



Full Length Research Article

MODIFICATION OF THE INTERNATIONALISATION MODEL OF JOHANSON AND VAHLNE

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ARTICLE INFO

Article History:

Received 17th October, 2016
Received in revised form
26th November, 2016
Accepted 02nd December, 2016
Published online 30th January, 2017

Key Words:

Internationalization model,
Resources, Risk aversion,
Behavioral variables.

ABSTRACT

The internationalisation model by Johanson and Vahlne describes the typical internationalisation paths of companies. However, the internationalisation model does not completely explain new forms of internationalisation — as seen in born global companies — or the various internationalisation paths of all company sizes. Additionally, the current internationalisation model cannot explain the reason that companies experience different intensities of internationalisation or the reason that companies remain at certain stages of internationalisation. Therefore, the internationalisation model is modified with the resource factor and by the intrinsic and extrinsic behaviour variables of the decisionmakers. Also is the modified internationalisation model able to explain the internationalisation paths of all company sizes and all grades of internationalisation-related intensities. For this new point of view it is possible with a new modifyto use method structured data to assess an international target market.

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INTRODUCTION

The internationalisation model according to Johanson and Vahlne

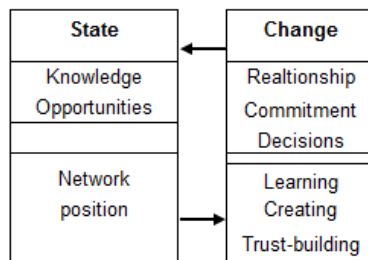
Johanson and Vahlne developed a theoretical model describing the typical internationalisation paths of companies. Johanson and Vahlne's model is based on an empirical study of Swedish companies and describes the behaviour that appears when companies enter and expand their internationalisation efforts. Several other empirical studies confirm Johanson and Vahlne's research. (DIHK, (2012), p. 5); (Pieper and Neinhaus, (2010), p. 11); (ZEW, (2011), p. 45) Therefore, Johanson and Vahlne's internationalisation model has found a broad scientific consensus, but there are also legitimate criticisms of this model. These criticisms principally relate to the fact that the economic framework of internationalisation has changed fundamentally after more than 40 years, and new forms of multinational companies have appeared, such as born global companies. At the time, this kind of multinational companies did not exist where the internationalisation model was developed. The study for this model is based only on a narrow data set of 4 large companies. Small- and medium-sized companies are therefore not considered in this model. Johanson and Vahlne have countered these criticisms with an expansion of the internationalisation model in 2009: This new internationalisation model explains the internationalisation

process that considers the company's current state and variables involving change. (Johanson and Vahlne, (2009), pp. 1413) The company's current state includes market knowledge, opportunities and network position. Companies generate market knowledge with the internationalisation process. Market knowledge includes knowledge about the competition, business conditions and market entry into international target markets. Based on this market knowledge, decisionmakers are able to identify international market characteristics and market trends and review their choices in the internationalisation process. Additionally, market-knowledge determines the speed and the geographical direction of internationalisation because the decisionmakers use their past experiences to determine the next steps toward the internationalisation goal. (Johanson and Vahlne, (2009), p. 1424) Opportunities are the result of companies' national and international activities, which offer new possibilities to understand or enter an international market. The company's relationship with its international networks also influences the internationalisation process. (Johanson and Vahlne, (2009), p. 1413) Networks are generated through contacts with international customers, suppliers, internal and external sales representatives, opportunities, and market information. However, the focus is on risk reduction or risk avoidance as well as the recognition of the opportunities and risks. (Johanson and Vahlne, (2009), p. 1412) Information on international markets is transported through networks, and for this reason, networks are critical for the entry for knowledge of international markets. The extent to which companies use this

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critical knowledge on international markets is dependent on the company's internal and external network. The quality of the internal network determines the speed and amount of information with which the market knowledge and market commitment is transferred between the company's departments. External networks are used by companies for information searches, creating initial business contacts, and the reduction of market entry barriers in international markets. In addition, networks can be classified according to formal and informal networks. Formal networks are based on organizations such as public service providers, semi-public organizations and private export companies. Informal networks are based on personal and social relationships, such as customers or suppliers. "In this context, it is noteworthy that the majority of entrepreneurs judging the informal networks in international business more important than formal networks." (Baumgartner, (2010), p. 17)



