

# Internationalisation of Firms through Networks - Empirical Evidence from Poland

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## Summary

The aim of this study is to illustrate the role of networks in the internationalisation process of firms. It discusses the evolution of academic research on firm internationalisation through networks and explains the relationship between the network and the international behaviour of firms as well as presenting the research results. A survey was conducted of 216 internationalised firms, carried out at the turn of 2013 and 2014 on enterprises from all 16 Polish regions. The statistical calculations were made with the use of the statistical software Statistica 10.0. In order to verify the assumed hypothesis the Pearson's chi-square independence test was applied. The research results lead to conclusions that there is a statistical relation between firms operating in networks and 1) their knowledge about international markets, 2) the strategy type and 3) the main motives/reasons for internationalisation according Dunning's typology of internationalisation motives (Dunning, 1993). Statistical significance between firms operating in networks and the main motives/reasons for internationalisation according to the OECD internationalisation motive typology (OECD 1997a, 1997b) has not been found.

**Keywords:** small and medium-sized enterprises (SMEs), networks, internationalisation.

**JEL classifications:** F2, F5, M21

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## 4.1. INTRODUCTION

The problems of cooperation among businesses and different organisations is in the area of interest of economists, management specialists and sociologists. Networks and networking are also a subject of interest to researchers of SMEs and entrepreneurship.

Early entrepreneurship research focused on the characteristics of the single entrepreneur. However, in the mid-1980s researchers (eg. Birly, 1985) recognised that networks play a catalyst role in organisational emergence.

There are many studies supporting the existence of a link between social networks and a firm's performance, including its internationalisation process. Scholars have also recognised that informal social networks or networks of social relationships function as the initial basis from which new formal networks of business linkages are developed (Chen, 2003), and through which exporting relationships are formed (Ellis, 2000). Social networks are crucial to the identification of new opportunities (Ellis & Pecotich, 2001), to gain access to foreign markets (Ellis, 2000) and to develop specific competitive advantages through the accumulation of international knowledge and/or the development of formal business linkages across borders (Zhou et al., 2007).

## 4.2. LITERATURE REVIEW

### Small-Firm Networks

Axelsson and Johanson (1992, p.154) defined a network as "sets of two or more connected exchange relationships". Thus, networks include different relationships among various groups e.g. customers, suppliers, competitors, family which influence strategic decisions of firms.

In the literature many types of networks and criteria of their classification can be found. However, Perry (2007) points at four types of network according to the basis of the relationship through which it is sustained (Table 4.1.). These types are (i) personal and ethnic ties, (ii) geographical proximity, (iii) organisational integration, and (iv) buyer-supplier linkages.

Personal and ethnic networks include small-business networks constructed around social networks. The strength of social networks derives primarily from trust and commitment among family, friends and close associates (managers, employees, suppliers, customers and business advisors).

Community-based networks can be characterised by special containment within a specialised industrial district. These kinds of networks bring about accumulation of knowledge and a capacity for a high degree of industrial specialisation.

Organisational networks are held together through relations of ownership, investments or shared membership. For example joint-ventures and strategic alliances involve two or more firms in the control of a third-party venture (e.g.

*keiretsu* in Japan and the *chaebol* in Korea; franchising can be also an example of an organisational network).

Buyer-supplier networks are formed through relational contracting or ongoing relations of exchange, interaction and mutual development between two or more firms and sometimes involve some degree of commitment to mutual development and willingness to accept some degree of involvement by one firm in the operation of another (Daszkiewicz & Wach, 2012).

**Table 4.1.** Small Firm Networks

Network type	Linkage characteristics	Examples	Issues
Family and ethnic	Ties based on family and personal contacts, embedded in close-knit communities	Overseas Chinese, ethnic minority enterprise, family business	Dependence on ethnic resources, enclave economies, impact on racism
Place	Geographical proximity and shared commitment derived from common values and goals	Third Italy, Silicon Valley, Japan's <i>jiba sangyo</i>	Sustainability, variations between industrial districts, origins as a barrier to replication
Organisational	Investment or ownership ties or membership of industry associations	Business groups, joint-ventures, chamber of commerce, industry bodies	Small firm status in horizontal and vertical groups, influences on industry cooperation
Buyer-supplier	Interaction to enhance role of supplier and subcontractors	Relational subcontracting	Extent of change in subcontracting, use of vendor rating, impact of global manufacturing

Source: adapted from Perry (2007: 25)

