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Macroeconomic Determinants of FDI Decisions in the Automotive Industry: Theoretical Foundations and Empirical Evidence

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Abstract

Purpose – *Foreign direct investment (FDI) has seen a tremendous increase over the years. Decision-making concerning FDI puts great pressure on managers due to their complexity and long-term effects on the companies. Macroeconomic factors increase in their importance when companies go international. The external environment is complex and directly influences the activities of business entities and often decides about the future progress of them. The study aims to bring more clarity into the specific macroeconomic factors and their impacts on the manager's decision-making process. Also, intervening factors will be analyzed if they may attract or distract FDI behavior.*

Method – *Set-up of a new model by separating macroeconomic factors within certain characteristics as well as including potential intervening factors such as incentive schemes and risk/uncertainty as negative and/or positive stimulating factors for FDI decisions.*

Findings – *The conditioned data show that some macroeconomic factors have strong influences on FDI decisions and often are not considered by the decision-makers as much as they should have been. Incentive schemes for FDI seem to have a strong positive impact on investment decision-makers. Risk/Uncertainty factors have negative impacts.*

Limitations – *The research was conducted on the German and Austrian automotive industries with industry-specific characteristics. The period of FDI ventures was limited to 10 years.*

Implications – *The study underlies the perception of FDI decision-makers in the specific business and environmental conditions of the automotive industry and its supplier organizations. Their views are important to consider and represent the results of this work. A vice-versa contemplation on the receiving party of FDIs may result in different findings.*

Originality – *The study separates different macroeconomic levels concerning FDI motives to set-up a new SEM-model approach. It includes intervening factors to get a holistic view of the macroeconomic environment with potential impact on decision-making.*

Keywords: decision-making process, foreign direct investment, macroeconomic factors, internationalization.

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Introduction

The growth of enterprises and expansions to new markets has dramatically accelerated over the last decades (Westerfield, 2004). Companies are more and more forced with different and new upcoming influence factors when expansion to other countries is targeted strategic goal. These factors can occur from the company's structure, strategic goals, and visions (internal factors), these are the so-called microeconomic factors (Varian, 1992). And also the outer environment of a company plays a very important role (Wagner & Disparte, 2016) by entering new markets, new countries, or unknown territories. These factors are defined as the external factors and known as macroeconomic factors (McCarthy, 1975; Porter, 2008). Internationalization and FDI are closely connected. Going international prerequisites a strategic concept (Hax, 1996) when it diversifies its business operations across national borders (Barney, 2002). Companies can organize their international business operations in a wide range with an uncountable number of possibilities and ways. It starts with a simple export of goods until managing a wholly-owned foreign subsidiary. And these options represent different levels of integration (Cheng *et al.*, 2009) into international activities available to companies. When firms become more integrated into international operations, their level of direct investment in foreign markets increases. And this investment is called (Barney, 2002) foreign direct investment (FDI).

This business model became more important and internationalization and globalization are terms that are used commonly in many economic contexts (Garcia-Canal *et al.*, 2018; Adler, 2008). Motivations therefore can be to seek natural resources, to seek markets, to seek efficiency, or to seek strategic assets (UNCTAD, 2007). Barney (2002) states, that competition becomes much more international, even the scope of the company is mainly regional. It tends to increase rivalry, the threat of new entrants, and the threat of substitutes. But also opportunities will occur. Larger markets bring more business opportunities for companies. Enlarging smaller existing markets often is a good

opportunity, proactive motive (Albaum & Duerr, 2008; Hollensen, 2011), or even is the only chance to survive on the market, to gain a higher value to the company. If a company is going to establish a subsidiary abroad, a dominant motive, therefore, is the exploitation of a new market with further potentials for existing products. Other reasons are when existing customers go abroad and want to take their suppliers with them or when the company is driven by the competitors (Gutmann & Kabst, 2000). This is a kind of a fast follower strategy. If the domestic market is saturated by their own company or by competitors, it is often the only opportunity to start transnational activities (Sternad *et al.*, 2013). Further reasons can be that certain important resources are located outside the domestic market. Barney (2002) defined the five most potential sources of economies of scope for firms pursuing international strategies. These are: 1.) to gain access to new customers for current products and/or services. 2.) to gain access to low-cost factors of production. 3.) to develop new core competencies. 4.) to leverage current core competencies in new ways, and 5.) to manage corporate risk.

The limitation of this research work is related to specific requirements and characteristics of the automotive industry and includes effects that are not representative of other branches or markets. This work takes the view from the investor's perspective and relates to macroeconomic influence factors. Geographically it is limited to companies with head offices in Germany and Austria and their employees or entrepreneurs. A time-wise limitation has also been set. Only FDI decisions from the last 10 years before the date of sending out of the electronic survey have been considered in this work.

In the following, research questions have specifically been formulated to get focused answers for this research work.

The main research question is below.

RQ_0: *How important are different macroeconomic factors for FDI motives in the automotive industry?*

The main research question, RQ_0, should deliver answers about the degree of importance of macroeconomic factors on FDI intentions and motives in the automotive industry. Three different sub-groups of macroeconomic factors allow a more detailed view of the potential power of them to impact FDI decisions.

RQ_1: *Which macroeconomic factors have the strongest influence on FDI motives in the German and Austrian automotive industry?*

The RQ_1 raises the question of the macroeconomic factors having the strongest influence on FDI decisions. This is going to be analyzed as a direct impact on FDI motives. Many countries establish and offer incentive schemes to foreign investors to attract specific industries which may influence the macroeconomic impact on FDI decisions.