Source: Johanson, Jan, Vahlne, Jan-Erik 2009

Figure 1. Uppsala model of internationalisation from 2009

Change comprises the dynamic variables of the model that include commitment, relationships, learning, creating knowledge and trust-building (Johanson and Vahlne,(2009), p. 1413). Market commitment is defined as the knowledge and ability of a company to identify market characteristics and market trends. Relationships are important for the internationalisation process because they offer the potential for learning and building trust and commitment in inter-national markets (Johanson and Vahlne,(2009), p. 1414), Johanson and Vahlne also included the entrepreneurial learning variable. Learning is considered a process where a company increasingly acquires additional market knowledge with every step toward internationalisation (Nuissl,(2006), p. 220). The internationalisation model distinguishes between geographical and temporal learning patterns and knowledge creation. Geographical learning involves the knowledge acquisition on markets in certain countries or regions, and temporal learning is knowledge acquisition during the internationalisation process. Therefore, the internationalisation model is a learning theory model, and the key regulatory variables are the knowledge and learning capacities of the company. The expanded internationalisation model will account for an interdependent relationship between the ability to understand the company's current state and change in terms of market knowledge and opportunities. Market knowledge and learning can theoretically describe many forms of entrepreneurial learning and market experience but does not describe different internationalisation paths.

The change variable of trust-building is also dynamic in the internationalisation process and is continuous over the whole internationalisation process. Existing trust affects market commitment positively because trust is the basis for market commitment. Cooperation between market players can help develop the decision makers' trust in the conditions and

necessities of the international markets (Johanson and Vahlne,(2009), pp. 1417). A prerequisite for successful internationalisation is for companies to understand the structures and processes of international markets, thereby building business and institutional knowledge of the international market. Johanson and Vahlne understand business knowledge as involving an understanding of international markets and competitor structures. Institutional market knowledge, however, includes language skills as well as information about laws, rules and other formal structures. Should the management have little or no knowledge about the international market, institutional structures, culture and other aspects of internationalisation, the psychological distance from the perspective of the decision makers is significant. Psychological distance is a subjective decision factor perceived by decision makers and depends on their cultural affinity and the experience. (Hodicová, (2007), pp. 23) According to Johanson and Vahlne, psychological distance — which can include gaps in international business know-ledge, knowledge about institutional market structures and other local knowledge — are significant. If no other constraints exist, companies initially entering international markets in which the company's management has the lowest psychological distance, which tends to be the decisionmakers' preference.(Johanson and Vahlne,(2009), p. 1416)

The expanded internationalisation model also describes the temporal entrepreneurial learning process. Companies initially study and acquire experience in their home market, after which they begin indirect exporting with sales agents (Johanson and Vahlne, (2009), pp. 1415) If this step is successful, further internationalisation steps follow. These next steps include direct export, foundation of a sales subsidiary and the foundation of a complete subsidiary with relocation aspects in the production. In this way, entrepreneurial learning and knowledge acquisition take place. For internationalisation to be successful it is not only necessary to procure and understand market data on international markets; it is essential that the company optimize the internal knowledge acquisition process. The faster and more efficiently entrepreneurial learning takes place, the more chances the management and employees have to make the company's internationalisation efforts successful, which is another temporal aspect of entrepreneurial learning. Moreover, acquired knowledge is considered a competitive advantage because knowledge of complex products, international markets and processes is difficult or impossible for competitors to copy, (Sammerl,(2006), p. 225); (Geißler,(2012), pp, 54). However, the expanded internationalisation model does not rectify two deficits. SMEs are only marginally or not at all considered in the expanded internationalisation model. Compared to large enterprises, SMEs predominantly have a different — and lower — level of resources. In addition, knowledge and learning in the expanded internationalisation model describes a unique internationalisation path. Other characteristics of the internationalisation path or different behaviours by the company in the internationalisation process cannot be explained by the expanded internationalisation model.

The modification of the internationalisation model

The recent internationalisation model is primarily based on learning theories. These learning theories can indeed describe the dynamic of internationalisation processes but does not explain different internationalisation intensities. This means that if a company has first learned to handle a certain

internationalisation process, it then continues on to the next internationalisation step. However, this step-by-step internationalisation path is only one of many possible internationalisation paths. In practice, many different internationalisation paths exist. For example, companies such as existing start-up companies (e.g., born global companies) may skip internationalisation steps. Companies may also remain at a certain level, or they may de-internationalize. In addition, discontinuous internationalisation paths cannot always be explained. Indeed, the internationalisation model should simplify reality, but a description of only one typical internationalisation path out of many possible paths does not establish a grounded theory. For this reason, the internationalisation model is further expanded to show most or all internationalisation paths. Furthermore, the internationalisation model describes the steps in the internationalisation process but does not include the temporal scales of the internationalisation process. Therefore, the internationalisation model cannot explain why some companies experience a more intensive internationalisation process than others.