### Network Relationship and Internationalisation Process

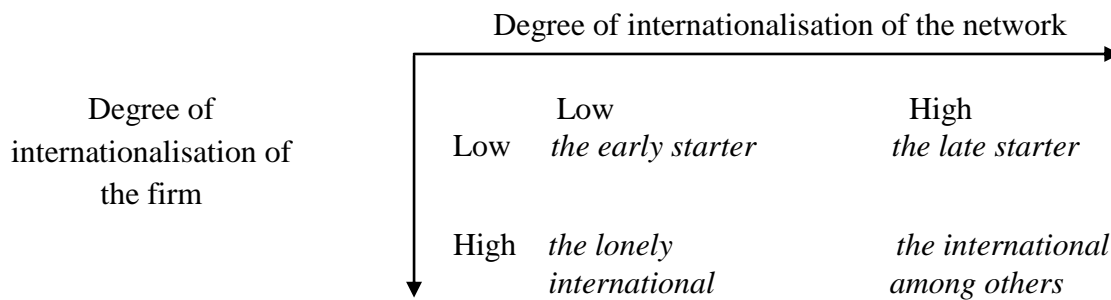
Johanson and Mattsson (1988) developed one of the first approaches towards internationalisation through networks and proposed a network model of internationalisation. The researchers discussed firms' internationalisation in the context of both the firm's own business network and the relevant network structure in foreign markets. From a network perspective, internationalisation is perceived as a process in which relationships are continuously established, developed, maintained and dissolved with the aim of achieving objectives of the firm (Wach, 2012). Johanson and Matsson (1988) identified four stages of internationalisation: 1) the early starter, 2) the late starter, 3) the lonely international, 4) international among others (Figure 4.1.).

*An early starter* - may have problems developing a network. When both the degree of internationalisation of the firm is low and the degree of internationalisation of network is low, the firm can follow the traditional step-by-step model.

*The lonely international* - the co-ordination of international activities might create some problems, such as the adjustment of resources.

In the case of *the late starter* the firm might be dependent on other firms that already exist within the network, which sometimes try to hinder the firms' entrance into the internationalised market.

*The international among others* operates within the international network, where differences among countries decrease over time. Thus, it is typical that, for example, mergers, joint ventures and alliances occur, which will have an effect on the existing network (Johanson & Mattsson, 1988).



**Figure 4.1.** Internationalisation and the network model

Source: Johanson & Mattsson, (1988: 298).

Many studies support the argument that networks have a significant impact on the internationalisation processes – its pace, pattern, market selection and entry mode. Coviello & Munro (1997) state that network relationships have an impact on foreign market selection and mode of entry in the context of ongoing network process. Zain & Ng (2006) analysed the literature concerning relationship between networks and internationalisation of SMEs. The analysed research show that networks trigger and motivate firms' internationalisation intention, influence firms' market – selection and entry – mode decisions, gain access to additional relationships and established channels as well as to local market knowledge. Moreover, networks obtain initial credibility, lower costs and minimise risks of internationalisation and influence firms' internationalisation pace and pattern. On the other hand, networks constrain firms' future scope and market opportunities (Zain & Ng, 2006, p. 188).

### The Uppsala Internationalisation Revised Process Model

The first theories concerning internationalisation of SMEs developed only in the mid-1970s. Nowadays, they are perceived as classical theories, also called “stage theories” among which the Uppsala Model (U-Model) seems to be the most famous (Johanson & Vahlne, 1977; Johanson & Wiedersheim, 1975; Daszkiewicz & Wach, 2013).

However, since the U-Model (1977) was published research on business networks and entrepreneurship has significantly developed. The Uppsala internationalisation process model was later revised due to ongoing changes in economies and firms' behaviour. In the revised model Johanson & Vahlne (2009) develop different aspects influencing the internationalisation process of the firm. Their two core arguments are based on business network research:

1. Markets are networks of relationships in which firms are linked to each other in various, complex and, to a considerable extent, invisible pattern.
2. Relationships offer potential for learning and for building commitment, both of which are preconditions for internationalisation.

What is more, the U-Model assumed that firm's internationalisation frequently started in foreign markets which were close to the domestic market in terms of *psychic distance* (defined as factors that made it difficult to understand foreign environments). Then, the firms would gradually enter other markets which were further away in psychic distance terms.

The researchers focused on business networks as the market structure in which an internationalising firm is embedded. The original model (Johanson & Vahlne, 1977) was based on the assumption that knowledge is crucial for a firm's internationalisation process. However, in the new, revised model, the researchers argue that the general internationalistion knowledge concerning different kinds of international experience (eg. foreign market entry, mode-specific, core business, alliance, acquisition) is even more important than they earlier assumed. Thus, they added to the "new" model the concept of *relationship-specific knowledge*, which is developed through integration between two partners, and which includes knowledge about each other's heterogeneous resources and capabilities.

