DERREG

Developing Europe's Rural Regions in the Era of Globalisation

An interpretative model for better anticipating and responding to Challenges for regional development in an evolving international context.

WP1:

Global Engagement and Local Embeddedness of Rural Businesses

Deliverable 1.2

Report on

Electronic Survey and Structured Interviews

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1. Introduction

This is the second report associated with DERREG Work Package (WP) 1. The first deliverable (D1.1) provided a conceptual framework and descriptions of the case study area contexts. This second report gives an account of the primary empirical phase of WP1, which comprised two surveys, both targeting small and medium-sized enterprises (SMEs) in the five case study areas (in Sweden, Netherlands, Czech Republic, Slovenia and Lithuania.) The first survey was carried out electronically (by email), and collected basic information on the entrepreneurs perceptions of their business networks. The second survey took the form of a set of structured interviews with a subset of the respondents to the electronic survey. It was more qualitative in nature and sought to build our understanding of the way in which business networks functioned, how they contributed to the success of the firms, and the way in which overseas linkages are integrated.

The structure of this report is very simple: The second section describes the methodology employed in the two surveys in more detail. The third section is the heart of the report, presenting the survey findings, structured according to the five case study areas. The final section presents a comparative summary of the findings, and some initial reflections regarding possible policy implications. The latter are intended to form an input into a more in-depth consideration of policy to support rural businesses (Task 1.3) which will be presented in D1.3, and an overall assessment of the findings of WP 1 (Task 1.4) which will be presented in D1.4. Appendix 1 and Appendix 2 contain working documents for the electronic and face-to-face interviews respectively.

2. Survey Objectives and Methodology

2.1. Objectives

Despite the increasing recognition that business networks play an important role in patterns of innovation, economic "vitality", and globalisation, little or no business linkage data are collected by statistical agencies, either at the national or the European level. Our knowledge of these phenomena is therefore essentially anecdotal and fragmentary. Furthermore, (see D1.1) much of the existing information relates to urban businesses. There is therefore a need to establish the basic facts about the changing configurations of rural business linkages. Since DERREG is concerned with rural globalisation processes, information regarding the geography of linkages is especially interesting. The nature of the interactions which define these linkages is important because it will help us to understand how networking supports innovation and growth, and allows us to begin to assess the validity, in this specific context, of the concept of relational space.

The DERREG "Description of Work" (p33) describes the objectives of this phase of data collection as follows:

"*Identify the linkages of local business networks in the different case study regions and analyse their spatial and socio-economic structure;*

- *Make a comparative analysis between the case study results and analyse the impact of globalisation processes on the structure of these networks;*
- *Identify key factors in the adoption of different strategies by rural businesses, including for sole traders and small businesses the significance of gender, age etc.;*"

2.2. Timing and Context

As already explained above, data collection took place in two phases, both of them completed during the Spring and Summer of 2010. This timing was of course very significant, in two respects: (a) In many parts of Europe this was the most psychologically difficult period of the economic crisis, after the initial banking failures and bail-outs, but before there was any clear evidence of recovery, and against a continued backdrop of mounting concern about national debts and the survival of the Euro. (b) For individual entrepreneurs this was a period of extreme uncertainty and nervousness. At the same time many had reduced their workforce or had increased their personal input to try to ensure survival. In this sense it was the worst possible time to request their cooperation in a research project which they would perceive as offering them little direct benefit. This undoubtedly increased the difficulty experienced in implementing the two surveys, and slowed down the acquisition of data.

2.3. The Electronic Survey

In the light of the increased risk of "survey fatigue" (see above) the design of the Electronic Survey was very much driven by the desire to minimise the effort required by the entrepreneur to fill it in. This led to the choice of an email survey, using a "smart" .pdf form, which could be completed simply by clicking on icons or typing in percentages. Likert scales were used where possible. Each research team translated the electronic form into their national language. An example of the forms used is provided in Appendix 1.

In practice it was found that "cold emailing" firms resulted in a very low response rate. All the research partners were able to raise this to acceptable levels by making initial contact with entrepreneurs through a phone call explaining the nature and objectives of the research.

On completion the responses were automatically emailed to the project team in a format which could be quickly and easily converted to a MS Excel database. A "manual" version was also provided, which could be mailed back to the team.

The questions on the electronic form related to transaction patterns, cooperation with other businesses, sources of finance, institutional support, membership organisations and clubs, and the impact of the recession. A final question asked the respondent to consider participating in the subsequent face-to-face survey (see below).

The sampling procedure developed by each research partner in their case study area varied slightly due to differences in availability of business email address lists. Specific details are provided in Section 3. As a general rule the aim was to elicit 50 completed responses, from businesses with fewer than 50 employees, located in the open countryside, or in smaller settlements. The agricultural sector was included only if the business was diversified and supplied some form of goods or service beyond the conventional "food and fibre". Businesses which are intrinsically localised (hairdressers, bakers etc) were also excluded. The result was thus not a statistically representative sample of the entire SME sector of the rural economy. Rather it may be seen as providing a broadly representative view of the behaviour of rural businesses for which international networks are potentially beneficial.

The WP1 lead partner (Nordregio) supplied an analysis and reporting format (see Appendix 1) to facilitate the production of broadly comparable case study region reports.

2.4. The Face-to-Face Survey

The objective of this survey was to explore in more detail the 'activity space' of a number of small and medium-sized businesses in each of the five Case Study Regions. Firms willing to participate were identified through a question in the electronic survey, and from this (relatively small) pool, firms with a higher degree of internationalisation were preferentially selected.

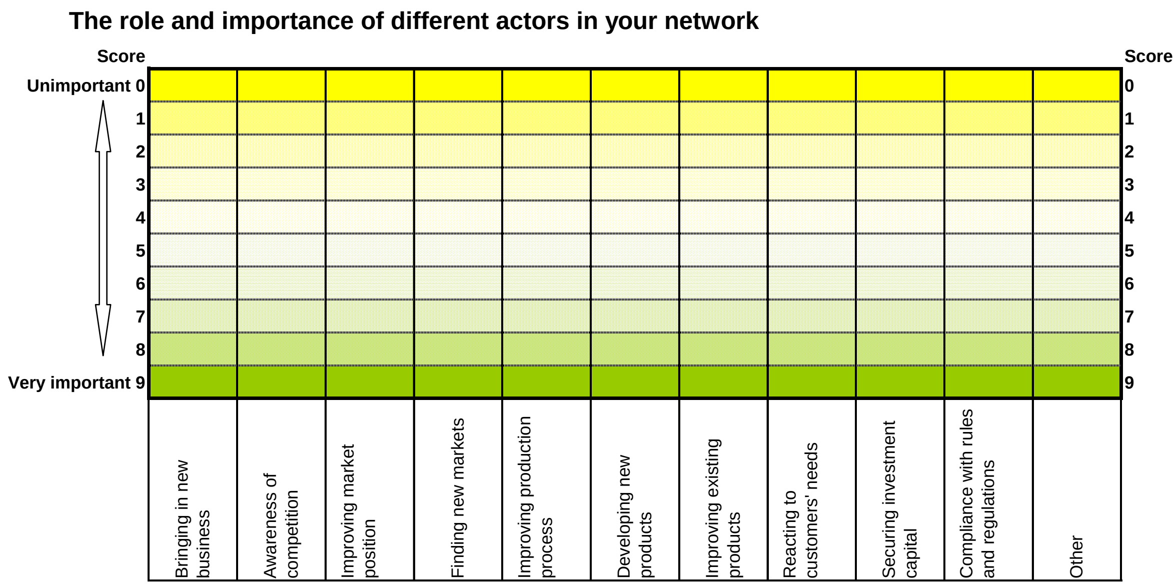


Figure 2.4.1: An Actor Map Template

The interviews centred upon the concept of an "Actor Map" (Figure 2.4.1). These are simple scoring matrices showing how important the interviewee considered different groups of actors (located in different geographical zones) to the successful operation of their business. It is important to emphasise that the ‘actors’ are not individual firms or organisations, but generic types. The interviewee was provided with a standard list of types of actors, distinguishing customers and suppliers, other SMEs with whom they cooperated, support institutions, sources of finance, and membership/representative organisations and clubs. For each of these codes were allocated for four geographic zones; the region, rest of Sweden, EU, and elsewhere in the world. The interviewee was then asked to select the types of actors which they considered part of their network, and to place the associated codes on the appropriate cells within the matrix.

The interviews were intended to be structured, but not tied to a specific sequence of questions. A detailed set of “prompts” was provided by the WP lead partner. These guided the interviewer to explore a range of issues, such as the origins of network linkages, the nature of interactions, barriers and opportunities, or the impact of recession, in an informal way. The interviews were recorded. A standard reporting fiche was provided to facilitate the recording of information in a comparable way. The full instructions for the interview and reporting procedures are reproduced in Appendix 2.

It should be emphasised that given the relatively small number of interviews the analysis presented in Section 3 is indicative only, and that no claims are made to statistical representativeness. In the same spirit, the interviews were a rich source of anecdotal material, supporting an essentially qualitative approach. The WP lead partner provided a draft report on the Swedish case study area as a model to the other partners. Despite the essentially qualitative approach it proved possible to incorporate a simple scoring system based upon the Actor Maps, which allowed some comparison between different types of business, and businesses which seemed to utilise their networks in different ways.

3. Case Study Area Reports

3.1. Övre Norrland (Sweden)

3.1.1 The Electronic Survey of SME Networking

Methodology and Sampling

The responses to the DERREG questionnaire on SME networking in Sweden were compiled between March and June 2010. A first sample of SMEs was performed using the AffärsData database. This database provides information on the limited companies registered in Sweden. The sampling was done by:

- selecting firms with a number of employees between 5 and 49, and located in the counties of Västerbotten and Norrbotten,

- but excluding firms located in the counties' urban municipalities, as identified by the former Swedish Agency for Rural Development (Glesbygdsverket), i.e. Umeå, Kiruna, Luleå, Gällivare and Kiruna

At this stage, all economic branches were included in the sample of firms, which contained approximately 800 firms. Of these approximately 200 were identified as being engaged in activities which were not intrinsically local (such as local service activities, education, real estate, retail and wholesale) and which may therefore reasonably be expected to engage in extra-regional, and international networking. From this sample of firms, the research team contacted the firms according to the following procedure:

- Contacting the firm's manager by telephone and explaining, in few sentences, the reason for our call.

- Asking her/him if s/he would be willing to answer our questionnaire on behalf of the company. If not, then the telephone conversation was ended. If the answer was yes, an email address to which we could send the questionnaire was requested.

- A brief email with the questionnaire attached was sent.

Of the 200 companies contacted in this way 50 returned the questionnaire. One of these proved unusable, and thus a sample of 49 firms is represented by the following analysis. Although no claims are made for strict statistical representativeness, the sample of 49 firms is broadly illustrative of how firms in sparsely populated areas of Northern Sweden are capable of developing extra-local relations to maintain and develop their business activities.

Overview of Sampled Firms

The first information which was gathered in the survey related to general characteristics of the company. The results are summarised in Table 3.1.1. The respondent was asked to provide information about location, firm age, ownership structure, branch and size. This was followed by a question about the extent to which the company was perceived to be integrated into international or global networks.

In terms of geographical location, the firms of the sample show a good geographical distribution, corresponding to about 20 different municipalities. Yet, some municipalities are more represented than others. For instance, 9 firms are located in the municipality of Kalix, 7 in Lycksele and 6 in Pajala and Robertsfors.

9 respondent firms the survey originated before 1970. Some of these companies are very old, one being created in 1850 and one in 1907. Furthermore, 13 firms were created in the 1970-1980s period, 15 during the 1990s and 14 since the turn of the Millennium. Consequently, our sample of firms represents a mix of old and rather new firms.

Of our sample of firms, 41 firms are independent firms, i.e. not owned by another company. 2 firms are belonging to a local/regional group, 5 to a national group and 5 firms belong to a foreign-owned group. The fact that few firms in our sample are part of a larger group implies, for our research, that most of the decisions concerning networking and business development are made ‘on site’ and not through an external hierarchical decision-making process.

Table 3.1.1:Main characteristics of the responding firms

Firm No.	Location	Firm Start	Firm ownership	Branch[1]	Firm Size[2]	Perceived level of global integration
SE15	Vännäs	2004	Indep. firm	Manufacturing	Micro	Low
SE25	Robertsfors	1984	Indep. firm	Manufacturing	Micro	Low
SE42	Kalix	1997	Indep. firm	Manufacturing	Micro	Low
SE6	Robertsfors	1999	Indep. firm	Construction	Micro	Low
SE7	Robertsfors	1999	Indep. firm	Professional, Scientific and Technical activities	Micro	Low
SE41	Storuman	1986	Indep. firm	Manufacturing	Micro	Low
SE4	Pajala	1979	Indep. firm	Manufacturing	Small	Low
SE14	Kalix	2001	Indep. firm	Manufacturing	Small	Low
SE17	Vindeln	1907	Indep. firm	Manufacturing	Small	Low
SE18	pajala	1997	Indep. firm	Manufacturing	Small	Low
SE22	Lycksele	1993	local/regional grp.	Manufacturing	Small	Low
SE2	Åsele	2002	National grp.	Manufacturing	Small	Low
SE33	Sorsele	1959	Indep. firm	Transport and storage	Small	Low
SE8	Kalix	1994	Indep. firm	Information and Communication activities	Small	Low
SE49	Lycksele	1995	National grp.	Information and Communication activities	Small	Low
SE32	Kalix	2002	National grp.	Professional, Scientific and Technical activities	Medium	Low
SE31	Kalix	1980	Indep. firm	Manufacturing	Micro	Med. low
SE45	Gällivare	2010	Indep. firm	Manufacturing	Micro	Med. low
SE48	Jokkmokk	1998	Indep. firm	Construction	Micro	Med. low
SE9	Lycksele	2007	Indep. firm	Wholesale and retail trade	Micro	Med. low
SE13	Pajala	1850	Indep. firm	Agriculture, Forestry and Fishing	Micro	Med. low
SE3	Vindeln	1988	Indep. firm	Manufacturing	Small	Med. low
SE5	Ånäset	2003	Indep. firm	Manufacturing	Small	Med. low
SE10	Övertorneå	1985	Indep. firm	Manufacturing	Small	Med. low
SE19	Kalix	2009	Indep. firm	Manufacturing	Small	Med. low
SE24	Pajala	1987	Indep. firm	Manufacturing	Small	Med. low
SE28	Norsjö	1985	Indep. firm	Manufacturing	Small	Med. low
SE29	Lycksele	1967	Nat. grp.	Manufacturing	Small	Med. low

[1] According to the European NACE 2.2 classification

[2] According the EU DG Enterprise definition. Micro from 0 to 9 employees; Small from 10 to 49 employees; Medium from 50 to 249 employees.

Firm No.	Location	Firm Start	Firm ownership	Branch[1]	Firm Size[2]	Perceived level of global integration
SE30	Lycksele	1995	Foreign grp.	Manufacturing	Small	Med. low
SE12	Nordmaling	1954	Indep. firm	Transport and storage	Small	Med. low
SE38	Robertsfors	1998	Indep. firm	Information and Communication activities	Small	Med. low
SE47	Kalix	2006	Indep. firm	Energy	Micro	Med. high
SE39	Kalix	2004	Indep. firm	Information and Communication activities	Micro	Med. high
SE46	Kiruna	2003	Indep. firm	Professional, Scientific and Technical activities	Micro	Med. high
SE1	Pajala	1953	Indep. firm	Agriculture, Forestry and Fishing	Small	Med. high
SE21	Arjeplog	1985	Indep. firm	Agriculture, Forestry and Fishing	Small	Med. high
SE26	Övertorneå	2007	Indep. firm	Agriculture, Forestry and Fishing	Small	Med. high
SE27	Pajala	1929	Indep. firm	Agriculture, Forestry and Fishing	Small	Med. high
SE50	Lycksele	1987	Indep. firm	Agriculture, Forestry and Fishing	Small	Med. high
SE34	Luleå	1993	Indep. firm	Manufacturing	Small	Med. high
SE36	Kalix	1995	Indep. firm	Manufacturing	Small	Med. high
SE40	Arvidsjaur	1939	Indep. firm	Manufacturing	Small	Med. high
SE11	Skellefteå	1940	loca/regional grp.	Manufacturing	Small	Med. high
SE44	Robertsfors	1998	Indep. firm	Manufacturing	Micro	High
SE23	Lycksele	1992	Indep. firm	Professional, Scientific and Technical activities	Micro	High
SE20	Dorotea	1990	Indep. firm	Manufacturing	Small	High
SE35	Vännäs	1985	Indep. firm	Manufacturing	Small	High
SE16	Robertsfors	1978	National grp.	Manufacturing	Small	High
SE43	Haparanda	1987	Foreign grp.	Manufacturing	Small	High
SE37	Jokkmokk	2006	Indep. firm	Manufacturing	Medium	High

The branch of economic activities most represented in our sample is manufacturing. 30 firms belong to this category, according to the NACE classification (Category C). 6 firms have activities related to Forestry and thus belong to the NACE class A (Agriculture, Forestry and Fishing).

32 firms in our sample are considered are small, i.e. with a number of employees (at the time of the survey) between 10 and 49. 16 firms are micro firms, with less than 10 employees. Finally, 2 firms belong to the category 'medium-sized firms', even if it was originally out of our sampling methodology. This is due a

discrepancy in the number of employees between the number of employees reported in the *AffärsData* database, and the number at the moment of the survey.

The respondents were asked to assess the degree to which their company is integrated into global network. This assessment enables us to get an idea on how the managers perceive the position of their company in times of globalisation. 4 options were available to the respondent: low integration, medium low, medium high and high. 16 firms stated that they have a 'low' degree of integration in such global networks, while 7 stated that they have a 'high' degree.

Comparisons between the variables shown in Table 3.1.1 provides a broad overview of the representativeness of the structure of our sample. Especially of interest is the correlation between the branch of economic activities in which the firm belongs to and the date of creation of the firm. One fifth of our whole sample (11 firms) consists of manufacturing firms that were created before 1970. This implies that those firms have well established offerings and products. These companies might have developed some key offerings that have enabled them to be successful and survive. To a lesser extent, 8 and 7 respectively of the manufacturing firms were created in the 1970-80s and 1990s period. Not all the cells in our table are covered by our sample. There is especially a good distribution of sectors for the firms settled in the 1990s (all possible cells are covered), and to a lesser extent in the 1970-80s. For firms created either before or after those two periods, our sample is much more concentrated on few sectors (manufacturing and forestry).

Table 3.1.2: Sectoral belonging and age of the sampled businesses

	Before 1970	1970-80s	1990s	2000s	Total
Agriculture, Forestry and Fishing	2		1	3	6
Construction		2			2
Energy			1		1
Information and Communication activities		3	1		4
Manufacturing	11	8	7	4	30
Professional, Scientific and Technical activities		2	2		4
Transport and storage				2	2
Wholesale and retail trade			1		1

The Geography of SME's Transactional Space

This section is based on the data compiled in the survey in the section "Clients and suppliers". The main task here is to identify different degrees of global involvement of firms, when it comes to transactions, i.e. both import and export activities.

In so doing, we have adapted a methodology that was elaborated by the OECD and applied to rural firms in a former FP5 project. The typology applied is called the SME Index of Globalisation. Table 3.1.3 shows the index and its main categories. The index is based on the geographical source/destination for traded inputs/outputs, the location of establishments and affiliations and the potential market opportunities. In the DERREG questionnaire, we are able to provide the information about the percentage of sales or purchases of the firm according to four (concentric) zones (regional, national, European and global), as well as about the structure of the ownership. However, as most of our firms are independent firms, we deem that this variable would not be interesting for explaining the geography of the transaction of the firms in our sample.

Table 3.1.3: SME Index of Generalisation

Index	Description	Traded inputs and outputs	Establishments and affiliations	Market opportunities and competition
1	No globalisation *"Domestic"*	All inputs sourced from local area, all outputs sold in local area.	Single establishment, no establishments or affiliations outside local area.	No market outside local area, no potential competition from outside local area.
2				
3	Limited globalisation *"Mainly domestic"*	< 10% of inputs sourced across borders, and < 10% revenue from across borders, usually within a limited span of nations.	At least one establishment or affiliate outside local area or outside national area.	Barriers to entry to outside markets and to local market (for competitors) are significant and amount to more than 50% of costs.
4				
5	Major globalisation *"Internationalised"*	> 10% but < 40% of inputs sourced internationally, and > 10% but < 40% of revenue from across borders, usually across two major international regions.	Establishments or close affiliates in at least four different nations and in two major international regions (e.g. Europe, North America, Asia).	Barriers to entry are noticeable, make up to 10% of cost disadvantage, but can be overcome fairly easily.
6				
7	Extensive *"Globalised"*	> 40% of inputs sourced internationally, > 40% of revenue from outputs traded across borders, across all major international regions.	Establishments or close affiliates in at least one country in all three major international regions.	Barriers to entry to international markets are not a significant impediment for firm or competitors, make up less than 5% of cost disadvantage.
8				
9				
10	Complete *"Fully globalised"*	Majority of inputs of any establishment sourced across borders, large majority of outputs traded across borders.	Multiple establishments or affiliates in many countries and in all major international regions.	Markets in all major international regions, competition likely to be present or come from any international region.

Source: OECD.

Using this table as an inspiration, we define five different types of companies according to the geographical structure of their sales and supplies. The typology is developed in two successive steps. First, separate typologies for imports and for exports are created. Table 3.1.4 shows the thresholds used to identify each category, from low degree of internationalisation of import/export to a high degree of internationalisation. In the survey, the managers had to identify the proportion of their sales and their purchases which originated from 4 different geographical zones: regional, national, European, and the rest of the world. This makes it possible to compile the necessary data to build two classifications of firms, according to purchases and according to sales.

Table 3.1.4: Building a typology of firms based on the geographical distribution of transactions.

Degree of internationalisation	**% of transactions**			
	Regional	National	European	World
Low	>80%			
Medium Low	>50%	<50%		
Medium		>50%	<10%	
Medium High		>30%	>10%, but <30%	<10%
High			>30%	>10% (or international >40%)

The two classifications are then cross tabulated to generate an 'Index of Globalisation'. This typology is divided into 5 types, from 'low' internationalisation (with sales or purchases made essentially at the regional level) to 'high' internationalisation (with more than 40% of the sales or purchases made outside the national border). Table 3.1.5 shows the results from Sweden using the responses from the 49 questionnaires (but only 47 valid answers). The crossing of the scale of internationalisation for sales and purchases enables us to know how many firms belong to each of the 25 possible cases, i.e. Low Sales-Low Purchases or Medium Sales-High Purchases. These are subsequently grouped into 5 broad types.

Table 3.1.5:Typology of the firms' transactional space

		SALES					
		Low	Medium Low	Medium	Medium High	High	Total
PURCHASES	Low	4	1		1		*6*
	Medium Low		1	2		4	*7*
	Medium	4	1	5	2	3	*15*
	Medium High	1	1	2	1	2	*7*
	High		1	4	1	6	*12*
	Total	*9*	*5*	*13*	*5*	*15*	*47**

** For three respondents, the responses given to this questions were incomplete and could not be processed further in the typology*

At first sight, it seems clear that there is a certain degree of symmetry in the geography of the transaction space, i.e. a firm that has essentially local purchases will have as well essentially local sales. Although this configuration is rather frequent and can be identified on the diagonal: Medium Purchases-Medium Sales (5), High Purchases-High Sales (6) and Low Purchases-Low Sales (4).

An interesting feature of the Swedish sample is that one third of the firms have a profile with a degree of internationalisation above the average for sales (20) or purchases (19). 10 firms combine these two characteristics.

From this table, the following 5 broad types of SME 'transactional spaces' are derived:

- blue: Local (6 firms in total)
- green: Domestic (7 firms)
- grey: National powerhouses (9 firms)
- orange: International interfaces (15 firms)
- purple: Globalized (10 firms)

Overall, 25 firms (Globalized and International interfaces categories), i.e. half of our sample, have export and/or import activities directed towards international markets. On the other hand, only 13 firms, corresponding to the Local and Domestic categories, have sales/purchasing patterns essentially focused on the regional scale.

Table 3.1.6:Index of SME globalisation and age of the firm

	Before 1970	1970-80s	1990s	2000s	Total
Local	1	3		2	6
Domestic	2	2	2	1	7
National Powerhouses	4	2	1	1	8
International Interfaces	3	4	6	3	16
Globalised	3	2	4	1	10
Total	**13**	**13**	**13**	**8**	**47**

The age of a company is often seen as an important parameter when it comes to the internationalisation of a firm's business activities. In general, it is expected that older firms will have more internationalized business activities due to the maturity of the firm's offering and the necessary time to establish stable international business relationships. On the other hand, some firms are said to be 'born global', i.e. those are rather new firms that are created with a key product that has the potential to be sold on any markets worldwide.

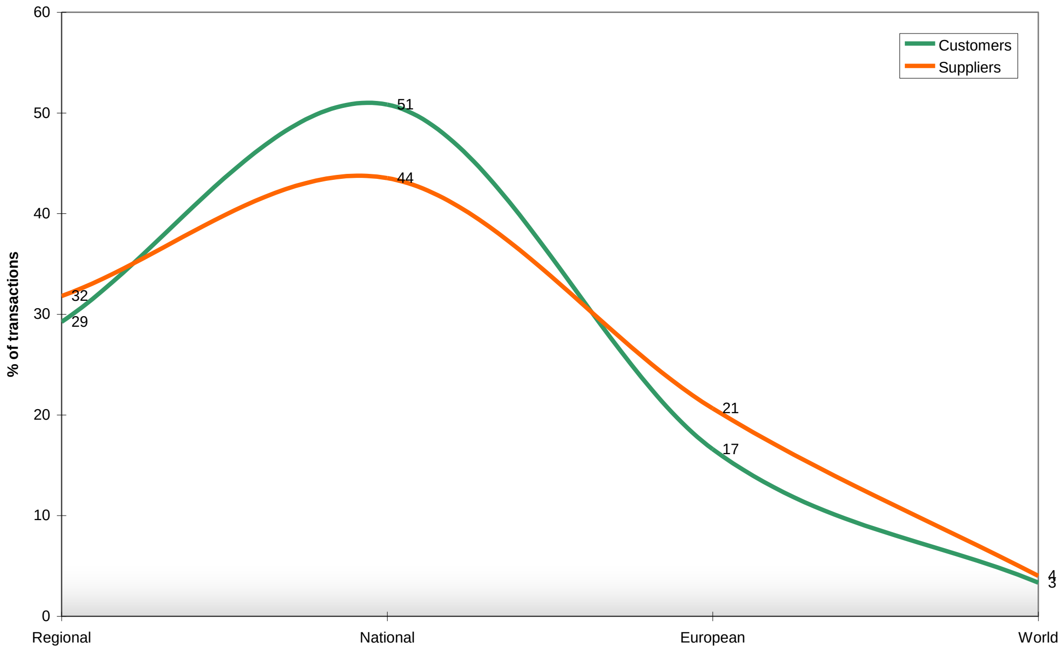
For our sample of SMEs, there seems to be a rather balanced distribution of firms by age for each of the categories in our typology. For the category of 'Globalized' firms, 3 of them were created before 1970, 2 of them during the 70s and 80s, 4 of them during the nineties and 1 in this century. In the case of our 'International interfaces' category, the largest number (6 out of 16) were 'born' in the 1990s.