In addition, the expanded internationalisation model does not explain the reason that some companies learn faster than others. In their model, Johanson and Vahlne do not differentiate according to company size. However, company size influences the internationalisation process because only companies that begin with a specific resource endowment are generally able to be active internationally. Therefore, resources availability is closely related to the company size. "So it's for example taken into account that some companies in the early stage of internationalisation may encounter due to their limited resources and a lack of experience in resistance to their internationalisation efforts." (Kruse,(2010), p 12) SMEs in particular often lack the adequate resources needed to accelerate or begin the internationalisation process. (Felden and Hack, (2014), p. 209) Compared to large enterprises, SMEs are usually only able to access lower financing options management capacities and are less able to access relevant market information (Kirilov,(2012), p. 5). In summary, it should be noted that the internationalisation model cannot explain various internationalisation paths, unique and discontinuous internationalisation processes and internationalisation in companies of different sizes.

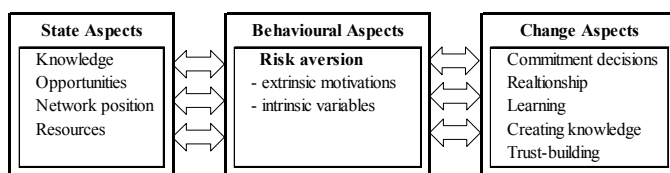


Figure 2. Modified internationalisation model, source: Self-illustration

To describe unique and discontinuous internationalisation paths and internationalisation processes for all company sizes, the state and change aspects complement behavioural traits. Only behavioural variables can explain the reason that companies move in a certain direction and reach a certain level of internationalisation. By supplementing the state and change aspects with behavioural aspects, discontinuous internationalisation paths can be explained. In addition, the company's state involving resources will be introduced into the internationalisation model to describe the internationalisation paths of companies of all sizes. Available

resources are substantial differentiators of the company size. These foregoing reasons will be discussed via the following modified internationalisation model:

Additionally, the previous model includes with the resources aspect. Recent studies have proven that resources significantly affect the internationalisation process; with an increase in company size, the amount of resources increases, and therefore internationalisation activities also increase. Thus, companies with a turnover of less than EUR 5 million have an average export share of 43%, but companies with turnover of EUR 50 - 250 million have an average export share of 79%.(KfW bank group, (2012), p. 9) Direct investments have shown an even clearer correlation between international activities and amount of resources. Therefore, SMEs with a turn-over of less than EUR 5 million invest significantly less in direct investments than larger companies. SMEs with a turnover of less than EUR 5 million invest 5% of their total investments in direct investments. In contrast, companies with a turnover of over EUR 250 million invest 61% of their total investments in direct investments.(KfWbank group, (2012),p. 28) When compared with smaller companies, larger companies have a higher amount of resources, experience fewer problems with fundraising and can more easily overcome market barriers due to a greater amount of available resources.

In addition, there is a positive correlation between the productivity of the resources being used and the company's degree of internationality. Companies with relatively low productivity invest only 12% in other countries, while companies experiencing high productivity invest up to 27% in other countries.(KfWbank group, (2012), p. 29) "However, it is not clear whether companies that invest in other countries are more productive or companies are more productive because they invest in other countries' businesses. Studies suggest that the causal relationship likely runs in both directions. On the one hand, more productive companies are willing to invest in other countries earlier because they are better able to finance the higher fixed costs, or they are already involved in other export activities. On the other hand, companies benefit from the learning curve effect of their investment activities and can thereby increase their productivity." (KfWbank group, (2012), p. 29); (Wagner,(2006), p. 347 -349); (Lipse, (2004), p. 333-382) Aside from productivity is the intangible resource R&D also important for the level of internationalisation intensity. Compared with companies without R&D activities, have companies which have a minimum of 5% R&D intensity more direct investments. These companies invest 4% more in Western Europe, 21% more in China, 22% in Asia excluding China, and 24% more in North America (KfWbank group, (2012), p. 13).

This means that R&D-intensive companies operate more frequently in more distant markets, which contradicts the theory of psychological distance. At this point, economic factors appear to be more dominant than psychological factors because companies appear to attempt amortizing the high R&D expenses in a timely manner through entry into large and fast-growing markets. Moreover, the market commitment rate increases with the increasing input of resources, at which time the market barriers may decrease. A company's resource level has a significant effect on the speed, level and success of internationalisation. Therefore, the resource level influences the speed of internationalisation because resource availability

determines whether a corporation is able to proceed to the next step of internationalisation. In addition, resource availability determines when the next stage of internationalisation can begin or whether de-internationalisation must take place. In addition, the resource endowment determines the number of international markets in which the company is involved. Resources also determine the intensity of the internationalisation process. Companies, especially SMEs, may have low resource levels, and this may lead to different forms of the internationalisation process. If resources are absent or are not properly targeted, the internationalisation process is negatively influenced. The absence or non-use of resources may force a company to remain at a certain level of internationalisation. In this case, the company may remain at a lower international presence even though it possesses sufficient market knowledge, opportunities and network relationships. Resource level is an aspect related to state and affects the intensity of the internationalisation process. According to Johanson and Vahlne, the internationalisation process depends on the psychological distance to foreign markets, which the decisionmakers perceive. Psychological distance is defined as the perceived economic, political and cultural distance of the decision makers to the foreign and domestic market (Johanson and Vahlne, (1990), p. 13).