The new model also includes affective or emotional dimensions in relationships. The authors state that, for example, trust can substitute for knowledge, especially when a firm lacks necessary market knowledge. This is because trust encourages people to share information, promotes the building of joint expectations and is also crucial in the early phases of a relationship. Trust is a major determinant of commitment.

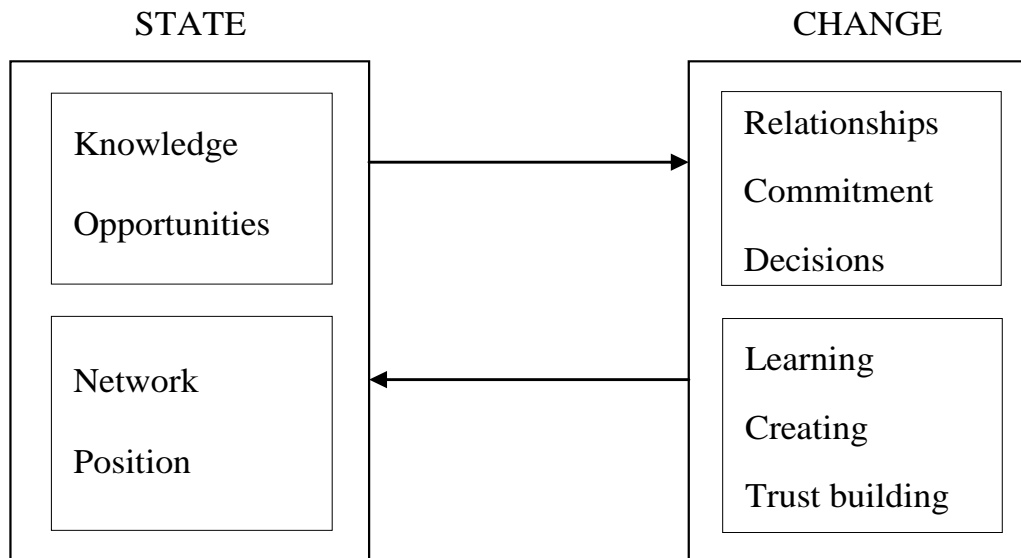
As far as commitment is concerned, the authors argue that it is rather a question of more or less intensive efforts: when both commitment and trust – not just one or the other – are present, they produce outcomes that promote efficiency, productivity and effectiveness (Johanson & Vahlne, 2009).

### **A Business Network Model of the Internationalisation Process**

The 2009 business network model (and the model from 1977) consists of two sets of variables: stable variables and change variables. The model depicts dynamic, cumulative process of learning, as well as trust and commitment building. An increased level of knowledge may thus have a positive impact on building trust and commitment. These processes can occur on both sides of a mutual relationship and at all points in the network in which the focal firm participates (Figure 4.2.).

The authors added "recognition of opportunities" to the "knowledge" concept in the new model. Opportunities constitute a subset of knowledge. By adding this variable, they consider opportunities the most important element of the body of knowledge that drives the process.

The second state variable is labelled the “network” position. This variable was identified in the original model as “market commitment”. Now, the authors assume that the internationalisation process is pursued within a network. Relations are characterised by a certain level of knowledge, trust and commitment.



**Figure 4.2.** The Uppsala internationalization process model revised: from liability of foreignness to liability of outsidership  
Source: Johanson & Vahlne (2009: 19)

As far as the change variables are concerned, the researchers changed the original label of “current activities” to “learning, creating and trust-building” to make the outcome of current activities more explicit. Finally, the other change variable, “relationship commitment decisions”, has been adapted from the original model. The researchers added “relationship” to clarify that commitment is to relationships or to networks of relationships.

The selected proposals introduced above show that the impact of network relationships on firms’ internationalisation has been highlighted in numerous studies. Ojala (2009) grouped a network approaches for entering foreign markets into the following categories:

**Network approaches for entering foreign markets** - a network model conceptualises internationalisation as being related to relationships establishment and building (Johanson & Vahlne, 2003). Johanson and Mattsson (1988) argue that a firm is dependent on resources controlled by other firms and can get access to these resources by developing its position in a network. Thus firms in a network have common interests in developing and maintaining relationships with each other in a way that provides them mutual benefits (Ojala, 2009).

