (2003) stress generational involvement, as family orientation can transform corporate entrepreneurship when successive generations assume control. Corporate entrepreneurship's level may differ in family firms from first generation to next generation. Kellarmanss and Eddleston (2006) point that first generation family firms may have the least amount of corporate entrepreneurship and second and next generation may be more willing to join corporate entrepreneurship.

Generational involvement is often measured with one item [Weismeier-Sammer, 2011; Kellermanns and Eddleston 2006; Kellermanns et al., 2008; Ching-Hsu and Chang, 2011). In this study it is also measured with one item developed by Kellermanns and Eddleston (2006).

Since next (second) generation involved in management of family firm is proposed to increase the corporate entrepreneurship, we also propose that;

H2: Generational involvement is positively associated with corporate entrepreneurship of the firm.

2.2.3. Perceived Technological Opportunities

Mansfield et. all(2005) state that the concept of technological opportunity is "*a means of characterizing the potential inflows of technical knowledge.*" Zahra(1996;1720) represents technological opportunity as "*executive's perceptions of ability to support and generate growth opportunities through product and process innovations.*" Palmberg (2004) explains that technological opportunity "*...is often used to capture the sources of technical progress with special reference to developments in the sciences*

and technologies underlying innovation". Kellermanns and Eddleston (2006) define perceived technology opportunities as "firm's ability to see opportunities for innovation and research and development within one's industry".

In this study Keats and Hitt's (1988) scale will be used, which contains four items on perceived technological opportunity.

Entrepreneurial firms are described as "having strategies related to innovation and growth." Therefore the more a family firm perceives technological opportunities, the more its corporate entrepreneurship is likely to increase. Therefore;

H3: Perceived technological opportunities are positively associated with corporate entrepreneurship of the firm.

2.2.4. Competitive Aggressiveness

Covin and Covin (1990) point that competitive aggressiveness can have numerous and diverse strategic and tactical manifestations. They also indicate that identification of the types of aggressive strategies is a useful endeavor. Lumpkin and Dess (1996) define competitive aggressiveness as "a firm's propensity to directly and intensely challenge its competitors to achieve entry or improve position, that is, to outperform industry rivals in the marketplace." They explain that competitive aggressiveness is characterized by responsiveness and reflects a willingness to be unconventional. Therefore it is taken as an important antecedent of corporate entrepreneurship.

Covin and Covin's (1990) competitive aggressiveness scale which is consisting of 3 items will be used in this study.

Since corporate entrepreneurship is fundamentally about taking risk and making innovation, competitive aggressiveness is supposed to be closely related to a firm's corporate entrepreneurship. Therefore;

H4: Competitive aggressiveness is positively associated with corporate entrepreneurship of the firm.

2.3. Strategic Planning

Recently, strategic planning has become an important issue for organization. Numerous researchers and executives argue that strategic planning is an essential process for business of every size. Crawford and Ibrahim (1985) explain that strategic planning is the process by which the owner/manager of a small business systematically evaluates organizational capabilities and opportunities and risks present in the environment to carry out the intended mission successfully. Kudla (1980) points that strategic planning is the systematic process of determining the firm's goals and objectives for at least three years into the future and developing the strategies that will govern the acquisition and use of resources to achieve these objectives. Upton et. al. (2001) state that fast growth firms are more likely to engage in strategic planning than their slower growth counterparts. In this study strategic planning will be measured with Kellermanns and Eddleston (2006) scale which contains four items on strategic planning.

Kellermanns and Eddleston (2006) state that strategic planning is closely related to corporate entrepreneurship. Therefore we also propose that;

H5: Strategic planning is positively associated with corporate entrepreneurship of the firm.

3. Methodology

3.1. Research Goal

Corporate entrepreneurship is seen as an important concept that affects a firm's long term competitiveness and innovation (Hitt et al., 1999). Therefore to be able to increase corporate entrepreneurship it is crucial to reveal its antecedents. Since every firm aims to stay competitive via making innovations, corporate entrepreneurship may serve as a useful tool for this purpose.

