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Article

Role of Strong *versus* Weak Networks in Small Business Growth in an Emerging Economy

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Keywords: small business growth; entrepreneurship; strong ties; weak ties; networks; Turkey

JEL Code: M

1. Introduction

Social capital has long been at the forefront of entrepreneurial research, and small business owners' network of relations has been studied as a major factor stimulating nascent and continued entrepreneurship. At the core of this literature is the distinction between strong and weak networks. Strong ties involve emotional intensity and intimacy; persons in the network know each other well [1,2]. Weak ties on the other hand are non-affective and less intense; network persons are not closely related [3]. Arguments are advanced in favor of one or the other type of network in facilitating entrepreneurship [4,5]. Some also claim that strong and weak networks may be complementary. Burt [6], for example, argues that they play different roles for different purposes or in different populations.

The motive behind the present study is to study the effectiveness of strong *versus* weak networks in a collectivistic cultural population. The study is based on the premise that in a collectivistic culture strong networks play a more crucial role in small business growth than weak networks. This expectation is tested on a sample of 139 firms spread among four, geographically dispersed cities in the relatively collectivistic Turkish culture. Network strength, measured by means of name enumeration method used in the General Business Survey, is linked to growth of firms in production expansion and technological improvement. Variables generally linked to growth, such as firm size, owner and firm age and industry growth rate, are controlled.

The results show that strong ties are related to both growth areas, whereas weak ties have no effect. The literature has been unequivocal on the importance of strong *versus* weak ties in entrepreneurship [1,6–8]. In support of Bian's [9] argument for the contingency role of context, the present findings show that a collectivistic cultural setting with its emphasis on in-groups rather than out-groups tips the balance toward strong ties in facilitating growth. If supported by comparative studies of other cultures that vary in degree of collectivism, culture may serve as a contingency variable and help clarify further the relation between network strength and entrepreneurship.

The following section provides a review of the literature on the effects of network strength on new firm emergence and subsequent growth, a brief description of the cultural context of the study, and the hypotheses of the study. This is followed by sections on the methodology used, the findings, and the implications of the study.

2. Theoretical Background

2.1. Network Strength and Entrepreneurship

The concept of social capital describes the instrumental benefits of social relationships [10] (pp. 81–88). Business transactions between firms, likewise, are often based upon a history of past dealings and continuing social interactions [11,12]. These networks play a crucial role in gaining access to resources and in obtaining legitimacy [13–16]. Information and awareness of opportunities are passed to the small business owner through an existing social network of friends and acquaintances [17,18]. Personal ties within these social networks are also viewed as resources that offer important emotional as well as practical support [16,19]. Social networks, which are typically conceptualized as sets of ties that connect individuals, can be purely utilitarian and infrequent (weak ties), affect-laden and frequent (strong ties), or formal/informal (weak/strong) [3].

According to Granovetter [1], strength of a tie is a function of time spent, emotional intensity, intimacy, and reciprocal services in a relationship. Strong ties contain great emotional investment and exist among individuals that have frequent affective contact such as family members and close friends [2]. In contrast, weak ties tend to exist among individuals that have infrequent and generally non-affective contact [3]. Weak ties refer to a diverse set of persons working in different contexts with which one has some business connection and infrequent or irregular contact. Granovetter [1] argues for a crucial role for weak ties because of the greater access to diverse and new information, and opportunities to present one's venture to outside supporters. In contrast, strong ties may carry redundant information [7,20]. Weak ties also lend themselves better to bridging between diverse networks than do strong ties.

However, the role of weak ties in entrepreneurship has not been unequivocal in the literature. Research shows that strong ties are commonly used by nascent entrepreneurs in their efforts; the majority of business owners report from three to 10 strong ties [21]. Strong ties are utilized when planning a major change, such as a new business start-up [8,21]. Burt [7] acknowledges that strong ties can also be conducive to bridging. Furthermore, the view on the information access advantages of weak ties has also been challenged. Krackhardt [8] argues that strong ties may provide access to sensitive information that requires trustworthiness. Indeed, Granovetter's [1] initial insight relies on the work of Rees [22], who claims that a major advantage of personal networks is their ability to pass a particular kind of information that is in-depth, sensitive, and difficult to formalize.