**The different types of network relationships used for entering foreign markets** - according to Johanson and Mattsson (1988), a firm can have relationships with various actors, including customers, distributors, suppliers, competitors, non-profit

organisations, public administration, and so on. Other authors divide the different types of network relationships for entering foreign markets into formal and informal (Birley, 1985; Coviello & Munro, 1997).

**The influence of network relationships on how markets are entered** - the network model of internationalisation says nothing about how markets are entered in terms of geographical or psychic distance or how network relationships impact the entry mode choice in a target country (Johanson & Mattsson, 1988; Johanson & Vahlne, 2003). However, there are studies related to internationalisation of knowledge-intensive SMEs (Bell et al., 1995; Coviello, 2006; Coviello & Munro, 1997; Zain & Ng, 2006) which have indicated that networks have a strong impact on market and/or entry mode choice.

However, Ojala (2009) asks a new research question: whether there are differences in the networking behaviour when firms enter a psychically distant market.

### 4.3. MATERIAL AND METHODS

The **research objective** of the paper is to identify the impact of network relationships on firms' internationalisation process. In the course of the study, the following **research hypotheses** were assumed:

**H1:** There is a relation between firms operating in networks and their knowledge about international markets.

**H2:** There is a relation between firms operating in networks and the types of firms' strategies.

**H3:** There is a relation between firms operating in networks and the four basic motives/reasons for internationalisation, namely resource seeking, market seeking, efficiency seeking as well as strategic assets or capabilities seeking.

**H4:** There is a relation between firms operating in networks and the four basic motives/reasons for internationalisation, namely pull factor, push factor, chance factor and and entrepreneurial factor.

The research was carried out within Project No. StG-21310034 on "Patterns of Business Internationalization in Visegrad Countries – In Search for Regional Specifics" financed by the International Visegrad Fund in the years 2013-2014 by the consortium of five Central European universities leading by Cracow University of Economics<sup>1</sup>. A survey was employed in this study, consisting of an e-mail or a telephone conversation request followed by an online passwordprotected questionnaire<sup>2</sup> (for more information, see Daszkiewicz & Wach 2014a; 2014b). In Poland, the responders were selected on the basis of Polish Exporters Database. The survey was conducted among 274 firms between October 2013 and February 2014 (for more information on the sampling and the applied research methodology, see

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<sup>1</sup> Further info at: <http://www.visegrad.uek.krakow.pl> (accessed on April 30, 2014).

<sup>2</sup> The online questionnaire was available at <<http://www.visegrad.uek.krakow.pl/survey>>. The questionnaire is attached in Duréndez & Wach (2014, pp. 239-244).

Wach, 2014). The questionnaire was sent to almost 7 thousands internationalised firms but only 274 firms replied and 216 were accepted for the analysis. Thus the results are not representative for the whole population of Polish internationalised firms.

The statistical calculations were made with the use of the statistical software Statistica 10.0. In order to verify the assumed hypothesis the Pearson's chi-square independence test was applied.

## 4.4. RESULTS AND DISCUSSION

### The Research Sampling

The research sample included micro, small, medium-size and large enterprises. The share of large enterprises in the sample is 24% (52 firms) and SMEs 76% (164 firms). The territorial scope of activities of the majority of the investigated firms is wide. Almost 63% of firms declare that they function both within and beyond EU markets, almost 17% of enterprises function within EU markets only, and only 3% just in neighbouring countries. However, almost 18% of the surveyed firms stated that they function mainly on the domestic market. There was no firm in the research sample that functions only outside of the EU market (Daszkiewicz & Wach, 2014).

According to the OECD internationalisation motive typology (OECD 1997a, 1997b), the most popular motives for going international are entrepreneurial factors as well as push factors. Following Dunning's typology of internationalisation motives (Dunning, 1993), the majority of the investigated firms are market seekers (74%). There is also a relation between these two typologies of motives. All four OECD motives correspond mainly with market seeking ( $\chi^2 = 26.3998$ ,  $df = 9$ ,  $p = 0.002$ ) (Daszkiewicz & Wach, 2014a).

Almost 69% of the investigated firms do not cooperate in any international or national networks for internationalisation. However 25% of the firms responded that they cooperate either in at least one formal network (12.5%) or in at least one informal network (12.5%) for the internationalisation process (Table 4.3.).