Another impacting variable is the risk and uncertainty factor. This implies, that if target countries (e.g. emerging markets) hold unforeseeable risks for the investors, they may hinder them to enter these markets. This leads to the following research questions, RQ_2 and RQ_3.

RQ_2: *How do FDI incentive schemes impact the macroeconomic factors?*
RQ_3: *How do the macroeconomic factors impact uncertainty/risk and what influence does this have on FDI motives?*

To answer the research questions, the variables need to operationalize and integrate into a new postulated causal model. An SEM-PLS analysis should gain a picture to see if significant effects occur between the variables.

Theoretical Foundations, Hypothesis, and Model

At the beginning of every internationalization venture, there is a general decision upfront to get involved with entering foreign markets (Grünig & Morschett, 2012) and countries. The initiation for such projects can occur from the company itself or directly from the market (Barney, 2002). The decision for going international can have far-reaching consequences, positive as well as negative, for the development of the company. Therefore such a decision-making process should be done carefully and deliberately (Buckley & Ghauri, 2015; Barney, 2002). According to Sternad *et al.* (2013), entrepreneurs and managers who consciously consider exporting goods or developing business activities abroad should think about the reason why the company should do business abroad. They should also consider the additional risks related to internationalization and whether the company can meet the requirements to be active on an international scale in terms of fitness and resources.

To have a clear perception of the motives for going international is so important because of the differences between those motives. Blitzenis *et al.* (2012) define nine different motives of going international of companies: market hunters, strategic market hunters, factor hunters, efficiency hunters, location hunters, exploiting ownership hunters, financial hunters, political reasons, and overcoming imperfections. Dunning and Lundan (2008) see as the main motives of internationalization in resource-orientation, efficiency orientation, and strategic aims to gain competitive advantages. The main motive is seen in the exploitation of new markets (Albaum & Duerr, 2008; Hollensen, 2011). The diversity of the motives easily shows the complexity of such ventures.

Going international always is connected with handling some risks. According to Jahrmann (2010), risks can be divided into the following sub-groups: economic risks, political-legal risks, and market risks. A company has to be aware of them and consider

them for making a decision. All three categories can be split into sub-factors (Jahrmann, 2010):

- Economic risks: exchange rate, inflation rate, credit risk, transport risk, and storage risk.
- Political-legal risks: installation of trade barriers, lack of legal security, capital transfer risks, security risks, corruption, tax risks, risk of misappropriation
- Market risks: qualitative and quantitative market risks, local market risks, temporary market risks, competition risks

The third point about the fitness of being prepared for the international market can be proofed, when the first two questions have been answered positively. This part focuses on the strengths of the company's product or services as well as its organizational structure. To make use of an existing USP would be an opportunity for going abroad. Delivering Added Values and competitive advantages for the customers (Delgado-Gomez *et al.*, 2004; Peng, 2001) or having access to special resources would be potential success factors. Entering cooperation with partners could be arguments for internationalization strategies. The management of the company has to commit to the internationalization. And the process, time schedule, goals, aims (Sousa *et al.*, 2008) have to be very clear for all members which are affected by this venture. According to Griffin and Pustay (2007) three major factors affecting the FDI decision-making process. And these can be classified into Demand Factors, Supply Factors, and Government Factors as shown in Table 1.

Table 1: Factors influencing FDI decision-making process.

Factors Affecting FDI Decisions		
Supply Factors	**Demand Factors**	**Government Factors**
- Production Cost	*- Customer Access*	*- Economic Priorities*
- Logistics	*- Follow Clients*	*- Avoidance of Trade Barriers*
- Resource Availability	*- Follow Rivals*	*- Economic Development Incentives*
- Access to Technology	*- Exploitation of Competitive Advantage*	

Source: Author's construction based on Griffin and Pustay (2007).

The most important impact factors for the FDI decision-making process according to Griffin and Pustay (2007), will be extended with factors from Dunning (1977, 1983) and from Ernst and Young (2016), which regularly published new empirical data about the

drivers for FDI decisions. Specifically, these are used for the respective automotive branch.

Demand Factors and Indicators

The market expansion is a strong motive for FDI decisions. Customer Access, Following Clients, Following Rivals, Exploitation of Competitive Advantage and Customer Mobility (Griffin & Pustay, 2007) are the main drivers. Gaining access to customers often requires physical presence in their markets to be able to serve them properly. German and Austrian engineering is a good example of a high-quality characteristic. The perception of buyers can enable firms to produce the goods in the country with the highest quality reputation and therefore be able to get higher prices. Companies with a high reputation and a valuable trademark or brand name or even technology may choose to operate in foreign countries (with subsidiaries) rather than export to them to gain a competitive advantage. Also, clients of companies often attract FDI. Following clients, who build facilities in foreign countries to enter new markets, enable the possibility to also expand business with existing customers by locating a new factory of its own nearby. It enables the companies to continue to meet customer demand promptly and attentively. Following clients also is a competitive advantage to bring win-win situations for both parties. A further possibility of gaining a competitive advantage by spending FDI is to follow rivals. A competitor analysis enables companies to find out their geographic strengths and weaknesses of individual competitors and the followers can select markets for FDI for their ventures. Most of the multi-national companies (MNCs) regularly monitor market sizes and growth rates from a global perspective (Griffin & Pustay, 2007).

