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The Effect of Entrepreneurial Orientation on SMEs Growth and Export in Israeli Peripheral Regions

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*T*his research explores the influence of entrepreneurial orientation (EO) on SMEs located at core and peripheral regions, by focusing on a single dimension of EO: proactiveness. We conducted a quantitative study of 626 Israeli SMEs. Business growth, as measured by the rate of change in number of employees, was found to be significantly higher in the core region. As expected, proactiveness was found to strongly affect SME growth as well as firm expansion to international markets. Our analysis shows that the difference in business growth between regions can be attributed also to a lower level of owners' proactiveness in peripheral regions since it was found to mediate the effect of peripheral location on firm growth. Differences in proactiveness levels may be explained by the historical development of peripheral regions. Our results have useful implications for policies that aim to promote growth and development in peripheral regions.

Keywords: entrepreneurial orientation; proactiveness; peripheral regions; SMEs growth.

This study is designed to determine whether entrepreneurial orientation (EO) affecting growth of young firms in core regions operates differently in peripheral regions. In this paper, peripheral regions are characterized by their distance from the economic center of a country and their lower population density (Davies & Michie, 2011). There is a paucity of studies probing the effectiveness in peripheral regions of applying business improvement methods designed to stimulate innovation implementation in small- and medium-sized enterprises (SMEs) (Harris, McAdam, McCausland, & Reid, 2013). These researchers asserted that the proximity of sophisticated and demanding customers, as one of the determinants of a competitive position, leads to an improvement of products and services and consequently to growth (Porter, 1990). Couclelis (2004) explored the constraints of space and time termed as "tyranny of the region," which traditionally led to predictable regional patterns of retail location, and found that the constraints hold even for advanced information and communication technologies using e-commerce. Since many countries have policies that were designed to promote economic growth through entrepreneurship in peripheral regions, knowing the factors that affect growth in those regions has important implications. In our study, we combine the concept of EO with regional and geographical economics, and ask how spatial heterogeneity and EO jointly determine observed differences in SMEs growth. Gupta and Gupta (2015) called for further research to unravel the link between EO and economic growth though this issue is not easy to address.

In addition to firm characteristics, in this study we examined activities related to entrepreneurial orientation (EO), which refers to the strategy-making processes that provide organizations with a basis for entrepreneurial decisions and actions (Lumpkin & Dess, 1996). These researchers suggested the usefulness of considering EO as a multidimensional construct consisting of autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness. Following Miller's (1983) conceptualization, three dimensions of EO have been identified and used consistently in the literature: innovativeness, risk-taking, and proactiveness. Researchers dispute how these three entrepreneurial elements are related to each other within a holistic unitary conceptualization of EO (Gupta, 2015). Hughes and Morgan (2007) found that the five dimensions of EO have different effects on the business performance of young firms. Also, Covin and Wales (2012, p. 688) argued that risk-taking, innovativeness, and proactiveness cannot be assumed to have the same antecedents and consequences. Gupta and Batra (2015) suggested that EO offers SMEs a way through which their proactiveness can counter the detrimental effects of these institutional forces.

In this study, we conceptualized EO as a latent unidimensional construct comprised of proactiveness, which was found to be useful in previous EO studies (Wales, Gupta, & Mousa, 2013). We tested several factors that evaluated proactiveness as related to EO of SME managers: the development of new products and services,

entry into new markets, the willingness of managers to expand their business and the establishment of new sub-units to the main business. It should be noted that previous research showed that one of the strongest predictors of small business growth is the managers' willingness to grow their business (McKelvie & Dennis, 2014) and that many small young firms are sleeping gazelles that are reluctant to hire new employees (Wiklund, Davidsson, & Delmar, 2003) despite having high profits (Bornhäll, Daunfeldt, & Rudholm, 2014).

The growth of SMEs can be measured by different financial tools and in various ways. For many management and economics sources SME growth is measured in terms of increases in firm employment. This is the most relevant measure for many government policy makers, since SME growth is seen as an important way of reducing unemployment (Bah, Brada, & Yigit, 2011; Westhead & Birley, 1995; Birley, 1987). In our sample of SMEs from core and peripheral regions in Israel, firm revenue and number of employees have a strong correlation (r = .55, p < 0.01), further justifying the use of growth in firm employment as a growth measure.