Table 3.1.7: Index of SME globalisation and perceived global integration.

	Low	Average Low	Average High	High	Total
Local	4	2			6
Domestic	2	4	1		7
National Powerhouses	3	2	2	1	8
International Interfaces	4	6	3	3	16
Globalised		1	6	3	10
Total	13	15	12	7	47

In the first part of the questionnaire, the respondents were asked to assess their degree of 'global integration'. Cross-tabulating this (subjective) perception data with the results of our typology enable us to compare the degree of international integration from a subjective (own perception), and more factual (import/export activities) perspectives. The results are shown in Table 3.1.7 below. If the subjective and factual perspective were to 'fit' with each other, then most of the firms should be located in to cells close to the diagonal. To a certain extent this expectation is fulfilled. Two cells in the top right corner, and the bottom left cell are empty. The majority (32) of the 47 firms are either in the diagonal or adjacent cells.

Figure 3.1.1: Average transaction profile of responding firms.



The purchase and sales profiles for each of the category of our typology enables to better understand the wide diversity of configuration when it comes to sales and purchases activities for SMEs in the northern, sparsely populated areas of Sweden. An interesting feature is that, even for the most internationalized firms, the proportion of sales or purchases activities taking place with partners outside Europe is rather limited. For the firms in the 'globalized' category, it accounts for 4% of the purchases and 5.5% of the sales on average. Interestingly, this proportion is higher for 'internationalized interfaces' firms: for firms belonging to this category thanks to their marked international sales profile (labelled Internationalized interfaces S), it amounts to 15.5% of the total sales on average; and for the firms belonging to this category thanks to their marked international purchase profile (labelled Internationalized interfaces P) it amounts to 12.5% of the purchases on average.

Figure 3.1.2: Purchases profile by type of firm according to the index of globalisation.

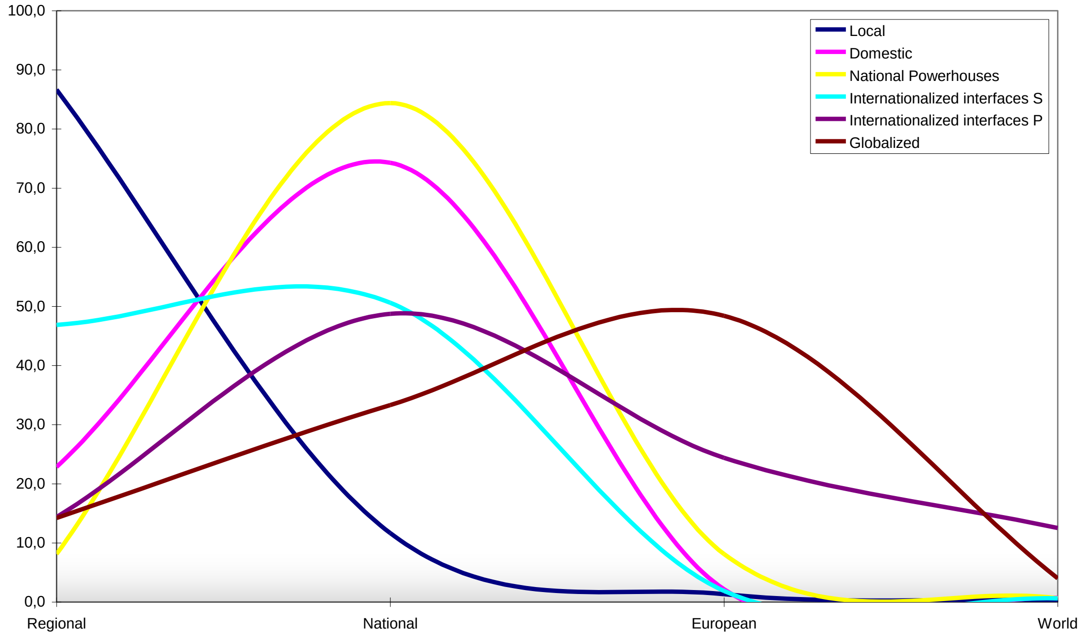
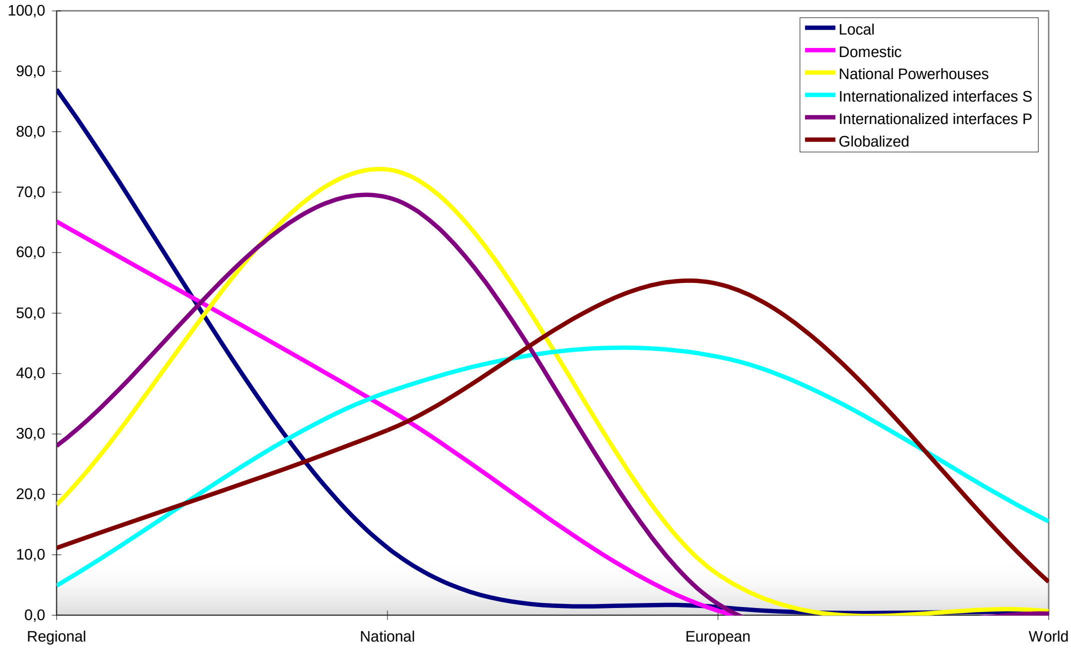


Figure 3.1.3: Sales profile by type of firm according to the index of globalisation.



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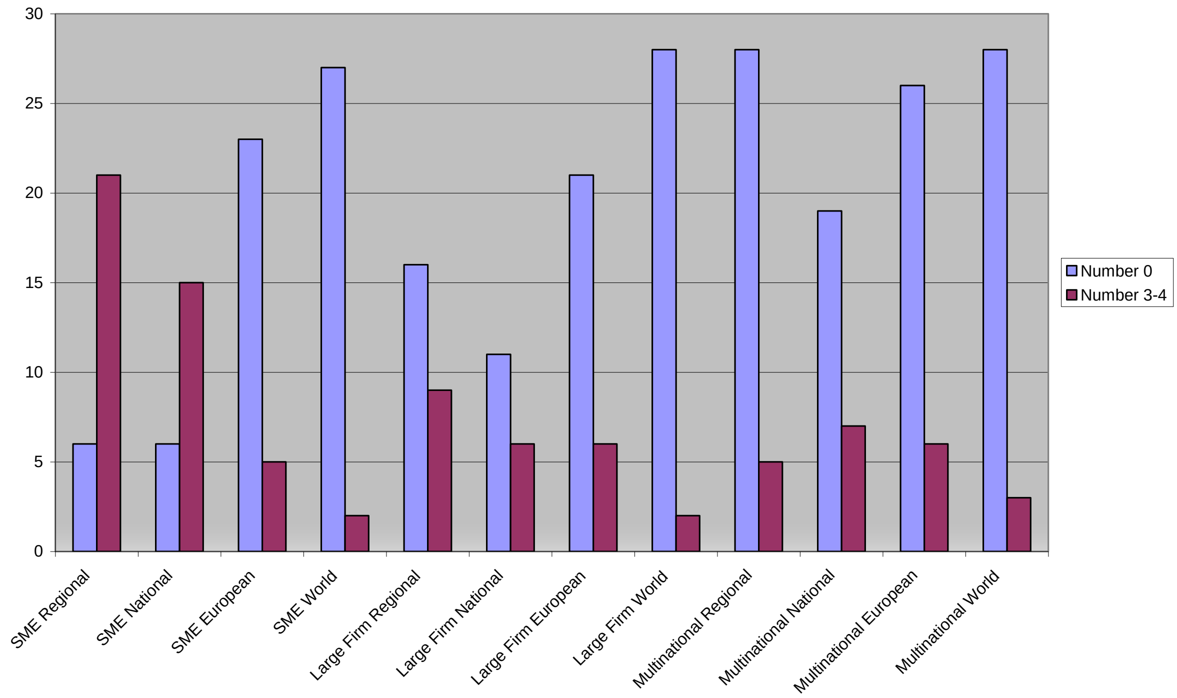
Internationalized interfaces S and P correspond to the firms belonging to the 'Internationalized interfaces' category with internationalized profile for respectively their sales and purchases.

The Collaborative Space of SMEs

It seems reasonable to hypothesise that the relationships SMEs have with other companies are not purely based on transactions. For instance, collaboration between SMEs and other companies could be based on the sharing of information regarding innovation processes, technology development or entering new marketplaces. In the questionnaire, the respondents were specifically asked to assess their extent of their collaboration with other types of firms by size and location by giving a score from 0 (no relation) to 4 (frequent/intense relation).

One way to summarise the responses is to record which types of firms (by size and location) are associated with the most 'zeros' and 'fours' (or 'threes'): counting the number of zeros expressed for each type of collaborating firms (by size and location) enable us to understand with what type of firms there usually no collaboration (if the number is high), and with which one there is at least some collaboration (if the number is low). Of course, in the latter case, it does not mean that it is a high degree of collaboration, but at least 'the gates are opened'.

Figure 3.1.4: Non-existent and strong measures of collaboration with other firms.



First of all, independently from the size of companies, the highest number of 'zeros' and the lowest number of 'threes-and-fours' is the for collaboration with firms located in Europe and the rest of the World. This shows that for SMEs in Norrland, it is rather unusual to have strong collaborative relationship with firms outside the domestic and national market.

Second, with respect to collaboration with firms located in the region, the number of 'threes-and-fours' is higher than that for collaboration with firms located elsewhere in Sweden. This applies to both collaboration with SMEs and large firms. Furthermore, the number of 'threes-and-fours' is higher in relation to nationally based multinational companies than for multinational companies located within the region[3].

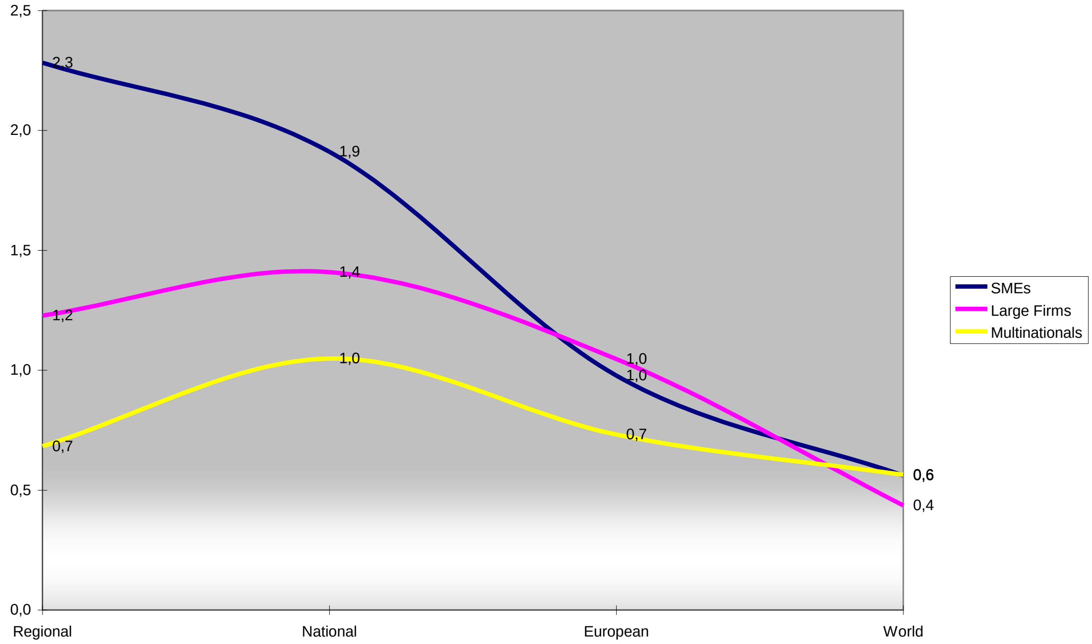
Figure 3.1.4 also suggests that the interviewed SMEs are more likely to develop strong relationships with national SMEs than with regional large firms. However, the sampled SMEs seem slightly more likely to develop strong relationships with European multinationals than with European SMEs.

Another way to look at the responses is to look at the average of the expressed results for each type of firm. Not surprisingly, the average collaboration intensity is the highest for SMEs at the regional level. The average intensity decreases steadily with the expansion of the territorial context: (regional, to national, European and the rest of the world).

When it comes to the collaboration between our sample of SMEs and Large Firms and Multinationals, the 'peak' takes place at the national level, with an average expressed intensity of respectively 1.4 and 1.0. For both types of firms, the average intensity of the collaboration at the European level is at the same level than at the regional level, which might indicate that the geographical proximity matters less when our sample of firms cooperate with bigger firms.

Figure 3.1.5: Average responses regarding collaboration with other firms by size group.

[3] Of course regional multinational companies are likely to also have offices or headquarters in Stockholm, which makes the distinction between the two types of firms rather difficult…

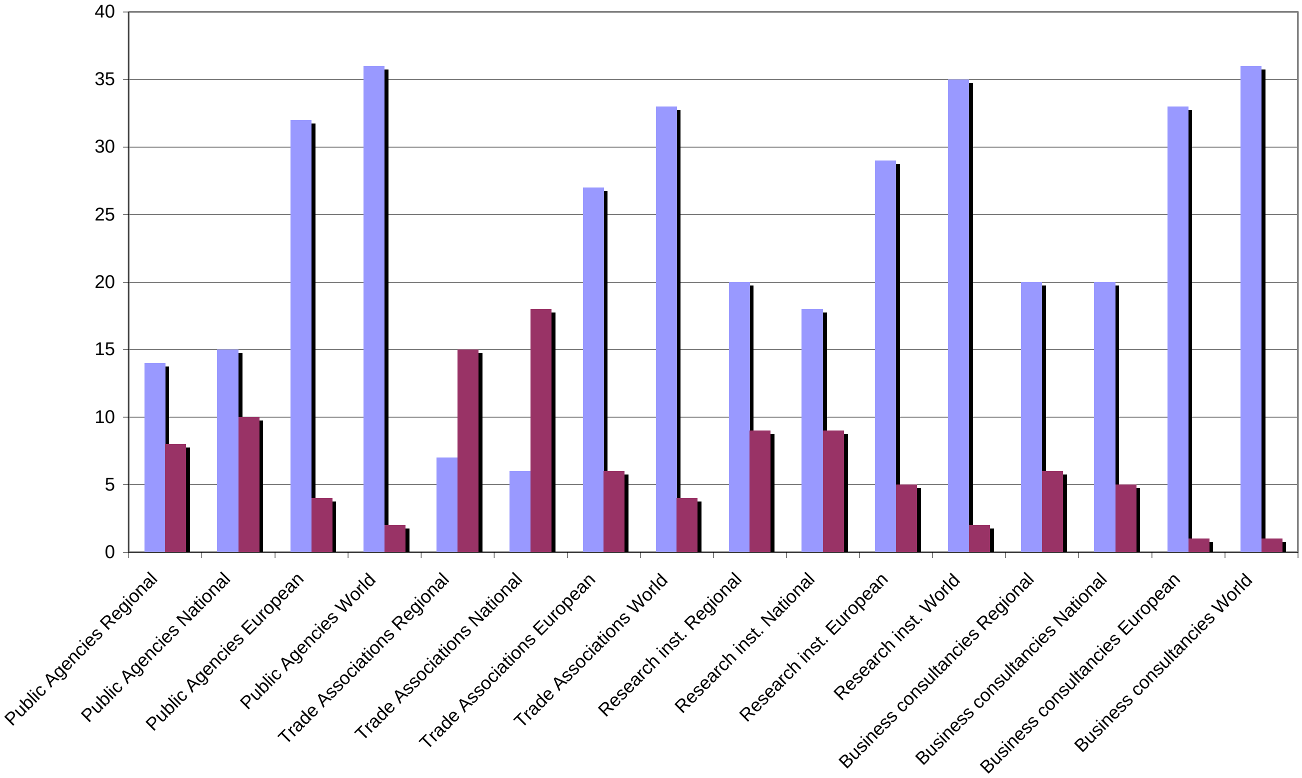


The Institutional Setting

Another main assumption from our joint work is the fact that the business network of SMEs (and firms in general) reaches out to non-private actors. Furthermore, we assume that those institutions are especially important for firms that wish to be further integrated in global networks. Such institutions may be of various kinds, official agencies or bodies, organisations representing the business environment, educational centres or even business consultancies. In the questionnaire, the respondents were specifically asked to assess the support provided by different institutional actors by giving a score from 0 (no relation) to 4 (frequent/intense relation).

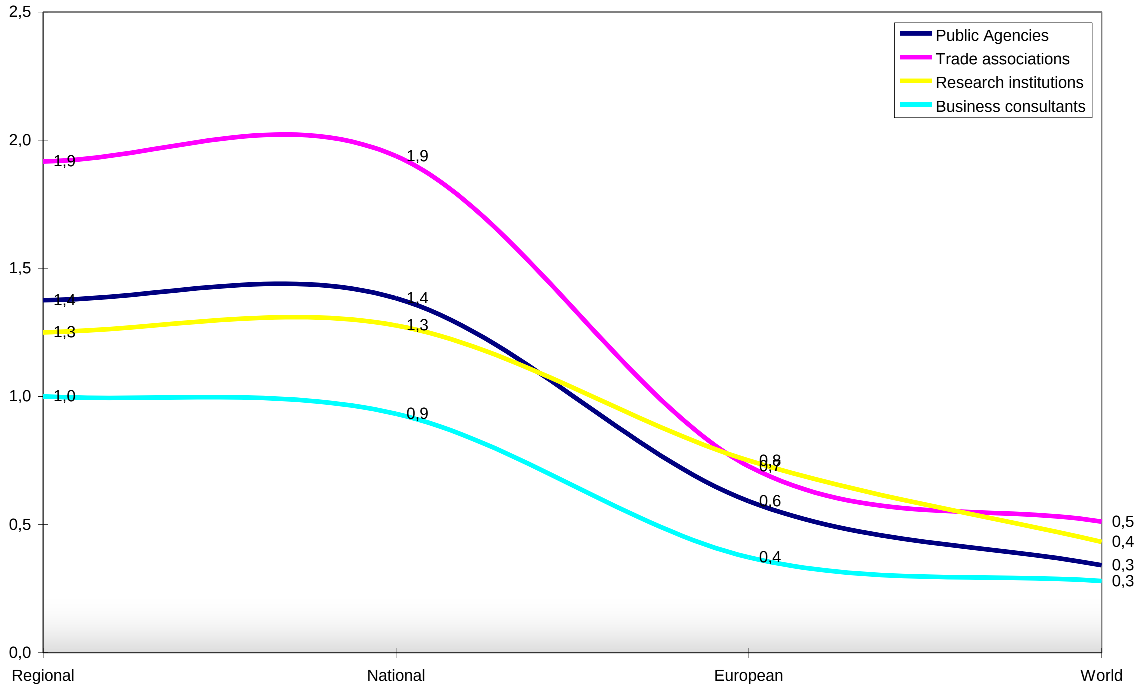
The results of the Swedish survey (Figure 3.1.6) confirm the fact that the institutional context for SMEs in northern, sparsely populated areas is strongly rooted at the regional-national level. The number of SMEs in our sample which expressed a strong relationship with support institutions at the European or 'World' institutional actors was small. However, whereas the collaboration with companies was more intense at the regional level than at the national level, the support from the institutional level is more intense from the national level than from the regional one. This is hardly surprising in Sweden, as the regional and local level have less 'policy levers' when it comes to economic development initiatives than the national level.

Figure 3.1.6: Non-existent and strong measures of support from institutional actors.



The Swedish results also highlight the importance of 'business organizations', such as Chamber of commerce or associations of enterprises, as a source of support for Small companies. Trade and business associations at regional and national level get the highest number of 'high scores' (about 15 each) and the least number of 'zeros' (about 5). This clearly shows their importance for local economic development processes. Finally, it appears that the support from regional and national business organizations is equally important.

Figure 3.1.7: Average responses regarding support from institutional actors given by the sample.

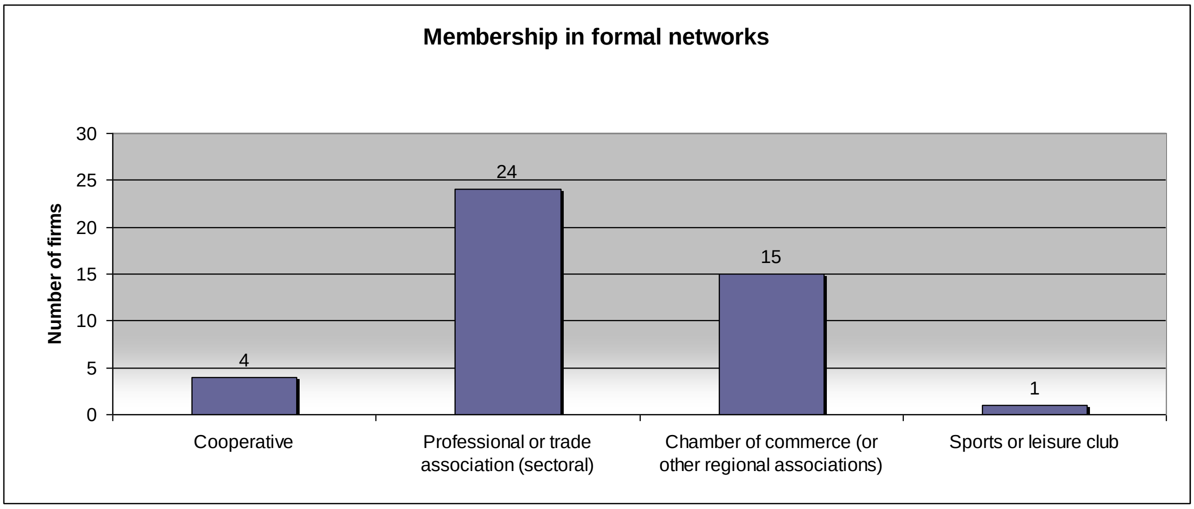


The importance of the support of institutional actors at the regional and national is clearly displayed when picturing the average expressed results for each type and geographic level of institutions (Figure 3.1.7). At the regional and national level trade associations seem to have the strongest links to SMEs, followed by public agencies and research institutes. At the European or 'World' level all types of agency are much less closely associated with SMEs in Övre Norrland.

In a separate question, the managers were asked to state in which types of membership organisations they are involved in. A set of pre-define types of associations or clubs was listed (cooperative, sectoral business associations, regional business associations, or sports club). The respondents had the opportunity to add other associations if appropriate.

The results for Swedish SMEs (Figure 3.1.8) show that associations based on informal or non-business connections (sports and leisure clubs) are not an important arena for SMEs for them to develop networks that could improve their firm's performance. This is rather in contradiction with previous Swedish studies (See Johannisson et al., 2002) that have emphasized the important role of such personal connections as a 'backbone' for the firm's business network.

Figure 3.1.8: Expressed membership in formal networks.



Few of the firms were members of cooperatives[4] However, half of the firms sampled, i.e. 25, state that they are members of professional or trade associations with a sectoral focus. In Sweden, the most cited sectoral associations are *Teknikföretagen* and *Företagarna*. A little less than a third of the respondents (15) were members of regional trade associations such as Chambers of Commerce.

Relationships with Sources of Finance

One feature of small and medium-sized firms is that they are not only small in terms of numbers of employees, which is the common indicator for identifying them, but also limited in terms of internal funding available for the firm's development, i.e. product, process and market development. Consequently, the relationship that a small firm has developed with financiers is of outmost importance for the long-term development of the firm.

In our electronic survey, we asked the entrepreneurs to assess the relevance of a pre-defined list of sources of finance. To whom do they turn when they need a strategic financial investment?

Figure 3.1.9: Non-existent and strong measures of support from financiers.

[4] The Swedish sample exclude firms with activities in agriculture.

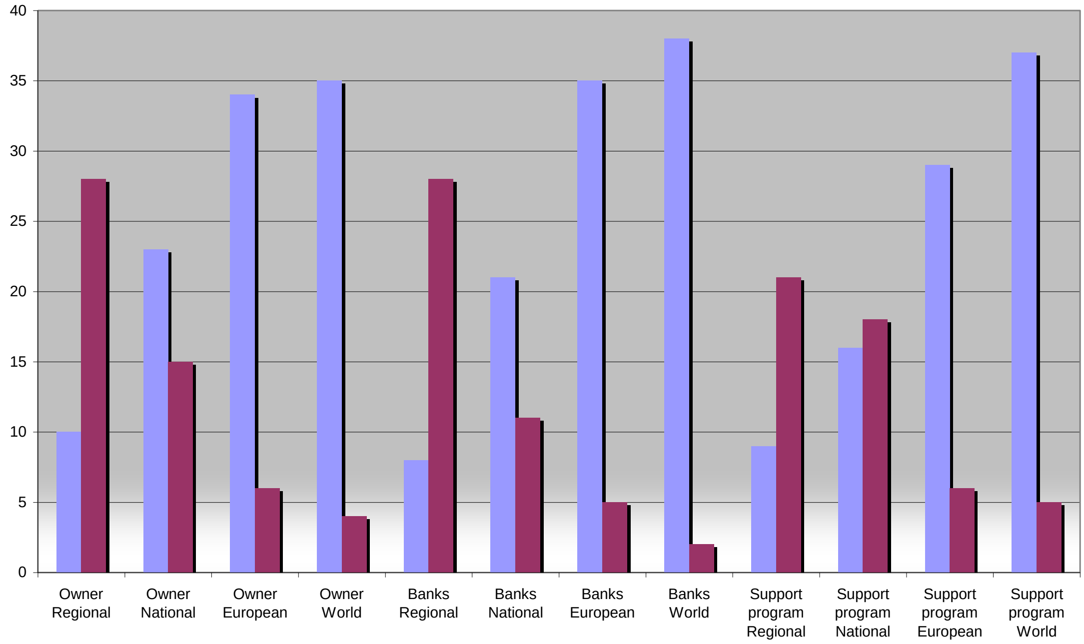
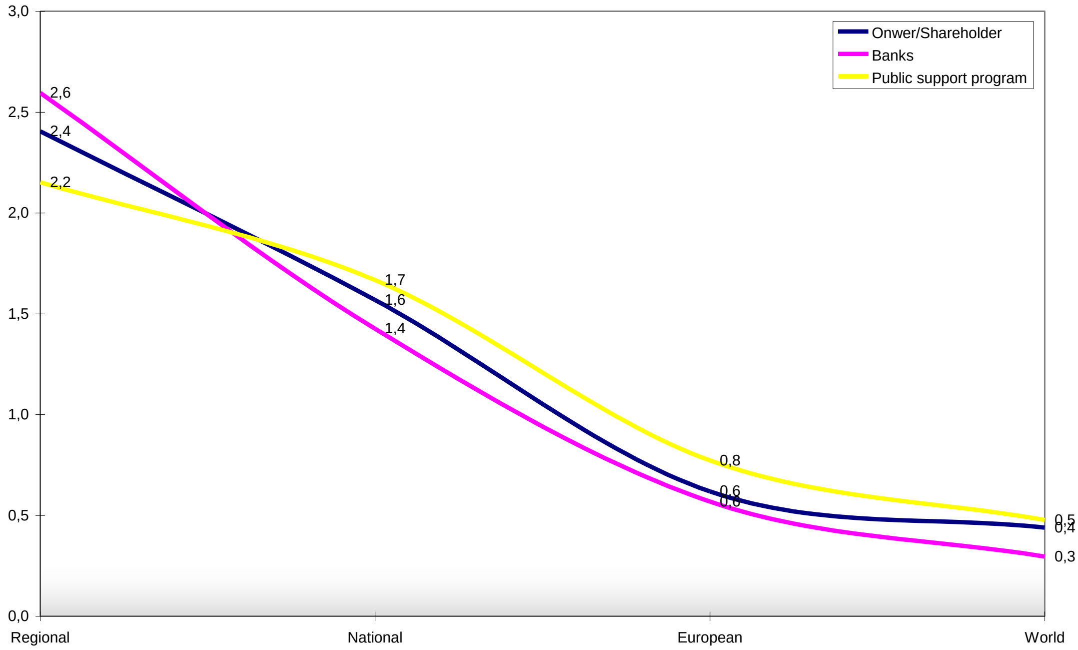


Figure 3.1.10: Average responses regarding support from financiers given by the sample.