2.2. The Role of Culture

Cultural context may serve as a contingency variable on the effectiveness of weak *versus* strong ties. Bian [9] argues that in third world countries strong ties may help the entrepreneur to gain status by bridging across social boundaries and status levels. Batjargal and Liu [23] report that in China, investors used particularistic relations to complement universal criteria as a tool to mitigate risk in supporting venture creation. The culture within which entrepreneurship is exercised would influence entrepreneurial behavior. The premise of this study is that the nature of relationships among members of a collectivistic culture tips the balance towards strong ties in entrepreneurial undertakings.

The link between culture and networks can be explained by Bourdieu's [24,25] argument for the convertibility of cultural and social capital into each other. Inter-convertibility is a single, specific form of capital exchanged to create a different type of capital. Carley [26] and Mark [27,28] elaborate on Bourdieu's thesis in a constructional model, that explains how cultural capital can be translated into social capital. According to this model, the probability of formation of a social tie increases with the cultural similarity of those involved. Reciprocally, the social tie, through increased interaction, reinforces similarity.

Lizardo [29] further investigates convertibility by asking which types of culture lead to which types of social capital. More specifically, he demonstrates that individual tastes for different types of culture creates and sustains different types of networks. Restricted access, high-eyebrow cultures lead to strong ties whereas widespread and popular cultures lead to weak ties. A similar argument can be developed for the effect of collectivistic *versus* individualistic cultures on tie-strength.

Collectivistic cultures are characterized by definition of self in terms of a closely knit group, norms and duties imposed by the collectivity, primacy of group as opposed to personal goals, and emphasis

on relatedness rather than rationality [30]. Collectivistic cultures emphasize in-groups as opposed to out-groups in social life. This calls for concern with the welfare of in-groups, cooperation with in-groups without immediate reciprocation, and discomfort when separated from in-groups [30]. Collectivistic cultures emphasize particularistic relations as opposed to universals. In-groups are composed of members who are similar, while out-groups may be seen as threatening. Triandis [30] recognizes that some groups may be neither, but in collectivistic cultures these ambiguous groups are likely to be seen as out-groups.

The similarity hypothesis of the constructional model described earlier suggests that the in-group emphasis in collectivistic cultures also sets the ground in favor of strong ties as opposed to weak ties. Extending this reasoning to entrepreneurial behavior, when a small business owner in a collectivistic culture needs advice, emotional support, or material resources, the in-group is the most likely venue. In-groups possess both tacit knowledge about the behavioral history of entrepreneurs and gaining experience with them. When material support is involved, this knowledge will enable them to make judgmental projections about entrepreneurs' predictability, honesty, and trustworthiness. In contrast, weak ties revoke the doubts that are generally associated with out-groups in collectivistic cultures.

2.3. Turkish Cultural Context for Small Business

In the specific case of Turkey, both the relative collectivism of the culture and the conditions of small businesses favor strong ties for continued entrepreneurship. Hofstede's [31] seminal work on national cultures reveals that Turkey has a collectivistic outlook, with also high scores on power distance, uncertainty avoidance, and femininity. Schwartz's [32] measures similarly show that Turkish culture emphasizes values promoting tight links with in-groups, as well as hierarchical roles for maintaining societal order. There is some variation in the culture, with some elements of individualism co-existing with collectivism [33]. Using Schwartz's [32] value measures, Kozan [34] describes several subcultures in Turkey, such as power seekers, egalitarians, and stimulation seekers, along with the mainstream traditional culture. However, the dominant pattern is the collectivistic tendency of the mainstream culture to rely more on in-groups than out-groups. Reliance on an in-group of family and friends suggests that strong ties rather than weak ties would play a crucial role in entrepreneurial start-up or growth.

The economic and political forces surrounding small business also reinforce this tendency. During recent decades, Turkey has abandoned old protectionist policies and opened the economy to globalization. The reforms, still ongoing, included privatization, deregulation, liberalization of foreign trade and investment, reduction of tariffs, and the easing of capital transfer exchange controls [35,36]. However, the recent trend in the World towards smaller firms carrying a major load in economic development has not taken as strong a hold in Turkey. A shift in emphasis in favor of small and medium enterprises constitutes a major and difficult political and cultural change in countries embedded in century-old models of development based on large, bureaucratic organizations [37]. The Turkish private sector is dominated by large, family-owned conglomerates. While numerous small firms play an important role in creating employment, they have a meager share of loans, investments, and exports [38].