Literature Review

Prior empirical research has highlighted the role of entrepreneurship and new venture creation as a mechanism for employment creation, innovation, and economic growth (e.g., Thurik & Wennekers, 2004). Birley (1987) showed that growth would appear not to be a primary objective of the entrepreneur. Therefore, employment growth in SMEs is a prime concern and deserves further research (Westhead & Birley, 1995). More specifically, the differences between core and peripheral economies raises the question to what extent the uneven distribution of resources (Mueller, Van Stel, & Storey, 2008; Bosma, Acs, Autio, Coduras, & Levie, 2009) restrains employment growth of new ventures in peripheral regions.

Agglomeration economies and geographical accessibility shape location determinants of new manufacturing establishments, and the better connected a region is to the highway network, the more attractive it is for the growth of local firms (Alañón-Pardo & Arauzo-Carod, 2013). Following economic geography, McCann and Ortega-Argilés (2015) argue that entrepreneurship and innovation processes tend to be less successful in peripheral regions due to one or more fundamental characteristics that are difficult to modify or rectify relating to: sector, structure, transaction, behavior, resources and

capabilities, risk and financial flows, externalities and issues of market failure, technology, and perception.

Schnell, Greenberg, Arnon, & Shamai (2015) proposed a theoretical model of the entrepreneur as an agent of change and economic growth that is embedded in his/her entrepreneurial environment. An adapted version of this model is described in Figure 1. It shows that the environment is comprised of support systems on different levels: kinship, local, regional and national support, and also by the social networks in which the entrepreneur is embedded. Examples of such networks are markets, suppliers, cooperators, and competitors. Due to reasons such as low population density and historical processes that differentiated these areas from core areas, peripheral regions lack both support systems and social networks. One of the results is lower growth rates for businesses in these regions.

The weakness of peripheral regions was demonstrated by various empirical studies conducted in different countries, both underdeveloped such as El Salvador (Lanjouw, 2001) and developed such as Canada (Polese & Shearmur, 2006) and the United Kingdom (Kalantaridis, 2009). In addition, previous studies conducted in different developed countries in Western Europe such as Austria (Todling & Wanzenbock, 2003), the United Kingdom (Johnson, 2004), the Netherlands (Van Stel & Suddle, 2008), and in the United States (Headd, 2003), demonstrated that core regions showed greater propensity for fostering entrepreneurial activities.

In the current study, we expect to reconfirm the findings about firm growth and entrepreneurial success in peripheral regions. We hypothesize that:

Hypothesis 1: *Growth rates are lower in peripheral regions in comparison to core regions.*

Firms pursue activities related to EO in order to achieve competitive advantage and subsequent growth. Previous studies have generally established a positive relationship between aggregated measures of EO and firm performance (Kreiser, Marino, Kuratko, & Weaver, 2013). Rauch, Wiklund, Lumpkin, & Frese (2009) conducted a meta-analysis of 53 samples from 51 studies with an N of 14,259 companies and found that the correlation of EO with performance is moderately large (r =.242) and that this relationship is robust with regard to different operationalizations of key constructs as well as cultural contexts. Most new business owners expressed