The finance sources listed in the questionnaire were; owner and shareholder, banks and other financial institutions, and public support programs. These cross-tabulated with the four geographical zones, (regional, national, European, and World).

The results from the Swedish case highlight the importance of regional financiers for SMEs in Övre Norrland. Regional institutions in all three categories were given the largest number of high scores (threes-and-fours) and the fewest 'zeros'. National public support schemes are seen as more relevant than other national sources of finance. As a general observation, it seems that the relevance of financial institutions fades away with increasing distance from the location of the company.

One possible interpretation of this pattern is that a high degree of organizational proximity, bolstered through a system of shared institutions (norms, trust, governance…), fosters the development of a relationship between SMEs and local financial institutions, lowering the risks associated with investment. Another interpretation may be that, because the size of the investments needed by local SMEs is (often) not very large, mobilizing local and regional capital may be enough (low risk + low capital needed).

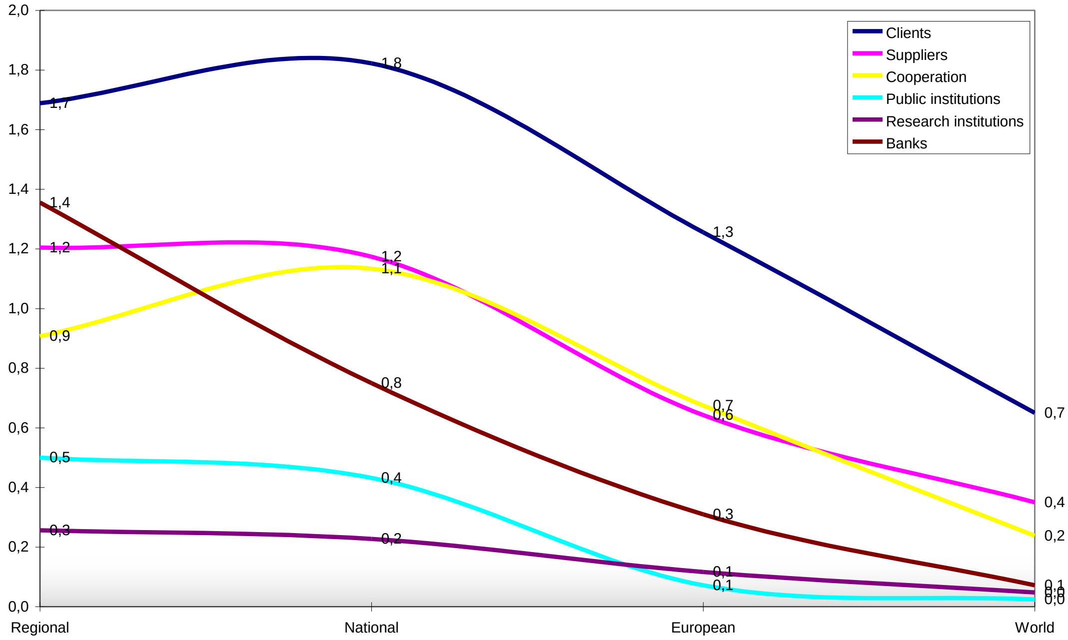
Resilience and the Impact of the Financial Crisis

A question in our electronic survey sought information on the impact of the financial crisis of 2008-09 on the future structure of the firm's business network, for our sampled firms. The respondent had to assess the importance of the crisis for the development of their relationship with the set of actors that were identified previously: clients, suppliers, companies, public agencies, research institutions and financial institutions. The question did not ask if the impact would be positive or negative, (the assumption is the latter), only its intensity.

Networks are dynamic. They evolve over time and across space, in order to meet the firm's need for strategic development. Networks are shaped not only by the actions of the firm, but by the context in which the firm is embedded. For example the economic crisis was not caused by small firms in Norrland. In the questionnaire, the respondents were asked to assess the impact of the crisis on their relationship with the set of actors discussed earlier, by giving a score from 0, no impact at all, to 4, strong impact.

Figure 3.1.11 highlights the fact that the crisis has had an impact primarily upon networking at the regional level, and to a lesser extent at the national level. Thus the crisis, although it is global in reach, has not affected relations with distant actors, but rather those with actors that are in close geographical proximity.

Figure 3.1.11: Average expressed responses on the impact of the crisis, given by the sample.



In general, the relations that are the most affected by the crisis are the ones based on market transactions, i.e. between the firm and its customers and suppliers. The average perceived impact drops sharply beyond the national arena. However the average impact for customers at the European level is equivalent, in terms of level, to the impact on the cooperation with firms at the regional level. The average perceived impact on the relation with banks and financial institutions is high at the regional level and then decreases steadily and sharply to the national level, and becomes negligible at the European level. The impact on the relation between the sampled firms and public agencies in Sweden (both regional and national) is small, and negligible at the European and World scales. Finally, the average perceived impact on relations with research organizations is negligible at all scales.

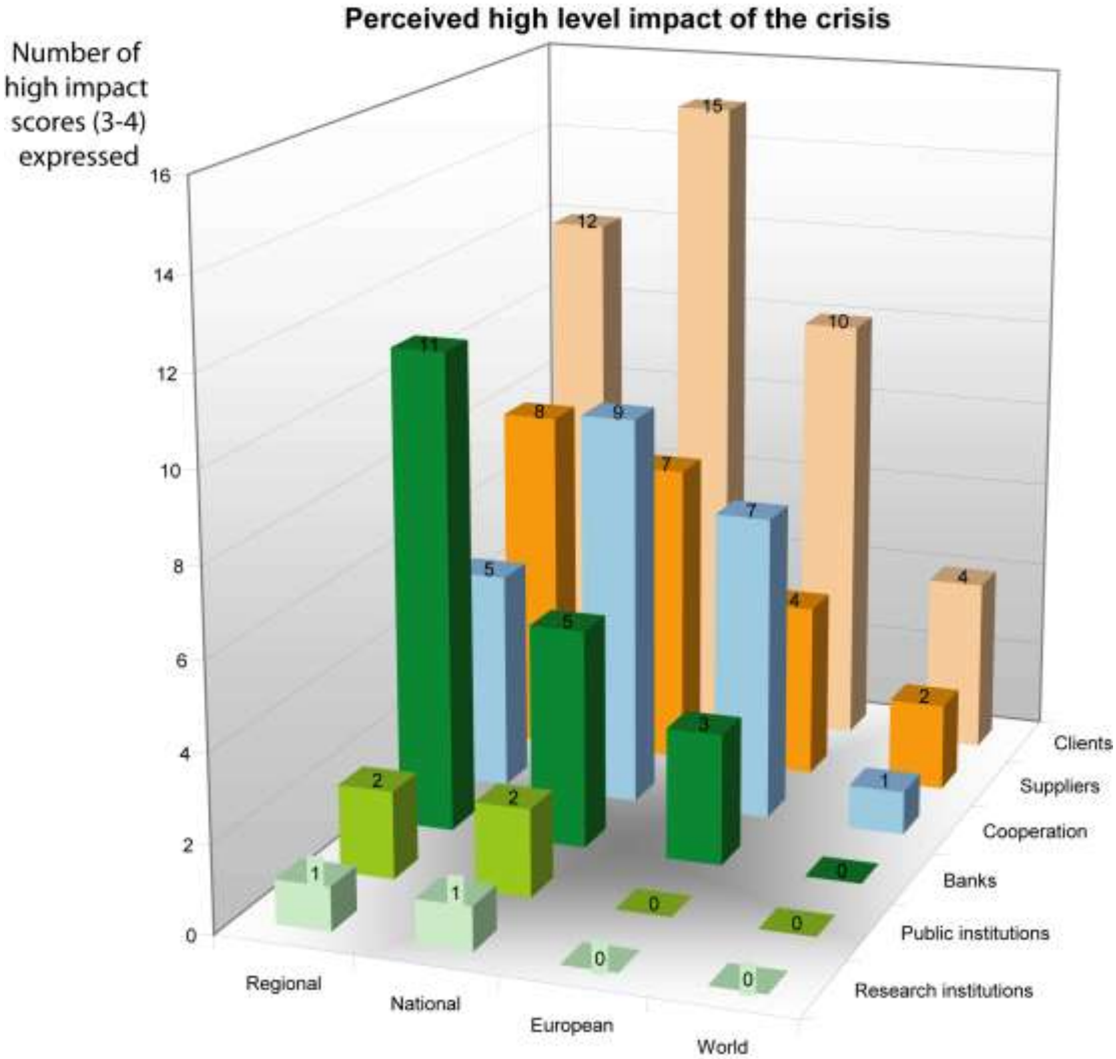


Figure 3.1.12: Perceived High Level Impact of Crisis.

Another way of visualising the results of the question on the financial crisis (Figure 3.1.12) is by focusing on the responses that identified a high impact on the relationship of the firm with other organizations (by type and location). The branches of the business network for which the highest number of 'high impact' scores is given are for national (15) and regional (12) customers. A high impact of the crisis is also expected in terms of relationships with regional banks (11). On the other hand Norrland firms do not deem that the crisis will have a strong impact with public actors, such as public institutions or educational centres.

Conclusions

This section of the report provides a summary analysis of the results of the Business Network questionnaire gathered during Spring 2010 for the Swedish case study. 50 Small and Medium-Sized firms have replied to our questionnaire sent to them by email. Despite showing a rather good distribution when it comes to geographical location, firm age and sector of activity, the sample cannot be deemed as representative of all SMEs located in northern, sparsely populated areas of Sweden. Yet, the responses provide us a valuable insight on how SMEs located in such territorial setting are able to develop and maintain their business networks.

The investigation of the geographical distribution of customers and suppliers highlighted the fact that many different situations, when it comes to the degree of internationalisation of business activities, can be found in this type of territorial setting. Some firms have very local customers and suppliers, while others have quite well developed international business partners. In that respect, 5 different types of firms were identified: local ones, with the largest share of business carried out at the regional level; domestic ones, with a balance of sales and purchases between the regional and national level, national powerhouses, for firms having a solid national dimension to their customer and supplier base, internationalized interfaces, corresponding to firms having a marked international profile for sales (resp. purchases) and a more domestic market for purchases (resp. sales), and globalized firms, with a strong international focus of both sales and purchases.

Data was also compiled about collaborative relationships (not based on transactions) between our sample of SMEs and other private firms. The results revealed the importance of regional and national SMEs as collaboration partners for our sample of firms. Moreover, the importance of Large Firms or Multinationals is more pronounced for the national ones than for the ones originating from other locations. In general, the relationship with European and World firms is less pronounced, although this limited number of relations may be important for the capacity of firms to develop their activities.

The compilation of the data expressing the intensity of the relation of our firms with support organizations such as trade associations, public agencies or research institutions highlighted the importance of regional and national trade associations for our firms' business network. Overall, institutional actors at the regional and national levels are deemed more important than others located outside the national realm.

The relationship between our sampled firms and financial institutions, such as stakeholders/owners, banks or public support programs, is very dependent on institutional proximity. Regional financial support institutions are more important than national ones, which are in return more important than European ones.

Finally, the impact of the financial crisis on the different strands of the firms' business network was investigated. Firms assess that the crisis will have a high impact on their relationship with customers at the regional and national levels. They also believe that it will have a substantial impact on their capacity to get support from regional banks.

3.1.2 In-depth Face-to-Face Interviews

This survey was carried out during August and September of 2010. Details of the methodology and interview guidelines are provided in Section 3. The objective of this survey was to explore in more detail the 'activity space' of a number of small and medium-sized businesses in the Ővre Norland region.

The interviews centred upon the concept of an "Actor Map". These are simple matrices showing how important the interviewee considers different groups of actors (located in different geographical zones) to the successful operation of their business. It is important to reiterate that the 'actors' and not individual firms or organisations, but generic types.

An initial task is to describe the sampled firms, and to place them into groups according to their 'line of business'. In the analysis which follows the Actor Maps will also allow the interviewee firms to be classified, according to the dominant function of their networks. These two classifications are key structural elements for the discussion of the configuration of the Actor Maps, through some simple quantitative analysis. It is important to stress that this analysis is indicative only, and that no claims are made to statistical representativeness. In the same spirit, the interviews are the source for anecdotal material, supporting an essentially qualitative approach.

Sample Selection and Firm Characteristics

Firms were selected for the face-to-face interviews partly on the basis of their willingness to participate, and partly on the basis of the "perceived level of global integration", as determined by the Electronic Survey. In fact the number of firms willing to participate was such that although firms with more international links were preferred, some with "low" global integration were also included. The list of firms is presented in Table 3.1.8 below.

The firms are scattered across the case study region, some of them in settlements of just a few hundred people, but four of them in the larger market centre of Lyksele. Almost all of the enterprises are locally owned independent firms. Two are parts of Swedish businesses based elsewhere. Two-thirds of the firms are classed as "small" (10-49 employees), one is in the medium category (50-249), and the remaining four firms employ less than ten people.

Table 3.1.8: Firms Selected for In-depth Face-to-Face Interviews

Firm No.	Location	Firm Start	Firm ownership	Branch[5]	Firm Size[6]	Perceived level of global integration
SE01	Pajala	1953	Indep. firm	Agriculture, Forestry and Fishing	Small	Med. high
SE03	Vindeln	1988	Indep. firm	Manufacturing	Small	Med. low
SE10	Övertorneå	1985	Indep. firm	Manufacturing	Small	Med. Low
SE17	Vindeln	1907	Indep. firm	Manufacturing	Small	Low
SE23	Lycksele	1992	Indep. firm	Professional, Scientific and Technical activities	Micro	High
SE29	Lycksele	1967	National grp.	Manufacturing	Small	Med. low
SE31	Kalix	1980	Indep. firm	Manufacturing	Micro	Med. low
SE35	Vännäs	1985	Indep. firm	Manufacturing	Small	High
SE36	Kalix	1995	Indep. firm	Manufacturing	Small	Med. high
SE37	Jokkmokk	2006	Indep. firm	Manufacturing	Medium	High
SE40	Arvidsjaur	1939	Indep. firm	Manufacturing	Small	Med. high
SE44	Robertsfors	1998	Indep. firm	Manufacturing	Micro	High
SE47	Kalix	2006	Indep. firm	Energy	Micro	Med. high
SE49	Lycksele	1995	National grp.	Information and Communication activities	Small	Low
SE50	Lycksele	1987	Indep. firm	Agriculture, Forestry and Fishing	Small	Med. high

Four of the firms interviewed (Table 3.1.9) are engaged in resource-based activities (fish processing and timber processing) – all of them exploiting particular qualities of the local resource to specialise in high quality products.

Five firms are engaged in engineering or manufacturing activities which could be described as 'high tech.', such as solar panel production, biotechnology, IT cables. Four firms are more traditional small engineering or manufacturing firms (e.g. die-casting, air filters). The remaining two provide business services, (risk management and GIS).

[5] According to the European NACE 2.2 classification

[6] According the EU DG Enterprise definition. Micro from 0 to 9 employees; Small from 10 to 49 employees; Medium from 50 to 249 employees.

Table 3.1.9: Description of Activity and Simple Classification of Firms.

Interview	Year Founded	Line of Business	Type
SE01	1953	Specialist sawmill - timber processing.	1
SE03	1988	Small engineering company.	2
SE10	1985	Producer of cables for IT and video.	3
SE17	1907	Specialist wooden products - Skis.	1
SE23	1992	Business services - risk management consultants.	4
SE29	1967	Stainless steel products for food and pharmaceutical industries.	3
SE31	1978	Small engineering company, die casting.	2
SE35	1985	Producer of eggs for virus/antibody research.	3
SE36	1995	Light engineering - metal working.	2
SE37	2005	Solar panel production.	3
SE40	1939	Specialist timber products.	1
SE44	1998	Air filters for mining machinery and tranport.	2
SE47	2006	High tech. domestic heating systems.	3
SE49	1995	GIS mapping specialist.	4
SE50	1987	Arctic char fish processing.	1

Key to Types	Description	No.
1 (Res.)	Resource based activities (timber/fish)	4
2 (EMTrad.)	Specialist light engineering and manufacturing - Traditional	4
3 (EMHiTech.)	Specialist light engineering and manufacturing - High technology	5
4 (Bus. Serv.)	Business Services	2

Actor Maps: Key Findings regarding their configuration.

The configuration of the Actor Maps may be viewed from a number of different perspectives. The following analysis will concentrate upon three aspects:

(i) The ten 'dimensions' of activity (the columns).

(ii) The different kinds of actor.

(iii) The different spatial scales associated with the actors.

(i) Relative importance of different kinds of activities.

In this section we present a summary of the interview findings relating to the relative importance of external linkages to the different kinds of business activities represented by the columns of the Actor Map. The columns are also referred to as "activity axes". These activities can be placed into four broad categories, those relating to marketing (columns 1-4), those relating to the product (5-8), the sourcing of investment capital (9) and compliance with regulation (10)[7]. On the basis of the relative importance of the four broad categories the networks of the interviewed enterprises are placed into four 'functional' groups, reflecting the overall (activity) orientation of their business networks.

Table 3.1.10: Average scores on each activity axis.

Interview	Bringing in new business	Awareness of competition	Improving market position	Finding new markets	Improving production process	Developing new products	Improving existing products	Reacting to customers' needs	Securing investment capital	rules and regulations	
SE01	**0.69**	0.15	0.65	0.41	0.46	0.39	0.43	0.35	0.46	0.24	0.42
SE03	0.29	0.18	0.22	0.16	**0.40**	0.16	0.09	0.07	**0.40**	0.11	0.21
SE10	0.44	0.44	0.41	**0.63**	0.59	0.57	0.56	0.00	0.00	0.48	0.41
SE17	0.56	0.43	**0.78**	0.57	0.28	0.26	0.28	0.19	0.33	0.30	0.40
SE23	0.15	**0.32**	**0.32**	0.19	**0.32**	**0.32**	0.29	0.06	0.19	0.04	0.22
SE29	0.17	0.15	**0.40**	0.27	0.10	0.11	0.11	0.11	0.22	0.00	0.16
SE31	0.37	0.33	**0.49**	0.14	0.43	0.36	0.46	0.06	0.22	0.05	0.29
SE35	0.22	0.32	**0.44**	0.30	0.29	**0.44**	0.22	0.22	0.14	0.06	0.27
SE36	0.11	0.22	**0.54**	0.27	0.16	0.35	0.44	0.30	0.40	0.08	0.29
SE37	0.20	0.19	**0.26**	0.09	0.04	0.00	0.04	0.12	0.16	0.04	0.11
SE40	0.39	0.21	**0.47**	0.38	0.36	0.29	0.40	0.44	0.43	0.24	0.36
SE44	0.20	0.11	0.27	0.31	0.31	**0.46**	0.20	0.21	0.32	0.26	0.26
SE47	0.42	0.61	**0.65**	0.42	0.18	0.18	0.13	0.25	0.40	0.38	0.36
SE49	0.78	0.75	**0.81**	0.81	0.64	0.78	0.83	0.58	0.28	0.33	0.66
SE50	0.28	0.46	**0.52**	0.31	0.57	0.46	0.43	0.36	0.42	0.40	0.42
Mean	**0.35**	**0.32**	**0.48**	**0.35**	**0.34**	**0.34**	**0.33**	**0.22**	**0.29**	**0.20**	**0.32**
LoB											
Res.	0.48	0.31	0.60	0.42	0.42	0.35	0.38	0.33	0.41	0.29	0.40
EMTrad.	0.24	0.21	0.38	0.22	0.32	0.33	0.30	0.16	0.34	0.12	0.26
EMHiTech.	0.29	0.34	0.43	0.34	0.24	0.26	0.21	0.14	0.19	0.19	0.26
Bus.Serv.	0.47	0.53	0.56	0.50	0.48	0.55	0.56	0.32	0.24	0.19	0.44

[7] Column 9 (reacting to customer's needs, is difficult to classify, but is viewed here as part of the process of product improvement, rather than marketing. The 11th column (other) was only used in two interviews, and is excluded from the analysis.

Table 3.1.10 shows the average score on each of the ten activity 'axes' (summing over the actors). The scores are expressed as a proportion of the maximum possible score (taking account the number of actors [rows] in the actor map). Table 3.1.11 shows the same information as ranks (across the axes for each interview).

Table 3.1.11: Ranking of average scores on each activity axis.

Interview	Bringing in new business	Awareness of competition	Improving market position	Finding new markets	Improving production process	Developing new products	Improving existing products	Reacting to customers' needs	Securing investment capital	Compliance with rules and regulations
SE01	**1**	10	2	6	3	7	5	8	3	9
SE03	3	5	4	6	**1**	6	9	10	**1**	8
SE10	6	6	8	**1**	2	3	4	9	9	5
SE17	3	4	**1**	2	7	9	7	10	5	6
SE23	8	**1**	**1**	6	**1**	**1**	5	9	6	10
SE29	4	5	**1**	2	9	6	6	6	3	10
SE31	4	6	**1**	8	3	5	2	9	7	10
SE35	6	3	**1**	4	5	**1**	6	6	9	10
SE36	9	7	**1**	6	8	4	2	5	3	10
SE37	2	3	**1**	6	7	10	7	5	4	7
SE40	5	10	**1**	6	7	8	4	2	3	9
SE44	8	10	5	3	3	**1**	8	7	2	6
SE47	3	2	**1**	3	8	8	10	7	5	6
SE49	4	6	2	2	7	4	**1**	8	10	9
SE50	10	3	2	9	**1**	3	5	8	6	7
Mean	**2**	**7**	**1**	**3**	**5**	**4**	**6**	**9**	**8**	**10**
LoB										
Res.	2	9	1	4	3	7	6	8	5	10
EMTrad.	6	8	1	7	4	3	5	9	2	10
EMHiTech.	4	2	1	3	6	5	7	10	9	8
Bus.Serv.	7	4	1	5	6	3	1	8	9	10

It is immediately apparent that the third activity axis – "improving market position" – was considered a very important role of business networking. It achieves the highest average score in 11 out of the 15 enterprises interviewed. All three other activities in the 'Marketing' category, achieve average scores of more than 0.3.

Of the 'product' related activity axes the first two (Developing New Products, and Improving Existing Products) are ranked first by two and three interviewees respectively. Just one entrepreneur scored the sourcing of capital high enough for it to equal the highest scoring product-related activity axis. The 'compliance' axis was generally scored rather low, and was clearly not considered a key aspect of business networking by the interviewees.

Summarising the scores for each of the 'lines of business' groups of interviews reveals a consistent pattern, with the third activity axis in first position in all four types. For the Business Services type 'Reacting to Customers needs' also has a high score, and 'Improving existing products' is almost as important.

The final column of Table 3.1.10 shows a simple unweighted mean score (across the activity axes). Comparisons between interviews, or between the LoB groups should be made very cautiously, since there is no way to "benchmark" the scores assigned by different interviewees. (Some tend to score consistently high, others tend to be conservative in their scoring.) However, bearing this caveat in mind, it is interesting to note that the two Business Services interviewees had the highest average score overall, closely followed by the Resource-based group. The former is consistent with the need for service companies to interact intensively with their customers to ensure that they meet specific requirements. In the case of the resource-based companies, intensive networking (with customers) seems to be associated with their specialisation in high quality "niche" products, which tend to be 'bespoke' rather than mass produced. This is a strategy to overcome the penalties of remoteness, whilst at the same time exploiting specific regional qualities in the raw materials.

Table 3.1.12 summarises the activity orientation of the interviewed firms' business networks by grouping the 'market' and 'product' axes. On the basis of the "profile across the four broad categories of activity, four groups of firms may be distinguished:

- **M** networks are valued principally for the support they provide to marketing. Four firms fall into this group.
- **Mp** networks are also very important for marketing, but product related activity axes are almost as important. Six firms fall into this group.
- **Pm** networks function principally to support product development, with marketing a close second. One firm was placed in this group.
- **C** networks are particularly important for sourcing capital. Four firms seemed to have networks of this type.

Table 3.1.12: Average Scores for Broad Activity Categories, and Enterprise Activity Groups

Interview	Market	Product	Capital	Compliance	Group
SE01	**0.47**	0.41	0.46	0.24	Mp
SE03	0.21	0.18	**0.40**	0.11	C
SE10	**0.48**	0.43	0.00	0.48	Mp
SE17	**0.58**	0.25	0.33	0.30	M
SE23	**0.25**	**0.25**	0.19	0.04	Mp
SE29	**0.25**	0.11	0.22	0.00	M
SE31	**0.39**	0.37	0.22	0.05	Mp
SE35	**0.32**	0.29	0.14	0.06	Mp
SE36	0.29	0.31	**0.40**	0.08	C
SE37	**0.18**	0.05	0.16	0.04	M
SE40	0.36	0.38	**0.43**	0.24	C
SE44	0.29	0.27	**0.32**	0.26	C
SE47	**0.52**	0.18	0.40	0.38	M
SE49	**0.78**	0.71	0.28	0.33	Mp
SE50	0.47	**0.51**	0.42	0.40	Pm
Mean	**0.31**	0.29	0.29	0.20	**Mp**

LoB	Market	Product	Capita	Compliance
Res.	**0.45**	0.40	0.41	0.29
EMTrad.	0.26	0.27	**0.34**	0.12
EMHiTech.	**0.35**	0.28	0.19	0.19
Bus.Serv.	**0.52**	0.50	0.24	0.19

This is a rather interesting finding. It suggests that the interviewees perceived role of their business networks principally in terms of their ability to help them follow trends in demand, and to market their products more effectively. This seems at odds with the (implicit) assumption of much of the academic discourse on the role of business linkages, which emphasises the diffusion of technical information, relating to product development.