Supply Factors and Indicators

Supply Factors according to Griffin and Pustay (2007) include production costs, resource availability, access to technology, and logistics. Production costs influence the competitive situation in negatively or positively. MNCs often try to locate their production facilities in low wage countries to gain a competitive advantage. Not only labor costs are of importance for FDI (Boghean & State, 2015), but also real estate prices and lower taxes. Hunady and Orviska (2014) say that taxes are still often emphasized as a crucial determinant of FDI. In terms of logistics, MNCs seek to invest in subsidiaries in foreign markets if the cost of transport raw materials is high. Also, infrastructure is a driver for FDI. Natural resources are often of essential importance for companies and their products. MNCs tend to utilize FDI to access natural resources. Natural resources attract many MNCs. Examples of important resources are iron ore and wood. A key technology is also an important supply factor that affects the FDI decision-making process. Technology (Aswathappa, 2008) influences every aspect of the global market place, it drives innovation, affects partnership and locations, and changes stakeholder relationships.

Government Factors and Indicators

Political factors according to Griffin and Pustay (2007) are often influential factors to attract or distract FDIs. Economic priorities (Aswathappa, 2008) of emerging markets and developing countries regularly have misalignments with profit-oriented strategies and goals of MNCs. Development countries impose restrictions on the flow of FDI into their economies. This is not in general, there are examples, see on the example of China or India (UNCTAD, 2020), which allowed and welcomed FDI to enable big economic growth. A driver to affect FDI flows is the avoidance of trade barriers (Aswathappa, 2008). Such barriers reduce the flexibility and the willingness of FDI from MNCs which follow the profit-oriented strategies. Development incentives are interesting for MNCs and related FDI decisions. Governments offer attractive development incentives to MNCs to invest in their economies. In particular developing countries. The primary motive of developing countries to attract FDI (Griffin & Pustay, 2007) is to fill the resource gaps from the industrialized countries.

Potential Intervening Factors - Incentive Schemes

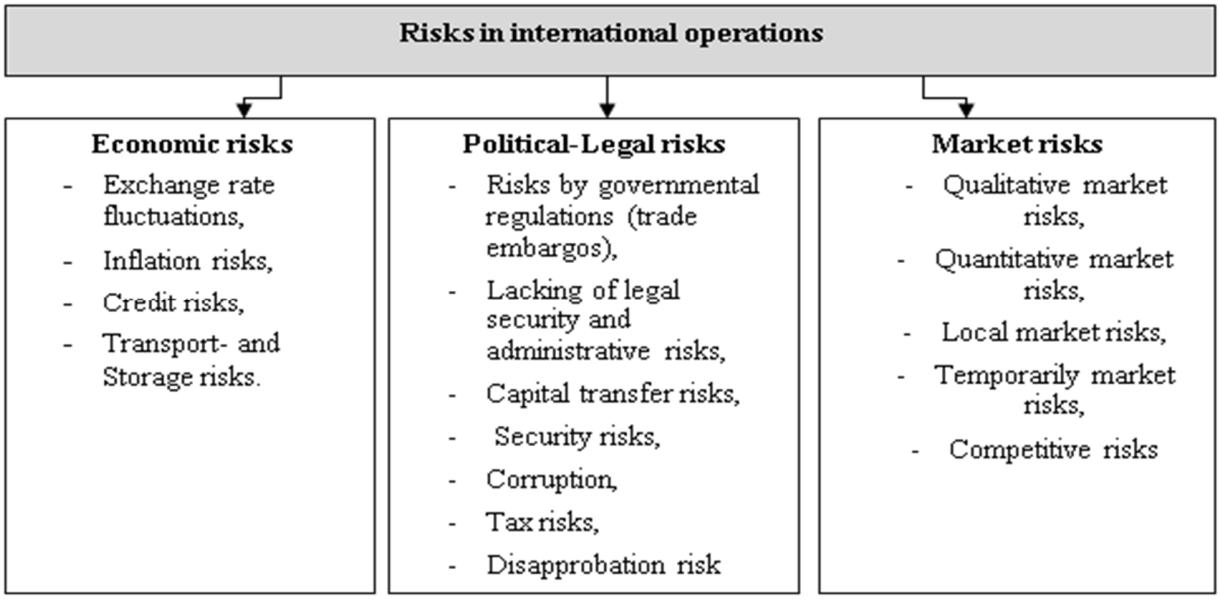
Countries often create policies to attract FDI. Host government policies are location-specific factors that may influence profitability and MNC's decision for doing FDI in different ways. Such governmental policies include both, incentives and performance requirements (Gilroy *et al.*, 2006). Related to incentive schemes are performance requirements for FDIs. A host government can place performance requirements on investors to push to ensure that the benefits of FDI will stay in the country. Examples for such requirements could be hiring and training of local personnel, local content, technology transfer, and exporting of output. Such performance requirements may distract FDI flows. To decrease negative effects, governments often link meeting the requirements to FDI incentives (Gilroy *et al.*, 2006). This paper focuses only on the intervening power of incentive schemes to FDI decisions. Examples of typical incentives include tax reductions, investment allowances, tax deductions, and exemptions from import or export duties (Navaretti & Venables, 2004).