For financing and investment, small businesses have to rely overwhelmingly on family resources rather than loans from secondary financial institutions such as banks. A very small percentage of loans are extended to small businesses in Turkey, compared to developed countries and even emerging economies such as India [38]. Most banks feel that little information exists to predict which small businesses are likely to succeed; being financed through family sources, the bookkeeping practices of most of these firms come short of providing valuable insights into their potential for survival and growth [39].

2.4. Hypotheses

Small business growth is linked to owners' ties in terms of both the intensity and diversity of their networks [13,40]. However, what type of network leads to growth is affected by the cultural context. The literature in Western countries emphasizes the role of weak ties in *continuing* growth. While strong ties have been linked to growth at the inception and early stages of the firm, growth in later stages rests more on weak ties [14,41,42]. More calculative ties, as found in weak networks, may replace the emotional relationships of earlier stages which may constrain the firm [7]. Weak ties may enhance the number of opportunities [43] and can lead to strengthening of internal capabilities and performance [44,45].

In contrast, in collectivistic cultures continuing growth is more often linked to strong ties. As the foregoing discussion of Turkish small businesses highlighted, the key factor here may be the low level of trust found in institutional relationships. Trust has been defined as the willingness of a party to be vulnerable [46]. The information provided by small business owners may not justify the likely vulnerability of banks to default, whereas strong ties may carry a higher degree of trust because of the intensity of the relationship. Similarly, in other emerging economies such as China and Russia, personal connections and blurred business-government relations are linked to lack of trust in market institutions [47]. Heterogeneous networks which do not involve mutual obligation and are governed by self-interest may not be seen as trustworthy, which in turn reduces the role of weak ties in financing or acquiring information for growth purposes. In collectivistic countries, investors, motivated to reduce risks, sometimes use particularistic relations of strong ties to complement universal criteria as a tool in supporting venture creation [23]. A comparative study reports that economic-dependence ties are more positively associated with affect based trust for the collectivistic Chinese managers than for American managers [48].

As in other collectivistic cultures, trust in Turkey is embedded in close ties of family and friendship. Close ties enable the transfer of fine grained and sensitive information utilized in business expansion and development [8,22]. Furthermore, weak institutional support caused by low levels of trust in information provided by small businesses hampers weak ties in playing a major role in growth. Small businesses, when contemplating and carrying out growth, are more likely to turn to, and find support from, their immediate circle. It may not be worthwhile for owners of small businesses to invest into, and nurture, weak ties for achieving growth. Hence,

Hypothesis 1: Growth in small businesses will be related positively to strong network ties.

Hypothesis 2: Growth in small businesses will not be related to weak network ties.

3. Method

3.1. Variables

In order to isolate the influence of network strength as hypothesized, the confounding effects of a number of variables need to be controlled. Firm size and age, owner age and education, and sector growth rate are used as controls in the study. Their confounding role may be due to their association with growth as well as network strength. Firm size is a common factor related to small business growth, although with contradictory predictions. Large size may negatively affect ability to learn [49] and may be an indicator of being content with earnings [50]. On the other hand, size is perceived as providing economies of scale and resource sufficiency [51], which in turn foster growth. The Turkish context favors the latter position. Small-to-medium sized firms depend heavily on internal resources for growth, particularly in financing [52] and the know-how needed for adopting modern management methods [53]. Size is also associated with assets which can be used as collateral in securing loans. Size makes growth easier in the Turkish context, and controlling for size would help eliminate its confounding role on the relation of network strength and growth.

The age of the owner as well as that of the firm influence growth negatively [50,54,55]. Davidsson [50] argued that both are correlated with being content with what the firm successfully does and with the standard of living achieved. Majumdar [56] reports that in India, younger firms, born under the recent open-market policies, showed better growth than older firms, which were founded and initially learned how to operate under earlier export-substitution policies. A similar situation exists in Turkey, where import substitution practices were replaced with an emphasis on integration with the global economy [35,36]. Younger owners and younger firms are expected to adapt faster to the new policies, and project more dynamism and better use of external resources.