At the bottom of the table summary results for the four 'Line of Business' groups are provided. Again these should be treated with caution, due to weighting issues which cannot be allowed for. Three of the groups seem to place the greatest emphasis upon market orientated linkages, whilst the traditional engineering and manufacturing companies are very aware of the importance of sources of finance. This could perhaps be explained in terms of these firms rather difficult experiences during the recent recession.

(ii) Relative Importance of Different Types of Actor

Customers and suppliers were both included on every Actor Map (Table 3.1.13). Several of the interviewees distinguished more than one Customer or Supplier actor group, usually on the basis of geographic location (regional, national, European or Global). Other types of actor which were mentioned more frequently were Public Support Programmes (all interviews except 1) banks, and other SMEs. Membership organisations were included in a total of 11 actor maps, the majority of these were Professional or Trade Organisations. Chambers of Commerce were regarded a important actors by just three interviewees.

Table 3.1.13: Occurrence of Different Types of Actors in the Interviews

Types of Actors		Interviews	Actors
Market	Customers	15	22
	Suppliers	15	19
Coop with:	SMEs	11	16
	Large Firms	1	1
	MultiNationals	2	2
Support from:	Govt Advisory Bodies	3	3
	Research Institutes	5	5
	Business Consultants	1	1
	Other	0	0
Sources of Finance	Shareholders/Owners	7	7
	Banks etc	12	12
	Public Support Programmes	14	14
	Other	0	0
Membership Orgs.	Coops	0	0
	Professional or Trade Org.	8	9
	Chamber of Commerce	3	3
	Sports or Leisure Club.	0	0
	Other	0	0

Customers and suppliers account for the largest share of actors regardless of Line of Business, or Functional Group (Table 3.1.14). Indeed the 'profile' is rather similar regardless of which line of business the firm is in. The only exception is the Business Services group, where there are fewer actors relating to Sources of Finance, and a greater number from Membership Organisations. Firms in the 'M' functional group seem to recognise more cooperation linkages, whilst the 'Pm' group places an unusually strong emphasis upon Support Institutions.

Table 3.1.14: Percentage of Actors in Different Groups.

		Customers/ Suppliers	Coop other Businesses	Support Intstitutions	Finance Sources	Assoc. and Clubs
		% of Actors				
LoB Groups	Res.	33	17	10	30	10
	EMTrad.	33	15	9	30	12
	EMHiTech.	40	18	5	30	8
	Bus.Serv.	36	18	9	18	18
Functional Groups	M	35	24	6	29	6
	Mp	41	13	8	28	10
	Pm	30	10	30	20	10
	C	32	16	3	32	16
Mean		**36**	**17**	**8**	**29**	**11**

(iii) Relative importance of actors at different spatial scales.

There are two ways in which the relative importance of regional, national, EU and Global actors can be assessed from the actor maps: (a) According to the proportion of actors located in each "zone". (b) According to the relative weight placed upon the national and international actors. Because some of the interviewees were unable to distinguish between actors at all four scales a simplified (national/international) zoning is necessary in parts of the analysis below.

Table 3.1.15 shows the distribution of actors for each of the interviewed firms, for the four 'Lines of Business' and four 'Functional Groups' identified above. On average one third of all the actors identified by the interviewees were fully or partially international[8]. At the individual interviewee level the proportion varied from 0% to 63%. Six firms had more than one third international actors. Only one firm named no international actors.

[8] 'Mixed' location actors were treated as international if they included EU or Global scales in their definition.

Table 3.1.15: Distribution of Actors at Different Spatial Scales

Interview	LoB Group	Funct-ional Group	Regional	National	European/ Global	Mixed national	Mixed (incl. EU/Glob.)	EU/Glob.	Total	% EU/ Global
			Number of actors in Actor Map/Cobweb							
SE01	1	Mp	2	0	1	2	1	**2**	**6**	**33**
SE03	2	C	3	1	0	1	0	**0**	**5**	**0**
SE10	3	Mp	3	1	1	0	1	**2**	**6**	**33**
SE17	1	M	1	0	1	2	2	**3**	**6**	**50**
SE23	4	Mp	1	3	1	1	1	**2**	**7**	**29**
SE29	3	M	2	4	1	0	1	**2**	**8**	**25**
SE31	2	Mp	3	0	2	3	1	**3**	**9**	**33**
SE35	3	Mp	1	0	3	2	0	**3**	**6**	**50**
SE36	2	C	2	3	1	1	0	**1**	**7**	**14**
SE37	3	M	3	0	5	0	0	**5**	**8**	**63**
SE40	1	C	5	1	1	0	0	**1**	**7**	**14**
SE44	2	C	4	1	1	0	3	**4**	**9**	**44**
SE47	3	M	4	0	1	1	2	**3**	**8**	**38**
SE49	4	Mp	0	1	0	1	2	**2**	**4**	**50**
SE50	1	Pm	2	0	1	5	2	**3**	**10**	**30**
Total			**36**	**15**	**20**	**19**	**16**	**36**	**106**	**34**
LoB Groups	Res.		10	1	4	9	5	**9**	**29**	**31**
	EMTrad.		12	5	4	5	4	**8**	**30**	**27**
	EMHiTech.		13	5	11	3	4	**15**	**36**	**42**
	Bus.Serv.		1	4	1	2	3	**4**	**11**	**36**
Functional Groups	M		10	4	8	3	5	**13**	**30**	**43**
	Mp		10	5	8	9	6	**14**	**38**	**37**
	Pm		2	0	1	5	2	**3**	**10**	**30**
	C		14	6	3	2	3	**6**	**28**	**21**

One of the LoB groups, the High Technology Engineering and Manufacturing had a substantially higher proportion (42%) of international actors in its network than any other group. The Resource Based-firms had the second-highest proportion of international links, due to their specialisation in high quality 'bespoke' products, for which the regional or national market is of insufficient size. The lowest degree of "internationalisation" was among the Traditional Engineering and Manufacturing group. Again the limitations associated with unweighted average scores must be recognised as a caveat to these conclusions.

Of the four functional groups the most international was the one for which marketing related benefits were dominant (i.e. M). The Mp group also had an above average proportion of international actors. The Pm and C groups had fewer than average international actors.

Table 3.1.16: Percentage International Actors and Average weight placed on Domestic and International Actors

Interview	LoB Group	Funct-ional Group	% Actors EU/ Global	Weight - Regional/ National	Weight - EU/ Global
SE01	1	Mp	33	0.33	**0.60**
SE03	2	C	0	0.21	0.00
SE10	3	Mp	33	0.27	**0.70**
SE17	1	M	**50**	0.39	**0.40**
SE23	4	Mp	29	0.24	0.15
SE29	3	M	25	0.16	0.17
SE31	2	Mp	33	**0.31**	0.27
SE35	3	Mp	**50**	0.21	0.34
SE36	2	C	14	**0.30**	0.22
SE37	3	M	**63**	0.00	0.17
SE40	1	C	14	0.33	**0.61**
SE44	2	C	**44**	0.19	**0.43**
SE47	3	M	**38**	0.26	**0.53**
SE49	4	Mp	**50**	0.66	0.66
SE50	1	Pm	30	0.38	**0.59**
Total			34	**0.28**	**0.39**
LoB Groups	Res.		31	0.36	**0.55**
	EMTrad.		27	**0.17**	0.23
	EMHiTech.		**42**	0.91	**0.38**
	Bus.Serv.		36	**0.23**	0.41
Functional Groups	M		**43**	0.20	**0.32**
	Mp		**37**	0.34	**0.45**
	Pm		30	0.38	**0.59**
	C		21	0.26	**0.32**

Table 3.1.16 summarises the information which may be assembled relating to the relative importance of national and international actors in the Actor Maps. In the final two columns the relative weight of the national and international actors is expressed as a proportion of the maximum possible score for each group of actors. On average, across all interviews the score for the international actors was almost 40% of the maximum possible, whilst the score for national actors was just 28%. The six firms which had above average shares of international actors all attached greater importance to the international than to national actors in their networks. Indeed ten of the fifteen firms interviewed gave greater weight to international actors. Of these, seven attached a weight above the average to their international actors. On the other hand four firms attached greater weight to domestic actors than to international, and of these two gave the domestic

actors more weight than the average (28%). One remaining interviewee placed an identical (relatively high) weight on both national and international actors.

There is a rather interesting pattern of globalisation across the four LoB groups. The High technology Manufacturing and Engineering firms have both a high proportion of international actors in their Actor Maps, and they attach a higher importance to them than the regional and national actors. This is, of course, consistent with what we would expect, given the need to keep up with global technology developments, and the fact that the regional/national market is too small to generate sufficient demand for their products. Interestingly the resource-based firms also place greater emphasis upon international actors, again primarily because the regional/national market is too small to sustain them. At the other extreme the Traditional Manufacturing and Engineering firms, and (surprisingly) the Business Services firms, attach greater weight to Swedish and regional actors than to those in Europe and beyond.

All of the four functional groups accorded (on average) greater weight to international actors than domestic ones. The most 'strongly globalised' groups seem to be the Mp and Pm groups.

Insights into the Building, 'Maintenance' and Globalisation of Business Networks.

The building and maintenance of business networks in Ővre Norland requires more attention than simply sticking to 'the rules of the game' in terms of day-to-day transactions. It is clear from the comments of the interviewees that it demands conscious effort, consideration and tact. A number of interviewees pointed out that emails were acceptable for routine interaction, but nurturing contacts necessitated an occasional telephone call, or a face-to-face meeting. Thus interviewee SE10 argued that it was *"… important to take some time to call the customers instead of always sending an e-mail. Even though it might take you an extra half an hour this is how you build the relationships, through talking about everything but work for a while. With some customers our relation is so good that they dared call us during the crisis to see how we where doing. After talking to us they could trust us again, even though they knew we where letting people go, and remained our customers."*

Interviewee SE29 referred to their long established network of suppliers as follows: "*The contacts are very personal. We visit the suppliers every now and then but deal with the more weekly contacts via e-mails".*

Another interviewee (SE31) had begun to build technical collaboration with a firm in the United States. Mindful that face-to-face contact would establish and strengthen this relationship, he was planning to travel over to visit the American firm.

Informal networking was taken to another level by SE17, who found it worthwhile talking with the truck drivers who served their customers and suppliers, *"We have a good relation with the drivers of the trucks and talk a lot with them, and they talk about their other customers who might be both competitors and customers to us. And as long as they are happy with us they give us a good reputation when they stop for a chat at their other customers."*

Several interviewees spoke of the benefits of good relationships with other entrepreneurs within the same local area (though engaged in a range of different activities). SE10 stated that *"Sometimes the most giving meeting among us in the network are the lunches or the times we meet to watch an ice hockey game. Then we can really talk and give each other good advice. These meetings can also end with new orders and hence new jobs for us."* Similarly SE31 talked about the "good chemistry" within the local business community, which meant that he "*can always just cross the street and go and ask the others for help and ideas…*". In interview (SE40) the importance of nurturing the more informal contacts with small and large firms within the same business sector at regional level was stressed. These contacts where said to have grown stronger over time and are built on meetings, phone calls and also e-mails. *"The contacts with these colleagues, and at the same time competitors, are based on trust and have taken years to establish. It needs to be taken care of you cannot suddenly turn your back on them."* This is clearly evidence of a degree of 'embeddedness' which needs to be cultivated, but which is then very supportive to its participants.

Some firms did however also stress the importance of personal relations with actors further away. One example is SE37 who used the good connections to get information from abroad: *"The well developed personal relations with customers,* *colleagues, competitors and suppliers all around Europe makes us able to understand and predict the development of the European market"*

A key driver for the extension of actor networks for firms in Ővre Norrland is the small size of the regional market. Several of the interviewees explained that finding overseas customers was essential, since there simply was not sufficient demand for their products within the region, or within Sweden. Interviewee SE01 did for example state: *"The Swedish market is limited and considering all the raw material in the form of the large forests with exceptionally good quality that we have here, exporting has sort of been incorporated in the concept for a long time now."*

Interviewee SE17 did not only extend the firms network to gain access to new markets but also to get higher status at the regional and national market: *"Doing business with large international actors is very time consuming but it is also exciting and makes us more interesting among actors back home."*

One barrier to globalisation of actor networks is language. SE17 explained that the use of English as the common language was time consuming, and could lead to confusion. SE17 concluded that: *"The contacts with non Swedish speaking actors are less personal"* due to the language. However this is a generational issue, younger people in rural Sweden tend to have fewer difficulties conducting business in English. SE17 did for example also stress that his sons, also working in the firm, had closer contacts with international actors than him. Customs, ways of doing business, and access to information about potential customers were also potential barriers to globalisation.

Distance to markets is obviously an issue for entrepreneurs in a region as remote as Ővre Norland. However the impression from the interviews is that most of the firms had already 'factored in' remoteness into their way of doing business (for instance, by concentrating on high value, quality products).One way to reduce the cost of face-to-face contact with distant customers was the use of agents or consultants (SE49).

Two of the firms interviewed (SE49 and SE37) did see a way of using their peripheral location in a positive way to stand out at the national as well as European market and thus become more competitive. They did this by inviting their customers to come and visit them and arranging different activities connected to the northern location such as dog sleigh trips and snowmobile exhibitions. *"Inviting them all to the northern Sweden has turned out to be a success, the customers have found it exotic and exciting and it has made the firm "stand out in the crowd*". (SE49)

In one of the interviews (SE01) the additional costs associated with the long distance to larger markets was discussed and the importance of awareness and tolerance of this among the managers was stressed: *"If the firm would have been sold to any larger business group it would have been either moved to another location or closed down. Our only chance has been to have a locally rooted and very engaged owner."*

The Evolution of Business Networks and the Impact of Recession

The firms interviewed ranged in age from over 100 years old to 4 years. Some had expanded rapidly in recent years, even during the recession, others had made a conscious decision to stay "small but profitable", and a third group had been forced to contract. In one case half the workforce had been made redundant. However the worst-hit firms were already beginning to see signs of recovery.

Three firm characteristics seem to be related to rates of growth and resilience during the recent recession:

(a) Not unexpectedly, firms which rely upon more "traditional" engineering and manufacturing markets seem to grow slowly, and be more severely affected by recession than firms involved in high technology (or biotechnology) sectors.

(b) Firms which have always been forced to interact with markets beyond the local region (simply because the latter provided too few customers) and especially those which have made a conscious decision to sell their products outside Sweden seem to have been largely unaffected by the recession.

(c) It was a conspicuous common characteristic of the more successful firms that they focus their efforts upon niche markets, and upon the high quality segment.

Of course these three characteristics are not independent – they can (and did) coincide within a single firm.

Two further issues were recurrent themes in the discussion of the development of the firms: The first was the local labour market. For some interviewees the scarcity of local staff with appropriate skills or qualifications, and the tendency for young employees to be lured away to urban areas were constraints to growth. One example of this is found in interview SE23:*"So many have moved to larger cities and larger firms by the time they have worked for a few years here and learnt to do a good job. Then they become attractive at the labour market and can leave this small place."*

For others the local labour force was essentially a low cost resource, reliable because of low rates of turnover and loyal due to strong community ties. According to interviewee SE10: *"Sometimes it would have been fruitful to get new employees to start in the firm, once you have been in the same place long enough you do not develop your skills as much any more. But on the other hand we have never had any problems in finding staff (…) and I can really trust our employees. They are skilled and reliable."* SE49 considered the low turnover within the labour force to be a good reason for running a business in the sparsely populated and remote region of the case study area: *"The staff is more inclined to remain with the firm here which is an incentive for running a business in this area"*

One employer feared that this balance would be upset if a new mine opened up locally, luring the workforce away. Interviewee SE23 remarked on the limited access to labour locally. This acted as a driver in the decision to move the firms' product development office abroad a few years ago. To access a larger labour market some firms employed staff to work remotely from other parts of the region. SE49 had for example employed product developers, located in other villages in the northern Sweden, working from home most of the time.

The second issue, not unsurprisingly, was the remoteness of the region, and the high cost of transporting products to distant customers. What was surprising, however was the fact that some of the interviewees emphasised the relatively good communications as a positive factor. Interviewee SE49 stressed the importance of the physical infrastructure in the region: *"With out the good*

Internet and flight connections we have […] we would not be able to build a network reaching beyond the local market." Another interviewee, SE47, stated that: *"A good Internet connection is crucial for a firm located as far from any larger markets as we are and with the ambitions of acting on a larger market."*

Clearly business success, even in certain kinds of manufacturing, is not precluded from even relatively remote rural areas, providing good broadband, regional airports and adequate road/rail links are in place. However the three characteristics of a successful firm mentioned above (high technology, a geographically wide spread customer base, and niche/quality products) seem to be crucial.

Conclusions

Key findings from the face-to-face survey of enterprises in the Ővre Norland region are:

- Market-related activities in general, and 'Improving market position' in particular, are the most important dimensions of the Actor Maps, regardless of line of business.
- Business Services companies, and enterprises producing high quality 'bespoke' products tend to have relatively strong and active networks.
- Business networks in Ővre Norland seem to be valued more for their benefits in terms of marketing than as a source of technical innovation.
- Of the different types of actor the most commonly included on the actor maps were customers and suppliers, and public support agencies. Sources of capital and membership organisations were less commonly incorporated. The impression created by the actor maps is that most of the firms interviewed had actor networks firmly anchored to transactions. (However see the point below about local embeddedness).
- On average one third of the actors added to the Actor Maps by the interviewees were wholly or partially international. Only one firm had no international actors.
- High technology manufacturing and resource-based activities tended to have the greatest share of international actors in their Actor Map. In both

cases the main reason for this seemed to be the fact that the regional/national market was too small for their specialist and high quality/bespoke products.

- International actors were generally rated as more important than domestic ones.
- Whilst email, fax, letters were seen as adequate forms of communication for day-to-day transactions, most of the interviewees regarded regular (informal) telephone contact or face to face meetings as crucial to building and retaining an effective network.
- Informal social networking was clearly crucial to the 'local embeddedness' aspect of the firm's business network. This was not picked up by the Actor Maps, but was clearly perceived as a vital support to entrepreneurship in a remote sparsely populated context.
- Language and distance were perceived to be the two principal barriers to globalisation of networks in Ővre Norland.
- The greatest 'driver' towards developing international networks was the insufficient demand in the regional and national markets, a factor whose importance was heightened by specialisation in high quality, 'bespoke' goods and high technology goods and services.
- The impacts of the recession have been most severe on 'traditional' engineering, less so on high quality niche producers, and those which sell geographically dispersed customers.
- Two further issues were noted in the context of recent business trends: Local labour market characteristics were sometimes seen in a positive light, sometimes negative. Remoteness and transport costs were seen as an issue by some interviewees, but others stressed that there were effective strategies to overcome the disadvantages faced by the region.

3.2. Jihomoravský kraj (Czech Republic)

3.2.1 The Electronic Survey of SME Networking

Methodology and Sampling

During February and March 2010, a database of the companies in the South Moravian countryside was created as a sampling frame. It was extracted from the Administrative Business Register of the Czech Republic (available at ***http://wwwinfo.mfcr.cz/ares/ares.html.cz***) which is an information system allowing searches of businesses registered in the county. It mediates visualization of data held in various registers of the state administration where such data is located (so called source registers). All South Moravia region communities were placed into the register of economic entities. The villages were searched on the portal Cities Online (available at www.mesta.obce.cz). The portal offers to municipality's free publication of mandatory information under the Act No. 106/2000 Coll. For each village, active firms were searched. In the case of some villages it was necessary to search for companies by the Classification of economic activities (CZ-NACE). Some companies did not have cited the number of employees and the objects and therefore could not be included into our compiled database. The database includes firms according to a set parameters (micro 9 or less employees; small enterprises 10-49 employees and medium enterprises 50-249 employees in rural areas). The database for the South Moravia region comprises a total of 555 firms from six rural districts (Blansko, Břeclav, Brno-County, Hodonín, Vyškov, Znojmo).

In the first phase, micro and small businesses were contacted by telephone to ask whether they wished to receive our electronic questionnaire in pdf or doc format (8 pages in Czech language). All sectors of activities were considered in the survey. In the questionnaire, the respondent had to assess their degree of interaction with a set of actors divided into 4 territorial scales: regional, national, European and global. The topics were: clients and suppliers; collaboration with other companies; support from institutional actors; sources of financing; membership in formalized networks and associations. For each of these topics, the respondent had to score their level of interaction with those actors from 0 (no interaction) to 4 (strong interaction). In the question relating to clients and suppliers, the respondent had to provide estimated proportion of sales and purchases occurring at the 4 different territorial levels. Finally, the respondent had to assess the impact of the recent global financial crisis on their relationship with the previous actors, at the different geographic scales.

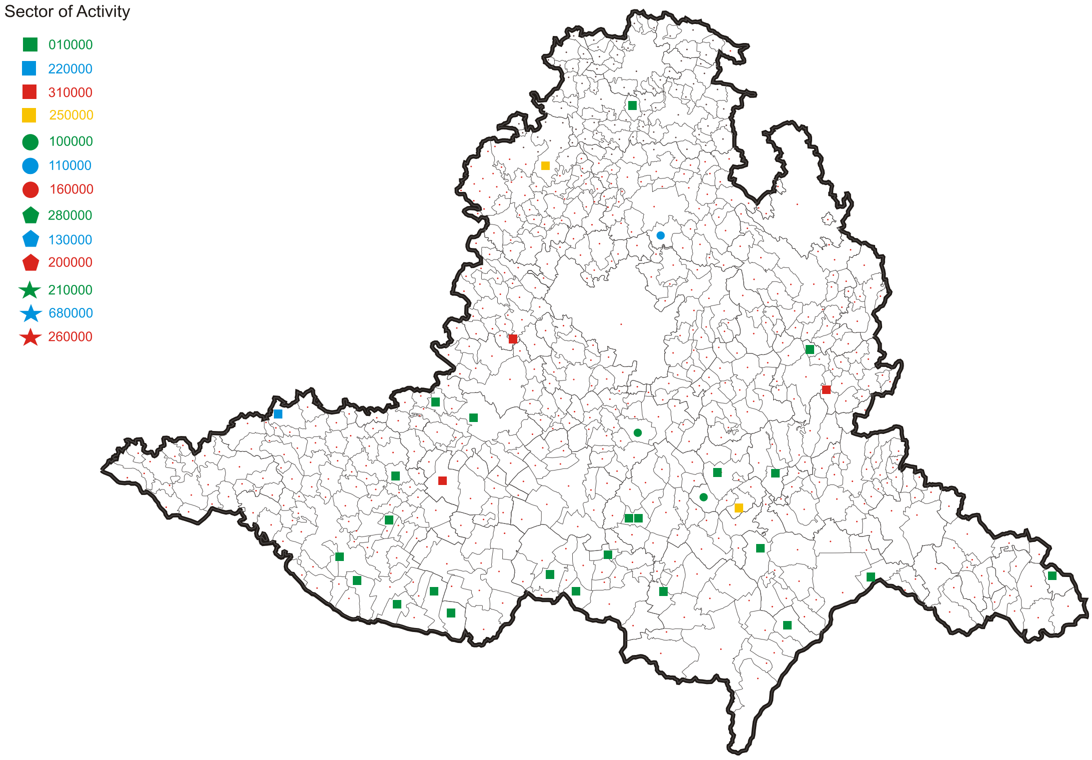
Overview of Sampled Firms

The total number of questionnaires sent in the districts of Blansko, Brno-county and Vyškov-county was 62, from which only 11 were returned. The total number of questionnaires committed in the district Břeclav, Hodonín and Znojmo was 186, of which 23 were returned. Due to the low number of returned questionnaires we decided to contact again the companies that promised to fill them in. In the districts of Blansko, Vyškov and Brno-countryside, our strategy had only a small effect. For the Břeclav, Hodonín and Znojmo districts, we noticed higher return after repeated telephone contact.

As a next step, we have also contacted medium-sized businesses in the region, in order to increase the number of returns. In the Region only 98 medium-sized companies were found. (36 medium-sized businesses in the districts of Blansko, Vyškov and Brno - county, 62 medium-sized companies in the districts of Břeclav, Hodonín and Znojmo). Eleven completed questionnaires were received from them.

The last phase of the analysis followed as "face to face interview". 25 firms of 555 contacted were interested to take part, of which 15 eventually participated.

Figure 3.2.1:Sectors of activity in the South Moravian Region.



Legend:

010000 Crop and livestock production, hunting and related activities

220000 Manufacture of rubber and plastic products

310000 Manufacture of furniture

250000 Manufacture of fabricated metal products, except machinery and equipment

100000 Manufacture of food products

110000 Beverages

160000 Wood, wood, cork, straw and plaiting materials, except furniture

280000 Manufacture of machinery and equipment J. N.

130000 Textiles

200000 Manufacture of chemicals and chemical products

210000 Manufacture of basic pharmaceutical products and pharmaceutical preparations

680000 Real estate

260000 Manufacture of computer, electronic and optical equipment

Table 3.2.1: Main characteristics of the responding firms

Firm	Location	Firm start	Firm ownership	Branch[1]	Firm size[2]	Perceived level of global integration
CZ 2	Lužice	1999	Unknown	Manufacturing	micro	Low
CZ 5	Vacenovice	1992	Individual	Manufacturing	medium	Low
CZ 6	Blučina	2001	Independent	Manufacturing	micro	Low
CZ 9	Zastávka	1995	Independent	Manufacturing	small	Low
CZ11	Dolní Dubňany	1996	Independent	Agriculture, Forestry and Fishing	micro	Low
CZ 13	Suchov	2006	Independent	Agriculture, Forestry and Fishing	micro	Low
CZ 15	Popice	2001	Independent	Agriculture, Forestry and Fishing	micro	Low
CZ 17	Nesovice	1993	Independent	Manufacturing	small	Low
CZ 18	Olbramkostel	1994	Independent	Wood, cork, straw and plaiting materials, except furniture;	medium	Low
CZ 20	Bořetice	2003	Independent	Manufacturing	medium	Low
CZ 21	Násedlovice	1993	Independent	Agriculture, Forestry and Fishing	small	Low
CZ 23	Vrbice	1993	Independent	Manufacturing	small	Low
CZ 24	Březí	2002	Independent	Agriculture, Forestry and Fishing	micro	Low
CZ 25	Boleradice	2000	Independent	Manufacturing	medium	Low
CZ 28	Hostěradice	1993	Local/regional consortium	Manufacturing	micro	Low
CZ 30	Lomnice	2001	Independent	Manufacturing	small	Low
CZ 33	Popice	1994	Unknown	Agriculture, Forestry and Fishing	micro	Low
CZ 36	Olomoučany	1999	Independent	Manufacturing	micro	Low
CZ 37	Novosedly	1997	Independent	Agriculture, Forestry and Fishing	small	Low
CZ 39	Rohatec	1999	Independent	Agriculture, Forestry and Fishing	micro	Low
CZ 40	Nový Šaldorf-Sedlešovice	2002	Independent	Agriculture, Forestry and Fishing	micro	Low
CZ 41	Horní Věstonice	1997	Independent	Agriculture, Forestry and Fishing	small	Low
CZ 43	Sebranice	1994	Independent	Agriculture, Forestry and Fishing	small	Low
CZ 45	Bohaté Málkovice	1993	Independent	Agriculture, Forestry and Fishing	small	Low
CZ 3	Prušánky	1994	Shareholders	Agriculture, Forestry and Fishing	small	Average low
CZ 4	Hrádek u Znojma	1974	Independent	Agriculture, Forestry and Fishing	small	Average low
CZ 8	Brumovice	2002	Independent	Manufacturing	medium	Average low
CZ 10	Šitbořice	1997	Local/regional consortium	Wholesale and retail trade	small	Average low
CZ 12	Vrbovec (Znojmo)	1993	Independent	Agriculture, Forestry and Fishing	small	Average low
CZ 22	Kelčany	1998	Independent	Manufacturing	small	Average low
CZ 26	Těšetice u Znojma	1998	Local/regional consortium	Agriculture, Forestry and Fishing	medium	Average low
CZ 34	Mouchnice	1993	Foreign	Manufacturing	medium	Average low
CZ 42	Dyjákovice	1995	Local/regional consortium	Agriculture, Forestry and Fishing	small	Average low
CZ 44	Bulhary	1949	Independent	Agriculture, Forestry and Fishing	medium	Average low
CZ 1	Lipov	1995	Independent	Manufacturing	medium	Average high
CZ 7	Veverská Bítýška	1993	Independent	Manufacturing	medium	Average hight
CZ 14	Černá hora	1992	Independent	Manufacturing	small	Average high
CZ 16	Domašov	1992	Independent	Transport and storage	small	Average high
CZ 35	Čejkovice	1994	Unknown	Agriculture, Forestry and Fishing	medium	Average high
CZ 29	Němčičky	1993	Independent	Manufacturing	small	High
CZ 31	Klobouky u Brna	1996	Shareholders	Agriculture, Forestry and Fishing	small	High
CZ 32	Hostim u Znojma	1996	Independent	Manufacturing	medium	High
CZ 19	Slup	1993	Independent	Agriculture, Forestry and Fishing	micro	Unknown
CZ 27	Moravský Krumlov	1994	Unknown	Manufacturing	small	Unknown
CZ 38	Horní Dunajovice	2001	Independent	Agriculture, Forestry and Fishing	micro	Unknown

The table (Table 3.2.2) presents the structure of our sample in terms of the date of firm foundation and branch of economic activities.

