

SENMICRO GMBH EXPANDING BEYOND EUROPE –
COUNTRY ANALYSIS FOR A POTENTIAL MARKET ENTRY IN ASIA

Daniel Kromoser

Project submitted as partial requirement for the conferral of

Master in International Management

Supervisor:

Prof. Jorge Bertinetti Lengler, PhD, ISCTE Business School,
Departamento de Marketing, Operações e Gestão Geral

February 2013

ABSTRACT

This work describes the development of the internationalization strategy of the Austrian sensors developer Senmicro GmbH. This company, which was founded in 2008, develops, produces and markets sensors to measure moisture during the production of paper in a very innovative way. In order to continue with their successful expansion, Senmicro's management is seeking for new markets in Asia. This project has the objective to find the most promising country for the Austrian company, give the management detailed information about the selected country and assist to develop an entry strategy. Therefore, it first depicts a comparison between the pre-selected Asian countries China, Indonesia, Japan, South Korea, Taiwan and Vietnam, based on various indicators available from official institutions. These economic, political, legal and market indicators allowed an objective comparison of the attractiveness of the six countries. From this comparison, China was selected as target market. Secondly, this thesis gives a detailed picture of China based on the PESTEL model. Political, economic, social, technological, environmental and legal factors of China were analyzed taking into account the needs of Senmicro's management, in order to develop a strategy for the market entry. In the last part the different potential entry modes in China are explained and analyzed, again in respect to the needs of Senmicro. Furthermore it gives an idea about the next steps the company should make.

JEL Classification: F23 – Multinational Firms; International Business

M16 – International Business Administration

Keywords: China, Austria, International Marketing Research, Country Analysis,

ABSTRACT (PORTUGUESE)

O seguinte estudo descreve o desenvolvimento da estratégia de internacionalização da empresa Austriaca, Senmicro GmbH, que na sua actividade desenvolve sensores para diversos equipamentos. Fundada em 2008, esta empresa desenvolve, produz e comercializa sensores cuja função é medir a humidade durante o processo de produção de papel de uma forma inovadora. A fim de prosseguir a sua bem-sucedida expansão, a Senmicro procura agora novos mercados, com destaque para a Ásia. Este projeto tem como objetivo encontrar o país mais promissor, juntamente com a partilha de informação detalhada do mesmo, promovendo uma estratégia de entrada. Em primeiro lugar está uma comparação entre os países asiáticos pré-selecionados: China, Indonésia, Japão, Coreia do Sul, Taiwan e Vietnam. Com base em vários indicadores disponíveis por instituições oficiais, os indicadores económicos, políticos, legais e de mercado permitiram uma comparação objectiva da atratividade dos seis países. A partir dessa comparação, a China foi escolhida como mercado-alvo. Em segundo lugar, este estudo dá uma imagem detalhada do País com base no modelo PESTEL. Factores políticos, económicos, sociais, tecnológicos, ambientais e legais da China foram analisados tendo em conta as necessidades específicas da Senmicro, a fim de desenvolver uma estratégia de entrada no mercado. Finalmente de modo a complementar o estudo, foram revistos os diferentes modos de entrada no mercado Chinês. Onde são explicados e analisados, de novo no que diz respeito às necessidades de Senmicro. Adicionalmente, é dada uma ideia sobre os próximos passos a tomar pela empresa.