The education level of the owner served as a personal background variable that may predict growth intentions requiring knowledge and technical skills [50]. Growth intentions in these areas require what Mitchell *et al.*'s [57] label as ability scripts, which include skills and knowledge of the entrepreneur. Growth areas that are particularly influenced from education are technological improvements, which may involve the acquisition of new equipment and the computerization of current operations, and resource aggregation, which may include hiring of specialists, use of professional consultants, and training of employees. Educated owners are expected to explore outside opportunities more effectively for technical and financial support.

Finally the recent growth rate in the industry in which the firm is operating is included as a control variable. The purpose was to test the effect of strong versus weak ties after the firms are brought to an even playing field in terms of growth opportunities provided by the environment.

The dependent variable, growth is conceived in the literature both as a narrow or broad concept. Freel and Robson [58] measure growth in terms of employment, turnover, productivity, and profit margin. In contrast, Lebrasseur *et al.*'s [59] (p. 2) definition "emphasizes breadth of entrepreneurial activity and largely ignores the issue of effective use of resources". The approach used in the present paper is closer to the broader conceptualization. It captures better the variety of venues through which both strong and weak networks operate in firm growth. Following Pistrui *et al.* [60,61], growth is conceived as a multi-dimensional construct consisting of the following areas: entering new markets,

new product introduction, facilities expansion, equipment acquisition, technological improvements, capital financing, acquisition of specialists, and training of personnel. A *Principal Components Analysis*, to be discussed in the following section, indicated that these growth areas were made up of two main components.

3.2. Sample

Data were collected from firms operating in *Organized Industrial Districts* in four cities. These districts are established by a law providing incentives for growth for participating firms that commit to acquiring land to build facilities. Incentives include lower taxes, and subsidies for energy costs and social security payments. Although conceived for any small-to-medium sized firm, relatively established firms that are in anticipation of further growth are more likely to become members. There is more than one district in the largest metropolitan areas, but usually a single district in most cities. The directorate of the district in each city was approached by the researchers for permission (in Ankara and Izmir one of the districts was chosen). Newly formed and very small firms were excluded. Out of a total of 220 firms contacted through the directorates, 139 accepted to participate in the study. In each firm, the majority owner was asked to fill out the questionnaire at his/her workplace. The owners were assured of the anonymity of their responses, which, they were informed, is to be reported only in summarized form. A total of 92 complete questionnaires were obtained from the owners, resulting in an overall response rate of 42%.

The distribution of the firms among the four cities, which represent different regions of the country, was as follows: Ankara, 18%, Izmir 37%, Trabzon 22%, and Diyarbakir 23%. Several industries were represented in the sample. Metal works (28%), textiles (24%), and food processing (18%) had a higher share of the sample than others. Average firm age was 17.5 years with a standard deviation of 13.3 and the average firm size was 57.2 full-time employees with a standard deviation of 69.4, both showing a wide range and a positively skewed distribution. Average owner age was 43.6 years with a standard deviation of 9.5. Median education fell mid-way between high school and college. The most common college majors were business (21%) and engineering (20%).

3.3. Measures

Network strength was measured by means of the procedure used in General Social Survey (GSS) [62]. GSS is a sociometric measure based on intensity of relations among specific persons in a network. Among various measures of network intensity, GSS is most commonly used [63]. Its main drawback is the time and care responses require. However, Burt [20] found that compared to the more simple, general questions on network strength, the name-enumeration based GSS measure provides more reliable data. In the present study, respondents were asked to write down the initials of five persons whom they consulted, or sought help from, for their business during the last two years. Combinations of pairs were created using the numbers in front of the persons to be listed (up to 10 pairs, altogether). Respondents were then asked to indicate which of the paired persons knew each other well by checking the appropriate pairs. This was followed by another question asking them to indicate which pairs (again enumerated) were total strangers. The measure for strong ties was the total number of pairs checked in the first question divided by the total number of possible pairs (which could be less

than 10 if the respondent mentioned fewer than five persons). The measure for weak ties was, similarly, the ratio of pairs checked in second question to the total number of possible pairs.