Most of the firms (34 firms) were founded during the 1990s. Of these almost half (16) were engaged in Agriculture, Forestry and Fishing. Ten companies were founded in 2000. Only one company was founded in 1974. 22 of the total 45 sampled firms were engaged in agriculture.

Table 3.2.2: Sectoral belonging and age of the sampled businesses

	Before 1970	1970-80s	1990s	2000s	Total
Crop and livestock production, hunting and related activities		1	16	5	22
Manufacture of chemicals and chemical products			1		1
Manufacture of machinery and equipment J. N.			2		2
Manufacture of food products			1	2	3
Manufacture of furniture			2	1	3
Wood, wood, cork, straw and plaiting materials, except furniture;			2		2
Manufacture of rubber and plastic products			4	1	5
Manufacture of fabricated metal products, except machinery and equipment			1	1	2
Beverages			1		1
Real estate			1		1
Manufacture of computer, electronic and optical equipment			1		1
Textiles			1		1
Manufacture of basic pharmaceutical products and pharmaceutical preparations			1		1
	0	1	34	10	45

[1] According to the European NACE 2.2 classification

[2] According the EU DG Enterprise definition. Micro from 0 to 9 employees; Small from 10 to 49 employees; Medium from 50 to 249 employees.

The Geography of SME's Transactional Space

The combination of the sales and purchase profile of SMEs resulted in a typology of firms according to the degree of internationalisation of the firms' transactional space. Five main types of firms were derived:

- *Local* firms (light blue): firms that have sales and purchases in majority occurring within the region (16);

- *Domestic* firms (light green): firms that have sales and purchases that are balanced between the regional and the national level (2);

- *National powerhouses* (grey): firms that have sales and purchasing markets essentially at the national level (0);

- *Internationalized interfaces* (orange): firms that have a marked internationalisation of either their sales or their purchases (14);

- *Globalized* (purple): firms that have both sales and purchases that are taking place outside the national borders (11).

Table 3.2.3: Typology of firms according to their transactional space.

		SALES					
		Local	Domestic	National	Internationalized	Globalized	Total
PU RCHASES	Local	9	2	0	1	1	13
	Domestic	1	4	1	2	2	10
	National	1	0	0	0	1	2
	Internationalized	0	2	0	2	2	6
	Global	2	0	3	1	6	12
	Total	13	8	4	6	12	43

Overall, 25 firms in the Globalized and International Interfaces categories, (i.e. half of our sample), have marked export and/or import activities turned towards international markets. On the other hand, only 18 firms, corresponding to the Local and Domestic categories, have export and/or import markets essentially focused on the regional scale.

Table 3.2.4: Index of SME globalisation and age of the firm

Index	Before 1970	1970-80s	1990s	2000s	Total
Local	0	1	12	3	16
Domestic	0	0	2	0	2
National Powerhouses	0	0	0	0	0
International Interfaces	0	0	9	5	14
Globalised	0	0	9	2	11
Total	**0**	**1**	**32**	**10**	**43**

The age of a company might be seen as an important parameter in relation to the internationalisation of a firm's business activities. In general, it might be expected that older firms will have more internationalized business activities due to their maturity and experiences, however this is not the case of our sample. Firms founded around 1990, which are more open to a trade on an international market, prevail in the South Moravian region. However they are experiencing difficulties to enter those markets.

For the category of 'Globalized' firms, 9 companies were founded during the 1990s and 2 during the 2000s. For the category of 'International interfaces' firms, 9 were founded within the 1990s and 5 during the 2000s. No firm was located in the 'National powerhouses' category. For the category of 'Domestic' firms, 2 were founded within the 1990s. Finally for the category of 'Local' firms only 1 was founded during the 70s and 80s, 12 within the 1990s and 3 during the 2000s. No company was founded before 1970.

The respondents were asked to subjectively evaluate their degree of 'global integration' in the first part of the questionnaire. A comparison of their subjective evaluation to the results of our typology is presented in Table 3.2.5. There is broad agreement between the two measures.

Table 3.2.5: Index of SME globalisation and perceived global integration.

Index	Low	Average Low	Average High	High	Total
Local	10	5	1	0	16
Domestic	1	1	0	0	2
National Powerhouses	0	0	0	0	0
International Interfaces	9	3	1	1	14
Globalised	4	1	3	3	11
Total	24	10	5	4	43

* firms – Unknown

Figure 3.2.2: Average proportion of transaction taking place at different level.

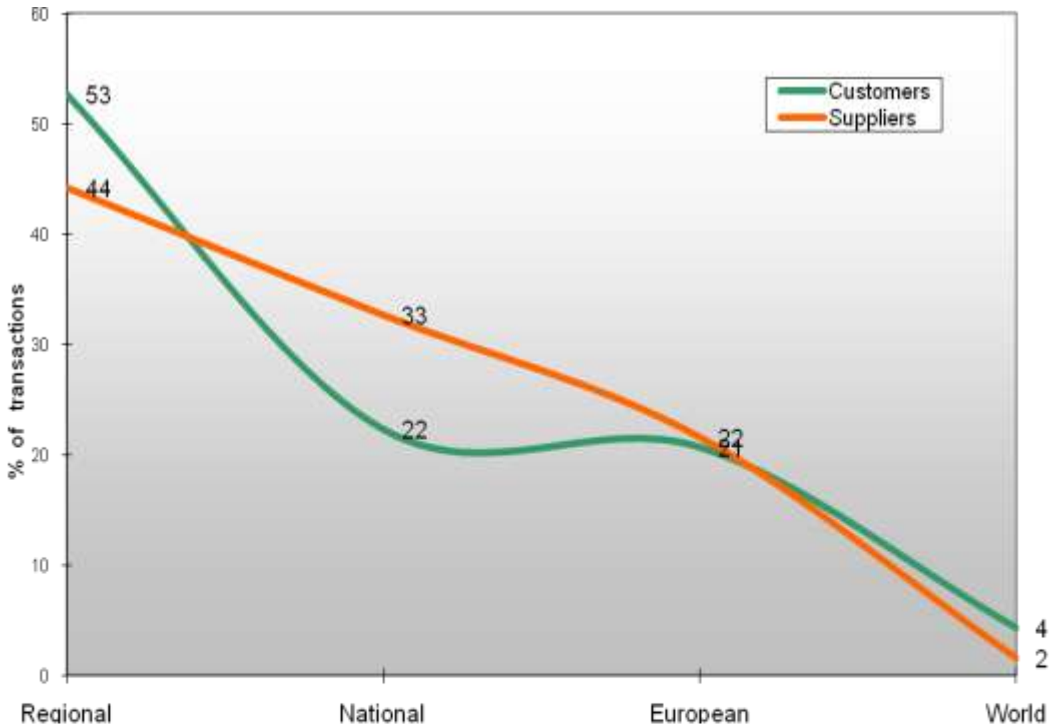
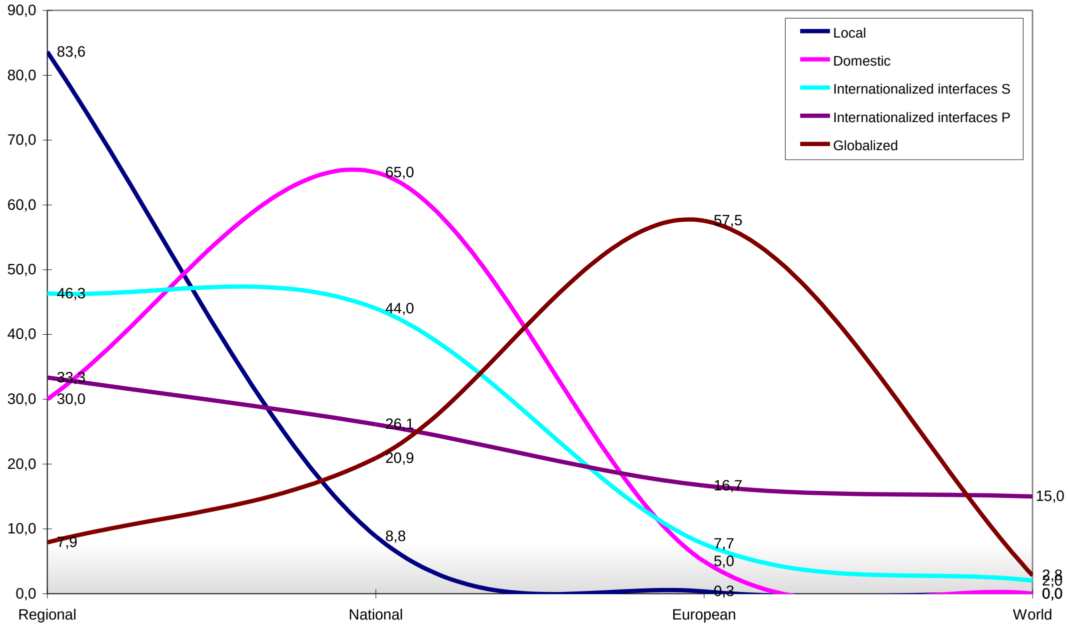


Figure 3.2.2. shows that the (on average) 44% of sales and 53% of purchases of the firms were within the same region.

Figure 3.2.3: Average proportion of purchases taking place at different levels by type of firms, according to the Index of Globalization.

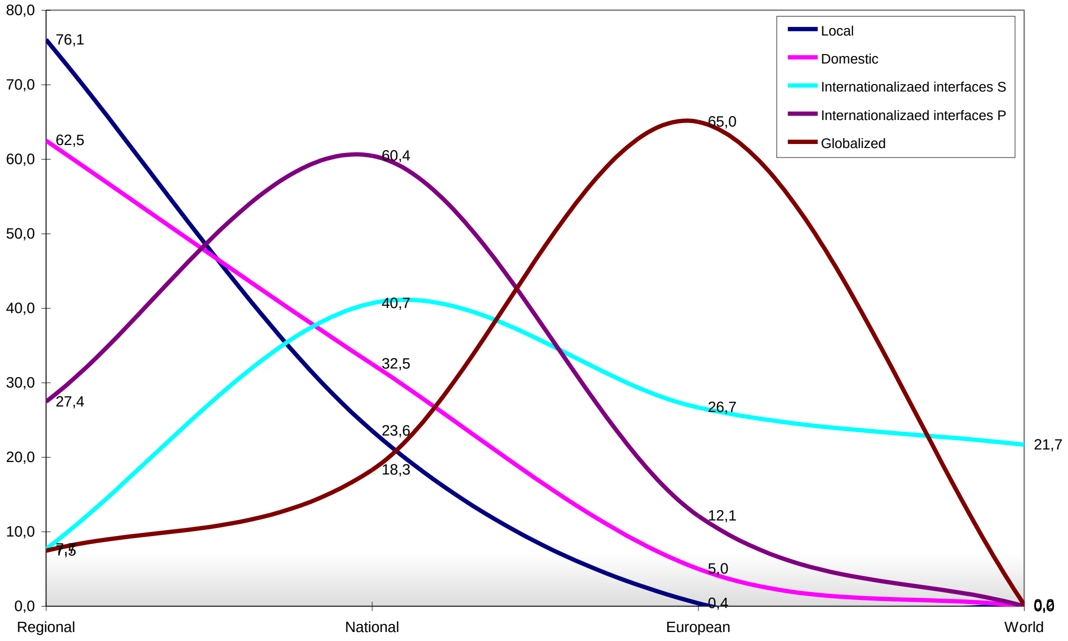


- *Internationalized interfaces S and P correspond to the firms belonging to the 'Internationalized interfaces' category with internationalized profile for respectively their sales and purchases.*

The results displayed in Figure 3.2.3 and

Figure 3.2.4 show that even for firms that have an international profile, a relatively small proportion of transactions are taking place at the world (global) level. For Globalized firms, about 65% of the clients and 57% of the suppliers are located in Europe, and less than 3% are outside Europe. The national powerhouse's category is not visible as there is no transaction activity at this level.

Figure 3.2.4: Average proportion of sales taking place at different levels by type of firms, according to the Index of Globalization.

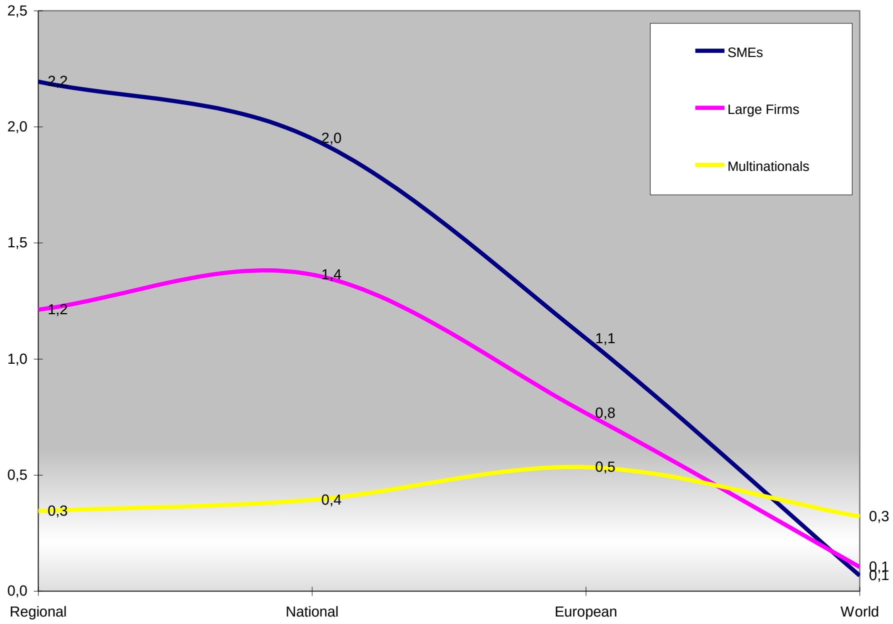


** Internationalized interfaces S and P correspond to the firms belonging to the 'Internationalized interfaces' category with a marked internationalized profile thanks to respectively their sales and purchases.*

The Collaborative Space of SMEs

The respondents were asked to assess an extent of their collaboration with other types of firms concerning size and location by giving a score from 0 (no relation) to 4 (intensive relation).

Figure 3.2.5: Averaged expressed scores to the question on "collaboration with other firms".



Concerning the hypothesis assuming that firms will establish strong relationship with firms in closer territorial scales (Dubois, 2010), it is possible to say, that the hypothesis was confirmed for firms between European and World levels, especially for firms with multinational relationship. On the other side the strenght of relationship is higher at the national level then at the regional for SMEs and Large firms, except multinational firms, where it is higher at the European level.

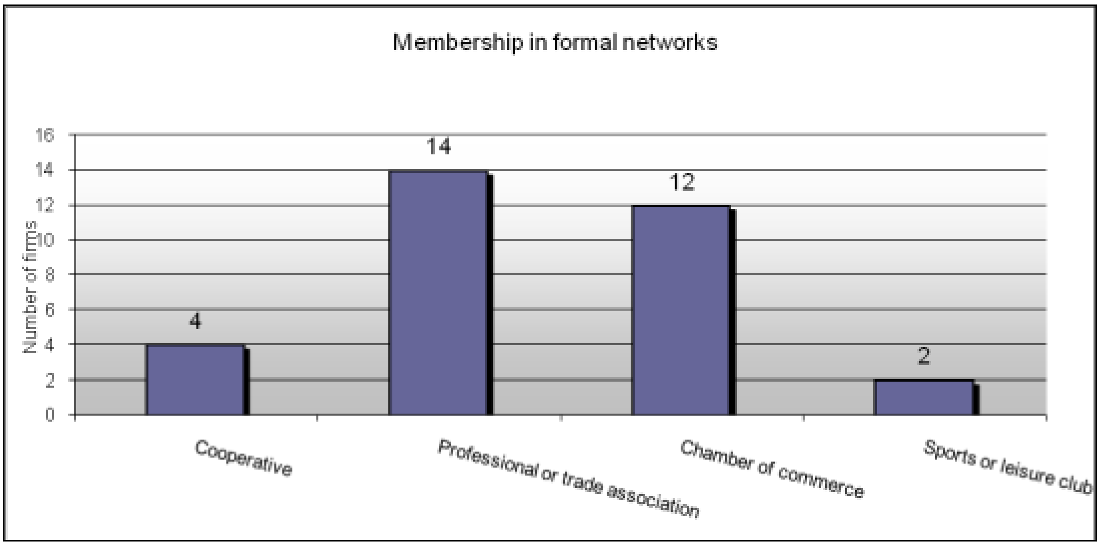
The average collaboration intensity is the highest for SMEs at the regional level (2.2). For collaboration between our sample of SMEs, the average intensity decreases from 2.2 on average at the regional, to 2.0 at the national level, 1.1 at the European level and 0.1 for the rest of the world.

When it comes to the collaboration between our sample of SMEs and Large Firms and Multinationals, the 'peak' takes place at the national level for the Large Firms (1.4) and 0.5 at the European level for Multinational.

The Institutional Setting

The highest number of firms participate in Professional or trade association as contacts and other advantages come with membership. The lowest level of involvement related to Sport and leisure club which is not perceived as profitable to the interviewees.

Figure 3.2.6: Membership in formal network.



Relationships with Sources of Finance

In the electronic survey, we asked the entrepreneurs to assess the relevance of a set of pre-defined financial sources when their firm seeks financing to develop its activities. To whom do they turn when they need a strategic financial investment? The highest importance was placed on regional owners and banks, and national banks were close behind (Figure 3.2.7 and Figure 3.2.8). It is mainly due to the mentality of people in the region to trust more to the local sources, and of course they get more reasonable interest there. The growing importance of the European level withing all categories, indicates an increasing European orientation.

Figure 3.2.7: Importance of financial sources (owners/shareholders; banks; support programmes).

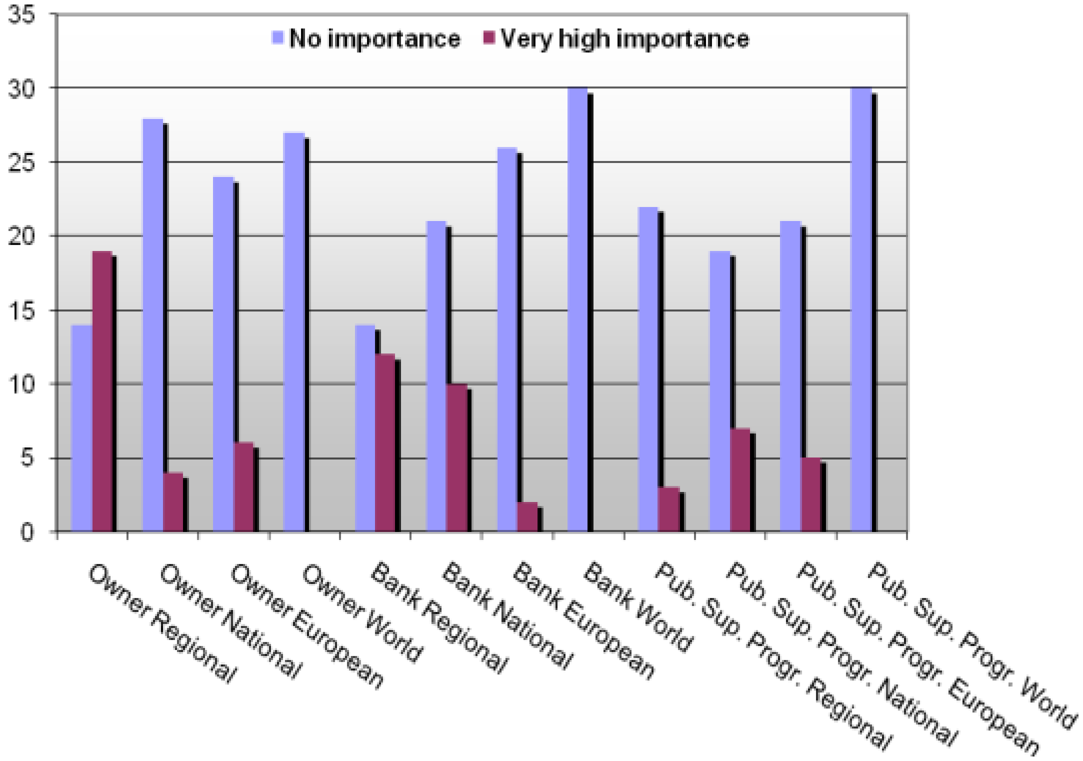
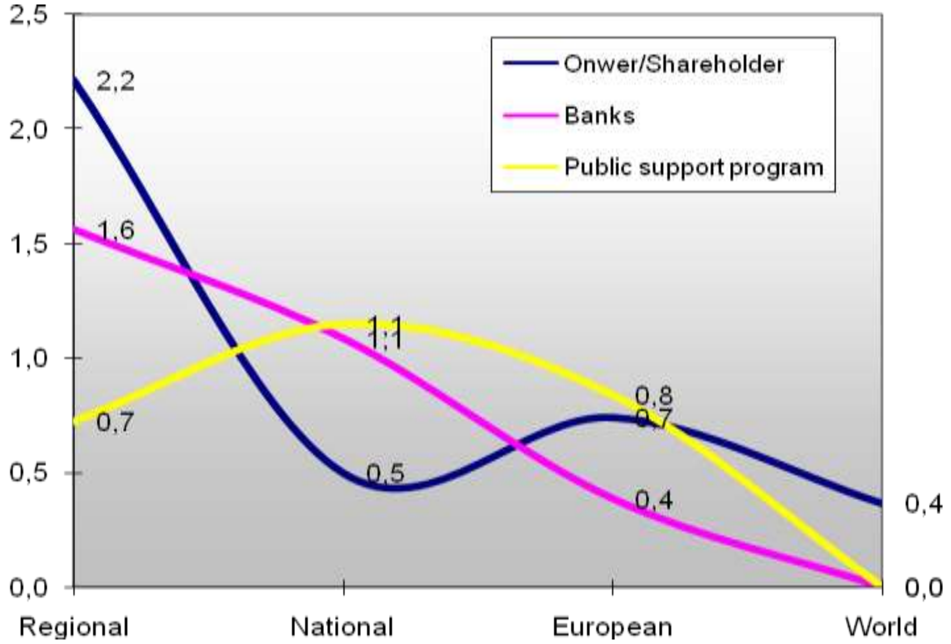


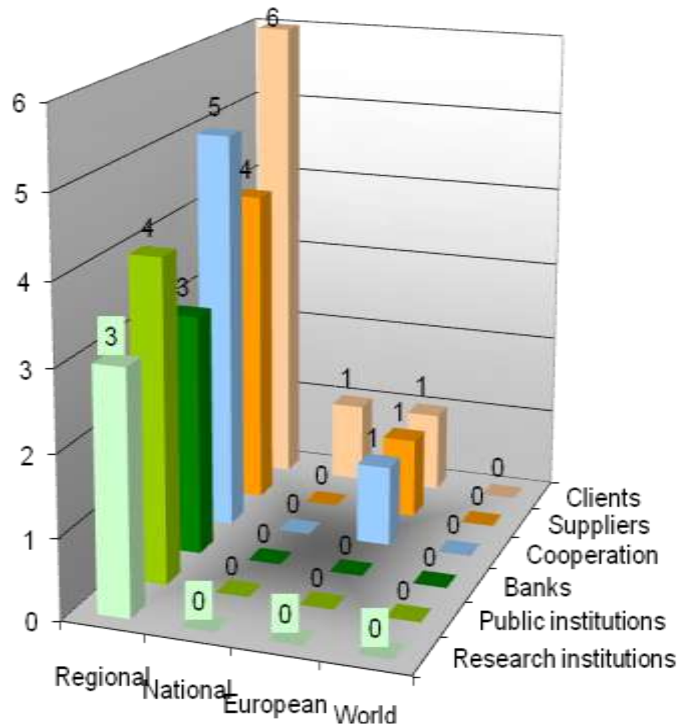
Figure 3.2.8: Financial space. Percentage of finances flowing from different sources into the firms.



Resilience and the Impact of the Financial Crisis

It is perhaps a little surprising that the impact of the global economic crisis was most evident in terms of linkages at the regional level, where the most sensitive categories were clients, cooperation and public institutions. A lower level of impact was noticed in terms of linkages at European level, where losses were to be expected in terms of international financial transactions. The highest impact at the regional level was in terms of networking with clients. This can be explained by redundancies and closure of some businesses, but also by higher prices of comodities, and lower company turnover.

Figure 3.2.9: Crisis top impact.



Conclusions

The first part of the Business network questionnaire for the Czech case study took a place during spring 2010. Forty five Small and Medium-Sized firms have replied to our questionnaire sent to them by email. Despite showing a rather good distribution when it comes to geographical location, firm age and sector of activity cannot be considered as representative of all SMEs located in South Moravian Region. Yet, the responses provide us with a valuable insight on how SMEs located in such territorial setting are able to develop and maintain a certain structure of their business network.

3.2.2 In-depth Face-to-Face Interviews

The second stage of activities dealing with structured interviews, was carried out during July, August and September 2010. The aim of this survey was to find more information about the activities of small and medium-sized businesses in the South Moravian region. The main focus during the interviews was on completing the ”Actor map”. This is a simple matrix designed to capture the relative importance for the business of networking with various types of actors at different geographical levels.

As for the other case studies, an initial task was to place the sampled firms into groups according to their ‘line of business’. The analysis will also allow the interviewee to classify the firms according to the dominant function of their networks. These two classifications are key structural elements for the discussion of the configuration of the Actor Maps, through some simple quantitative analysis. It is important to stress that this analysis is only indicative, and that no claims are made to statistical representativeness. In the same spirit, the interviews are the source of a material, supporting an essentially qualitative approach.