JEL Classification: F23 – Empresa Multinacionais; Gestão Internacional

M16 – International Business Administration

Palavras Chave: China, Áustria, Marketing Internacional, Análise de mercado

INDEX

ABSTRACT	2
ABSTRACT (PORTUGUESE)	3
INDEX	4
EXECUTIVE SUMMARY	9
1. INTRODUCTION.....	11
2. LITERATURE BACKGROUND	13
2.1. GLOBALIZATION.....	13
2.2. MOTIVATION TO INTERNATIONALIZE.....	14
2.3. IMPORTANCE OF INTERNATIONAL MARKETING RESEARCH.....	17
2.4. INTERNATIONAL MARKETING STRATEGY	19
3. THE COMPANY AND ITS ENVIRONMENT	25
3.1. THE COMPANY: SENMICRO GMBH.....	25
3.2. THE PRODUCT: COMPACT MOISTURE DETECT.....	25
3.3. BUSINESS ENVIRONMENT AND COMPETITION	26
3.4. THE GLOBAL PAPER PRODUCTS MARKET	28
3.5. IMPORTANCE OF THIS PROJECT FOR SENMICRO.....	31
4. RESEARCH METHODOLOGY	32
4.1. SELECTING A COUNTRY	33
4.1.1. ECONOMIC INDICATORS	34
4.1.2. POLITICAL INDICATORS	37
4.1.3. LEGAL INDICATORS.....	37
4.1.4. PAPER PRODUCT MARKET INDICATORS.....	38
4.1.5. THE PROCESS OF DATA ASSESSMENT	39
4.2. COUNTRY RESEARCH AND IN DEPTH INTERVIEWS.....	40
4.3. STRATEGY DEVELOPMENT.....	41
4.4. MEETINGS WITH SENMICRO	41
5. COUNTRY SELECTION.....	42
5.1. COLLECTING AND RANKING DATA.....	42
5.2. WEIGHTING THE INDICATORS	43

5.3.	RESULT AND DISCUSSION	45
6.	COUNTRY ANALYSIS - CHINA.....	48
6.1.	OVERVIEW	48
6.1.1.	BRIEF HISTORY OF CHINA	48
6.1.2.	FACTS AND FIGURES	50
6.2.	POLITICAL FACTORS.....	51
6.2.1.	GOVERNMENT AND POLITICAL SITUATION	51
6.2.2.	POLITICAL INDICATORS	52
6.2.3.	REGULATION AND DEREGULATION	53
6.2.4.	CONCLUSION	55
6.3.	ECONOMIC FACTORS	55
6.3.1.	OVERVIEW ON CHINA'S ECONOMY	55
6.3.2.	DOMESTIC COMPETITION FOR SENMICRO.....	57
6.3.3.	ECONOMIC INTEGRATION BETWEEN CHINA AND AUSTRIA.....	57
6.3.4.	PAPER PRODUCTS MARKET IN CHINA.....	58
6.3.5.	CONCLUSION	61
6.4.	SOCIAL FACTORS.....	61
6.4.1.	HOFSTEDE'S CULTURAL DIMENSIONS	61
6.4.2.	THE IMPORTANCE OF 'GUANXI' IN CHINESE BUSINESS.....	65
6.4.3.	CULTURAL EFFECTS ON NEGOTIATING IN CHINA.....	66
6.4.4.	BUSINESS DINNERS.....	68
6.4.5.	CONCLUSION	68
6.5.	TECHNOLOGICAL FACTORS	69
6.5.1.	PATENTS AND INTELLECTUAL PROPERTY RIGHTS (IPR).....	69
6.5.2.	NORMS AND STANDARDIZATION	69
6.5.3.	CONCLUSION	71
6.6.	ENVIRONMENTAL FACTORS.....	71
6.6.1.	ENVIRONMENTAL PROTECTION	71
6.6.2.	ENERGY POLICY	72
6.6.3.	WOOD SUPPLY.....	73
6.6.4.	CONCLUSION	73

6.7.	LEGAL FACTORS	73
6.7.1.	LEGAL INDICATORS.....	74
6.7.2.	TAXATION IN CHINA	75
6.7.3.	CONCLUSION	76
6.8.	PESTEL SUMMARY	77
7.	RECOMMENDATIONS AND FURTHER STEPS.....	78
7.1.	POSSIBLE ENTRY MODES IN CHINA.....	78
7.1.1.	IMPORT AGENT	78
7.1.2.	REPRESENTATIVE OFFICE.....	79
7.1.3.	WHOLLY FOREIGN OWNED ENTERPRISES (WFOE)	79
7.1.4.	JOINT VENTURE (JV).....	80
7.1.5.	FOREIGN-INVESTED COMMERCIAL ENTERPRISE (FICE)	80
7.1.6.	SELECTING THE ENTRY MODE	80
7.2.	THE MARKETING STRATEGY.....	82
7.3.	THE NEXT STEPS	84
8.	CONCLUSION	85
9.	REFERENCES / BIBLIOGRAPHY	87
10.	ANNEX.....	92