The greater the psychological distance to a foreign market is, the greater the risk involving market cultivation is perceived by the decision makers. Therefore, the decision makers first attempt to enter the international markets in which they perceive the least amount of psychological distance and the highest cultural affinity. Johanson and Vahlne's thesis can be validated on the basis of the geographic allocation of the direct investment as the final step of an internationalisation process. In 2013, 49% of all German FDIs were located in Europe. Deutsche Bundesbank, (2014) at first glance, the thesis appears to be confirmed. However, 51 % of direct investments were situated outside of Europe. Apparently, the 51% of non-European markets were seen as more important than the European market. Markets with a greater psychological distance from European markets are preferred by German companies. Therefore, the decision is not based on psychological distance; the decision is based on the risk and benefit expectation of the foreign market. This is logical because an FDI is made for economic reasons and is not based on the decision makers' tendencies. However, is this assumption confirmed when looking at FDIs according to the distribution of countries? German FDIs were generally divided in 2013 as follows: UK, 19%; Netherlands, 17%; and China, 17%. Deutsche Bundesbank, (2014) Indeed, FDIs in the UK and the Netherlands corroborate the thesis of the psychological distance, but China is in 3rd place. China has strong economic, political, and cultural differences with Germany — Germany has a social market economy and China has a socialist planned economy.

Germany is a democracy and China is a dictatorship. Additionally, the cultures differ significantly. In line with the theory of psychological distance, companies had more FDIs in other European target markets than in China. This shows that the psychological distance perceived by the decision makers cannot be the main variable in the internationalisation process. For the decision makers, it is more important that the FDI represent an acceptable risk. Economic motives for internationalisation are in the foreground instead of psychological distance. Several studies have shown that the

internationalisation-based motives of the decisionmakers are primarily market-oriented (Kranzusch and Holz, (2013), pp.49); (Pieper and Neinhaus,(2010), pp. 11); (Schulz,(2005), pp. 21). Therefore, the perceived and expected chances and risks of the target market are the most important factors for the investment decision. Perceived and expected risks and chances vary, as does individual behaviour among decision makers. For this reason, the inter-nationalization model is supplemented with behavioural variables because only behavioural variables can explain why companies behave differently in the internationalisation process and why they take different paths toward internationalisation. Behaviorale variables can be classified as extrinsic motives or intrinsic variables. Intrinsic behaviour variables should be understood as all decisions and activities in the context of internationalisation that are determined by individual and personal factors of the decision makers themselves. Extrinsic behavioural variables should be understood as all decisions and activities in the context of internationalisation that are triggered by external factors of the companies' markets.

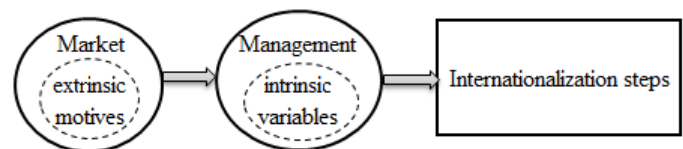


Figure 3: Extrinsic and intrinsic behavioural variables, source: Self-illustration

Extrinsic variables are triggered by the companies' markets. Therefore, a company's market has an extrinsic influence on the internationalisation process. According to Lee's migration theory, market influences are based on push and pull factors.(Lee,(1966), p. 47-57) Pull factors can stimulate internationalisation because decision makers are hoping to secure or expand the company's competitive position with internationalisation. In contrast, push factors are based on the status of the domestic market and exerts pressure on the company to be internationally active to secure its competitive position (Geyer and Uriep, (2012), p. 11). In this situation, decision makers make decisions either voluntarily or act under pressure to expand their international activities by looking for internationalisation opportunities. It can be assumed that decision makers take opportunities that coincide with the presence of pull factors, while push factors prompt the decision makers to drive toward a systematically opportunity search due to the applied pressure. Therefore, the pull and push factors have an impact on the decision maker's behaviour and the intensity of the internationalisation process. Additionally, this approach closes a gap in Johanson and Vahlne's internationalisation model, in which no explanation is made as to the conditions that decision makers use when considering existing opportunities for internationalisation.