Sector growth rate was measured by four questions which asked growth for demand to products in the sector, growth in total employment by the sector, new firm entry, and overall judgment of sector growth. A five-point scale was provided, with the following categories: strong growth, fair amount of growth, little growth, no change, and contraction. Internal consistency (alpha) of sector growth index was .79. The measures for firm’s size, firm’s age, and both strong and loose tie scales were positively skewed, and required correction by logarithmic (*ln*) transformation. Correlations among independent and control variables are shown in Table 1.

3.4. Methodological Analysis

Growth items were subjected to a *Principal Components Analysis*, using an *eigen* value of 1.0 for extraction threshold, and *Varimax* rotation. Two components emerged, explaining 56 percent of total variance. These components were labeled as *production expansion* growth and *knowledge acquisition* growth. Table 2 shows the abridged items comprising each component and their loadings. Response categories were the same as for the sector growth items. As can be seen from the table, production expansion included items on physical growth, new markets, new products, and increased promotion activities. Knowledge acquisition growth included training, utilizing outside consultants, and process innovation. Table 2 highlights in boldface the highest loading for each item. Composite scores were obtained by averaging the items with the highlighted loadings for each component. The internal consistency coefficients (alphas) for production capacity growth scale was 0.87, and for knowledge acquisition scale, 0.83. The correlation between the two growth scales was 0.55.

Table 1. Correlations among independent and control variables.

Variables	Strong ties	Weak ties	Sector growth	Firm size	Owner age	Firm age	Owner education
Srong ties (ln)	-	-0.31	0.08	-0.08	0.06	-0.02	0.14
Weak ties (ln)		-	0.12	0.13	-0.05	0.02	0.13
Sector growth			-	0.10	-0.06	-0.12	-0.02
Firm size (ln)				-	0.04	0.40	0.05
Owner age					-	0.31	0.00
Firm age (ln)						-	0.01
Education							-

A second analysis looked at possible bias introduced because of non-responses. As pointed out earlier, out of a total 139 owners who agreed to participate in the study, 92 complete questionnaires were returned. Almost all non-responses involved the two question sets on network pairs, where the respondent was asked which pairs, among the 15 possible, knew each other well, and which ones were strangers. Partial responses were compared to full responses in terms of both control variables and the two growth scales (the dependent variables). A *t-test* of full *versus* incomplete response groups indicated that there were no significant differences in terms of industry growth rate, firm size, firm

age, owner age, owner education, and production expansion growth. However, the full response group indicated significantly higher knowledge acquisition growth ($t = 5.30, p < 0.01$).

Table 2. Principal components analysis of growth items *.

Items	Production Expansion	Knowledge Acquisition	Communality
Increase in products/services offered	0.788	0.170	0.649
Entry into new markets	0.706	0.168	0.526
Expansion of production areas	0.810	0.077	0.662
Expansion of distribution channels	0.659	0.249	0.496
Increase in promotion activities	0.433	0.391	0.341
Growth in machinery and equipments	0.643	0.334	0.526
Improvement of existing equipments	0.580	0.184	0.371
Expansion of office space	0.755	0.111	0.582
Increase in direct labor	0.618	0.327	0.489
Increase in specialists employed	0.474	0.646	0.642
Increase in training of employees	0.103	0.854	0.740
Innovations in work processes	0.167	0.790	0.652
Increase in utilization of consultants	0.188	0.765	0.620

* *Varimax* rotation with Kaiser normalization; minimum *eigen* value of 1; total variance explained, 56%.