LIST OF TABLES

Table 1: Dimensions why companies internationalize (with examples).....	16
Table 2: Set of countries for research.....	32
Table 3: Economic, political, legal and paper product market indicators for comparing attractiveness of countries	33
Table 4: The sub indexes and pillars of the ETI	36
Table 5: Examples for content of the PESTEL analysis	40
Table 6: Overview of indicator weighting	44
Table 7: Final score of the countries	45
Table 8: Detailed result for Japan and China	46
Table 9: Facts and figures on the People's Republic of China.....	51
Table 10: Political indicators for China and selected European countries.....	52
Table 11: Economic indicators for China and selected European countries.....	56
Table 12: Product groups which need CCC certification.....	70
Table 13: Legal Indicators for China and selected European countries.....	74
Table 14: Criteria for choosing an international distributor.....	81

LIST OF FIGURES

Figure 1: The International Marketing Context	18
Figure 2: The international marketing task, Ghauri and Cateora.....	19
Figure 3: The establishment chain model	20
Figure 4: A Model of International Entry and Expansion.....	21
Figure 5: Compact Moisture Detect	26
Figure 6: Porter's five forces	26
Figure 7: Global paper products market value: \$ million, 2007-11	29
Figure 8: Global paper products market geography segmentation: % share , by value, 2011 .	30
Figure 9: Global paper products market value forecast: \$ million, 2011-16	30
Figure 10: Graph of Indicator scorings	42
Figure 11: The overall indicator of product market regulation, 2008.....	54
Figure 12: Product market regulation in China, an international comparison, 2008	54
Figure 13: Annual GDP growth rate for China and the EU (2001-2011).....	56
Figure 14: Development of paper production (2001-2011).....	59
Figure 15: Annual growth rate of paper production (2001-2011).....	59
Figure 16: National Culture Dimensions Austria vs China.....	62

EXECUTIVE SUMMARY

This thesis deals with the Austrian sensors developer and producer, Senmicro GmbH and its approach to the Asian market. The small company, which was founded in 2008, develops and produces sensors especially for the moisture measurement in paper producing machines. Their innovative product is much smaller than any competing product available today and they have patented the underlying technology. Therefore the company has a monopoly position in a niche market and the need for Senmicro's Compact Moisture Detect (CMD) is justified by the possibility to assemble it in places of paper machines, where it wasn't possible so far. This gives paper producing companies additional information during production, to make it more efficient. After expanding throughout Europe since the beginning of 2011, the company's management is now seeking for new opportunities in countries further away. They have an idea, that the Asian countries China, Indonesia, Japan, South Korea, Taiwan and Vietnam could be promising, but they have not enough knowledge to decide which country would be most promising and with which strategy they should enter it. This is why this thesis is important for Senmicro's management.

In order to find the most promising country for Senmicro, the six countries are compared in 24 different indicators representing economic, political, legal and paper product market indicators. These indicators were collected from different institutions such as The World Economic Forum, World Bank, Transparency International, the Food and Agriculture Organization of the United Nations and others. According to the countries' performance they received scores for each indicator. These scores were then weighted, taking into account the preferences and needs of Senmicro's management. From this objective selection procedure, China arose as most promising country for Senmicro.

To provide more detailed information about China, a country analysis following the PESTEL model was carried out. Therefore, political, economic, social, technological, environmental and legal factors were analyzed with a focus on questions and information which is of vital importance for Senmicro's management. This analysis also gives an overview on the overall attractiveness of China, which is very positive. China shows outstanding performance in economic and market factors. For example is China's economy growing steadily, whereas the European economy is stagnating. The same is true for the paper products market. In 2008 China's paper production exceeded the production in all countries together, where Senmicro is currently doing business. In 2011, 100 million tons of paper were produced in China. And the market it is still growing fast, with an annual average of around 7 per cent during the last 4

years. On the other side China is still lagging behind in terms of regulation, legal security, environmental control and other political and legal factors. However, the positive factors in China are outweighing the negative ones.