In addition, extrinsic motives affect the risk attitude of the management in the internationalisation process. As several studies have shown, risk attitude plays a major role in decision making (Solvic,(2009), pp. 35 – 40); (Heß,(2013), p. 7)To make the fundamental decision as to whether a company is internationally active or not, the decision makers require market information. This market information affects the decision makers' risk attitude. Depending on the presence of pull or push factors, decision makers may perceive internationalisation as voluntary or market-driven and that it is

therefore an imposed process. Based on the Prospect Theory, one can assume that with increasing market pressure, decision makers are also more willing to take greater risks to avoid the possible loss of their competitive position. Therefore, extrinsic motives affect the risk attitude of the decision makers. Also the internationalisation process itself affects the risk attitude of the decision makers. Johanson and Vahlne described the ideal internationalisation path for companies. With each level of internationalisation, the company's risk varies, as does the risk attitude of the decision makers. With an increasing degree of internationalisation, the company's risk also increases. The lowest risk is seen with export goods, while the highest risk is seen with direct investments. For exports, the maximum economic loss is limited to the supply. However, it is possible for a direct investment to lose invested assets or to experience a heavier loss. Moreover, a decision maker assesses the risk of internationalisation individually because each decision maker develops a subjective utility perception of internationalisation. Decision makers assess the utility and the risks of internationalisation.

This individual, subjective risk-utility function defines the risk aversion on the part of the decision makers. Risk aversion is therefore based on the decision makers and influences decisions in the context of internationalisation. "Risk aversion is present, when the negative deviations of a risk by the decision makers are higher weighted, than the positive deviations of a risk." (Wagner, (2010), p. 1) This means that a risk-averse decision maker prefers a safer investment's profit even if it acquires less profit. (Zimmermann, (2013), p. 4) In case a decisionmaker has doubts due to risk aversion they would rather defer an internationalisation step than take an unacceptable risk. Therefore, individual decisionmakers and their subjective risk aversion influence the intensity of the internationalisation process and can lead to different internationalisation paths for a company. Interdependencies also exist also between the aspects of state, chance and behaviour. The decision makers can use their knowledge to assess the risks of internationalisation. Even the network of the decision makers can be used to contribute to the risk assessment.

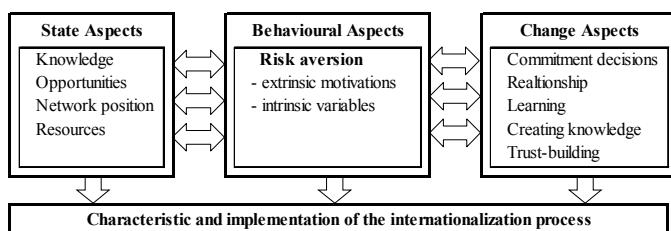


Figure 4: Influence of state, behavioural and change aspects in internationalisation, source: Own presentation

In this case, they use the information from the network and evaluate the risk involved in the internationalisation process. The risk attitude of decision makers also influences whether they seize opportunities. If decision makers perceive a suitable opportunity as too risky, this opportunity will not be taken. Likewise, the available resources affect the risk assessment of the decision makers in the internationalisation process. Therefore, it is essential that the decision makers perceive their available resources as sufficient for the internationalisation process. The decision makers will therefore evaluate whether the available resources are sufficient. Lacking resources can cause decision makers to believe that the company's

insufficient resources are an additional risk in the internationalisation process. As described above, the degree of risk aversion also influences commitment decisions made by the decision makers. Through relationships with foreign markets, decision makers may see the opportunity to learn foreign market structures and build trust into the foreign market. This allows the decision makers to evaluate the existing risks of internationalisation with a higher degree of objectivity. Under consideration of the interdependence between the state, chance, and behavioural aspects, the modified international model is represented as: By modifying the internationalisation model, it is now possible to explain and describe not only the external influence of the market, but also the individual risk preference of the decision makers in the internationalisation process. Also there is a relationship between the market conditions of the target market and the risk aversion. Depending on the existing market conditions of the target market, assess decision makers the occurrence probability of risks and chances of the target market. Therefore operates a decision maker not only as a rational homo oeconomicus. Rather, the decisions about internationalisation depend on the risk aversion of decision makers. Through the introduction of behavioural aspects it is now possible to analyse profoundly the internationalisation processes with a new point of view. The modify internationalisation model can therefore analyse the internationalisation process, both at the macro level of the company, as well as at the micro level of decision makers. This allows developing new instruments, which takes the behaviour of decision makers into account.

How will the target market develop?

Since the internationalisation has a sustained impact on the economic development of a company, the companies endeavouring to predict the long-term development of the target markets. To assess the attractiveness of the market volume of the target market, it is therefore necessary to predict the market development.