Kellermanns and Eddleston (2006) indicate that in examining corporate entrepreneurship in family firms, a family perspective that considers family members' attitudes and values is necessary. Research results reveal that some family-related factors such as willingness to change, competitive aggressiveness lead to innovation and competitiveness [Weismeier-Sammer 2011; Lumpkin and Dess, 1996]. Also generational involvement which is also taken as a family-related factor is supposed to increase competitiveness indirectly via corporate entrepreneurship. Therefore family-related factors are assumed to increase corporate entrepreneurship which will affect a firm's long term competitiveness.

Strategic planning is also assumed to increase corporate entrepreneurship (Kudla, 1980). Therefore as corporate entrepreneurship is an important concept for firm's competitiveness; this study aims to reveal it's antecedents by examining the affects of family-business related characteristics and strategic planning on corporate entrepreneurship.

3.3. Participants

The survey of this study has been conducted on micro enterprises in Istanbul industrial sites. Firms fulfilling the criteria that being managed with at least two family members have been considered as family firms and were included in the study. 128 firms were participated in the survey.

4. Results

First of all zero-order correlations were calculated; these are portrayed in Table 1, together with the means and standard deviations.

Table 1: Correlation matrix, means and standard deviations (n = 128).

	Mean	Std.Dev.	1	2	3	4	5	6
1. Ownership	1.41	0.49						
2. Willingness to Change	5.68	1.35	-0.145					
3. Generational Involvement	1.83	0.42	0.341**	0.015				
4. Perceived Techn. Opp.	5.10	1.53	-0.022	0.308**	0.035			
5. Comp. Aggressiveness	4.14	1.63	0.102	0.115	0.110	0.263**		
6. Strategic Planning	6.36	0.85	-0.186*	0.432**	-0.139	0.210*	0.110	
7. Corp. Entrepreneurship	5.31	1.21	-0.077	0.512**	0.071	0.454**	0.284**	0.445**

*p < 0.05, **p < 0.01

Together with multiple regression analysis of the model proposed in the original study, variables were tested on multi-collinearity by calculating the variance inflation factors (VIF) and condition indexes. The VIFs for all variables were just slightly above one, the highest condition index equaled 1.33. Therefore, both criteria for multi-collinearity concerns were far below critical values (Urban and Mayerl, 2008).

To control for common method bias in line with the original study, the Harman's single-factor test was conducted, although the explanatory power of it is controversial and no single factor emerged in exploratory factor analysis (EFA) (Padsakoff et al, 2003). In line with Knight (1997), in international studies it is important "to evaluate the dimensionality of the scales" and to control for factor structures and loadings (Knight 1997). Two separate EFAs using VARIMAX rotation were conducted for the dependent variable (corporate entrepreneurship), the independent variables (willingness to change, generational involvement, perceived technological opportunities, competition aggressiveness, and strategic planning) following generally accepted procedures. One item of competitive aggressiveness

(third question) and one item of perceived technological opportunities (third question) were removed due to low communalities (<0.50). Table 2 shows the constructs and their respective factor loadings establishing a consistent factor structure.

Table 2: Rotated component matrix.

	CE	WTC	SP	PTO	CA	GI
CE_2	0.711					
CE_4	0.669					
CE_6	0.646					
CE_1	0.641					
CE_5	0.609					
CE_7	0.592					
CE_3	0.590					
WTC_3		0.833				
WTC_2		0.814				
WTC_4		0.731				
WTC_1		0.713				
SP_2			0.880			
SP_1			0.820			
SP_3			0.708			
SP_4			0.700			
PTO_2				0.844		
PTO_4				0.829		
PTO_1				0.717		
CA_2					0.810	
CA_1					0.804	
GI						0.918
Cronbach's alpha (0.875)	0.837	0.836	0.826	0.799	0.602	-
% of variance explained (69.583)	15.758	15.254	14.030	11.403	7.697	5.441

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.834

Bartlett's Test of Sphericity: Approx. Chi-Square = 1.250E3, df = 210, Sig. = 0.000

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

CE: Corporate Entrepreneurship; WTC: Willingness to Change; SP: Strategic Planning; PTO: Perceived Technological Opportunities; CA: Competitive Aggressiveness; GI: Generational Involvement.