Measures for incentive schemes have already been mentioned in a UNCTAD report in 1996. The most common financial incentive schemes to finance new foreign investments or operations have been defined as follows: government grants (direct subsidies) to cover capital, production, or marketing costs; government credits at subsidized rates; government equity participation and government insurance at preferential rates; subsidized infrastructure or services; special market preferences or preferential treatment on the foreign exchange (UNCTAD, 1996). Nowadays further measures have been discovered, but the main drives stayed the same. The effectiveness and influence of incentive schemes to foreign direct investments seems to be a controversial topic and different studies have produced different conclusions (Navaretti & Venables, 2004). The study from UNCTAD (1996) concluded that incentive schemes seem to play a minor role relatively seen to other factors such as market size, economic

stability, political stability, regulatory framework production costs, or skill levels. But they also state that incentives are not negligible. Hanson (2001) did several case studies to analyze the effect of incentive schemes to FDI and found them influenced the final investment locations. For other industries and markets, they got quite different results.

Potential Intervening Factors - Risks/Uncertainties

Every company that needs to decide whether it would go international or not has to be conscious about the chances and risks which are linked to this decision (Jahrmann, 2010). Multinational companies are facing certain macroeconomic risks that are completely outside of their control. These include cataclysmic events such as wars and natural calamities, and also equilibrium-seeking or random movements in exchange rates, commodity prices, interest rates, or even wage rates (Aliber & Click, 1999). In addition to that, MNCs facing what is usually referred to in the literature as political risks (Jahrmann, 2010; Aliber & Click, 1999) but maybe more appropriately called policy risks to emphasize that they arise from policymakers and their decisions and actions of national governments and not from either long-term equilibrium-seeking forces of global markets, or short-term random fluctuations in economic variables arising out of stickiness or unpredictability of market mechanisms (Aliber & Click, 1999). There are diverse risks that can be generally divided into the following three areas as illustrated in figure 1.



Source: Author's construction based on Sternad *et al.* (2013) and Jahrmann (2010).

Figure 1: Risks in international operations.

Risks are often not directly influenced by companies (Aliber & Click, 1999). They depend on macroeconomic varieties and framework conditions. Political frameworks and subsidies can change very fast when politicians change, parties change or other

circumstances make it necessary to change. Then, companies are forced with changes in their environment. This can bring changes but also may bring risks and uncertainties into the mid- and long-term success of a company (Hungenberg & Meffert, 2005). Kelly and Philippatos (1996) include foreign risks into the international investment decisions of multinational firms.

Derived from the research questions RQ_0, RQ_1 - RQ_3, the following assumptions can be made:

Base hypothesis:

H_0: *There is no significant impact of macroeconomic factors and intervening factors FDI incentive schemes and risk/uncertainty on FDI motives of German and Austrian Automotive companies.*

The base hypothesis H_0 should provide a holistic novel view on macroeconomic perspectives and their impact on FDI motives. It assumes that besides the well-studied micro-economic impact factors (Porter, 2008; Ansoff, 1965), the macroeconomic level, the FDI incentive schemes, and risk/uncertainty factors have no significant impact on FDI decisions. The macroeconomic level has been divided into three main groups of determinants according to Griffin and Pustay's (2007) model: demand factor, supply factor, and public and governmental factor. To answer the base hypothesis H_0, seven sub-hypotheses (SH_1 – SH_7) have been derived to provide a new and holistic view of macroeconomic influence factors to FDI intentions (Wagner & Disparte, 2016) including potential intervening variables: FDI incentive schemes and risk/uncertainty factors.

Derived sub-hypothesis:

SH_1: *The macroeconomic factor (Demand – Expected Market Volume) positively impacts both the macroeconomic factors (Supply–Production Factors) and Public and Governmental Conditions.*
SH_2: *The Demand factor positively impacts the Risk/Uncertainty factor.*
SH_3: *The Demand factor impacts the FDI Motive more strongly than Supply and Public factors do.*
SH_4: *The Supply factor has more influence on FDI Motive than on Risk/Uncertainty.*
SH_5: *FDI incentive schemes have a positive impact on macroeconomic factors.*
SH_6: *The Public factor is negatively related to Risk/Uncertainty.*
SH_7: *The Risk/Uncertainty factor negatively impacts FDI Motives.*