Figure 1: Theoretical model of entrepreneurship orientation in a geographical context (based on Schnell et al., 2015).
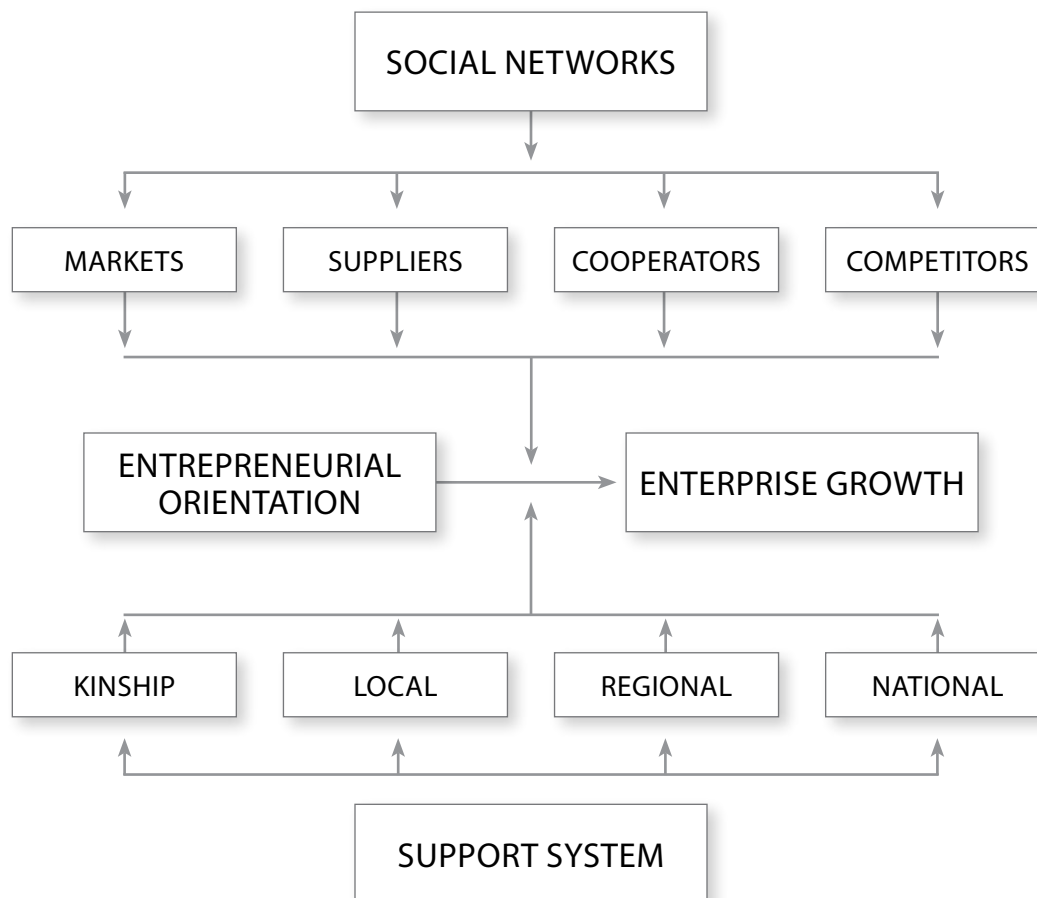
willingness to grow their businesses (McKelvie & Dennis, 2014), although this finding was not corroborated by all studies (e.g., Wiklund, Davidsson, & Delmar, 2003). Based on data gathered from farms in peripheral regions engaged in innovative ventures, Grande, Madsen, & Borch (2011) found that firms get better performance in the long run as a result of engaging in entrepreneurial efforts and activities enabling firms to create, reconsider, and apply their resources in more efficient ways. In the same stream Simon, Stachel, & Covin (2011) found that EO and commitment to objectives enhanced sales growth and determined that commitment to objectives was associated with greater increased sales growth of companies high in EO, as compared to those low in EO. Miller (1983) argued that the three EO components of strategic posture—innovation, proactiveness, and

risk-taking—comprise a basic, unidimensional strategic orientation. While considering the different effects of the five dimensions of EO introduced by Lumpkin and Dess (1996), Hughes and Morgan (2007) found that only proactiveness and innovativeness have a positive influence on business performance while risk-taking has a negative relationship. Competitive aggressiveness and autonomy appear to hold no business performance value at this stage of firm growth. Gupta and Batra (2015) investigated the influence of EO on firm performance while considering organizational inertia and slow reactivity as opposed to proactiveness.

The effect of EO on firms' growth in relationship to firms' location in peripheral regions has been under-researched. Chaston and Sadler-Smith (2012) conducted a study in Southwest England and found that in this

peripheral region the existing attribute of EO had no effect on firm growth. With respect to universal growth factors, the literature stresses the importance of EO manifested by firms. Thus, we hypothesize that:

Hypothesis 2: *EO proactiveness yields higher growth in core regions in comparison to peripheral regions.*

Further investigation of growth may focus on exporting and internationalization. Limited previous studies explored this question. Kuivalainen, Sundqvist, & Servais (2007) proposed that since rapid geographical dispersion increases commitment to international operations, firms that are true-born globals are more entrepreneurially oriented. But counter to their expectations they found that EO and specifically proactiveness were not found to affect growth in global sales. Several studies report the opposite finding of EO and in particular its proactiveness component having a positive effect on international performance (Sundqvist, Kyläheiko, Kuivalainen, & Cadogan, 2012; Covin & Miller, 2014). In our study, we expect that firms in peripheral regions will concentrate their growth efforts in domestic markets. Thus, we expect the following:

Hypothesis 3: *EO proactiveness does not characterize exporting firms.*

Methodology

The unique dataset employed in the quantitative analysis was collected by means of a survey of small business owners, conducted in the first half of 2013. The questionnaire was pre-tested with a telephone pilot survey of 30 SME owners, resulting in the removal or modification of several items that showed low reliability or were not sufficiently clear to respondents. The content validity of the questionnaire was assessed and discussed by a panel of 10 experts in the fields of entrepreneurship and regional business development.

Items in the questionnaire include demographic information about the owner of the business and the business itself; questions about perceived growth and its causes; funding sources; number of employees currently and at inception; financial information such as revenue and costs; customer characteristics; expectations; and questions evaluating attitudes of the business owner.