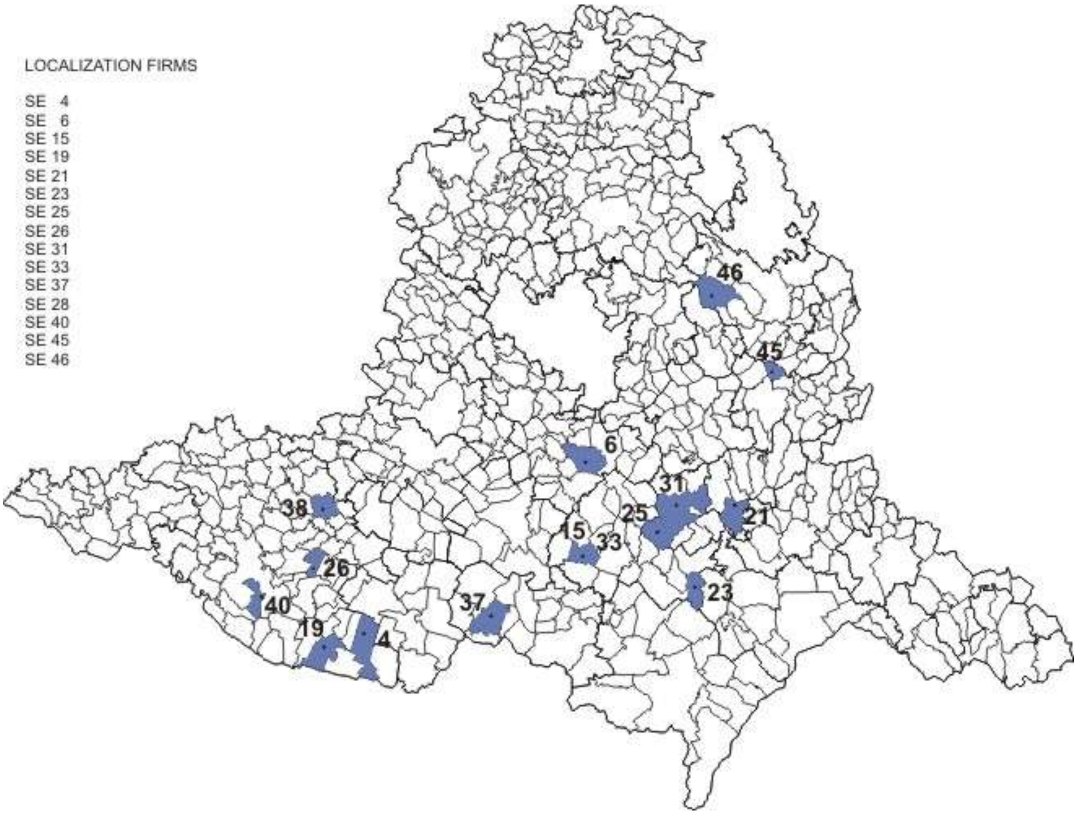
Sample Selection and Firm Characteristics

Firms were selected for interviews principally according to their willingness to participate. Those companies, which stated in their response to the first questionnaire that they did not mind to be contacted, , were approached by the phone to arrange a meeting in person. The Czech team was able to meet and do a structured interview personally with 15 of the 25 companies that promised further participation in the project, which can be considered as a big success. Structured interviews were highly time-consuming. It was not always easy to synchronize the time with contacted business representatives. We also met with considerable reluctance in same cases even though respondents had previously expressed their willingness to be contacted again. On the other hand, many business representatives agreed with the meeting and acted friendly. Some were more communicative, some less. In case we did not get enough information the reasons were two: or they were not sure or they did not know the answer. The list of companies is given below in According the activities, twelve companies were in the category "Agriculture, Forestry and Fishing". Here prevails wine growing and processing. Three companies were in the category "Manufacturing", where two of them were bakeries and one company manufactured rubber and plastic products. Detailed activities are shown in **Error! Not a valid bookmark self-reference.**.

Table 3.2.6.

Companies were spread throughout the whole South Moravian region. Most of them were in Břeclav district (six). Five companies were situated in Znojmo district, two in Vyškov district, one in Hodonín district and one in Brno-county district. They were mainly in municipalities having a few hundred inhabitants. No company was located in a larger centre. The firms were usually located at the village's boundary. All firms were independent companies owned by the family or individuals. Most were founded after 1990, six companies in and after year 2000 and 1 in 1974, however this company started to officially operate only in 1993. Two companies are mid-sized and employ 50-249 workers; six are small firms employing 10-49 people and seven are micro firms employing 9 or less workers.

Figure 3.2.10: Localization of the firms in the South Moravian Region.


LOCALIZATION FIRMS
SE 4
SE 6
SE 15
SE 19
SE 21
SE 23
SE 25
SE 26
SE 31
SE 33
SE 37
SE 28
SE 40
SE 45
SE 46
46
45
6
31
38
25
21
15
33
26
23
40
37
19
4

According the activities, twelve companies were in the category "Agriculture, Forestry and Fishing". Here prevails wine growing and processing. Three companies were in the category "Manufacturing", where two of them were bakeries and one company manufactured rubber and plastic products. Detailed activities are shown in **Error! Not a valid bookmark self-reference.**.

Table 3.2.6: Firms Selected for In-depth Face-to-Face Interviews

Firm No.	**Location**	**Firm Start**	**Firm ownership**	**Branch**[9]	**Firm Size**[10]	**Perceived level of global integration**
CZ04	Hrádek	1974 (1993)	Independant	Agriculture, Forestry and Fishing	Small	Med. high
CZ06	Blučina	2001	Independant	Agriculture, Forestry and Fishing	Micro	Low
CZ15	Popice	2003	Independant	Agriculture, Forestry and Fishing	Micro	Low
CZ19	Slup	1993	Independant	Agriculture, Forestry and Fishing	Micro	Unknown
CZ21	Násedlovice (Nechvalín)	1993	Independant	Agriculture, Forestry and Fishing	Small	Low
CZ23	Vrbice	1993	Independant	Manufacturing	Small	Low
CZ25	Boleradice	2000	Independant	Manufacturing	Small	Low
CZ26	Těšetice	1998	Independant	Agriculture, Forestry and Fishing	Medium	Med. low
CZ31	Kašnice	1996	Independant	Agriculture, Forestry and Fishing	Small	High
CZ33	Popice	1994	Independant	Agriculture, Forestry and Fishing	Micro	Low
CZ37	Novosedly	1997	Independant	Agriculture, Forestry and Fishing	Small	Low
CZ38	Horní Dunajovice	2001	Independant	Agriculture, Forestry and Fishing	Micro	Low
CZ40	Nový Šaldorf	2002	Independant	Agriculture, Forestry and Fishing	Micro	Low
CZ45	Bohaté Málkovice	1993	Independant	Agriculture, Forestry and Fishing	Small	Low
CZ46	Račice-Pístovice	2007	Independant	Manufacturing	Micro	Low

Table 3.2.7 shows a simplified classification of the interviewed firms by 'line of business' (LoB). The largest number of companies (eight) fall into category 'Light Specialist Engineering and Manufacturing – Traditional'. The second largest category is 'Resource based Activities (primary agricultural production)' with 5 firms. The 'Light Specialist Engineering and Manufacturing - High-tech' category

[9] According to the European NACE 2.2 classification

[10] According the EU DG Enterprise definition. Micro from 0 to 9 employees; Small from 10 to 49 employees; Medium from 50 to 249 employees.

contains only 2 firms whilst the final category 'Business Services' is not represented in the sample.

Table 3.2.7: Description of Activity and Simple Classification of Firms.

Interview	Year Founded	Line of Business	Type
CZ04	1974	Viticulture	2
CZ06	2001	Fodders and mashes production	3
CZ15	2003	Viticulture	2
CZ19	1993	Primary agricultural production	1
CZ21	1993	Primary agricultural production	1
CZ23	1993	Manufacture of plastic products	3
CZ25	2000	Bakery	2
CZ26	1998	Agricultural production	1
CZ31	1996	Primary agricultural production	1
CZ33	1994	Viticulture	2
CZ37	1997	Viticulture	2
CZ38	2001	Viticulture	2
CZ40	2002	Viticulture	2
CZ45	1993	Primary agricultural production	1
CZ46	2007	Viticulture	2
Key to Types		**Description**	**No.**
1 (Res.)	Resource based activities (primary agricultural production)		5
2 (EMTrad.)	Specialist light engineering and manufacturing - Traditional		8
3(EMHiTech.)	Specialist light engineering and manufacturing - High technology		2
4 (Bus. Serv.)	Business Services		0

Table 3.2.8: Number of actors in the Actor Maps, by Geographic Zone

	Number of actors in Actor Map/Cobweb						
Interview	**Regional**	**National**	**European /Global**	**Mixed national**	**Mixed (incl. EU/Glob.)**	**EU/Glob.**	**Total**
CZ04	1	1	1	0	1	**2**	**4**
CZ06	1	0	2	1	0	**2**	**4**
CZ15	1	2	1	1	1	**2**	**6**
CZ19	1	3	1	1	0	**1**	**6**
CZ21	0	1	0	0	1	**1**	**2**
CZ23	1	1	0	0	0	**0**	**2**
CZ25	1	2	1	0	1	**2**	**5**
CZ26	0	0	1	0	0	**1**	**1**
CZ31	1	0	0	2	1	**1**	**4**
CZ33	1	1	1	2	0	**1**	**5**
CZ37	0	4	1	1	1	**1**	**7**
CZ38	2	6	1	0	0	**1**	**9**
CZ40	2	3	1	0	0	**1**	**6**
CZ45	7	1	0	0	1	**1**	**9**
CZ46	2	6	0	2	1	**1**	**11**
Total	**23**	**31**	**11**	**10**	**8**	**17**	**81**

Actor Maps: Key Findings regarding their configuration.

The configuration of the Actor Maps may be viewed from a number of different perspectives. The following analysis will concentrate upon three aspects:

(i) The ten 'dimensions' of activity.
(ii) The different kinds of actor.
(iii) The different spatial scales associated with the actors.

(i) Relative importance of different kinds of activities.

In this section we present a summary of the interview findings relating to the relative importance of external linkages to the different kinds of business activities represented by the columns of the Actor Map. The columns are also referred to as "activity axes". These activities can be placed into four broad categories, those relating to marketing (columns 1-4), those relating to the product (5-8), the sourcing of investment capital (9) and compliance with regulation (10)[11]. On the basis of the relative importance of the four broad categories the networks of the interviewed enterprises are placed into four 'functional' groups, reflecting the overall (activity) orientation of their business networks.

Table 3.2.9 shows the average score on each of the ten activity 'axes' (summing over the actors). The scores are expressed as a proportion of the maximum possible score (taking account the number of actors [rows] in the actor map).

[11] Column 9 (reacting to customer's needs, is difficult to classify, but is viewed here as part of the process of product improvement, rather than marketing. The 11th column (other) was only used in two interviews, and is excluded from the analysis.

Table 3.2.10 shows the same information as ranks (across the axes for each interview).

From the table it is clear that the first activity, called ‘bringing in new business’ and the third activity entitled ‘improving market position’ were considered very important for the development of the companies and their business activities. ‘securing investment capital’ was also considered an important networking activity. Of the 'product-related’ activities the highest rated the category was ‘reacting to customers' needs’. At the other end of the spectrum, the least important networking activity related to ‘compliance with Rules and Regulations’. Interestingly ‘developing new products’ and ‘improving existing products’ were also considered relatively unimportant.

Table 3.2.9: Average scores on each activity axis.

Interview	Bringing in new business	Awareness of competition	Improving market position	Finding new markets	Improving production process	Developing new products	Improving existing products	Reacting to customers' needs	Securing investment capital	Compliance with rules and regulations	
CZ04	**0,46**	0,26	0,30	0,22	0,13	0,13	0,19	0,30	0,20	0,09	0,23
CZ06	0,22	0,29	0,33	0,09	**0,09**	0,13	0,18	0,27	**0,16**	0,04	0,18
CZ15	0,35	0,13	0,31	**0,28**	0,15	0,06	0,17	0,33	0,57	0,04	0,24
CZ19	0,56	0,43	**0,44**	0,44	0,13	0,04	0,15	0,11	0,30	0,04	0,26
CZ21	0,07	**0,06**	**0,06**	0,07	**0,10**	**0,24**	0,13	0,08	0,01	0,00	0,08
CZ23	0,21	0,04	**0,21**	0,04	0,11	0,04	0,04	0,21	0,04	0,04	0,10
CZ25	0,01	0,01	**0,00**	0,04	0,14	0,04	0,04	0,01	0,11	0,05	0,04
CZ26	0,05	0,13	**0,14**	0,05	0,08	**0,00**	0,10	0,11	0,00	0,00	0,07
CZ31	0,24	0,10	**0,17**	0,16	0,08	0,10	0,14	0,13	0,11	0,08	0,13
CZ33	0,22	0,17	**0,27**	0,27	0,12	0,07	0,07	0,12	0,19	0,06	0,16
CZ37	0,13	0,33	**0,19**	0,15	0,11	0,07	0,07	0,10	0,25	0,08	0,15
CZ38	0,07	0,00	0,04	0,00	0,17	**0,07**	0,00	0,00	0,23	0,05	0,06
CZ40	0,15	0,06	**0,01**	0,06	0,07	0,07	0,04	0,13	0,15	0,00	0,07
CZ45	0,58	0,11	**0,11**	0,06	0,00	0,08	0,11	0,25	0,58	0,11	0,20
CZ46	0,28	0,46	**0,52**	0,31	0,57	0,46	0,43	0,36	0,42	0,40	0,42
Mean	**0,24**	**0,17**	**0,21**	**0,15**	**0,14**	**0,11**	**0,12**	**0,17**	**0,22**	**0,07**	**0,16**
LoB											
Res.	0,30	0,16	0,19	0,16	0,08	0,09	0,12	0,14	0,20	0,05	0,15
EMTrad.	0,21	0,18	0,21	0,17	0,18	0,12	0,13	0,17	0,27	0,10	0,17

EMHiTech.	0,22	0,16	0,27	0,06	0,10	0,09	0,11	0,24	0,10	0,04	0,14
Bus.Serv.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

The final column of Table 3.2.9 shows a simple unweighted mean. Comparisons between interviews or between the LoB groups should be made very cautiously.

Table 3.2.10: Ranking of average scores on each activity axis.

Interview	Bringing in new business	Awareness of competition	Improving market position	Finding new markets	Improving production process	Developing new products	Improving existing products	Reacting to customers' needs	Securing investment capital	Compliance with rules and regulations
CZ04	**1**	4	2	5	8	8	7	2	6	10
CZ06	4	2	**1**	8	8	7	5	3	6	10
CZ15	2	8	4	5	7	9	6	3	**1**	10
CZ19	**1**	4	2	2	7	9	6	8	5	9
CZ21	5	7	7	5	3	**1**	2	4	9	10
CZ23	**1**	5	**1**	5	4	5	5	**1**	5	5
CZ25	7	7	10	4	**1**	4	4	7	2	3
CZ26	6	2	**1**	6	5	8	4	3	8	8
CZ31	**1**	7	2	3	9	7	4	5	6	9
CZ33	3	5	**1**	**1**	6	8	8	6	4	10
CZ37	5	**1**	3	4	6	9	9	7	2	8
CZ38	3	7	6	7	2	3	7	7	**1**	5
CZ40	**1**	6	9	6	4	4	8	3	**1**	10
CZ45	**1**	4	4	9	10	8	4	3	**1**	4
CZ46	10	3	2	9	**1**	3	5	8	6	7
Mean	**1**	**4**	**3**	**6**	**7**	**9**	**8**	**5**	**2**	**10**
LoB										
Res.	1	4	3	5	9	8	7	6	2	10
EMTrad.	2	5	3	7	4	9	8	6	**1**	10
EMHiTech.	3	4	1	9	6	8	5	2	7	10
Bus.Serv.	0	0	0	0	0	0	0	0	0	0

Error! Not a valid bookmark self-reference. summarises the activity orientation of the interviewed firms' business networks by grouping the 'market' and 'product' axes. On the basis of the "profile across the four broad categories of activity, four groups of firms may be distinguished:

- **M** networks are valued principally for the support they provide to marketing. Five firms fall into this group.
- **Mp** networks are also very important for marketing, but product related activity axes are almost as important. Two firms fall into this group.
- **Pm** networks function principally to support product development, with marketing a close second. One firm was placed in this group.
- **C** networks are particularly important for sourcing capital. Six firms seemed to have networks of this type.

Table 3.2.11: Average Scores for Broad Activity Categories, and Enterprise Activity Groups

Interview	Market	Product	Capital	Compliance	F. Group
CZ04	**0.31**	0.19	0.20	0.09	M
CZ06	**0.23**	0.17	0.16	0.04	M
CZ15	0.19	0.15	**0.57**	0.04	C
CZ19	**0.39**	0.11	0.30	0.04	M
CZ21	0.06	**0.14**	0.01	0.00	P
CZ23	**0.12**	**0.10**	0.04	0.04	Mp
CZ25	0.07	0.08	**0.11**	0.05	C
CZ26	**0.09**	**0.07**	0.00	0.00	Mp
CZ31	**0.17**	0.11	0.11	0.08	M
CZ33	**0.23**	0.10	0.19	0.06	M
CZ37	0.20	0.09	**0.25**	0.08	C
CZ38	0.05	0.09	**0.23**	0.05	C
CZ40	0.07	0.08	**0.15**	0.00	C
CZ45	0.17	0.11	**0.58**	0.11	C
CZ46	**0.47**	**0.51**	0.42	0.40	Pm
Mean	0.19	0.14	**0.22**	0.07	**C**
LoB	**Market**	**Product**	**Capital**	**Compliance**	
Res.	**0.20**	0.13	**0.20**	0.05	MC
EMTrad.	0.19	0.16	**0.27**	0.10	C
EMHiTech.	**0.18**	0.15	0.10	0.04	M
Bus.Serv.	**0.00**	0.00	0.00	0.00	

At the bottom of the table summary results for the four 'Line of Business' groups are provided. The resource-based activity companies placed, on average, equal emphasis upon networking for marketing and with sources of finance. The firms engaged in traditional manufacturing seemed to place more emphasis upon networking with sources of capital, whilst the networking of high technology manufacturing firms focused more on marketing. Again these should be treated with caution, due to weighting issues which cannot be allowed for.

(ii) Relative Importance of Different Types of Actor

Across the full sample, customers and suppliers seem to be the most important type of network actor (

Table 3.2.12).

Table 3.2.12: Occurrence of Different Types of Actors in the Interviews

Types of Actors		Interviews	Actors
Market:	Customers	15	48
	Suppliers	15	46
Coop from:	SMEs	4	5
	Large Firms	2	2
	MultiNationals	0	0
Support from:	Govt Advisory Bodies	4	5
	Research Institutes	7	8
	Business Consultants	0	0
	Other	0	0
Sources of Finance:	Shareholders/Owners	7	7
	Banks atc	10	13
	Public Support Programmes	6	9
	Other	0	0
Membership Orgs.:	Coops	0	0
	Professional or Trade Org.	8	12
	Chamber of Commerce	1	1
	Sports or Leisure Club.	1	1
	Other	0	0

However, splitting the sample into LoB groups (Table 3.2.13) shows that sources of finance are of equal importance to both the traditional and high technology manufacturing groups. The results for the functional groups also highlight the importance of linkages to finance sources.

Table 3.2.13: Percentage of Actors in Different Groups.

		Customers/ Suppliers	Coop other Businesses	Support Intstitutions	Finance Sources	Assoc. and Clubs
		% of Actors				
LoB Groups	Res.	50	10	3	27	10
	EMTrad.	30	20	11	29	10
	EMHiTech.	36	14	0	36	14
	Bus.Serv.	0	0	0	0	0
		0	0	0	0	0
Functional Groups	M	38	10	5	33	14
	Mp	30	22	4	30	13
	Pm	28	17	17	28	11
	C	40	17	8	27	8
Mean		**32**	**14**	**6**	**29**	**17**

(iii) Relative importance of actors at different spatial scales.

Table 3.2.14 shows the distribution of actors for each of the interviewed firms, and for the four 'Line of Business' and four 'Functional Groups' identified above.

Fourteen of the fifteen firms were found to be linked to partners which are active (partially or fully) at the international level. One company (CZ26) seemed to have a fully internationalised network. Three firms had networks which were 50% at the EU/global level. The remaining twelve had a majority of national, regional or local actors.

Table 3.2.14: Distribution of Actors at Different spatial Scales

Interview	LoB Group	Funct-ional Group	Number of actors in Actor Map/Cobweb: Regional	National	European/Global	Mixed national	Mixed (incl. EU/Glob.)	EU/Glob.	Total	% EU/ Global
CZ04	2	M	1	1	1	0	1	**2**	**4**	**50**
CZ06	3	M	1	0	2	1	0	**2**	**4**	**50**
CZ15	2	C	1	2	1	1	1	**2**	**6**	**33**
CZ19	1	M	1	3	1	1	0	**1**	**6**	**17**
CZ21	1	P	0	1	0	0	1	**1**	**2**	**50**
CZ23	3	Mp	1	1	0	0	0	**0**	**2**	**0**
CZ25	2	C	1	2	1	0	1	**2**	**5**	**40**
CZ26	1	Mp	0	0	1	0	0	**1**	**1**	**100**
CZ31	1	M	1	0	0	2	1	**1**	**4**	**25**
CZ33	2	M	1	1	1	2	0	**1**	**5**	**20**
CZ37	2	C	0	4	1	1	1	**1**	**7**	**14**
CZ38	2	C	2	6	1	0	0	**1**	**9**	**11**
CZ40	2	C	2	3	1	0	0	**1**	**6**	**17**
CZ45	1	C	7	1	0	0	1	**1**	**9**	**11**
CZ46	2	Pm	2	6	0	2	1	**1**	**11**	**9**
			23	**31**	**11**	**10**	**8**	**17**	**81**	**21**
LoB Groups	Res.		2	4	2	3	2	**4**	**13**	**31**
	EMTrad.		8	19	7	4	4	**11**	**42**	**26**
	EMHiTech.		2	1	2	1	0	**2**	**6**	**33**
	Bus.Serv.		0	0	0	0	0	**0**	**0**	**0**
Functional Groups	M		3	1	3	5	1	**4**	**13**	**31**
	Mp		4	10	3	1	1	**4**	**19**	**21**
	Pm		2	10	1	3	2	**3**	**18**	**17**
	C		12	10	4	1	4	**8**	**31**	**26**

Of the LoB, groups, high technology manufacturing and the resource based activities (wine companies) had a significantly higher proportion (33%) of international partners in their networks. Firms which had networks focused upon marketing functions had the most international networks.

Insights into the Building, "Maintenance" and Globalisation of Business Network.

The majority of respondents indicated that formal networks play an important role while making and maintaining business contacts, especially at the national and international geographical level. Informal networks are not negligible and have their importance in business relations too, but they are not as important as formal ones. Informal networks are used only at the regional level; at other geographical levels they are not important.

The Internet is quite important for all contacted companies. Most firms have their own websites, some of them even in different languages. Most companies perceive the website as a good tool for their promotion and advertisement. Also companies who have not their websites yet are planning to build them up soon. Email is used mainly for communication with their partners. Some companies have started to run e-shops, or sell their goods over the Internet indirectly through other companies. These are mainly wine companies, which started to trade much more over the internet during the last two years. The company CZ19 mentioned that it's also registered on the Facebook social network to reach out a young people.

The respondents generally state that personal contact is the most important, both in establishing and maintaining the common relations. They intend to maintain permanent relations and continuously strengthen them. Company owners usually meet with partners once per month, or more often if needed. Although all put high importance on a personal communication, on a day to day basis they maintain contact by telephone and recently also by e-mail.

Representatives of the companies stated that they are not planning any changes in relations with existing business partners or looking for a new one. Most of them would like, and try to, penetrate into foreign markets, but there were also companies preferring the Czech market only. Among the mentioned foreign countries appeared mainly Austria, Germany, Poland, Hungary, Holland, France and even Russia and Japan. Due to the geographical position of the South Moravian Region (it is located between two countries: Austria and Slovakia) it is assumed that to enter a foreign market is not as difficult as for other regions, which are located further inland of the Czech Republic.

Potential barriers in establishing contacts with foreign partners are:

- A difficult organization;
- Time and financial demand;
- Language barrier;
- Promotion at the foreign market;
- Wholesalers (supermarkets);

- Patriotism;
- Distance;
- Exchange rate (currency).

Some companies solve such problems by sending some of their sales representatives abroad to map the foreign market and find contacts. Other companies have no interest in a direct trade with foreign countries and they do business only indirectly through trading companies.

The Evolution of Business Networks and the Impact of Recession

The majority of companies were not affected significantly by the crisis. The worst years for them were 2008 and 2009 where profits decreased in all areas of activity. The crisis mainly affected commodity prices, which had a significant impact on the agricultural firms. The CZ06 Company experienced a change in sort of customers. Their services are now more in demand by wealthier customers. Winemakers agree that there is a higher interest in cheaper wines in the time of crisis. Generally it is possible to say that customers did not stop buying, but they mainly purchase cheaper goods. Most of the interviewees were involved in crop production where there was no reduction of permanent employee within the last five years. Only a few respondents mentioned reduction of the number of seasonal temporary workers. The crisis affected the salaries of employees slightly. Small businesses agree that in time of crisis it is much harder to succeed in the market against supermarkets and wholesalers, who can afford to lower the prices. However, even during the crisis, firms try to keep their regular partners. The positive effect of the crisis is that it can motivate companies to try to get into foreign markets where they get offered better prices for some commodities (e.g. milk). This is typical for neighbouring countries as Austria, Germany, Slovakia and Poland. The majority of respondents agreed that the crisis is retreating and they look optimistically into the future.

Regarding agriculture there is a major problem of outflow of people. It is a demanding job that offers a lot of hard work and only a little money. Young people in particular have no interest in this as a career. However, viticulture remains more popular in the South Moravian region, and this is a part of agriculture which may sustain the local economy. Unfortunately profitability is viewed as dependent upon subsidies, the future of which are uncertain.

None of interviewed businesses is completely financially independent. All of them are depending on commercial loans of subsidies (grants). Some companies are trying to get finances from private individuals, where there are not such high interest rates. Some companies are also cooperating with various research institutions to develop new varieties and technological practices that would improve their existing products or develop new ones. Wine growers are usually members of various institutions, which are allowing them to gain new information and easier access into the wine business world.

Conclusions

Key findings from the face-to-face survey of enterprises in the Jihomoravský kraj (the South Moravian region) are:

- The level of involvement in global trade network is not linked to the main firm activities.
- Activities in "Improvement of market position‟ category greatly exceeds results of other ones.
- The lowest importance from all categories was found at "Compliance with Rules and Regulations".
- Most of the surveyed businesses fall into the Light Specialist Engineering and Manufacturing – Traditional category. These are mostly small wineries, which prefer high quality products and focus on enlarging of their active networks.
- The most important contribution to the business networks in the South Moravian Region seems to be in terms of sourcing capital. Four firms got to have networks of this type.
- Customers and suppliers were the largest group of actors involved in the business networks. Especially small companies (wineries) or growing businesses often reported the importance of a support (subsidies) from European level.
- Most players were at the national geographical level.
- The level of globalization in the South Moravian region could be described as fairly low..