4. Results

Relation of network strength to growth was tested by means of *Regression Analysis*. Two separate analyses were carried out, with each of the growth areas serving as the dependent variable. A stepwise procedure was used, first entering sector growth rate during the last three years. Next, firm's size and age, and owner's age and education were entered. In step three, the measures for loose ties and strong ties were entered. The regression analysis with production expansion as the dependent variable (shown in Table 3) yielded significant R-square change for all three models. Sector growth entered the equation in step one ($\beta = .51, t = 6.2, \text{ and } p = .001$), firm size in step two ($\beta = 0.24, t = 2.71, \text{ and } p = 0.008$) and close ties in step three ($\beta = 0.22, t = 2.92, \text{ and } p = 0.004$). The F value in the final step was 13.11 ($p = 0.001$). Durbin-Watson statistic was 1.77, indicating low autocorrelation. The regression analysis with knowledge acquisition as the dependent variable yielded significant R-square changes in model 2 and 3 (Table 4). Firm size entered the equation in step two ($\beta = 0.28, t = 2.7, \text{ and } p = 0.008$), and close ties in step three ($\beta = 0.30, t = 3.44, \text{ and } p = 0.001$). The F value in the final step was 3.09 ($p = 0.005$). Durbin-Watson statistic was 2.06, indicating low autocorrelation. Both analyses had satisfactory collinearity diagnostics, with VIP values in step three ranging between 1.04 and 1.36.

In sum, the effect of network strength on growth was consistent across the two growth areas. Close ties had a positive effect on growth while weak ties had no effect, as hypothesized. Among the controls, the positive effect of firm size was also similar for both growth areas, whereas sector growth rate increased production expansion only. Sector growth, size and strong ties explained 41 percent of the variance in production expansion. Size and strong ties explained 15 percent of the variance in knowledge acquisition. Strong ties seem to have a moderate effect on production expansion and a low-to-moderate effect on knowledge acquisition.

Table 3. Regression analysis of production expansion and network strength.

Variable	Standardized coefficients (β)		
	Model 1	Model 2	Model 3
Sector growth	0.43**	0.42	0.40
Firm size (ln)		0.41 **	0.47
Firm age (ln)		0.08	0.06
Owner age		0.01	-0.03
Owner education		0.11	0.10
Strong ties (ln)			0.27**
Weak ties (ln)			0.10
R square change	0.19**	0.20 **	0.07**
Adjusted R square	0.18	0.35	0.41

* $p < 0.05$; ** $p < 0.01$.**Table 4.** Regression analysis of knowledge acquisition and network strength.

Variable	Standardized coefficients (β)		
	Model 1	Model 2	Model 3
Sector growth	0.03	0.01	-0.02
Firm size (ln)		0.39**	0.45
Firm age (ln)		-0.04	-0.06
Owner age		-0.01	-0.05
Owner education		0.16	0.16
Strong ties (ln)			0.26**
Weak ties (ln)			-0.10
R square change	0.01	0.15**	0.06*
Adjusted R square	-0.01	0.10	0.15

* $p < 0.05$; ** $p < 0.01$.

5. Discussion and Conclusion

5.1. Synthesis of Results

The findings provide support for the convertibility model of Bourdieu [24,25] in the context of continuing entrepreneurship; cultural capital is used in enhancing acquisition and growth of economic capital. The collectivistic nature of Turkish culture is carried over to social relationships for achieving business growth by utilizing strong ties rather than weak ties. Strong ties characteristic of collectivistic cultures enable the development of trust and the transfer of fine-grained information and tacit knowledge [5,12] utilized in growth of economic capital.

The role of family business may deserve further attention for the convertibility thesis. The effect of close ties may come from the predominance of family-owned businesses in this and other collectivistic societies. Family business literature emphasizes the role of family in securing initial capital and in gaining access to new markets, sources of supply, and new ideas [63,64]. Such ties extend beyond the formal family to include distant relatives, and convey important professional and affective resources [65].

The immediate and extended family rather than close friends may comprise the greater part of strong ties associated with growth.

Trust may also play a mediating role on the relation of strong versus weak ties on growth, and, in turn, serve as a key explanatory variable for the convertibility thesis. According to Uzzi [12], the governing mechanism of strong, embedded ties is trust. Levin and Cross [66] found that the link between strong ties and receipt of useful knowledge was mediated by competence and benevolence based trust. Drawing upon similarity-attraction paradigm and social categorization theory, Jiang *et al.* [67] hypothesized and found that Chinese senior executives had higher affect based trust in overseas partners of same ethnicity as themselves. Cognition-based trust was also more strongly associated with affective trust for overseas partners of same ethnicity. Financing of small businesses are, similarly, affected from trust as investors look for particularistic relations to augment formal agreements [23]. Hence, one of the mechanisms of convertibility of cultural capital into economic capital may center around trust.