The pre-tested questionnaire, comprising 70 questions, was then used in two formats: a telephone interview and a web-based questionnaire, for which

respondents were approached by email (the online version of the questionnaire was built and administered with ©Qualtrics).

The survey was administered to a representative sample from the following population: small businesses in Israel with 1–49 employees (based on the EU 2003 definition) that have been in existence for more than 1 year at the time of the survey, with proportional representation of the main industry groups defined by Israel's Central Bureau of Statistics (2011): agriculture; manufacturing; electricity and water supply and construction; trade, repair of vehicles, and other repairs; accommodation services and restaurants; transport, storage, and communications; banking, insurance and other financial institutions; real estate, renting, and business activities; public administration, education, health services, and welfare and social work; community, social, personal, and other services.

An additional sampling dimension was the location of the businesses: businesses were sampled from a very central region of Israel, as defined by the Israel Peripherality Index (Central Bureau of Statistics, 2008), and from a very peripheral, (i.e., remote) region in the north of Israel.

The response rate for the phone survey was 12.5%, resulting eventually in 329 completed questionnaires; the response rate for the web-based survey was 9.6%, resulting in 437 completed questionnaires, making the size of the final survey n = 766. Accounting for observations with missing values, the final sample size used in this study was 626 SMEs. Though we feared that the response rate would drop considerably (Cabus & Vanhaverbeke, 2006), we asked for the share of designated customers in the firm's sales.

The construct proactiveness was measured through questions adapted from scales presented by Covin & Slevin (1989), Bateman & Crant (1993), Crant (1996), Hughes & Morgan (2007), Stenholm, Pukkinen, & Heinonen (2015). We adjusted the questions to fit this study following Covin & Wales (2012, p. 690): "the content of a formatively measured latent construct is defined by the degree of association between its causal indicators and the endogenous outcome variables used to identify the measurement model. This is why the empirical meaning of formative constructs can change from study to study depending on the outcome variable being examined." Items that were relevant to personal characteristics, such as "I am constantly on the lookout for new ways to

improve my life" (Bateman & Crant, 1993, p. 112) were removed from the final version of the questionnaire by the panel of 10 experts mentioned above. The business owners were asked questions such as if they excel at identifying opportunities, if they actually try to take the initiative in every situation, have they developed new products and services, and whether they have entered into new markets. On a Likert scale of 1 (strongly disagree) to 5 (strongly agree) the mean value of proactiveness was 3.04 with standard deviation of 1.24. In comparison, the mean value of proactiveness in previous studies was 3.18 (Stenholm et al., 2015, 4.45 on a 1 to 7 scale) and 3.81 (Hughes & Morgan, 2007, 5.33 on a 1 to 7 scale).

Peripheral Regions in Israel

This study was conducted in Israel, a country distinguished by its long shape (Orni & Efrat, 1971) which clearly creates peripheral regions. Other examples of such countries are Portugal (Vale & Caldeira, 2007) and Chile (Felzensztein, Gimmon, & Aqueveque, 2013), in which there are regions that comply with the definition of peripheral regions (Davies & Michie, 2011). The heart of the country consists of three large metropolitan areas all located in its geographic middle. These cities make up Israel's financial and business center. Peripheral areas distant from this center are located to the north and south. The mean population density in the central region is 1,200 per sq. km; the mean population density in the peripheral region is merely 164 per sq. km. (Central Bureau of Statistics, 2012).

An additional characteristic of the peripheral regions is its numerous agricultural settlements and mid-size cities. The agricultural settlements in the peripheral regions experienced a financial crisis beginning with the introduction of mechanization and computerization into farming, reduction of government support of agriculture, international agreements that opened up the market of agricultural products to import, and the granting of import licenses for fruits, and vegetables that opened up agricultural markets to competition. These changes led to a reduction in the number of farmers, to transition from farming to salaried employment, and to the development of business initiatives that turn farms into multi-functional economies (Greenberg, 2013).

Israeli peripheral regions are populated by three different groups of people. The first group includes second- and third-generation descendants of Jews who immigrated to Israel in the 1950s from Eastern Arab

countries, and were sent to settle new towns (called "development towns") established around that time in the peripheral sphere (Shachar, 1998). The second one includes rural, cooperative communities, which were established as part of the agricultural settlement movement of these regions (Palgi & Getz, 2014). The third group includes minority groups, which have existed in the peripheral regions before the State of Israel was established, and for which economic development occurs alongside the Israeli economy (Schnell & Sofer, 2002; Avraham, 2002). This phenomenon, it must be mentioned here, is familiar from many peripheral regions worldwide (Kulcsar & Curtis, 2012).