**Table 4.3.** Cooperation in networks

Answers	Frequency	Cumulative Frequency	Percent	Cumulative Percent
We do not cooperate in any international and/or national networks for internationalisation	148	148	68.52	68.52
We operate in at least one formal network, which helps us in the internationalisation process	27	175	12.50	81.0
We operate in at least one informal network, which helps us in the internationalisation process	27	202	12.50	93.5
No answer	14	216	6.48	100.0

Source: own study based on the V4 survey results of 2014 ( $n = 216$ )



Basing on the literature review presented above it seems to be reasonable to investigate whether internationalisation motives/reasons are related with cooperation in networks.

### Selected Survey Results

Statistical analysis leads to the following conclusions:

1. There is a relation between operating in networks and the knowledge on foreign markets ( $\chi^2 = 19.49663$ ,  $df = 8$ ,  $p = 0.01242$ ). Calculated on the basis of Chi-square contingency coefficient C Pearson  $C = 0.297$  shows that between these variables there is a relationship of moderate strength (Table 5.4.).
2. There is a relation between operating in networks and the strategy type ( $\chi^2 = 13.18287$ ,  $df = 6$ ,  $p = 0.04022$ ). Calculated on the basis of Chi-square contingency coefficient C Pearson  $C = 0.252$  shows that between these variables there is a relationship of moderate strength (Table 4.5.).
3. There is a relation between operating in networks and the main reason for internationalisation ( $\chi^2 = 15.14892$ ,  $df = 6$ ,  $p = 0.01913$ ). Calculated on the basis of Chi-square contingency coefficient C Pearson  $C = 0.264$  shows that between these variables there is a relationship of moderate strength (Table 4.6.).
4. Due to the lack of statistical significance Hypothesis H4 is neither confirmed nor rejected ( $\chi^2 = 11.09321$ ,  $df = 6$ ,  $p = 0.08554$ ).

## 4.5. CONCLUSIONS

Based on the calculations it was possible to accept three hypotheses entirely. In the case of the fourth hypothesis no statistical significance was found. Thus:

**H1:** There is a relation between firm's operating in networks and the knowledge about on international markets - *confirmed*

**H2:** There is a relation between firm's operating in networks and the types of firms' strategies - *confirmed*

**H3:** There is a relation between firm's operating in networks and the reasons for internationalisation - *confirmed*.

**H4:** There is a relation between firm's operating in networks and the main motive for internationalisation – *no significance*.

Concluding the research results, the empirical findings presented in this paper are consistent with other studies. They confirm the relation between firm's operating in networks and its motivation for internationalisation as well as selection of used strategies. Knowledge about foreign markets is also related with functioning in networks. Although the results are not representative for the whole population of Polish internationalised firms and show only selected aspects of firm's functioning in networks and its internationalisation, they are one more evidence that such a relationship exists.

There is no doubt that the findings raise additional questions, which can be a starting point for further/deepened research, especially the impact of operating in

networks on firms' internationalisation pace and pattern, market – selection and entry – mode decisions, access to additional relationships and to local market knowledge.

**Table 4.4.** Cross tabulation concerning knowledge about international markets of the entrepreneurs

Answers	Knowledge - extremely low	Knowledge rather low	Knowledge moderate	Knowledge-rather high	Knowledge-extremely high	Total
We do not cooperate in any international and/or national networks	5	10	53	52	27	147
We operate in at least one formal network	2	1	3	12	9	27
We operate in at least one informal network	0	0	4	18	5	27
Total	7	11	60	82	41	201

Source: own study based on the V4 survey results of 2014 ( $n = 201$ )

**Table 4.5.** Cross tabulation concerning strategies of the firms

Answers	Ethnocentric (on international markets we use the same strategies as on domestic market)	Policentric (on particular international markets we include the specific conditions for marketing and management strategy)	Regiocentric (we use different strategies for a couple of blocked international markets, in which there are similar marketing and management conditions)	Geocentric (on all or at least most of international markets we use a standardized and single marketing and management strategy)	Total
We do not cooperate in any international and/or national networks	35	47	20	42	144
We operate in at least one formal network	3	7	10	5	25
We operate in at least one informal network	5	12	5	4	26
Total	43	66	35	51	195

Source: own study based on the V4 survey results of 2014 ( $n = 195$ ).

**Table 4.6.** Cross tabulation concerning main reasons of firm internationalisation

Answers	market seeking	efficiency seeking	resources seeking	Strategic assets and/capabilities seeking	Total
We do not cooperate in any international and/or national networks for internationalisation	118	12	5	13	148
We operate in at least one formal network, which helps us in the internationalisation process	22	1	0	4	27
We operate in at least one informal network, which helps us in the internationalisation process	13	6	2	6	27
Total	153	19	7	23	202

Source: own study based on the V4 survey results ( $n = 202$ ).

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