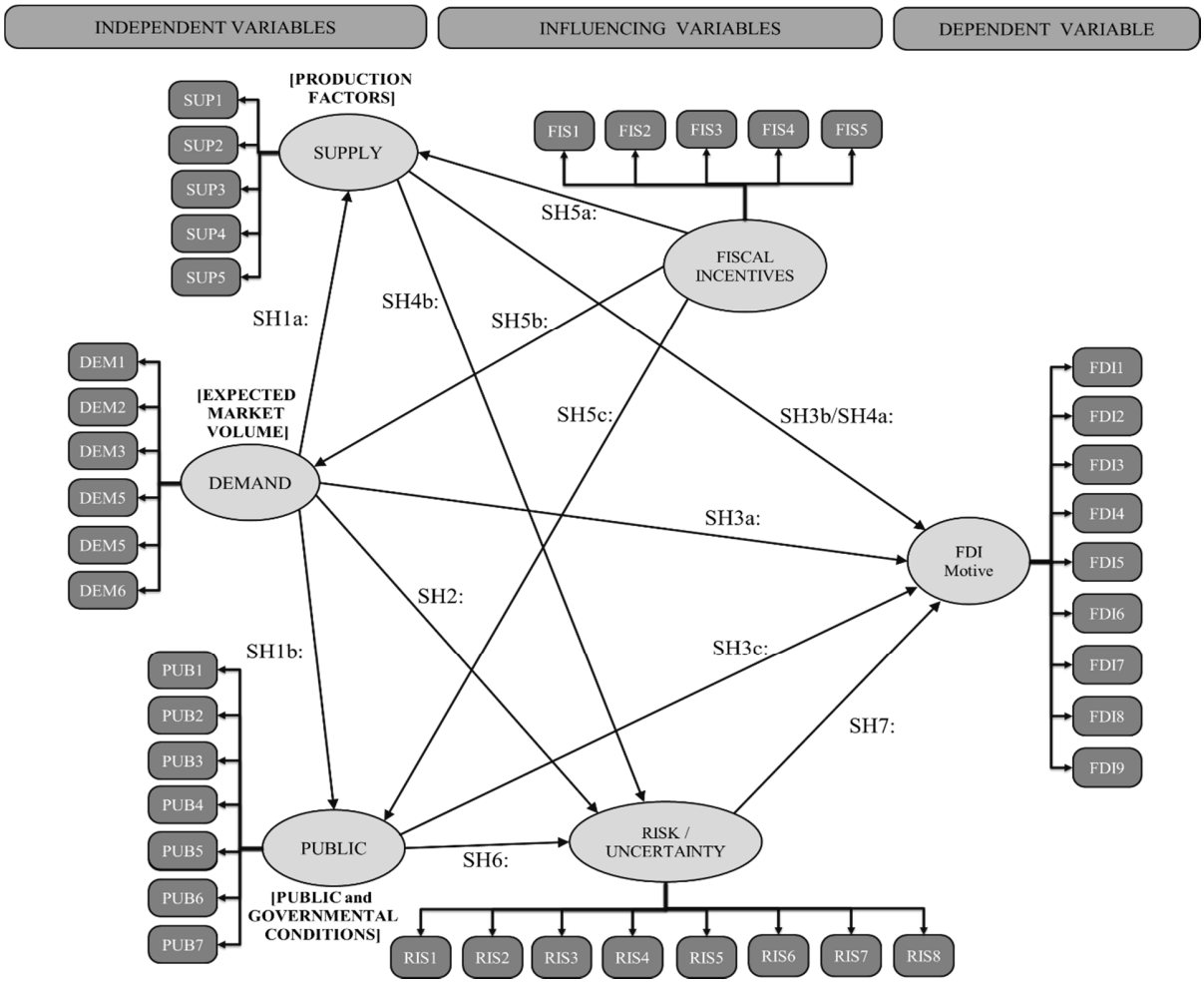
The null hypothesis H_0 and the derived sub-hypothesis SH_1 – SH_7 shall generate a holistic picture of macroeconomic influence on FDI decisions, extended with intervening variables of FDI incentive schemes and risk/uncertainty factors. The aim is to find out the biggest influencing factors and potential relationships between them to derive interpretations and conclusions. These results are only valid and limited to the selected

industry, which is the German and Austrian located automotive industry. The aim is to find out the strongest influence factors and potential relationships. After testing the relationships, the results will be analyzed and interpretations will be worked out as well as conclusions derived.

Empirical Design and Research Model

Research Design and Methodology

A new model has been constructed by the author. The model has been used to determine and operationalize the dependent variable *FDI motive*. The indicators, therefore, were carefully extracted from existing research works. Furthermore, the determination of the independent variables: *demand, supply, public and governmental conditions* (Griffin and Pustay, 2007), and the intervening variables *risk/uncertainty* and *FDI incentive schemes* were operationalized. A semi-structured questionnaire was created and distributed to experienced persons among the focus groups of employees in German- and Austrian-based companies from the automotive industry sector, in which all respondents were asked a standard list of questions in a standardized order. Only fixed-alternative questions have been applied. Figure 2 shows the postulated causal model including indicators and paths.



Source: Author's construction.

Figure 2: A complete postulated causal model with indicators and paths.

Research Results and Findings

The semi-structured questionnaire has been sent to 481 employees in Austria and Germany which are working for in the automotive industry. 138 persons returned and fulfilled the survey requirements which results in a reply rate of 28.7%. For distributing the questionnaire, representatives were contacted mainly personally and via company directories. The questionnaires were addressed electronically with a special survey tool. The analysis of the 138 respondents shows the following distribution with respect to the locational aspect:

Table 2: Data description from location evaluation.

		Frequency	Percent
	Austria	60	43.5
	Germany	78	56.5
	Total	138	100.0

Source: Author's construction.

Out of the 138 respondents, more than half is out of German-located companies (78 employees). The others are from Austrian-located companies throughout the supply chain of the automotive industry sector. The data of the survey showed, that most of the respondents were from the middle and top management followed by lower management levels. Internal and external consultants only represent a minority within the sample size. See Table 3 with percentage distribution.

Table 3: Data description of the respondents' current professional positions.

		Frequency	Percent	Cumulative Percent
Valid	Top Management	45	32.6	32.6
	Middle Management	49	35.5	68.1
	Low Management	26	18.8	87.0
	Internal Consultant	11	8.0	94.9
	External Consultant	1	0.7	95.7
	Others	6	4.3	100.0
	Total	138	100.0	

Source: Author's construction.

The next question evaluated the experience of the respondents with FDI in years. This was an important point to see if the respondent is experienced in FDI ventures and was involved in such decision processes. The responded data represent an equal distribution of short term experiences (<3 years to 4-6 years). The main respondents have long-term experience of more than 7 years (see Table 4).

Table 4: Data description for respondent's experience with FDI [in yrs.]

Interval	Frequency	Percent	Cumulative Percent
<3 years	27	19.6	19.6
4-6 years	27	19.6	39.1
7-10 years	44	31.9	71.0
11 years and more	40	29.0	100.0
Total	138	100.0	

Source: Author's construction.