Most of the workplaces in the peripheral regions of Israel were characterized as blue-collar industries, with low development level and low incomes for the workers. All of those elements impacted the development level of the local capital in these regions, and local activism in establishing small businesses and regional economic development based on local self-entrepreneurship. Other obstacles for developing local entrepreneurship are related to the lack of financial resources in these areas, difficulty of attracting entrepreneurs and private capital from central urban regions (Felsenstein & Schwartz, 1993), and the individuals' ability to raise capital—the level of proactiveness in these towns. These differences between the regions are also evident in the following statistical data: the average monthly wage in the central region is 10,844 NIS (1 NIS = 3.8 USD), compared to 7,800 and 8,232 NIS in the north and south peripheral regions, respectively (Bendelac, 2013).

Results

Table 1 shows the summary statistics for the variables used in this study, for the full sample and by region. In addition, we have tested for the significance of the difference in the means of the variables between the two regions with a t test. Businesses in the core region experienced a significantly higher rate of growth in the number of employees, supporting Hypothesis 1; they are characterized by higher proactiveness; and their owners are more educated on average. Businesses in the core region are more established, as shown by their higher average age. Businesses in peripheral regions have significantly higher rate of female ownership than those in the core region.

The share of businesses in the finance sector is higher in the core region. As expected, there is a higher share of agriculture-related businesses in peripheral regions. There is a significantly higher share of businesses in the real estate and business services sector in the core region, and a lower share of businesses in the food and hospitality sector. This also corresponds to our intuition, since economic activity is higher in core regions, while the peripheral regions have many tourist destinations.

Table 1: Summary Statistics

Variable	Full sample (n=626) mean	Core region (n=457) mean	Peripheral region (n=169) mean
Rate of growth	0.072852	0.080817	0.051282**
Proactiveness	3.039644	3.129133	2.797126***
Exporting business	0.149920	0.148471	0.1538462
Age of business	16.67783	17.40611	14.70414***
Female owner	0.23126	0.19869	0.319527***
Academic education	0.457735	0.478166	0.402367**
Home location	0.285486	0.246725	0.390533***
Many nearby customers	0.202552	0.131004	0.39645***
Few nearby customers	0.191388	0.163756	0.266272***
Many competitors	0.704944	0.722707	0.656805*
No competitors	0.027113	0.028384	0.023669
Finance sector	0.031949	0.039387	0.011834**
Agriculture sector	0.043131	0.032823	0.071006**
Utilities sector	0.140575	0.140044	0.142012
Education and health sector	0.076677	0.078775	0.071006
Wholesale and retail sector	0.135783	0.137856	0.130178
Real estate and business services sector	0.191693	0.21663	0.12426***
Food and hospitality sector	0.076677	0.035011	0.189349***
Other service sector	0.071885	0.074398	0.065089
Transport and communication sector	0.087859	0.09628	0.065089
Industry sector	0.14377	0.148797	0.130178

Note: Significance level for difference between core and peripheral regions is ***p < 0.01, **p < 0.05, *p < 0.1

Nearly 40% of businesses in the peripheral region are located at or near the home of the owner, significantly higher than the 24% of those in the core region. Businesses in the core region are less dependent upon customers living in their vicinity, with a significantly lower share of their customers living less than a half-hour drive from them.

Table 2 shows the correlation coefficients between the variables and their significance level. Growth rate has a significant and positive correlation with proactiveness,

while proactiveness has a negative correlation with peripheral location. A highly significant and strong positive correlation (0.29) was found between peripheral region location and having many customers in the vicinity of the business.

Our measure of proactiveness is positively correlated with businesses that are classified as finance or industry firms, and negatively correlated with businesses in the commerce and food and hospitality sectors.

Table 2: Correlations between Variables (n=626; p-values in parentheses)