In the last part of the thesis there are shared some thoughts on the different entry modes, their characteristics in China and how this influences Senmicro's approach. The outcome is, that due to the restricted resources and the need of avoiding high risk, utilizing an import agent in China would be the best entry strategy for Senmicro. When the business develops well, a joint venture with a company that has a good sales network in China and fits to Senmicro as a partner company, would be recommended.

1. INTRODUCTION

Globalization and International Trade sound like sophisticated business terms, but what they mean is occurring every day in our life. For example, when you go to the supermarket and you can choose from a wide range of products from all over the world. If it is the chocolate brand from the USA or Switzerland, or the exotic fruit from South America. Also the clothes we are wearing which are from China or Bangladesh, and high-tech gadgets, like notebooks and smart phones are examples of how globalization and international trade are influencing our daily life.

But, globalization of course has not only effects on our private life. Also our business environment is entirely effected. Even a small traditional coffee house in the center of Vienna, for example, feels the effects of globalization when the multinational enterprise (MNE) Starbucks opens a shop around the corner. However, this development doesn't need to be a threat for companies. The coffee house with the new and strong competitor for example can concentrate its resources on its core values (for example tradition and self made sweets). By doing so it can differentiate itself from the competition and maybe even internationalize its own business and sell traditional Austrian food to other countries and continents. Also small and medium enterprises (SME) like this can be successful abroad. This is of course a simple example, but it meets the core of the strategy of many Austrian companies. Many SMEs in Austria are operating in niche segments, where a lot of specific know-how is needed and they are performing well in these segments, even internationally.

This is also true for Senmicro GmbH, the company on which this project will focus on. The Austrian company, which was founded in 2008 and has 6 employees today, has gained expertise in sensors development and production especially for sensors in the paper producing industry. Their innovative product for measuring the moisture of paper during the production process is well received by many customers in Austria and throughout Europe. Their gadget, which is called Compact Moisture Detect (CMD), is an innovative sensors system which is smaller than competing products in the market and more robust, in order to sustain the rough environment in paper machines. Within the last 2 years Semicro was able to establish sales channels throughout Europe and the management is in negotiations to enter the next countries soon. As Senmicro is doing well in European markets, its management is now looking further and thinking of new markets. What they know from their experience in the paper products industry, they believe that the Asian market could be the best target for the company.

Especially the six countries China, Indonesia, Japan, South Korea, Taiwan and Vietnam could provide the best opportunities.

The objective of this project is now, to find out which of these countries would be the best to enter first and what would be the best strategy to enter it. For this reason the six countries will be analyzed, utilizing criteria which determine if it possible and/or profitable for Senmicro to enter them. One of the countries will be chosen for deeper research on the market, the country's culture and more, to give Senmicro a deep insight in the country they want to enter. The second purpose of this thesis is to tailor a strategy for Senmicro's management to enter the chosen country. Therefore, in the end a recommendation will be given, which consists of advice for the company how to enter this country.

2. LITERATURE BACKGROUND

Many books and articles have been published around globalization and the internationalization of businesses. For this thesis, some main ideas about the term “globalization” the motivation for companies to internationalize, the reason for international marketing research and international marketing strategies have been collected and compared.

2.1.GLOBALIZATION

The buzzword “globalization”, as it is often mentioned in media or politics has a broad meaning and can be interpreted in different varieties. According to Hodgetts, Luthans and Doh (2006: 7), for example, “globalization can be defined as the process of social, political, economic, cultural and technological integration among countries around the world. Evidence of globalization can be seen in increased levels of trade, capital flows, and migration. Globalization has been facilitated by technological advances in transnational communications, transport and travel. In recent years, globalization has accelerated, creating both opportunities and challenges to global business. (...) Proponents believe that the benefits of globalization are evident in lower prices, greater availability of goods, better jobs and access to technology. Critics of globalization point to the high number of jobs moving abroad, increasingly characterized by the offshoring of business service jobs to lower-wage countries.” This gives already a view on the overall meaning of globalization as it seems that it is not a sole economic phenomenon, but influences and is influenced by social-cultural, political and other factors. It also has positive and negative sides and therefore pro- and opponents.

Also Morrison (2011: 43) sees globalization as a process. But according to her it is “a mixture of processes by which products, people, companies, money and information are able to move quickly around the world as decision-makers desire, with few cross-border impediments in their way.” Therefore, Morrison has a more business-focused understanding of globalization.