- In most cases, there is an interest to enter international markets, which might ensure the future expansion of international networks and achievement of a higher global level.
- Only one firm had no international partner in its sales network.
- The highest level of globalization have been achieved among firms in the light manufacturing and high technology groups. In both cases the main reason is a high share of foreign suppliers, which at the same time allows the firm to use a high technology.
- Most of the companies have their own website; some of them run it even in foreign languages. Wine companies have their own e-shops, some of them sell indirectly.
- Email, phone and personal contacts seem to be the most effective type of communication. Many of the interviewees have also regular (informal) phone contacts or meetings to maintain an effective network.
- Informal relations prevail especially in micro and small businesses located at the regional geographical level.
- The biggest obstacles to expanding abroad include language barriers, the problem of visibility at the foreign market, transportation demand.
- Wine companies in particular regard a lack of promotion of the high quality Czech wines and patriotism in Austria as the main obstacles to penetrating international markets. Companies from Znojmo sub region, which lies on the border with Austria, would in particular be interested in a wine trade there.
- All interviewees reported, as a consequence of the economic crisis, a decrease in the annual company turnover, lower prices for commodities and increased interest in cheaper products. No company indicated that the crisis has affected the number of permanent employees.
- The majority of companies put a strong emphasis on a high product quality and a good advertisement.

- There is among the wine producers, a strong sense of dependence on European subsidies, and most seek specialist help to enable them to maximise their support.

3.3. Goriška (Slovenia)

3.3.1 The Electronic Survey of SME Networking

Methodology and Sampling

According to the data for 2008 (Agency of the Republic of Slovenia for Public Legal Records and Related Services) the Goriška region has:

- 2,548 commercial companies (with 28.311 employees),
- 19 co-operatives (273 employees),
- 5,185 registered *solo enterprises* (with 3327 employees),
- 1,272 associations (102 employees),
- 281 units of private law (217 employees),
- 102 units of public law (education, culture etc.; 5827 employees.

In terms of *commercial companies* in the Goriška region in 2008 was characterised as follows:

- 61.3 % are classified as micro-firms (1-9 employees),
- 16.0 % rank as small firms (10-49 employees),
- 12.9 % are medium firms (50 to 250 employees),
- 9.8 % are characterised as large firms (over 250 employees).

According to our criteria the surveyed firm should have more than 5 and less than 50 employees, it should be located in rural or urban-near municipalities of the Goriška region, at the same time all sectors of activities were considered. This sampling method resulted in an identification of approx. 100 companies. The relative modest number reflects the specific entrepreneurial structure of the region (described above), i. e. a shortage of SMEs and predominance of solo enterprises.

119 firms were contacted by phone; company managers were asked if they would like to take part in this survey. 27 firms rejected co-operation due to various reasons (shortage on time, no interest, insolvency). The electronic survey was sent to email addresses previously collected, (and confirmed during the telephone calls). Due to very low response after two rounds of calls and e-

mailing (only 5 responses after 1.5 month), another three rounds (two months) were carried out. Regional stakeholders assisted at this stage. From the companies contacted, 20 eventually completed the survey.

Table 3.3.1: Main characteristics of responding firms

Firm No.	Location	Firm start	Firm ownership	Branch[1]	Firm size[2]	Perceived level of global integration
SI01	Nova Gorica	1952	National	Transportation and storage	Medium	Low
SI02	Čiginj/Tolmin	1992	Independent	Manufacturing	Medium	average high
SI03	Bovec	1957	Local/regional	Manufacturing	Medium	High
SI04	Nova Gorica	1999	Foreign	Wholesale and retail trade	Small	average high
SI05	Nova Gorica	1990	Independent	Manufacturing	Medium	Low
SI06	Neblo	2004	Local/regional	Arts, entertainment and recreation	Medium	average high
SI07	Vrhpolje	1994	Independent	Agriculture, forestry and fishing	Micro	average high
SI08	Kromberk	1991	Independent	Manufacturing	Small	average high
SI09	Podljubinj	1991	Independent	Construction	Small	Low
SI10	Nova Gorica	1993	Local/regional	Agriculture, forestry and fishing	Micro	average low
SI11	Kanal ob Soči	1998	Foreign	Manufacturing	Large	High
SI12	Ajdovščina	2006	Independent	Transportation and storage	Small	High
SI13	Kobarid	1995	Local/regional	Manufacturing	Small	average low
SI14	Šempeter-Vrtojba	1987	Independent	Information and communication	Medium	High
SI15	Orehovlje	1992	Independent	Manufacturing	Medium	average high
SI16	Kromberk	1999	Independent	Wholesale and retail trade	Small	average high
SI17	Godovič	1992	National	Manufacturing	Medium	High
SI18	Kromberk	1989	Independent	Manufacturing	Medium	High
SI19	Volčja Draga	1989	Local/regional	Manufacturing	Medium	High
SI 20	Volčja Draga	1994	Foreign	Manufacturing	Small	average high

Source: DERREG, E-survey, 2010.

We do not consider this modest response rate as a failure due to the fact that 12 out of 20 corresponding firms were willing to participate in the second stage of our research. On the other hand we consider this result indicative of quite low interest among firms for cooperation in research (although the information on

[1] According to the European NACE 2.2 classification.

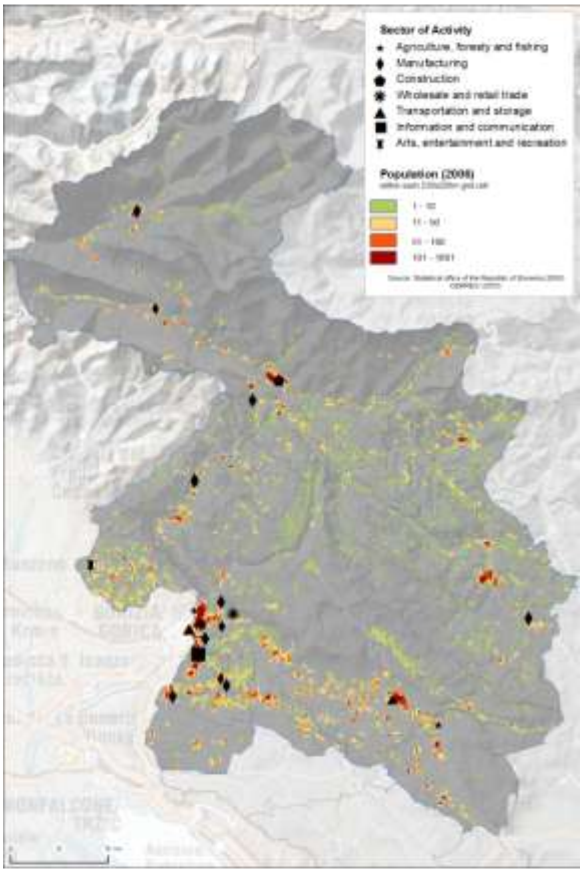
[2] According to EU DG Enterprise definition. Micro (from 0 to 9 employees), small (from 10 to 49 employees), medium (from 50 to 249 employees) and large (over 250 employees).

research was disseminated on regional council where the most relevant firms are represented) as well as a side-effect of current financial and economic situation.

Overview of Sampled Firms

Our survey covered 20 firms, distributed over main geographical units and agglomeration area (Nova Gorica region). Surveyed firms are broadly representative of the region's sectoral structure.

Figure 3.3.1: Geographical location of responding firms



Source: DERREG, E-survey, 2010.

Cartography: Department of Geography, Faculty of Arts, University of Ljubljana, 2010.

In the case of surveyed companies in Goriška region, the age of the company (Table 3.3.2) cannot provide any clues to the process of internationalization of firm activities: since the majority of the companies were established in the late 1980s and 1990s during the post-Communist socioeconomic transformation.

Table 3.3.2: Sectoral belonging and age of the sampled businesses

	Before 1970	1970-80s	1990s	2000s	Total

Agriculture, Forestry and Fishing			2		2
Construction			1		1
Information and Communication activities		1			1
Manufacturing	1	2	8		11
Arts, Entertainment and Recreation				1	1
Transport and storage	1			1	2
Wholesale and retail trade			2		2

Source: DERREG, E-survey, 2010.

The Geography of SME's Transactional Space

The (OECD) SME Index of Globalisation (see section 3.1.1) was used as a basis for a typology of the surveyed SMEs. The results show that the transactional space of surveyed SMEs is not confined to the regional scale. The importance of national and international markets for those firms, either selling their products (services) or purchasing the inputs for their production, is evident. Out of 20 responses, only three companies are considered as "local" (with sales and purchases mostly taking place within the regional borders). 80% of the surveyed companies are partly or strongly involved in international trade: 9 firms belong to the category "internationalized interfaces" and 7 to the category of "globalized" firms.

Table 3.3.3: Typology of surveyed Slovenian firms according to their transactional space

		SALES					
		Low	Medium Low	Medium	Medium High	High	Total
PURCHASES	Low	1					1
	Medium Low			1		1	2
	Medium		1	1		3	5
	Medium High		1		1	1	3
	High			4		5	9
	Total	1	2	6	1	10	20

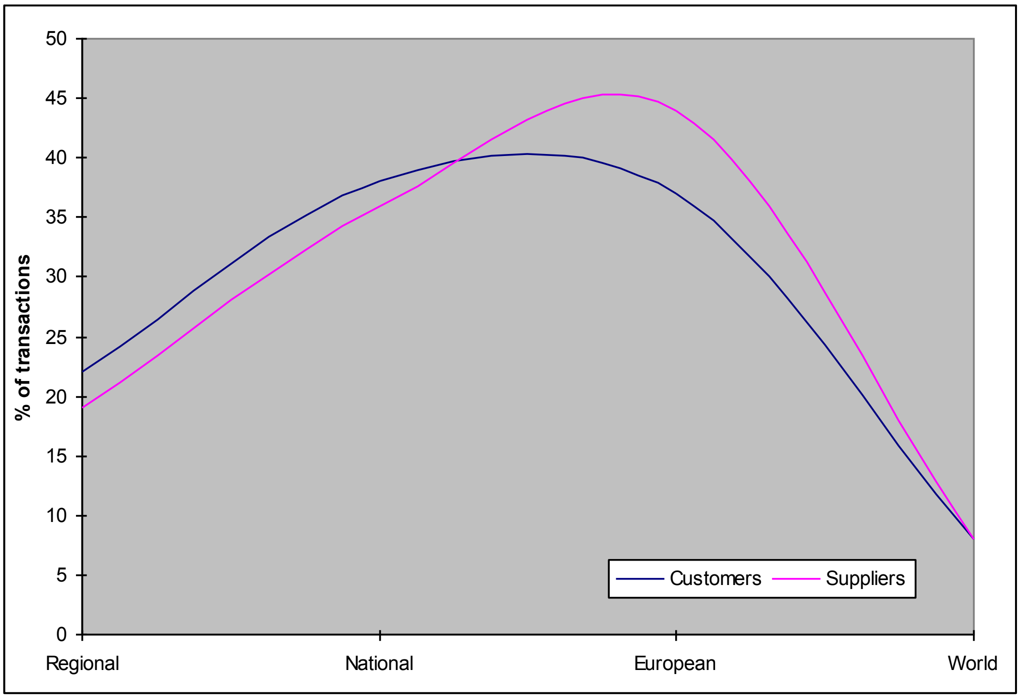
Source: DERREG, E-survey, 2010.

The results from our survey highlight the fact that location in rural, peripheral and sparsely populated areas does not mean that such firms are restricted to the regional market – on the contrary, a small, but open, market is often very intensively involved in the international market environment.

Figure 3.3.2 shows that, on average, suppliers located within the region account for 19% of total purchases, and regional clients for 22% of the total purchases.

The data confirm the fact that most of the firm's activities are taking place outside the regional framework.

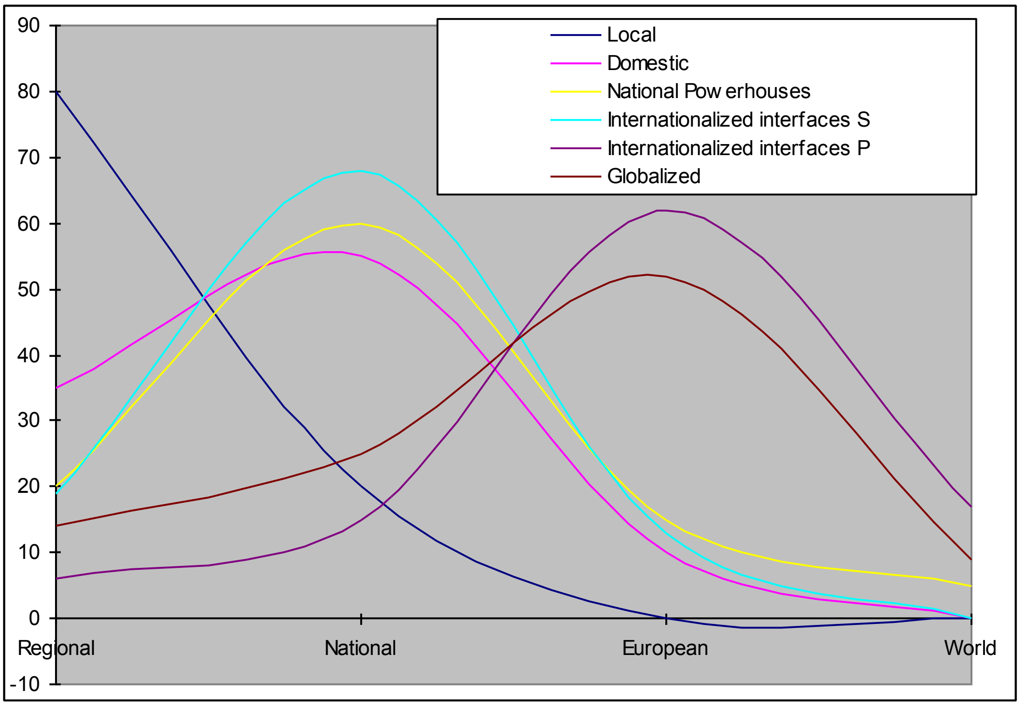
Figure 3.3.2: Average transaction profile of responding firms.



Source: DERREG, E-survey, 2010.

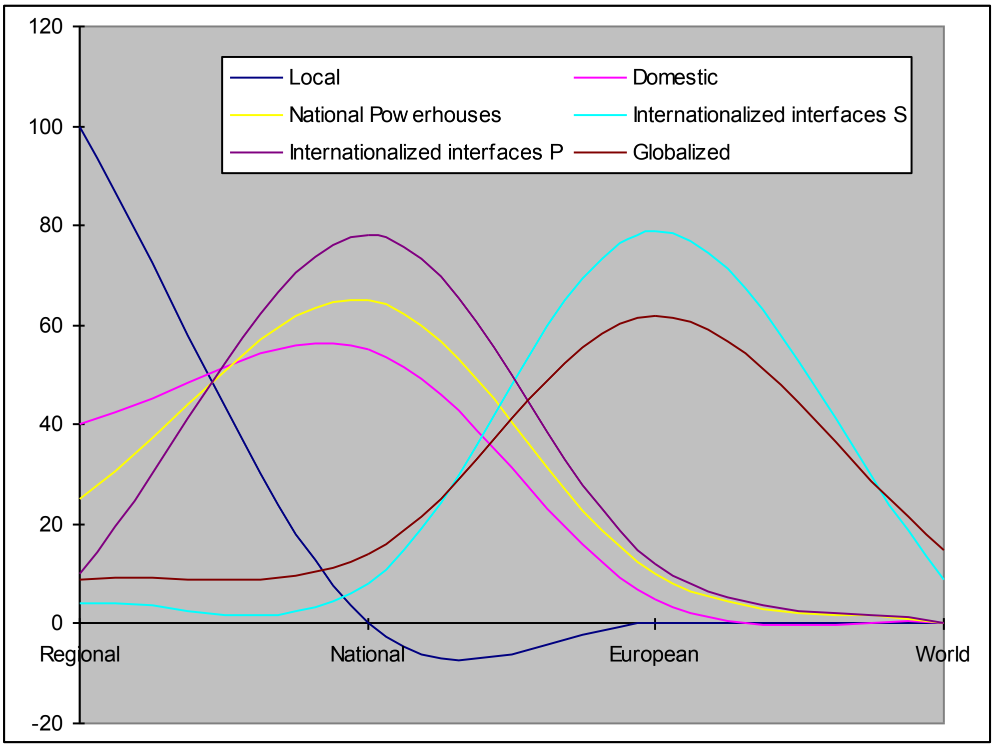
The results (Figure 3.3.3 and Figure 3.3.4) show that even for firms that have a strong international profile (the majority of surveyed firms), only a modest share of the total transaction is taking place outside the European continent. For "globalized" firms, about 62 % of the clients and 52 % of suppliers are located in Europe, and 10-15 % of them outside Europe.

Figure 3.3.3: Purchases profile by type of firm according to the index of globalization.



Source: DERREG, E-survey, 2010.

Figure 3.3.4: Sales profile by type of firm according to the index of globalization.

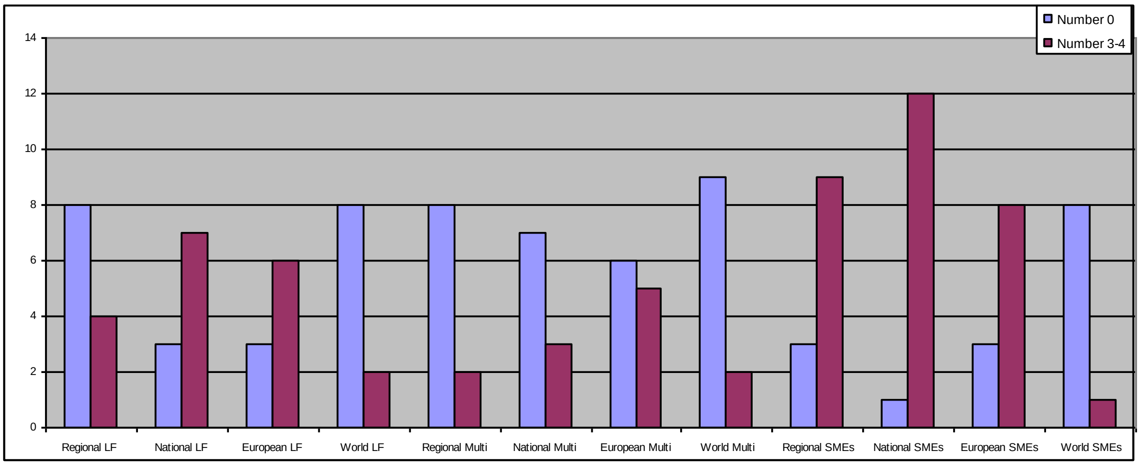


Source: DERREG, E-survey, 2010.

The Collaborative Space of SMEs

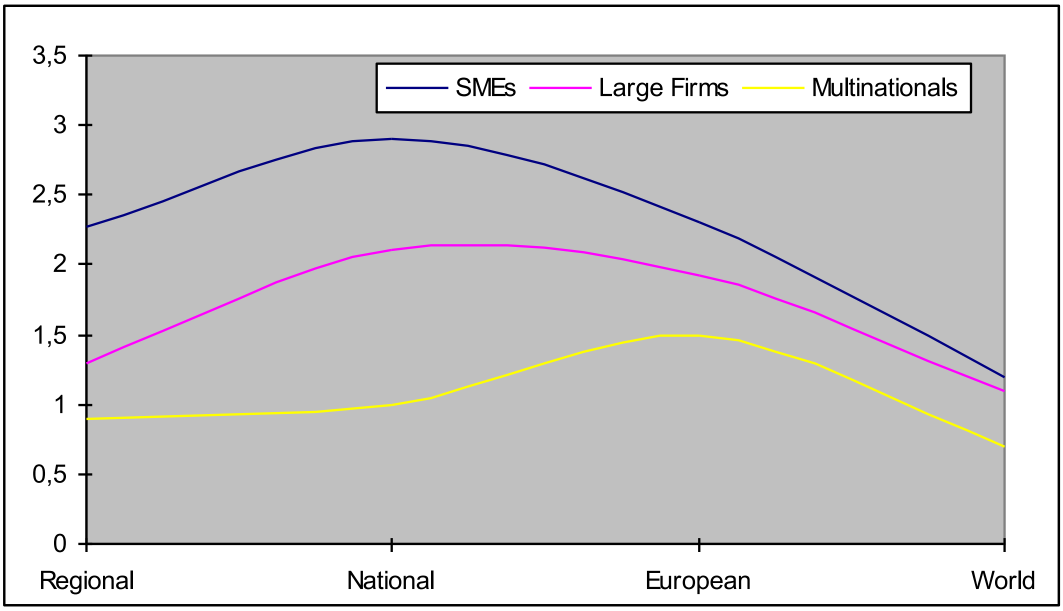
The results provided by the 20 respondents on "collaboration with other companies" indicate that surveyed SMEs have established stronger non-transactional relations with SMEs than with large firms or multinational companies. Regarding territorial aspects, the strongest ties of SMEs with other SMEs and large firms are evident on the national level; stronger cooperation with multinational firms is observed on European level.

Figure 3.3.5: Non-existent and strong measures of collaboration with other firms.



Source: DERREG, E-survey, 2010.

Figure 3.3.6: Average responses regarding collaboration with other firms given by the sample.

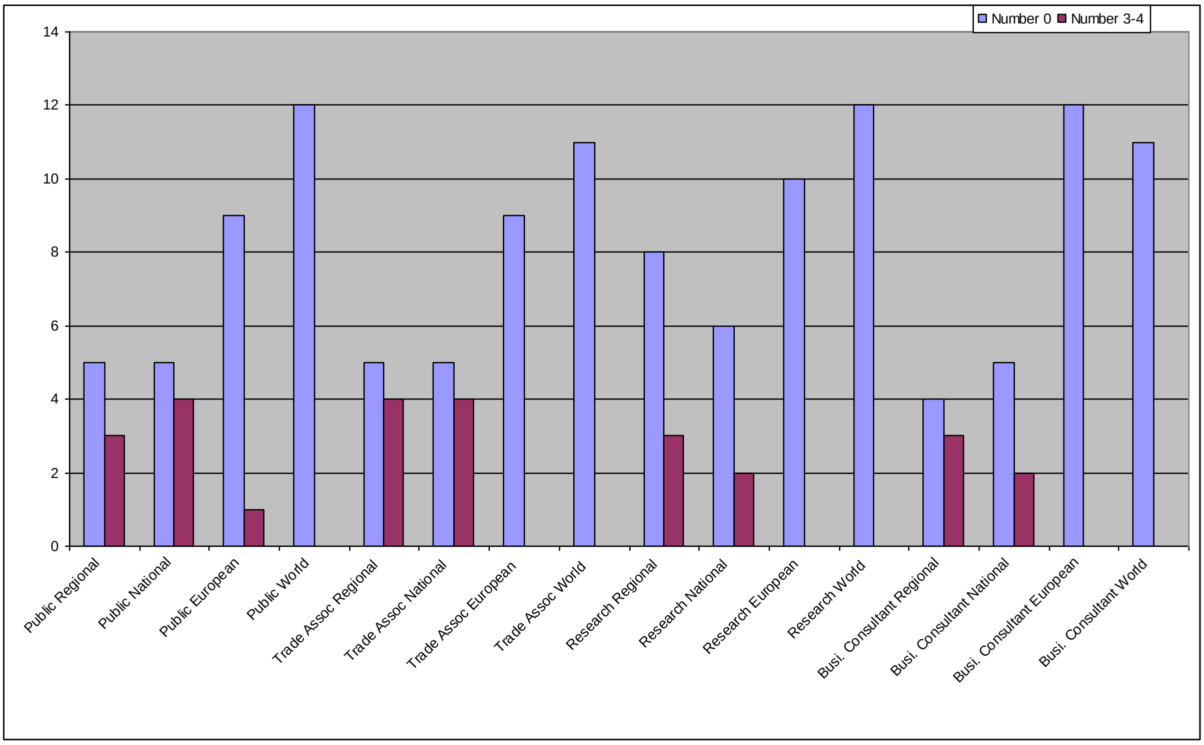


Source: DERREG, E-survey, 2010.

The Institutional Setting

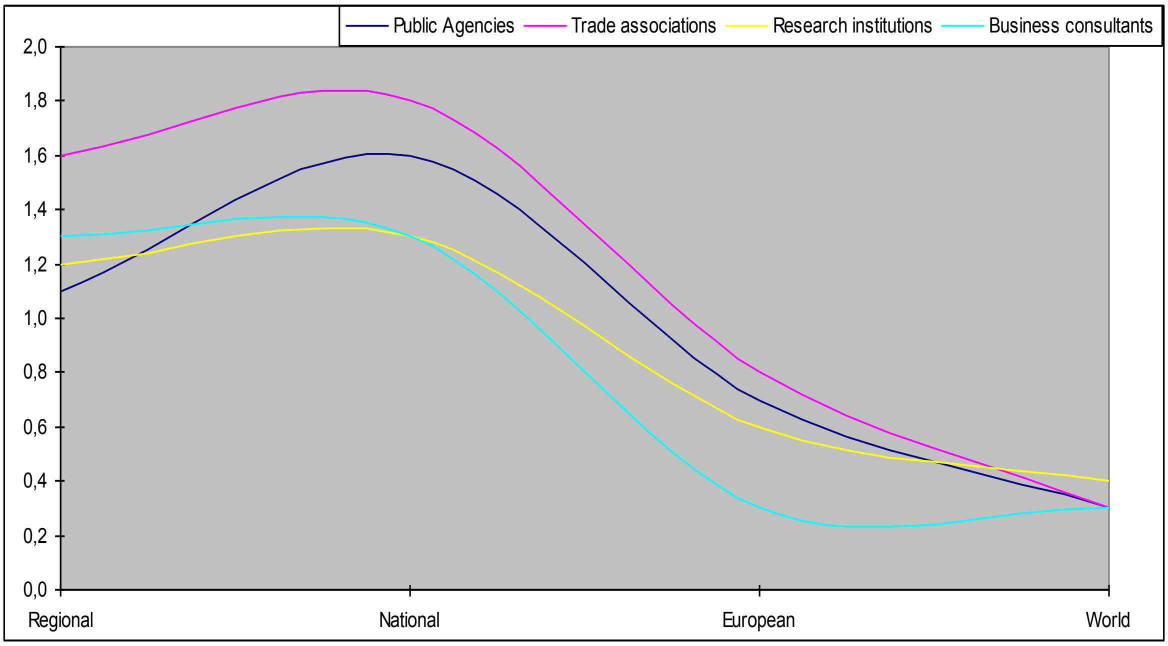
Survey respondents were asked to asses the importance of their relationships with public agencies, trade associations, research institutions and business consultants - divided into four territorial classes (regional, national, European, world). The strongest link of surveyed SMEs is to the national and regional associations (usually in function of a branch office) trade. The national level is also very important for the support of public agencies, research institutes and business consultants.

Figure 3.3.7: Non-existent and strong measures of support from institutional actors.