	Growth Rate	Periphery	Proactive	Age of Business	Female Owner	Home Location
Peripheral location	-0.047	1.000				
	(0.201)					
Proactive	0.086	-0.110	1.000			
	(0.024)	(0.004)				
Age of business	-0.184	-0.081	-0.137	1.000		
	(0.000)	(0.024)	(0.000)			
Female owner	0.067	0.147	-0.096	-0.085	1.000	
	(0.076)	(0.000)	(0.011)	(0.024)		
Home location	-0.045	0.170	-0.028	-0.072	0.133	1.000
	(0.220)	(0.000)	(0.469)	(0.048)	(0.000)	
Finance sector	-0.006	-0.047	0.092	0.057	0.007	-0.039
	(0.874)	(0.196)	(0.016)	(0.116)	(0.851)	(0.283)
Agriculture sector	-0.022	0.089	-0.032	0.115	0.002	0.073
	(0.542)	(0.014)	(0.405)	(0.001)	(0.951)	(0.045)
Utilities sector	-0.035	0.014	-0.044	0.002	-0.152	0.014
	(0.340)	(0.705)	(0.248)	(0.957)	(0.000)	(0.690)
Education and health sector	0.038	-0.017	0.027	-0.076	0.107	0.012
	(0.292)	(0.635)	(0.485)	(0.036)	(0.004)	(0.747)
Wholesale and retail sector	-0.057	-0.011	-0.116	0.004	0.133	-0.113
	(0.120)	(0.758)	(0.002)	(0.920)	(0.000)	(0.002)
Real estate and business services sector	-0.033	-0.127	0.031	-0.039	0.039	0.103
	(0.365)	(0.000)	(0.419)	(0.277)	(0.301)	(0.004)

Table 2: Correlations between Variables (n=626; p-values in parentheses) *continued*

	Growth Rate	Periphery	Proactive	Age of Business	Female Owner	Home Location
Food and hospitality sector	-0.024	0.261	-0.078	-0.089	0.016	0.080
	(0.511)	(0.000)	(0.040)	(0.014)	(0.680)	(0.027)
Other service sector	-0.001	0.015	0.019	-0.054	0.026	0.009
	(0.971)	(0.677)	(0.610)	(0.134)	(0.485)	(0.814)
Transport and communication sector	0.154	-0.047	0.021	0.029	-0.089	-0.026
	(0.000)	(0.196)	(0.582)	(0.425)	(0.018)	(0.466)
Industry sector	0.001	-0.024	0.101	0.082	-0.068	-0.099
	(0.968)	(0.510)	(0.008)	(0.023)	(0.071)	(0.006)
Academic education	0.105	-0.038	0.116	-0.109	0.114	0.102
	(0.004)	(0.297)	(0.002)	(0.003)	(0.002)	(0.005)
Many close customers	-0.048	0.290	-0.171	-0.106	0.073	-0.012
	(0.189)	(0.000)	(0.000)	(0.003)	(0.052)	(0.732)
Few close customers	-0.043	0.097	0.072	0.052	0.012	-0.036
	(0.237)	(0.007)	(0.059)	(0.148)	(0.748)	(0.322)
Many competitors	-0.030	-0.040	-0.106	0.093	-0.049	-0.022
	(0.416)	(0.269)	(0.005)	(0.010)	(0.191)	(0.543)
No competitors	-0.016	-0.007	-0.051	-0.021	0.044	0.017
	(0.666)	(0.849)	(0.177)	(0.563)	(0.245)	(0.631)

These correlations point to a possible path of effect on business growth: peripheral regions have a higher share of businesses in sectors that are not characterized by proactiveness, and as a result they grow less than those in core regions.

Regression analysis was then used to find causal relationships between the variables and the rate of growth in the number of employees. Column (1) in Table 3 shows the results of an OLS regression, using the full sample of businesses. As hypothesized, proactiveness was found to have a positive and highly significant effect on business growth, supporting Hypothesis 2. Similarly, academic education of the owner was also found to affect growth positively. Spatial characteristics of the business are also important: home location of the business was found to be a growth-inhibiting factor, as was the dependence on many nearby customers. Surprisingly, having no competitors also lowers the growth of the business. Controlling for other possible factors affecting growth renders the effect of peripheral location insignificant.

Column (2) in Table 3 shows the results of a linear probability regression where the dependent variable is the indicator for exporting activities by the business. The effects of most variables on export are qualitatively similar to those on growth. In particular, we find a significant effect of proactiveness on export, and Hypothesis 3 is rejected. Another finding is that having many competitors lowers the probability of the SME being an exporting business. After controlling for other factors, peripheral location still has a positive and nearly significant effect on exporting activities. Another factor with a similar effect is if the firm is in the agricultural sector. A logistic regression with the same variables yielded similar results.