Tables 2, 3, and 4 just show an excerpt of the descriptive analysis of this study. Further results can be looked after in the related promotional work. Now, the following analysis focuses on the assessment of the SEM-Model and the results out of it.

To assess the structural equation model, a 5-step approach after Hair *et al.* (2014) was going to be performed. As this model has been developed by the author, it hasn't been proofed before. The five steps brought positive results with concludes that the model fit has a good quality and the variables and its indicators have good descriptive quality. The interpretation of the research results in combination with the expert post-survey discussion finalizes the model and ends with specific suggestions as an outcome from this promotional work.

Causal Model's Fit and Quality

Validity and reliability of collected data follow the criteria as shown in Table 5 for proofing or rejecting a hypothesis.

Table 5: Acceptance criteria for hypothesis testing.

Characteristic	**Value description / definition**
Coefficient of Determination [R^2] (Chin, 1998)	> 0.67 (substantial); 0.33 (average); 0.19 (weak)
Path Coefficient [β] (Sapp, 2006, p. 31)	Null hypothesis: < 0.5 All Sub-hypotheses: > 0.1
Level of Significance [p-Value] (Hair, 2014, p. 171)	< 0.05

Source: Author's construction.

The coefficient of determination (R^2) measures the predictive quality of the observed values (Chin, 1998). The significance level of one sample size to another one is measured with the p-value is rated as <0.05 as significant (Hair, 2014). The quality of the causal model, the internal consistency reliability has been measured. An established and broadly accepted criterion is the Cronbach's Alpha measurement characteristic. This value explains the quality of the model and it is recommended that the value for the variables should be 0.70 or above (Cronbach, 1951; Hair *et al.*, 2014). Indicators with very low loadings (<0.40) are recommended to exclude from the model (Hair *et al.*, 2014) to increase the internal consistency of the model. Table 6 shows the model fit criteria for this construct. Three characteristics will be probed: Cronbach's Alpha, AVE, and Composite Reliability.

Table 6: Assessment of the measured values for the model fit.

Model Fit Characteristic:	**Cronbach's Alpha**	**AVE**	**Composite Reliability**
Threshold Value:	≥*0.70*	≥*0.50*	≥*0.70*
Literature source:	Hair *et al.*, 2014, p. 107	Hair *et al.*, 2014, p. 107	Hair *et al.*, 2014, p. 102, 115; Nunally & Bernstein, 1994
Used variables in the SEM-model:	**Measured values:**		
FDI Motive/Decision-Making	0.790	0.545	0.856
Demand [Expected Market Volume]	0.753	0.591	0.808
Supply [Production Factors]	0.707	0.486	0.710
Public and Governmental Conditions	0.742	0.592	0.780
Risk/Uncertainty	0.760	0.541	0.781
FDI Incentive Schemes	0.731	0.503	0.750

Source: Author's construction.

Cronbach's Alpha is recommended to be ≥ 0.70 as the acceptable threshold value of the model fit (Hair *et al.*, 2014; Nunally & Bernstein, 1994). The postulated causal model shows values from 0.707 (*supply*) up to 0.790 (*FDI motive*). So, all variables can be taken into consideration.

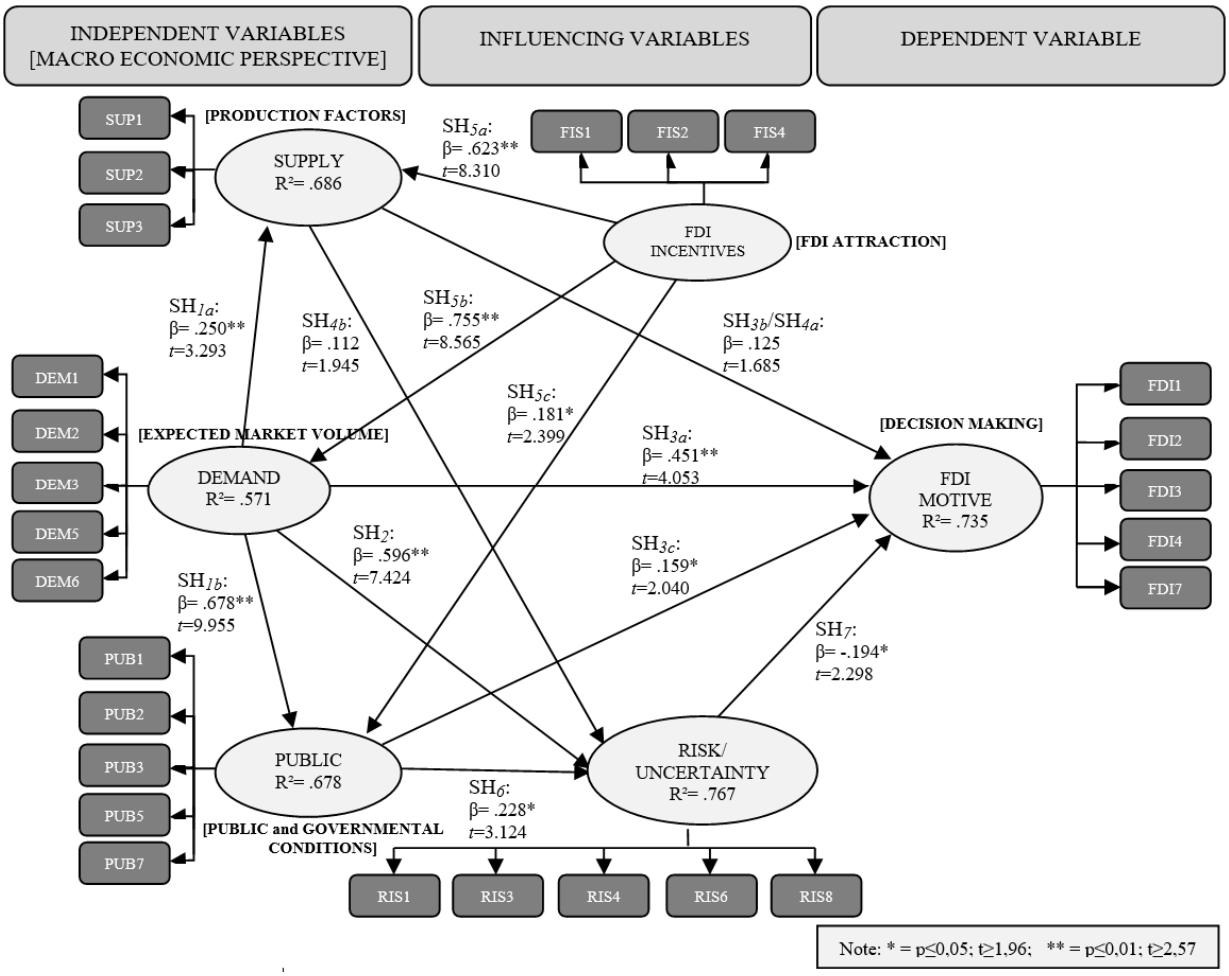
To proof the convergent validity the AVE value has been taken into consideration. This value is more than the correlation squared of the other constructs (Fornell & Larcker, 1981). The convergent validity is measured by the AVE value and shall exceed 0.50 (Hair *et al.*, 2014). The highest measured AVE value is 0.592 (*public*) and the lowest value is 0.486 (*supply*). The variable *supply* is slightly below (0.486) the required 0.50. But due to a good value at Cronbach's Alpha and Composite Reliability and the almost reached target of the AVE value, it has been taken as valid for the construct. Furthermore, Hair *et al.* (2014) describe these targets as rules of thumb for reflective measurement models and not as hard minimum targets. Therefore the author has decided to keep this variable with the adjusted indicators in the model.