There are also other understandings and definitions. For example from Menipaz and Menipaz (2011: 29) who say that “globalization may be defined as the increasing of worldwide integration of markets for goods, services and capital concurrent with the increased role of MNEs in the world economy and an increased intervention into domestic and regional policies and affairs by international institutions such as the IMF, the WTO, the World Bank, and the United Nations.” The authors seem to have their focus more on the involved institutions which are main drivers and regulators of globalization.

Shenkar and Luo (2008: 2) give a very short definition by seeing “globalization as the acceleration extension of interdependence of economic and business activities across national boundaries.” Simplified, the authors want to say that activities on one side of the world can influence developments on the other side and they see globalization also more as a process which is not limited to a pure economic approach.

From the above definitions it can already be seen that there is not only one right definition of globalization, but the authors more or less agree on a process which develops over time. The definitions mainly differ in their focus, namely if they are concentrating on a pure business and economic view or if they are also including other attributes such as political, social and cultural factors. From my point of view globalization cannot be seen solely economical. As it is mentioned in many books and articles, international business is always influenced by factors like culture, politics and others. That is why these issues shouldn't be neglected when talking about globalization.

2.2.MOTIVATION TO INTERNATIONALIZE

For understanding international business it is also important to understand what motivates companies to participate in the globalization process and internationalize their own business? Czinkota and Ronkainen (1993) for example think that motivations to internationalize can be divided into the categories proactive and reactive motivations. On the one hand, proactive motivations (Profit advantage, unique products, technological advantage, exclusive information, managerial urge, tax benefits and economies of scale) represent stimuli to attempt strategic change. On the other hand, reactive motivations (Competitive pressures, overproduction, declining domestic sales excess capacity, saturated domestic markets, proximity to customers and ports) influence firms that are responsive to environmental changes and adjust to them by changing their activities over time. Furthermore, Czinkota and Ronkainen (1993: 248) state that “the international marketing behavior of firms is related to managerial aspirations and the level of commitment that management is willing to give to the international marketing effort.”

Another explanation for the drivers for a company to expand internationally is given by Menipaz and Menipaz (2011: 27). They observed four major reasons for international operations which are expanding markets, improving economic gains, positioning themselves strategically to face future threats or to exploit future opportunities and fourth, addressing randomly discovered opportunities.

A different approach is given by Shenkar and Luo (2008: 12), according to whom there are three different motivations for conducting international business which include **market motives**, **economic motives** and **strategic motives**. When talking of market motives, the authors divide further into offensive and defensive motives. The difference is that the first one means the active urge of seizing market opportunities in foreign countries whereas the latter means the protective reaction to hold a company's market power in the face of competitive threat. Economic motives apply when the reason for internationalization is to increase profit whether by higher revenues or lower costs. The last motive they mention, the strategic, drives companies to internationalize in order to capitalize on resources or capabilities developed in the domestic country. Examples would be to be the first mover in the target market or gaining strategic benefits such as technological leadership, brand recognition, customer loyalty and competitive position. Phakat, Bhagat and Kashlak (2005: 20) also think that there are three motives driving companies to go abroad, which they call **market-seeking motives**, **cost-reduction motives** and **strategic motives**. What they mean by this is that companies go international, when their domestic market is saturated, to lower factor costs or because of strategic decisions, for example to enhance a competitive position or taking advantage of host countries' assets, knowledge and capabilities. This approach looks pretty similar to the one of Shenkar and Luo, but has not such a detailed approach. For example when comparing the economic motives (Shenkar and Luo) and the cost-reduction motives (Phakat, Bhagat and Kashlak), the first takes also into account higher sales, what the latter does not.