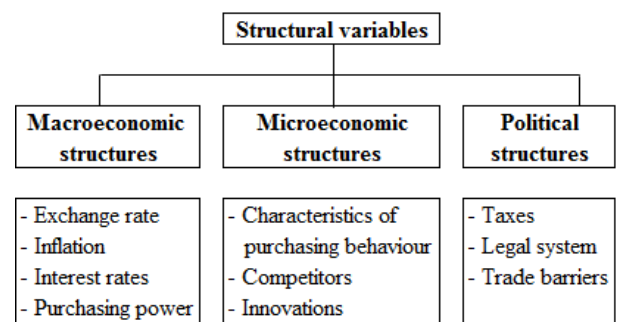


Figure 5: Structural variables of foreign markets, source: Own presentation

According to a study of Ashenfelter, significantly better forecasts about the market development are possible, if for the forecast additional, quantitative variables considered. It is crucial that these quantitative variables demonstrate the cause-and-effect relationships of the target market, (Ashenfelter, (2007), p. 1 – 21) Which quantitative data are usable, depends on the decision-influencing factors for the taking decisions. Therefore, every decision situation has a unique cause-effect relationship. Decision makers have indeed knowledge of their domestic market, the products and competitors; however, requiring decision makers - if available - additional quantitative data of the micro- and macroeconomic market

structures, as well as knowledge about the behaviour of political actors in the target market. (Tristram, (2013), p. 18) Exemplary, a decision maker can determine the following quantitative structural data for target markets: The structural data about target markets can be used for the valuation of the risk premium. Also it is possible to forecast the development of the target markets with structural data. Therefore it is additional possible to compare different target markets.

The information about the future development of an international market has an influence the risk assessment of the target market and thus the risk aversion of the decision makers. Therefore, the author has surveyed decision makers in SMEs. To validate the hypothesis, that information about the target market influences the risk aversion of the decisionmakers, 113 decision makers in the board of SMEs, which are located in the area of the Chamber of Industry and Commerce Wuppertal – Solingen – Remscheid, Germany, were interviewed. In 2015 were 221 SMEs registered in the CIC Wuppertal – Solingen – Remscheid. As the decision behaviour in the case of a direct investment is being investigated, those registered enterprises are excluded, which do not operate internationally due to their kind and their economic activity. After subtracting regional and savings banks, clinics and public utilities companies amount a basis of 177 SMEs and a confidence level of 95.4%. The interviewed enterprises roughly correspond in their distribution according to economic sectors with the economic sectors in Germany.

To assess the risks of a direct investment and to make a, for the decision maker risk-adequate decision, decision-relevant information has to be gathered. A decision maker assesses consciously and unconsciously the, during the decision process gathered and as decision relevant information. (Wüstermann, (2015), p. 141) With the information search the available information are selected. The advantage of the information search consists in the structuring and assessing of the decision risk, in the tendency more current information and in a better possibility to define the decision field. This contrasts with the costs of information acquisition, the resources for processing information and the costs for the expenditure of time to acquire information. (Peters, (2012), pp. 40) Decision makers will end the process of the conscious information perception, if the marginal cost of information procurement is higher than the anticipated marginal utility of gathering information. But in practise, decision makers do not always decide rationally. In the case of rational decisions, decision makers make their decisions only on the basis of complete information. (KühnandGrünig, (2013), p. 29).

In practice decision makers often decide according to the satisficing principle. (Corsten and Kauppert, (2013), p. 161) According to the satisficing principle decision makers do not strive for the procurement of complete information, but on the basis of limited information they decide on the alternative which suffices to make a decision. (Meyer and Weber, (2011), p. 129) Therefore the question arises, whether in practice decision makers decide according to the satisficing principle or whether decision makers strive due to their risk aversion after most complete information to assess the probability of occurrence of the direct investment risks. If decision makers behaved according to the satisficing principle, they would be satisfy with a minimal amount of information, if there are no further information or if the costs of information procurement are considered to be too high. If decision makers are risk

averse, the search for information would be continued until the decision makers have the degree of information with which they can securely assess the risks of the direct investment. Due to these preliminary considerations the following questions were asked:

Table 1. Information and decision-making behaviour, source: Own presentation

It is...	not true	probably not true	perhaps true	quit probably true	certainly true
Information and decision making					
I am looking for information as long until my assumptions about the Brazilian direct investment were confirmed	8%	14%	48%	26%	4%
Conflicting information from Brazil cause me to expand my information search	4%	4%	27%	35%	29%
I also consider information that contradict my assumptions about the Brazilian direct investment	4%	1%	35%	47%	14%
I ignore conflicting information from Brazil for my decisions about the direct investment	33%	38%	21%	7%	2%
I sense missing information as a risk	4%	4%	38%	35%	19%
If only insufficient information available, I would also favor a direct investment in Brazil	13%	22%	42%	22%	1%
company to delay the Brazilian direct investment	6%	13%	44%	30%	6%
Positive information from Brazil cause our company to force the Brazilian direct investment	6%	2%	32%	58%	3%

The survey participants were asked if their search for information was continued until the assumptions concerning a direct investment was confirmed by the information. With this question it was assumed that decision makers have a risk expectation concerning Brazilian direct investments and that this risk expectation influences the decision behaviour of risk-averse decision makers. The question was answered almost normally distributed: 22% would stop the search for information, 48% could not decide and 30% would continue the search. Whether a decision considered the available information as risk adequate for a decision, seems less on the assumptions but rather on the fact if the quality of the information is seen as sufficient for a risk adequate decision. Thus, 65% of the decision makers also take information into account which contradicts their individual assumptions and with 61% they will even widen the search for information in the case of contradicting information. This can also be seen as risk-averse decision behaviour.