Table 3: Regression Results

Variables	ln(growth)	Export
Peripheral location	-0.0448	0.0666*
	(0.0869)	(0.0348)
Proactive	0.120***	0.0434***
	(0.0297)	(0.0119)
Age of business	0.00152	0.00188*
	(0.00280)	(0.00112)
Female owner	-0.0335	-0.00527
	(0.0855)	(0.0342)
Home location	-0.293***	-0.0711**
	(0.0790)	(0.0316)
Finance sector	-0.0218	-0.131
	(0.208)	(0.0833)
Agriculture sector	0.143	0.131*
	(0.186)	(0.0745)
Utilities sector	0.229*	-0.0335
	(0.126)	(0.0504)
Education and health sector	0.0407	-0.103*
	(0.148)	(0.0592)
Wholesale and retail sector	0.00106	0.00342
	(0.129)	(0.0518)
Food and hospitality sector	0.224	-0.0487
	(0.154)	(0.0618)
Other service sector	-0.0377	0.0170
	(0.150)	(0.0600)
Transport and communication sector	-0.00743	-0.00207
	(0.140)	(0.0561)
Industry sector	0.0607	0.0694
	(0.125)	(0.0502)
Academic education	0.270***	0.117***
	(0.0746)	(0.0298)

Table 3: Regression Results *continued*

Variables	ln(growth)	Export
Many close customers	-0.219**	-0.110***
	(0.0973)	(0.0389)
Few close customers	0.00293	0.00150
	(0.0927)	(0.0371)
Many competitors	-0.0995	-0.0611*
	(0.0792)	(0.0317)
No competitors	-0.389*	0.112
	(0.224)	(0.0898)
Constant	0.109	0.0239
	(0.158)	(0.0634)
Observations	626	626
R-squared	0.104	0.121

Standard errors in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Next, we ask whether EO is a mediator in the effect of peripheral location on business growth and exporting activities. We proceed by conducting the Sobel Test for mediation, once with firm growth as the dependent variable and then with exporting activities as the dependent variable. In both cases the independent variable is peripheral/central location and the mediator is the proactiveness of the firm. Figure 2 shows the results of the test. In both cases we see that the only significant effect of peripheral location on the performance measures is indirect, through its effect on proactiveness.

Discussion and Conclusions

This study explores the effects of the entrepreneurial orientation on employment growth and export of small businesses, while comparing those in peripheral regions to similar businesses located in core regions. Some of the findings follow previous studies (Mueller, Van Stel, & Storey, 2008; Bosma, Acs, Autio, Coduras, & Levie, 2009) showing that in Israel, similar to other countries, the rate of growth of small businesses in peripheral regions is lower than that for similar businesses in core regions.

We traced the differences in growth between peripheral and core regions to difference in EO proactiveness between the regions. In the case of Israel, these differences can be traced back to the historical development of the peripheral regions and the people who live in them. Governments have historically considered these regions to be the food-producing areas and a suitable location for traditional, blue-collar industries. Consequently, policies were designed to aid the periphery in the development of these economic sectors. In the recent decades, these policies have resulted, on average, in a lower level of proactiveness among businesses in peripheral regions.

This research contributes to existing knowledge about the factors that advance growth of small businesses. It is the first study showing that businesses and their owners in peripheral regions differ from those in core regions in their proactiveness levels (i.e., it is lower on average), and this affects the growth of the business. The higher level of proactiveness found in core regions supports Lumpkin & Dess (2001), who suggested that proactiveness as a response to opportunities is an appropriate growth mode

Figure 2: The results of the mediation models related to growth and export of SMEs.