5.2. Limitations

A major limitation of the present study is the non-random sample due to entry limitations frequently faced in field research. A partial attempt is made to overcome this limitation by choosing cities from four distinct regions of the country, and including in the sample a variety of industries. The convenience sample, nevertheless, may prevent us from generalizing all small business in the country. It should be pointed out, however, that the sample does provide a conservative test for the hypothesis. As mentioned earlier, the industrial districts from which the sample was drawn usually attract more established firms that are in anticipation of further expansion and development. These firms are in a better position to acquire external financing or know-how compared to others. Weak ties would normally be expected to play a relatively more prominent role in their growth efforts. Little reliance on weak ties in growth, found in this sample of small firms, may actually be more prominent in the population.

The cultural effect argument advanced in this study need to be directly tested alongside the alternative hypothesis of inadequate institutional support for small businesses in developing countries. Small business owners may have turned to a close circle of family and friends because they see little opportunities for outside support. Without such opportunities, loose ties may not be worth the investment in time and energy for the small business owner. The present study controlled for the effect of firm size, which is associated with the ability to secure outside loans. However, a more direct comparative test for this alternative explanation can be conducted in collectivistic countries with better institutional support where entrepreneurs have less difficulty securing loans from various financial institutions.

5.3. Contribution

The present study illustrates how a collectivistic culture influences the relative role of network strength in small business growth. The more prominent role of strong ties is mainly attributed to the emphasis on close-knit, in-group relations prevalent in the culture studied. The study's findings are encouraging for multi-country studies that relate network type to continued or nascent

entrepreneurship in emerging economies with varying degrees of collectivism. Limited role of weak ties in growth may also warrant a closer look, as it may be a factor in limiting innovation.

A major consequence of overreliance on strong ties for emerging economies is the relative absence of access to diverse and new information and opportunities that weak ties provide [1], and the redundant information that strong ties may carry [6,7]. Although strong ties play a crucial role because of the trust, reciprocity, and the sensitive information they possess [8,22,68,69], this may have to be complementary rather than in place of weak ties and the diverse opportunities they provide. As Burt [6] argues, strong and weak ties play different roles for different purposes or in different populations. Greene and Brown [70] propose companies that have low rates of growth and are not particularly innovative tend to be based on social capital from the family. Highly innovative, rapid-growth firms, on the other hand, rely on the use of individually developed social capital. Firms that have high rates of growth but are not particularly innovative rely on both family and individually developed social capital. The results of the present study may help draw further attention to problems caused by the relative absence of weak ties in collectivistic cultures

5.4. Future Research

Future research may investigate whether weak ties in collectivistic cultures, when they do exist, are associated with acquisition of new information and, in turn, with more *innovative* business undertakings. Distinctions drawn between incremental and radical innovations should be at the core of such research. Alguezaui and Filieri [71] hypothesize that strong ties are more likely to be associated with radical innovation, because of the deep knowledge and trusting context they provide, while weak ties are likely to be associated with incremental innovation. However, Uzzi [69] notes that embedded networks provide positive effects up to a threshold after which they may insulate firms from information that exists beyond their network. Elfring and Hulsink [72] hypothesize that weak ties are associated with opportunity location and evaluation phase of incremental innovation. Yet, they argue, strong ties are essential for the remaining phases of resource acquisition and gaining legitimacy in both radical and incremental innovation. Further research is needed to test whether strong ties indeed provide a fertile ground for radical innovation in collectivistic cultures.

Future research may also incorporate trust in models of network intensity and small business growth. As a moderating variable, affective trust may influence the relation of strong ties to growth, as found in financial support from family and friends. Even in family businesses, interpersonal trust may deteriorate by time and has to be sustained through later stages of a firm's life for continued growth [74,75]. Cognition-based trust, on the other hand, may play a moderator role in the relation of weak ties to growth, as found in banks extending loans based on sound business plans. Weak ties may be associated with growth when there is more trust on the part of outside agencies for plans and information provided by owners.

Author Contributions

M. Kamil Kozan co-conceived the research plan, did the literature survey, analyzed the data, and wrote the manuscript. Levent Akdeniz co-conceived the research plan and collected the data.

Conflicts of Interest

The authors declare no conflict of interest.

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