The decision makers thus select the information according to worth and relevance to the decision. 71% of the decision makers will not ignore contradicting information. In the case of complex and longterm decisions, decision makers will therefore not decide according to anchor values. Therefore, the risk aversion of decision makers has a protective function against possible wrong decisions, when decision makers also consider that information which contradicts their assumptions. 54% of the decision makers see in missing information a risk. To validate if this subjective risk perception is a stable basic attitude, therefore a significance test with different degrees of experience of the decision makers and according to national and international decision makers was conducted. With increasing experience decision makers do see missing information as a growing risk, but those deviations are not significant. Missing information is also assessed as risk independent of the internationalisation experience. Therefore, the risk perception in the case of missing information can be described as a stable basic attitude.

The answer to the question if decision makers favour a Brazilian direct investment even if they have insufficient information follows a normal distribution: 35% would reject a direct investment due to insufficient information, 42% of the decision makers are not sure if they would reject a direct investment due to insufficient information and 23% of the decision makers would not reject a Brazilian direct investment due to insufficient information. Even if the answers are not unambiguous it becomes obvious, that the available and expected quality of information influences the decision-making behaviour of risk-averse decision makers and thus the equation 19 can be confirmed due to the survey. A possible rejection of a Brazilian direct investment can, but does not have to rely on insufficient information.

Table 2. Risk Preferences in the case of missing information, source: Own presentation

I sense missing information's as a risk							
M	1-5 Years	5-10 Years	> 10 Years	α	National	International	α
	3,5	3,6	3,6	No	3,6	3,7	No

The influence of information on the decision about a Brazilian direct investment also becomes obvious that 81% of the decision makers would maybe to certain postpone a direct investment in the case of negative information from Brazil, and 92% of the decision makers would maybe to certain force a direct investment in the case of positive information from Brazil. Thus, the decision makers react more intensively to positive information than to negative information. In the case of positive information the decision makers are additionally earlier willing to take the offered chances for a market entry or for an enlargement of the direct investment. Therefore, the assumption of Johanson and Vahlne can be confirmed that decision makers use every offered chance. The survey participants were also asked about the used sources of information.¹ (With the selection of an information resource makers not only evaluates the quality of information available, but also the credibility and usefulness for the decision.

Reviewed a decision maker an information source as trustworthy, rising for a decision maker subjectively the information quality and the forecast quality to the risks of a direct investment. (Laux, Gillenkirch and Schenk-Mathes, (2014), p. 30) Therefore has the choice of as trustworthy perceived information source an influence on the risk aversion of the decision makers. The decision makers use their customers most strongly as information sources. Several studies have proved that mostly marketing-oriented motifs are responsible for the foundation of direct investments. (DIHK, (2012), p. 5); (ZEW, (2011), p. 45);(Pieper and Neinhaus, (2010), p. 11) Therefore it is reasonable that often customers were mentioned as information source. The second place of information sources is held by public institutions, such as the CIC or the Chamber of Foreign Trade. Their individual economic and personal networks are only mentioned on the third and sixth rank as information source by the survey participants. Thus, individual information sources play a less important role for decision makers. The Decision makers also use business consultants in a subordinate extent as an information source. Obviously, the decision makers don't trust the business consultants to have sufficient information about

the Brazilian market. The participants in the survey could mention other, than the prescribed information sources. Only one participant (0.9%) named market studies as a relevant source of information. The limited use of market studies is not surprising, because the survey of their customers is much more purposeful and especially more cost-effective for the decision makers.

Utilization of information sources by the decision maker

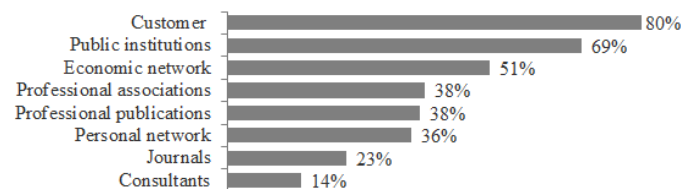


Figure 6. Utilization of information sources (multiple answers possible) source: Own presentation

If the information sources are distinguished according to external and internal information sources, then it becomes obvious that decision makers in family businesses rather use internal information sources than in non-family businesses. Decision makers in family businesses thus trust more in internal information sources than in external information sources. Tammerna and Miggiano (2015) define trust as “a relational, action relevant basic attitude in situations of uncertainty and in the expectation of a specific action from the other (person or group) with a concrete result and with a benefit.” (Tammerna and Miggiano, (2015), p. 5) Trust does not only exist concerning persons but also for information sources. Decision makers trust information sources, if they assumed a certain benefit in this information sources. When internal information sources are preferred in family businesses, an insufficient consideration of additional, external information sources, can lead to bad decisions.