Ghuri and Cateora (2010: 266) also have a similar approach with three main objectives why a company enters a specific market. The first objective they mention, the **market seeking objective**, is pretty similar to the other authors. Their second objective, which is called **efficiency seeking** is already including some attributes of the economic and the strategic dimensions of the other authors, since Ghauri and Cateora for example say "efficiency seeking means that firms want to enter countries/markets where they can achieve efficiency in different ways, e.g. R&D and other infrastructural effects. Efficiencies can also be achieved due to the fact that a certain industry has gathered at a place, creating a beneficial infrastructure, such as Silicon Valley." The third objective they mention, the **resource seeking** is also somehow combining the economic and strategic viewpoint as according to the authors "firms try to enter into countries to get access to raw materials or other crucial inputs that can provide cost reduction and lower operation cost; for example, investment by most oil companies in the Middle East or textiles and garment companies in India and Pakistan."

Therefore it can be considered that Ghauri and Cateora have similar ideas about drivers for internationalization.

Furthermore, Ghauri and Cateora (2010: 269) also share some ideas of Czinkota and Ronkainen of proactive and reactive motivations, which were mentioned above. With the difference that Ghauri and Cateora talk about **proactive** and **reactive market selection**. This means if a company is choosing the markets to enter with or without systematic analysis. In the first case a marketer “proactively makes visits and does marketing research to assess the potential of a market.” In the second case “the company is not actively collecting information or analyzing any market to assess its potential. Companies following this approach, often wait for unsolicited order, or an initiative taken by importers from a potential market. Often these companies wait for other companies (their competitors) to enter the market first.” Although this approach looks very similar to the model of Czinkota and Ronkainen, there is a major difference. Whereas the model of proactive and reactive motivations is dealing with the question if to internationalize, this is no question anymore for Ghauri and Cateora. Their approach of proactive and reactive market selection is dealing with the question which foreign country a company enters and if it is chosen actively or not.

	Market-driven	Economy-driven	Strategy-driven
Active	New market opportunities in foreign countries	Higher prices can be charged in foreign market	Product is not available in foreign market (first mover)
Reactive	Domestic market is saturated	Labor costs in home market are increasing	Competitors already moved there

Table 1: Dimensions why companies internationalize (with examples)

To summarize the different approaches which drive companies to internationalize it can be said that the mentioned authors have very similar ideas. Even if they number them differently or put them in a different order, there can be observed two dimensions. The one dimension differentiates if the company actively is looking to go abroad, (e.g. because they are performing well in their domestic country and they look for opportunities abroad or their innovative product is not available in other markets), or if the company reacts to its environment and is forced to go abroad (e.g. domestic market is saturated or production costs are too high). The second dimension explains the plan to go abroad is market-driven, economic-driven (revenue or costs) or strategy-driven. The two dimensions are pictured with examples on Table 1.

2.3.IMPORTANCE OF INTERNATIONAL MARKETING RESEARCH

International marketing research is an important part of the international marketing process, which according to Cateora (1996: 6) can be defined as “the performance of business activities that direct the flow of a company’s goods and services to consumers or users in more than one nation for a profit. The only difference in the definitions of domestic marketing and international marketing is that the marketing activities take place in more than one country. This apparently minor difference accounts for the complexity and diversity found in international marketing operations.” Kumar (2009) also mentions that international marketing research is not totally different from domestic marketing research. According to him, the major differences are “that (a) international research involves national differences between countries arising out of political, social and cultural differences, and (b) the problem of comparability of research results arises due to these differences.”

In the process of internationalization occur many questions and tasks. “As organizations become more global in their operations” Young and Javalgi (2007: 113) for example ask, “how will these companies continue to be able to carry on a meaningful dialog with their customers as they become ever more dispersed around the globe? Which countries represent the best opportunities for the organization’s products and services? How will these firms design consumer-based strategies that are customized for distant international market segments? Market research is the functional link between marketing management and an organization’s ultimate customer-base.”

Whereas international marketing research is important, Davis and Young (2002: 31) found out that “many companies expand globally with little marketing research. But like products and marketing strategies, also marketing research methods have to be adapted. Already a minimal amount of study in the host countries can prevent business failures.” A lack of international marketing can cause serious problems for a business entity, Czinkota and Ronkainen (1993: 248) for example observed that “the managers of firms that are unsuccessful or inactive in the international marketplace usually exhibit a lack of determination or devotion to international marketing. Because international markets cannot be penetrated overnight – but rather require a vast amount of market development activity, market research, and sensitivity to foreign market factors – the issue of managerial commitment is a crucial one.”