Finally, two regression models were tested and are presented in table 3. In model 1, the dependent variables willingness to change, generational involvement, perceived technological opportunities, and strategic planning were added. For this model, three variables showed significant positive impact on dependent variable: willingness to change ($\beta=0.305$, $p<0.001$), perceived technological opportunities ($\beta=0.300$, $p<0.001$) and strategic planning ($\beta=0.263$, $p<0.01$).

Table 3: Results of regression analysis^a (n=128).

	Corporate Entrepreneurship	
	Model 1	Model 2
Willingness to Change	0.305 ^{***}	0.303 ^{***}
Generational Involvement	0.091	0.078
Perceived Technological Opportunities	0.300 ^{***}	0.267 ^{***}
Strategic Planning	0.263 ^{**}	0.252 ^{**}
Competitive Aggressiveness		0.143 [*]
ΔR^2	0.415 ^{***}	0.019 [*]
R^2	0.415	0.434

Adjusted R^2	.396	.411
F	21.642***	18.561***

^a Standardized regression weights. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Thus, hypothesis 1, 3 and 5 were supported. No significant relationship between generational involvement and corporate entrepreneurship could be observed. Therefore, hypothesis 2 found no support ($\beta=0.091$, not significant).

In model 2, all the independent variables (willingness to change, generational involvement, perceived technological opportunities, competitive aggressiveness and strategic planning) were added. For this model, again a significant change in R^2 (adjusted value) was observed (ΔR^2 : 0.019, $p < 0.05$).

Four variables showed significant positive impact on dependent variable; willingness to change ($\beta=0.303$, $p < 0.001$), perceived technological opportunities ($\beta=0.267$, $p < 0.001$), strategic planning ($\beta=0.252$, $p < 0.01$), competitive aggressiveness ($\beta=0.143$, $p < 0.05$). Thus, hypothesis 4 was supported. Generational involvement showed no significant effect on dependent variable ($\beta=0.078$, not significant).

6. Conclusion

Results of this study showed that family-business related characteristics and strategic planning have a positive effect on corporate entrepreneurship. Results of this study contribute to the field in many ways. First the positive effect of competitive aggressiveness on corporate entrepreneurship is revealed. Second similar to Weismeier-Sammer's (2011) findings and contrary to Kellermanns and Eddleston's (2006) findings, strategic planning found to have a direct effect on corporate entrepreneurship. And third, the antecedents of corporate entrepreneurship were tested in different cultural setting, thus the broader generalization for the results in this field is provided.

Some of the findings put forward the importance of culture. In our sample willingness to change found to have the most important effect on corporate entrepreneurship. However in Austrian and U.S. based sample perceived technological opportunities found to have the most important effect on corporate entrepreneurship.

The results reveal that Turkish family firms are open towards innovation and change. These results also reveal that considering Austrian and U.S. family firms, Turkish family firms are more risk taking and less conservative. This may be due to the economic conditions and uncertain environment of Turkey that forces family firms to be more dynamic and flexible.

However this study is not without limitations. First, the sample was consisting of 128 family firms operating in Istanbul, which can not represent the whole Turkish family firms. Second this study was conducted on micro enterprises. Further research may test the model on SME's.

Also this study has only considered one of the dimensions that make up the family business, that is, the number of the owner family members in the management of the firm. However, as Casillas and Moreno (2010) state, other dimensions of family business such as ownership structure, structure of the family group etc. can also be considered.

In line with Weismeier-Sammer (2011) in this study we also applied a single-respondent approach. As the unit of analysis is the owner family, this approach is indicated to influence the results and to overcome problems with this approach multi-respondent approach is recommended (Weismeier-Sammer, 2011). Therefore further research may apply multi-respondent approach.

This study was not conducted on a single industry. However each industry has its specific conditions which may affect study's result. Therefore future research may replicate this study in a single industry.

Considering the importance of corporate entrepreneurship for family firms' growth, the effect of corporate entrepreneurship on outcomes such as sustainability, performance and competitive advantage can be examined.

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