Table 3. External and internal information sources, source: Own presentation

	Family business	No family business
External information sources	46%	49%
Internal information sources	54%	51%

If the usage of information sources is analysed according to the different grades of experience, then it is notable that decision makers with increasing experience increasingly use all available sources of information. As has been stated in the previous chapter, the risk aversion of decision makers increases with increasing experience. Obviously, decision makers validate their based on experience assumptions by increasingly using of all available information sources to make risk-adequate decisions of direct investments. If the use of the information sources is assessed whether a decision maker is active in a national or international company, then it becomes clear that decision makers in international active companies frequently use all available information sources, than in national active companies. As decision makers in international active companies in tendency evaluate chances and risks worse, the recourse on several and different information sources can be seen as a higher risk aversion. Through an increasing use of different information sources, decision makers try to reduce the perceived quantitative or qualitative information lack with additional information from additional

¹ Multiple answers were possible

information sources. Therefore the question arises, why decision makers in national active companies not act in the same way as in international companies? One reason can be that decision makers in national active companies see no need to become active international and thus do not need certain information sources. Thus, it can be assumed that the answers of the decision makers would be different in another decision situation.

Information sources according to experience and internationality

Table 4. Information sources according to experience and internationality, source: Own presentation

Comparison groups	Cus-tomer	Prof. pub-lications	Prof. as-sociations	Network		Consul-tants	Jour-nals	Public in-stitutions
				personal	economic			
1-5 years	19	6	8	10	14	2	4	11
5-10 years	20	7	7	6	6	3	7	20
> 10 years	51	29	28	24	37	11	15	46
International	65	28	29	31	47	13	17	58
National	25	14	14	9	10	3	9	19

Conclusion

With the modification of the internationalisation model that include behavioural and resource aspects, the internationalisation activities of all company sizes and various internationalisation paths can be explained. It is now possible to explain, independent of the company size, the various internationalisation paths with different temporal intensities and discontinuities. With the modification of the internationalisation model it is also possible to explain the macro and the micro level of the internationalisation process. Therefore is the macro level the company and the micro level of the decision maker. This new point of view allows the development of instruments to assess an international target market. Decision makers feel mostly a lack of information as a risk. This subjective risk perception of missing information is a stable risk-averse basic attitude of the decision makers and is neither compensated by quantitative experiences nor by context-related, international experiences of the decision makers. Negative and positive information influences the decision-making behaviour of decision makers with complex investment decisions. When decision makers receive negative information, investments are delayed or accelerated when positive information receives. Therefore decision makers are more ready with positive information to use offering opportunities for a market entry or the enlargement of a direct investment, than with negative information. From this follows that countries which follow a positive information strategy can expect a higher direct investment volume.

With the searching for information decision makers also consider information, which contradicts their individual assumptions to assess the investment risks. The consideration of contradict information is also an expression of the risk aversion of decision makers, because the decision makers try to protect with the consideration of conflicting information themselves from wrong decisions. However, the majoritarian of risk-averse decision makers continue the searching for information until the subjectively perceived conflicting information can be validated. Thereby, the decision-making process will be delayed und chances can be wasted. For this cause has the risk aversion of a decision maker on the hand the function of protect from possible bad decisions and on the

other hand can the risk aversion prevent the use of chances. The survey can show that of 71% decision makers not ignore contradictory information. For complex and longterm decisions, decision makers are not oriented towards anchor effects, but towards the economic chances and risks of the investment. Which sources of information are used depends on the decision context: The better the information source, which provides the information felt to be relevant by the decision maker, the more often decision makers use these sources of information. Therefore, decision makers use available information sources purposefully and according to the possible use for the decision. The better an information source is asses by a decision maker as relevant and significant for the decision, the more frequent a decision maker uses this information source. Therefore, decision makers use available information sources purposefully and according to the possible use for the decision. With the use of internal and external information sources, decision makers in family businesses and non-family businesses differ. Decision makers in family businesses prefer known, internal information sources, while decision makers in non-family businesses prefer external information sources. A result of the study is that positive information from the target market causes a stronger attraction for the foundation or the expansion of a direct investment, than negative information. Therefore, it could be a part of a strategic state communication to communicate negative economic developments and numbers not only as simple facts. Negative economic developments and key figures should rather be presented in relation with the future development and it should be communicated, when a positive development is expected. This has the consequence that negative information about the location is not perceived as absolute, but as relative in a positive context by potential investors, which leads to a sinking risk expectation of the decision makers.

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