Composite Reliability: This value represents the internal consistency reliability of the model. In exploratory research, it should be 0.60 to 0.70 to be considered as acceptable. The highest value in the model is 0.856 for the dependent variable. The lowest value is 0.710 for the independent variable *supply*. So, all AVE values are above the recommended limits to have a good base of the model fit for further investigations.

The hypotheses are shown in the model accordingly and are numbered according to the hypothesis numbers. The direction of the arrows shows the path of how the hypotheses are designed and defined in the way of explorative analysis. The β-value at each of the arrows shows the loading to the illustrated variable. The value of each indicator has been assessed specifically. Indicators with a β–loading of <0.400 have been deleted from the final model for improving the quality of each variable and according to the recommendations of Hair *et al.* (2014). This model is the result of the extensive research work and developed by the author of this thesis.

The aim was to determine the power of the impact of potential macroeconomic factors on *FDI motives* and decision-making process. It should diminish the lack of results in terms of the potential macroeconomic impact on such ventures. The model is extended by potential intervening factors that may attract or distract managers for FDI decisions from a macroeconomic perspective. The model is constructed for the B2B business activities only and the participants are entrepreneurs or employees exclusively from the German and Austrian automotive industry. Applying this model to other industries, countries, specific companies, etc. may need to adapt it to their specific environments and needs.

Figure 3 shows the final construct of the postulated causal model. This model represents the essence of this promotional work. The main three macroeconomic factors have been brought into relation to *FDI motives/decisions*. To complement this construct with potential intervening variables, the *risk and uncertainty* factor has been included to prove the impact of this dimension in such ventures. In addition to this, *FDI incentive* schemes have also been included in the model, as they have the potential to attract FDI inflows. The findings in the fourth chapter are, that the assessment of the newly developed model showed the constructs strong and resilient, even though there are intervening variables included which influence investment decisions (Moran *et al.*, 2018; Dutta & Roy, 2009). Andreff and Andreff (2017) said that the main motive for investors after market-seeking is strategic-asset-seeking, efficiency-seeking, or resource-seeking. This is similar to the results of the causal model's results. The focus on macroeconomic levels related to *FDI incentive* schemes and *risk/uncertainties* in terms of FDI motives/decisions brought more evidence in this case. The impact of this level on planned investments is significant and often is not considered in this certain context. It allows us to gain results for impact factors from the macroeconomic perspective on *FDI motives* (Liebscher *et al.* 2007). The in-depth analysis of existing literature and already existing research results has been executed for a holistic picture of this specific task.



Source: Author's construction.