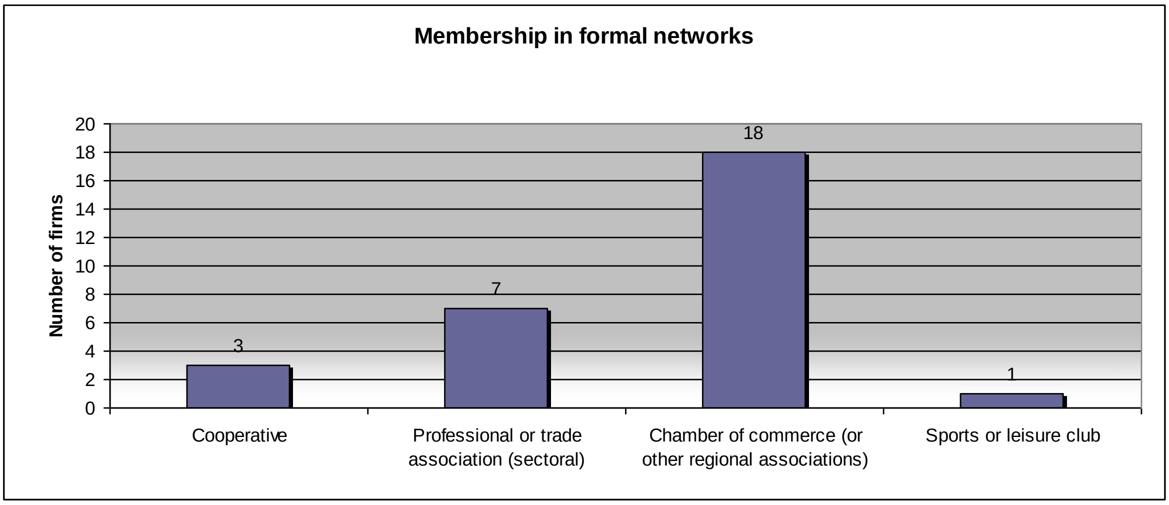
Source: DERREG, E-survey, 2010.

Figure 3.3.8: Average responses regarding support from institutional actors given by the sample



Source: DERREG, E-survey, 2010.

Figure 3.3.9: Expressed membership in formal networks.

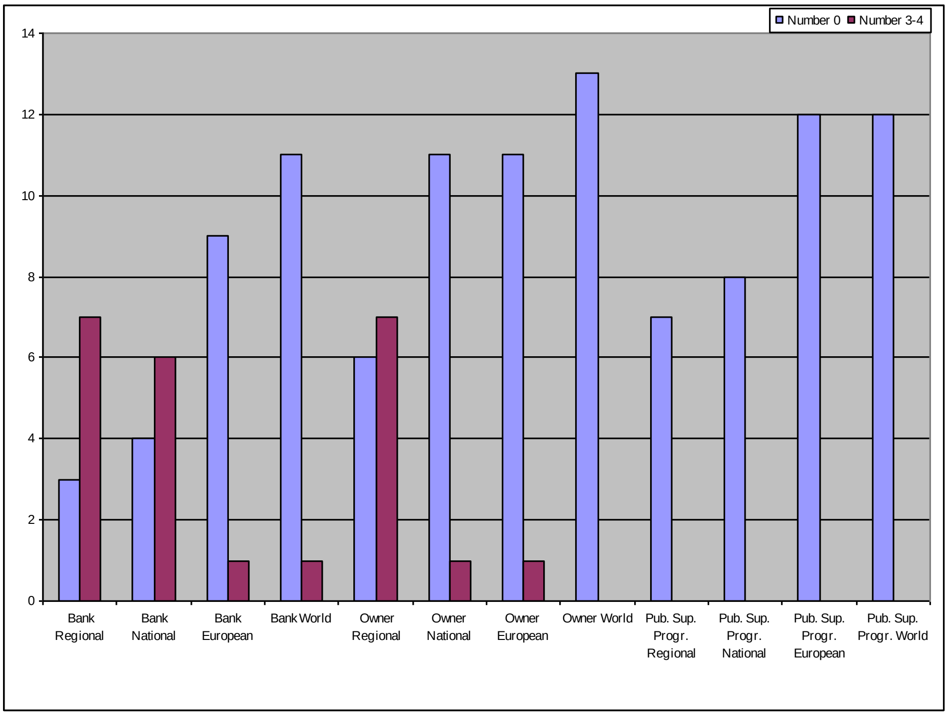


Source: DERREG, E-survey, 2010.

Relationships with Sources of Finance

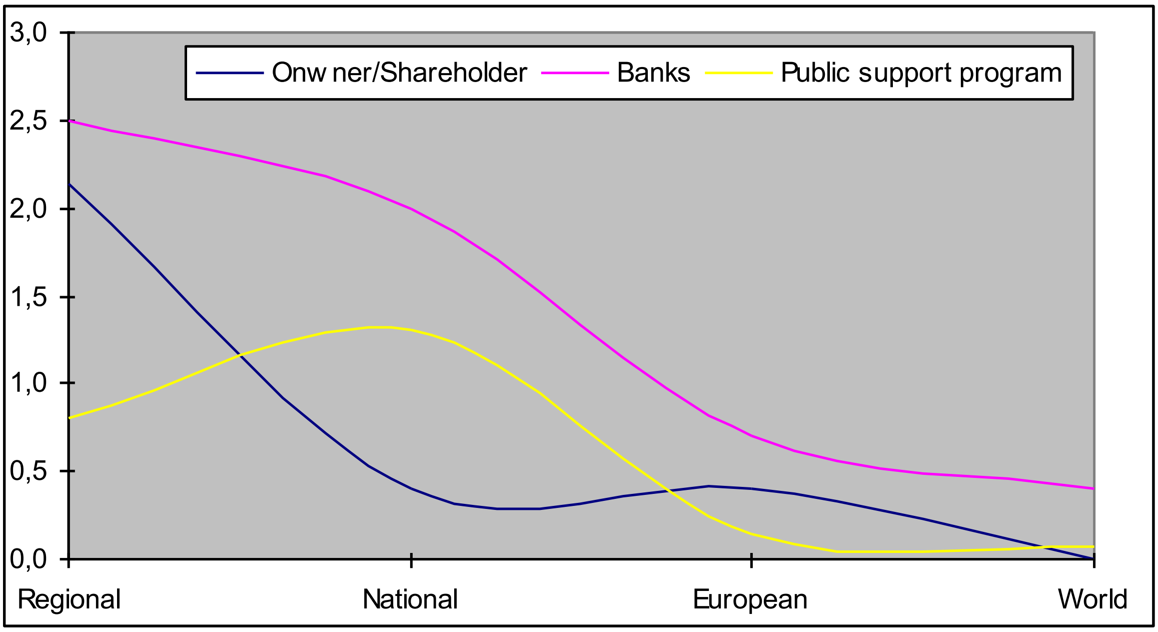
Financial support to the surveyed firms had been most frequently offered by regional (usually branch offices) and national banks, also funds provided by public support programmes (more important on national level) had been used. Domestic owners/shareholders also provide important financial means especially on regional level.

Figure 3.3.10: Non-existent and strong measures of support from financiers.



Source: DERREG, E-survey, 2010.

Figure 3.3.11: Average responses regarding support from financiers given by the sample.

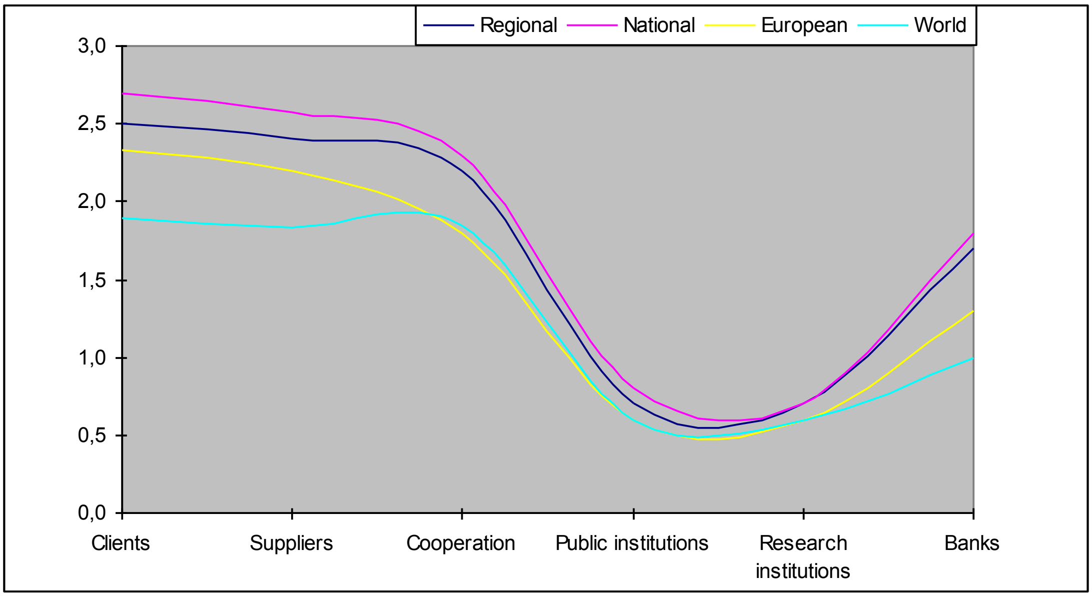


Source: DERREG, E-survey, 2010.

Resilience and the Impact of the Financial Crisis

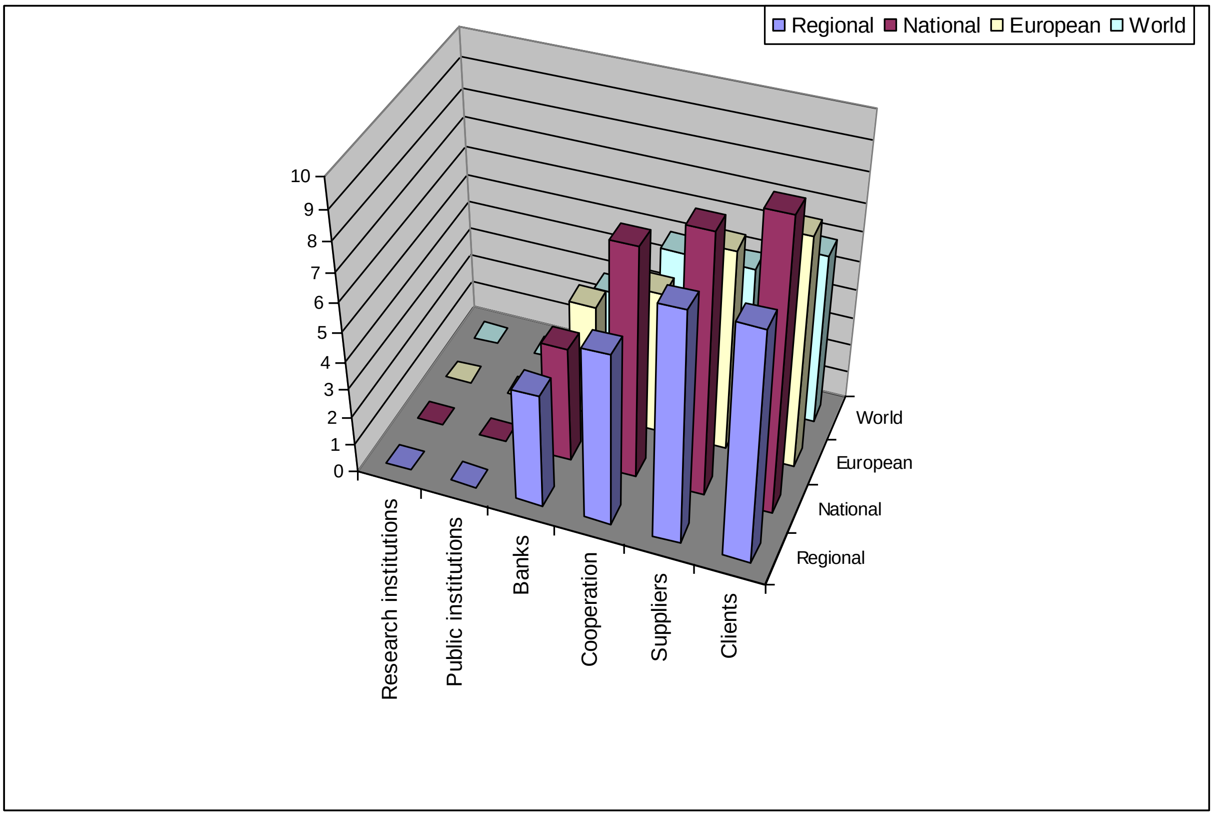
At the beginning of our e-survey we asked company managers to asses an integration of their companies into global market: 15 of them perceived that their firm was average-high or highly integrated. The qualitative assessment was accompanied at the end of our survey with a question related to the impacts of current financial and economic crisis on surveyed firms. The crisis evidently affected sales and purchases at all given territorial levels (regional, national, European, world), whilst the effect on cooperation with banks is assessed as less affected. Relationships with public and research institutions have been affected least.

Figure 3.3.12: Average expressed responses on the impact of the crisis, given by the sample.



Source: DERREG, E-survey, 2010.

Figure 3.3.13: Perceived high level impact of crisis.



Source: DERREG, E-survey, 2010.

Conclusions

The paper presents the first overview of the results of the Business network questionnaire gathered during Spring 2010 for the Slovenian case study. 20 small and medium-sized firms (including also one large firm) replied to the questionnaire sent to them by email. Despite dispersed distribution regarding the geographical location, firm age and sector of activity, the sample cannot be considered representative of all SMEs located in the western part of Slovenia. The responses provide valuable insights on how SMEs located in such territorial setting are able to develop and maintain the structure of their business network.

The majority of firms are highly integrated into international and globalized market as a consequence of the relatively small domestic market. Yet some firms are evidently embedded in local and regional environment. The majority of firms expressed the view that the economic crisis has already had and will continue to have a high impact on their relationships with customers (with some deviations in specific sectors).

3.3.2 In-depth Face-to-Face Interviews

In Goriška region the survey was carried out during September 2010. The objective was to "go behind" and explore in detail the "activity space" of selected small and medium-sized firms.

We applied the concept of an "Actor map" focusing on the perspective of interviewee: the connection of the firm's operation with geographically different groups of actors (not individual firms, organizations, societies).

We consider this analysis as indicative, since the number of interviews does not provide statistical representativeness, but it is nevertheless a very useful qualitative approach.

Sample Selection and Firm Characteristics

For the face-to-face interviews (FFI) in Goriška region the firms were selected according to:

- their proved interest for co-operation (already indicated in electronic survey),
- the perceived level of global integration (indicated also in electronic survey).

The total number of firms included in FFI in Goriška region is modest. We tried to obtain more interviewees, but apparently the awareness of the importance of this type of research is still very low amongst Slovenian entrepreneurs. The firms are dispersed across the case study region: some in remote and smaller settlements (Čiginj, Vrhpolje, Orehovlje), the other in settlements with higher levels of centrality (Volčja Draga, Godovič, Kobarid, Ajdovščina). The majority of surveyed firms are locally owned and have legal status as an "independent firm", just one is a part of German consortium.

Table 3.3.4: Firms Selected for In-depth Face-to-Face Interviews.

Firm No.	Location	Firm Start	Ownership	Branch[3]	Firm Size[4]	Perceived level of global integration
SI02	Čiginj/Tolmin	1992	Independent	Manufacturing	Medium	Med. high
SI07	Vrhpolje	1994	Independent	Agriculture, forestry and fishing	Micro	Med. high
SI12	Ajdovščina	2006	Independent	Transportation and storage	Small	High
SI13	Kobarid	1995	Independent	Manufacturing	Small	Med. low
SI15	Orehovlje	1992	Independent	Manufacturing	Medium	Med. high
SI17	Godovič	1992	Independent	Manufacturing	Large	High
SI19	Volčja Draga	1989	Independent	Manufacturing	Medium	High
SI 20	Volčja Draga	1994	Foreign owner	Manufacturing	Small	Med. high

Source: DERREG, FFI, 2010.

8 firms were interviewed: three of them are classified as "medium" (50-249 employees), three as "small" (10-49), one as "large" (500 and more) and one as "micro" (1-9). One firm is registered in agriculture (grapevine growing), another in transport and storage. 6 of them are registered in the manufacturing branch: 2 processing local resources (dairy production, timber processing), the remaining four are dealing with machine production, production of air and heating system, one working on false teeth, and one producing silicon cartridges. Two could be regarded as high-tech (false teeth and air and heating system production), and to some extent the grapevine growing firm too, due to the application of modern technology.

[3] According to the European NACE 2.2 classification

[4] According the EU DG Enterprise definition. Micro from 0 to 9 employees; Small from 10 to 49 employees; Medium from 50 to 249 employees.

Table 3.3.5: Description of Activity and Simple Classification of Firms.

Interview	Year Founded	Line of Business	Type
SI02	1992	Production of prototype machines, spare parts and provision of services	2
SI07	1994	Grapevine growing	1
SI12	2006	Transportation, storage and logistics	4
SI13	1995	Dairy products	1
SI15	1992	Saw mill and basic wood-processing	1
SI17	1992	Research and production of complex air and heating systems, photovoltaic's and solar systems	3
SI19	1989	Production of acrilate teeth	3
SI 20	1994	Production of silicon cartridges, nibs and labels for cartridges	2

Keys to Types	Description	No.
1 (Res)	Resource based activities (timber, grapevine, milk)	3
2 (EMTrad.)	Specialist light engineering and manufacturing – Traditional	2
3 (EMhItech.)	Specialist light engineering and manufacturing - High technology	2
4 (Bus. Serv.)	Business Services	1

Source: DERREG, FFI, 2010.

Actor Maps: Key Findings Regarding their Configuration

The configuration of the Actor Maps has already been described above (section 3.1.2). The analysis was focused on three aspects: *dimensions of activity*, *varieties of actors* and *different spatial scales associated with actors*.

(i) Relative importance of different kinds of activities.

The relative importance of external linkages to the different kinds of business activities was analysed (actor map columns are defined as "activity axis"), and summarised in four broad categories:

- marketing category (columns 1-4),
- product category (5-8),
- investment category (9),
- regulation category (10).

Table 3.3.6: Ranking of average scores on each activity axis.

Interview	Bringing in new business	Awareness of competition	Improving market position	Finding new markets	Improving production process	Developing new products	Improving existing products	Reacting to customer's needs	Securing investment capital	Compliance with rules and regulations
SI02	4	9	7	1	8	3	2	19	5	6
SI07	3	9	8	7	6	1	5	2	10	4
SI12	1	7	8	6	5	4	3	2	10	9
SI13	2	10	7	6	9	5	8	4	1	3
SI15	1	2	4	10	7	5	8	6	9	3
SI17	2	6	5	1	10	9	8	7	3	4
SI19	8	3	5	1	10	4	6	7	2	9
SI 20	10	2	3	4	5	6	7	8	1	9

Source: DERREG, FFI, 2010.

By presenting the ranks, it is immediately apparent that the forth activity axis (finding new markets) was considered as very important for business networking. The marketing category "bringing in new business" was also shown to be important. Two entrepreneurs scored high sourcing of capital (mostly firms with newer investments); one decided for "product" related activity (developing new products). The compliance axis was generally scored rather low, and was not considered as a key aspect of business networking by the interviewees.

Table 3.3.7: Absolute scores for each activity axis.

Interview	Bringing in new business	Awareness of competition	Improving market position	Finding new markets	Improving production process	Developing new products	Improving existing products	Reacting to customer's needs	Securing investment capital	Compliance with rules and regulations	Average	Type
SI02	23	23	24	22	41	29	37	32	16	28	27,5	EMTrad.
SI07	44	36	41	38	73	53	66	60	31	53	49,5	Res.
SI12	38	24	23	24	26	26	27	30	9	17	24,4	Bus. Serv.
SI13	38	22	28	30	25	31	27	35	41	37	31,4	Res.
SI15	16	14	12	10	11	12	11	12	11	13	12,2	Res.
SI17	72	65	66	75	54	54	57	58	71	68	64	EMHiTech.
SI19	26	33	31	41	25	32	31	27	37	26	30,9	EMHiTech.
SI 20	14	15	15	15	15	15	15	15	21	15	15,5	EMTrad.

Source: DERREG, FFI, 2010.

It is interesting to note that one High Tech interviewee had the highest average score overall, followed by the resource –based example. The former is consistent with the need for high-tech manufacturing and service companies to interact intensively with their customers to ensure that they meet specific requirements and bring innovation. In the case of one resource –based company (grapevine growing), intensive networking seems to be associated with their specialisation in high quality niche products – although this firm could be observed as a high tech firm in this branch as well. This is at the same time a strategy to overcome the marginality of rural areas, sometimes with poor accessibility, whilst at the same time exploiting specific regional qualities of the raw materials.

On the basis of the "profile" across above mentioned categories (market, product, capital, compliance), four groups of firms may be distinguished:

- **M** networks (they contribute to marketing – mostly to bringing in new business and finding new markets): four firms;

- **Pm** networks (principal function is the support of product development, marketing is closely on the second place – improving production process): two firms;
- **C** networks (important for sourcing capital): two firms indicated.

This is a rather interesting finding. It suggests that the interviewees perceived the role of their business networks mostly in terms of their ability to help them follow trends in demand and to market their products more efficiently. Of course, these statements should be treated with caution due to sampling issues.

(ii) Relative importance of different types of actor.

Customers and suppliers were both included on every Actor map.

Table 3.3.8: Occurrence of Different Types of Actors in the Interviews.

Types of Actors		**Interviews**	**Actors**
Market	Customers	8	9
	Suppliers	8	9
Cooperation with:	SMEs	8	19
	Large firms	3	7
	Multinationals	2	3
Support from:	Gvt Advisory Bodies	3	3
	Research Institutes	2	4
	Business Consultants	4	5
Sources of finance	Shareholders/Owners	1	1
	Banks etc.	6	7
	Public Support Programmes	2	2
Membership Orgs.	Cooperatives	2	2
	Professional or Trade org.	0	0
	Chamber of Commerce	3	3
	Sports or Leisure Club	0	0

Source: DERREG, FFI, 2010.

The following types of actor were mentioned most frequently on the Actor Maps; SMEs, banks, suppliers and customers.

(iii) Relative importance of actors at different spatial scales.

The DERREG methodology suggests that there are two ways in which the relative importance of regional, national, European and Global actors can be assessed from the actor maps:

- focusing on the proportion of actors located in each "zone",
- focusing to the relative weight placed upon the national and international actors.

For surveyed firms in Goriška region it is clear that the "EU market is the most important". Exceptions are to be observed:

- in the case of global networking of high-tech companies,
- in the case of "fresh" resource-based activities (dairy products).

For the majority of firms, the suppliers usually come from local and regional environment; exception is the firm with foreign owner or extremely specialised production (acrilate teeth).

In our opinion, the frequencies and relative scores derived from the Actor Maps are less 'telling' than the qualitative impressions about networking on different spatial scales.

Insights into the Building, "Maintenance" and Globalization of Business Networks

A number of interviews in Goriška region pointed out that emails are acceptable in daily communication, routine interaction and are making communication faster, convenient, 24 hours accessible and economical. All interviewees emphasised, that there is still a need for telephone calls, and occasionally (even a few times per year at professional fairs, family holidays, problems solving, new contracts) face-to-face meetings. Here are some examples of the opinions expressed…

Interviewee SI02: *"Communication with partners is done via e-mail, telephone calls, fairs in Russia, Serbia, Germany. Still individual contacts are important and the firm puts a lot of emphasis on the professional education of new agents (on firm functioning, machines etc.)."*

Interviewee SI12: "*I know the owners of the firms in all countries I am working with. We meet regularly or when some problems have to be addressed. Orders are done via e-mail, Skype, we also practice telephone calls*."

Interviewee SI17: *"Our firm practices very strong local formal and informal networks. Besides everyday e-mail communication with actors, individual approach (eye-to-eye meeting, phone calls, meetings at the case of international fairs) is very important: in the high season I as a sales manager am out of my office, i. e. on business trip 3 weeks in month. Our employees are included in national, European and worldwide associations that are responsible for their branch and they participate regularly in various events."*

The Evolution of Business Networks and the Impact of Recession

The firms interviewed ranged in age, from over 100 years (grapevine growing), to four years. During the conjuncture and EU pre-accession period, some developed rapidly. Some have even profited from recession (because their competitors went bankrupt). The majority had made a rational decision to stay "small but profitable". Some had been forced to contract (for just short period or on a long-term). Some firms have already being experiencing redundancy, some practice part-time employment, or employ cheaper workers from Eastern Europe. In the last two years, some firms used the state programme (salaries had been subsidised).

There are some characteristics of the firms that are apparently correlated to nature of business and growth pace:

- firms which rely upon more "traditional" engineering and manufacturing, grow slowly, they had been severely and more rapidly affected by recession (less investments in infrastructure, construction);
- also high-tech firms have been affected by the crisis strongly: but since they have introduced also research services, the research nowadays works as a buffer zone and provides new income and sets-up market innovations;
- in the Slovenian case firms to whom the Slovenian market is too small, and are therefore orientated to export, have been strongly affected by the recession;
- we have to bear in mind, that each branch has its own production-cycle characteristics: some last 2, some up to 4 or 6 years. Therefore the actual effects of crisis need to be considered also from this perspective.

Perceptions of the local labour market were rather variable:

Interviewee SI13: *"Our firm has very good co-operation with local environment: with kindergarten, schools – especially lately, they regularly visit the museum; the firm is always "there". People know each other in the valley and are constantly checking the quality of products. They sell piece by piece and no huge quantities (i. e. dairy products). The firm co-operates strongly with local community. Locals find this firm as a part of local community: not just the old,* *but also the young generations. Also in the future, the firm would like to have a "bonding and bridging role" in the area, focus on high quality products, and consequently support economic cycle in the valley."*

Interviewee SI02: *"Till the crisis, the firm was very generous in heterogeneous sponsorship in local environment: we sponsored elementary school and kindergarten renovation in Volče (village next to firm where a lot of workers live), also students and young people (usually family members of firm employees), local traditions, sports for employees."*

"At the beginning of the crisis, not so many orders came, we made redundant foreign workers first and kept local labour force (coming from Tolmin, Kobarid, Nova Gorica). At the moment, we are doing better. In the first half of 2010 the firm used the public support programme (for 50 employees in production the salaries were partly subsidized by the state). As the number of orders was growing in the mid 2010, now additional foreign workers (10) have been employed."

Interviewee SI17: *"The company is important not just locally, but also in the regional sense regarding employment: besides production the firm is focused also in research. As a consequence, the professional knowledge and high-tech skills are pull factors for broader high qualified labour market."*

Conclusions

The key findings from the face-to-face survey of enterprises in Goriška region are:

- due to the fact of small domestic (Slovenian) market, the majority of firms especially in this border zone to Italy have adopted resilience strategies already 20-30 years ago – they are mostly export oriented (European networks prevail);
- there are still some resource-based economies (timber), but they are focused on specific market niche;
- some traditional firms (dairy, grapevine growing) are locally embedded in the field of supply (fresh high quality milk, reeds etc.), but they have evolved different resilience strategies;
- high-tech firms originating from Slovenian rural areas have to struggle for market position very hard – modest support is given by the state or professional organizations;

- the majority of firms have established strong marketing and production networks;
- although companies are acting in local milieu, they need to adopt the most modern approaches if they want to survive;
- firms are usually strongly connected to local environment – with some evident exceptions as well;
- the impact of recession has been differently perceived by surveyed firms;
- networking within rural areas, combined with deliberate and long-term international networking is nowadays necessary for the economic success of local economies.