***p<0.01, **p<0.05, *p<0.1

***p<0.01, **p<0.05, *p<0.1
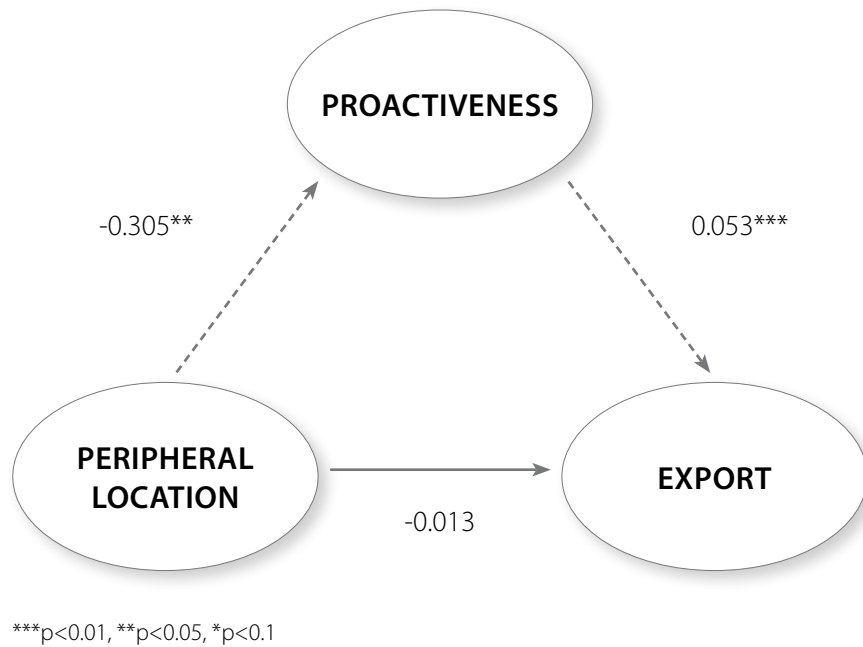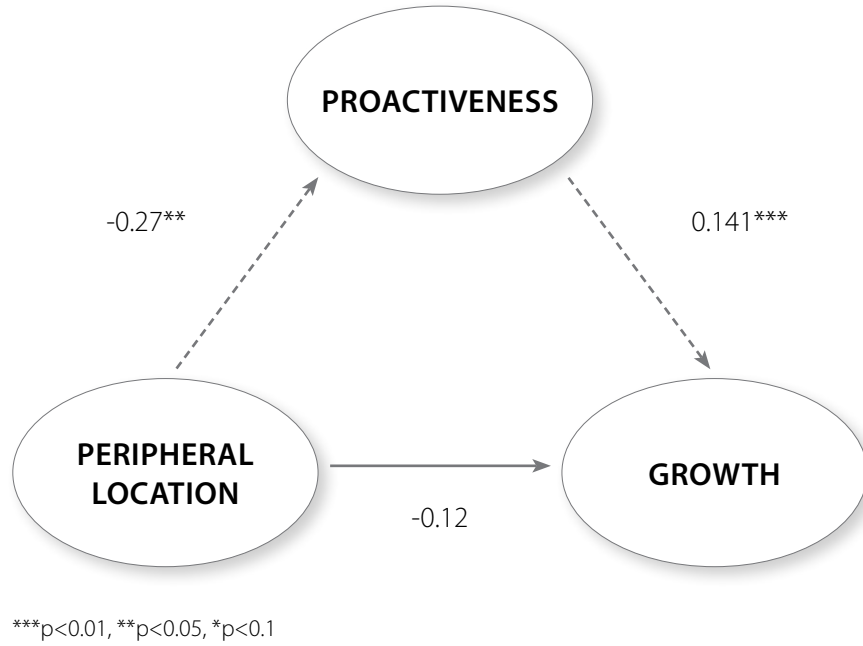
for firms in dynamic environments, where conditions are rapidly changing and opportunities for advancement are numerous. This finding also corroborates the model presented by Schnell, Greenberg, Arnon, & Shamai (2015), linking the firm's location in a peripheral region to owner's proactiveness. Another contribution is the formulation of recommendations for policy makers: government policies that aim to promote the growth of peripheral regions have to explicitly encourage the proactiveness of business owners in these regions.

The results and conclusions of this study have practical implications for practitioners who seek growth in employment (as opposed to those who are content with a more limited added income): entrepreneurs and managers of new ventures should be proactive, by engaging in the development of new products and services, entry into new markets and the establishment of new sub-units to the main business. They should increase networking and agglomerate within industrial or commercial zones rather than remain home-based. In addition, they should avoid any dependency on geographical proximity within the supply chain to either customers or suppliers. Entrepreneurs seeking to launch and manage a venture in peripheral regions need not be deterred by disadvantages related to their remote locations; rather they should overcome the detriments inherent in the periphery. Policy makers should consider adopting screening procedures and support programs that encourage entrepreneurs and managers to pursue strategies that promote employment growth. We argue

that these implications are relevant also for pursuing growth in revenue, since in our sample it strongly correlates with growth in employment.

In this study we controlled for various factors related to the type of business. However, we excluded financial considerations since we were unable to receive the necessary financial data such as sales volume and profits. Other limitations of this study refer to the Israeli context of its sample. The elongated geographic shape of the country enables clear distinction of peripheral regions; however, distances to the core region in Israel may be considered relatively short in wider, larger countries. Further research is suggested in other countries and in different settings in order to validate the generalizability of our findings. Moreover, in the e-commerce era implications related to decreased influence of geographical proximity within the supply chain should be studied further in different contexts. Finally, the conclusions of this study should not be applied directly to the differences in growth found between bigger businesses (50 employees and above) in core and peripheral regions.

In summary, this study traced the differences in growth between peripheral and core regions to difference in EO proactiveness between the regions, and found it is higher in core regions, where conditions are rapidly changing and opportunities are more abundant. We suggest that government policies should aim to promote economic growth by encouraging the proactiveness of business owners in peripheral regions.

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