Figure 3: Final postulated causal model including statistical values

Analysis of the hypotheses

The base-hypothesis [H_0] needed to be rejected because of the highly significant impact of the three macroeconomic determinants: *demand, supply,* and *public and governmental conditions* (Griffin & Pustay, 2007). Seven sub-hypotheses [SH_1-SH_7] have been derived from the null-hypothesis to get a more detailed view of each variable and its impact within the postulated causal model. The sub-hypotheses The three sub-hypothesis SH_1, SH_2, and SH_3 measured the impact factor from *demand* on *supply* and *public* and *governmental* factors [SH_1], *demand on risk/uncertainty* [SH_2] and proofed if *demand* has a stronger impact on *FDI motives* than on *supply* and *public* and *governmental* factor [SH_3]. All three sub-hypotheses could be accepted. The fourth sub-hypothesis [SH_4] verified the impact of *supply* on *FDI motives* and risk/uncertainty. Supply has more influence on *FDI motives* than on *risk/uncertainty*. This sub-hypothesis needed to be

rejected because *risk/uncertainties* are more impacted by supply than *FDI motives*. Sub-hypotheses SH_5 predicted a significant positive impact of *FDI incentive* schemes on macroeconomic determinants. The high factor loadings and significance values showed a significant and positive relationship. The sub-hypothesis SH_5 could be accepted. SH_6 predicted a reversely positive relationship of public and governmental conditions with *risk/uncertainty*. The last sub-hypothesis SH_7 predicted a significant negative impact of *risk/uncertainty* on *FDI motives*. This prediction also could be accepted due to the values gained by the survey. It can be concluded, that the null-hypothesis needed to be rejected due to a significant impact of macroeconomic factors on *FDI motives*. Only one [SH_4] out of seven sub-hypotheses needed to be rejected.

Interpretation of Research Results

The postulated causal model shows strong relationships between the macroeconomic factors and the *FDI motive*. The minimum level for the path loading β is set to ≥0.100. All three factors surpass this limit (Demand: β = .596; Supply: β = .125; Public: β = .159). Both *demand* and *public* have significant values on *FDI motive*. Only the *supply* factor didn't reach the minimum significant limit of $p \leq 0.05$.

Demand is positively related to *supply* and *public* factors as well. It can be interpreted, that if *demand* exists, also other macroeconomic factors are positively affected. The *FDI motive* is well explained (R^2= .735) which proves the model's quality and stability. The model shows that macroeconomic factors have a significant and positive influence on *FDI motives*.

The model shows a significant difference between the factors. The *demand* factor hereby is the strongest one in terms of impact on the *FDI motives* (β = .451; p=0.000; *t*=4.053). This factor is followed by *public* factors but much weaker (β = .159; p=0.042, *t*=2.040). And the weakest factor on *FDI motives* is *supply* (β = .596; p=0.093; *t*=1.685). This factor has a weak significant level and a weak path loading. It can be concluded that if a host country wants to attract FDI, the macroeconomic performance of such a country is of high importance for investors.

FDI incentive schemes seem to have the potential to positively impact macroeconomic factors in relation to FDI behavior. A closer look on the path coefficients and significant levels shows the following results: *FDI incentive* → *demand*: β = .755; p=0.000; t=8.565; *FDI incentive* → *supply*: β = .623; p=0.000; t=8.310; *FDI incentive* → *public*: β = .181; p=0.017; t=2.399. The analysis shows that the effort a country, government, or public department puts into foreign-friendly environments is accepted and granted by investors to reduce risks and uncertainties as well as being better able to start the business.

Conclusions and Implications

Scientists in the field of management sciences to this time have done some strong and broad investigations in the field of decision making and influence factors. But in fact, there are still gaps for specific applications such as diversified macroeconomic perspectives and special branch requirements. FDI motives can be of various forms and are often based on mid- and long-term corporate strategies. The willingness to expand in this context is mainly the core objective, but impact factors from the macroeconomic perspective are often not considered in the early stages of the decision process. The results of the model constructs demonstrate that the positive impact power of FDI incentive schemes on FDI motives/decisions from a macroeconomic perspective has a significant potential to influence FDI decision-makers. Therefore, it can be concluded that the countries intended to attract FDI inflows have a strong instrument to steer them.

The dependent variable FDI motive/decision-making is highly explained by the macroeconomic independent variables including the intervening variable of risk/ uncertainty with a value of 73.5%. That means that only 26.5% is explained by other variables that have not been included in the model. So, macroeconomic factors have a strong influence on the FDI motive and if they vary, the FDI decision also will be influenced in both ways, negatively and positively. The main importance is that the demand factor has a strong positive impact on FDI (β= .451). Conclusively summarized, if the expected market volume is stable and in good condition, the FDI willingness of the investors shall grow.

Decision-makers for FDI should be aware of the positive impact of FDI incentives from the target countries. FDI incentive schemes and public funding are targeted on certain regions, technologies, or industries and are limited for a certain period. FDI incentives can increase the potential of success and help to start-up a business. It is suggested to also have an in-depth understanding of potential uncertainties and risks of the target country. Corruption and political instabilities or other economic country conditions may have a significant and negative impact on business activities.

Managers should be clear of their motives or intention for investment. Indicators in this research work show the importance of internal growth strategy, too small home market, existing competition, shifting production to better conditions, etc. All these company internal drivers are affected by macroeconomic factors. It is suggested, that also macroeconomic development of potential target countries should be observed and analyzed in an appropriate period to get a better overview of the development of a country itself and of the specific industry which is targeted. This should be done regularly before taking such long-term decisions.

External and local consultants should be used as a first-hand information source. They cannot replace internal company know-how, but they should gain an external and independent view on the environmental influences of the target country.

Extension of this research work

To bring more depth and insight into this complex environment of macroeconomic factors and their potential impact on FDI decision, researchers are asked to do research projects in the opposite direction of the FDI – the so-called receiving party (target country) of the FDI perspective. Representatives from public and governmental institutions should be taken as target groups. This additional view on the complex procedure of decision making in the context of FDIs could provide a much better insight into potential positive as well as negative influence factors on FDI decisions.

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