Furthermore, Douglas and Craig (1983: 11) mention, “the diversity and complexity of the international environment, coupled with the lack of familiarity with a foreign country,

underscores the importance of undertaking research prior to making decisions. This is true whether with regard to initial market entry decisions, product positioning, or marketing mix decisions. Research is necessary to avoid the costly mistakes of inappropriate strategy and the possibility of lost opportunities, and to determine how far international operations can be coordinated across countries to take advantage of the potential synergies arising from marketing in a global environment.”

From the above it can be said, that international marketing research plays a vital role for the success of the internationalization process of a company. But which important factors should be taken into account when conducting international marketing research? Baack, Harris and Baack (2012: 193) for example state that in “the international context, differences in language, culture, economic systems, political and regulatory systems, technological development, and marketing infrastructures make data collection more complex.” (see Figure 1).

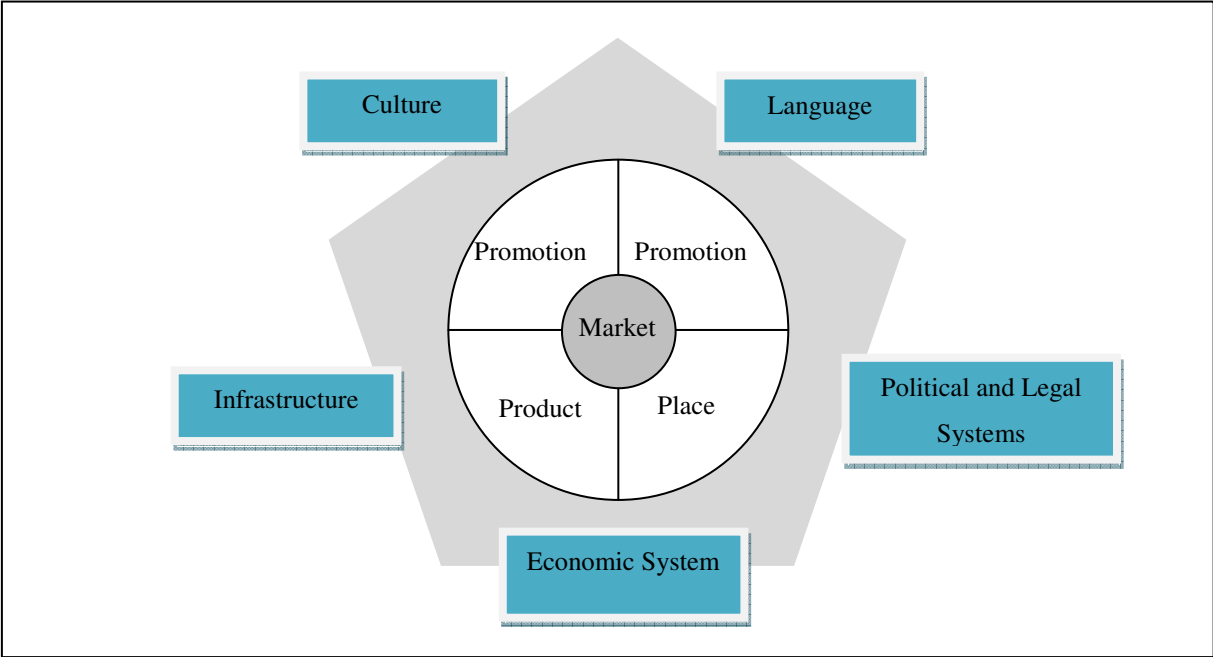


Figure 1: The International Marketing Context (Baack, Harris and Baack (2012))

Furthermore, they mention that objectivity plays a major role when developing research. It needs to be that personal feelings and emotions are avoided and that especially the self-reference criterion, which occurs when someone applies his or her own cultural values and background to the assessment of the behavior of others, can influence objectivity in a negative way.

Ghuri and Cateora (2010: 10) deliver a different approach on the question on what to focus when conducting international marketing. According to them, the “international marketer

must deal with at least two levels of uncontrollable uncertainty instead of one. Uncertainty is created by the uncontrollable elements of all business environments, but each foreign country in which a company operates adds its own unique set of uncontrollables” (See Figure 2).

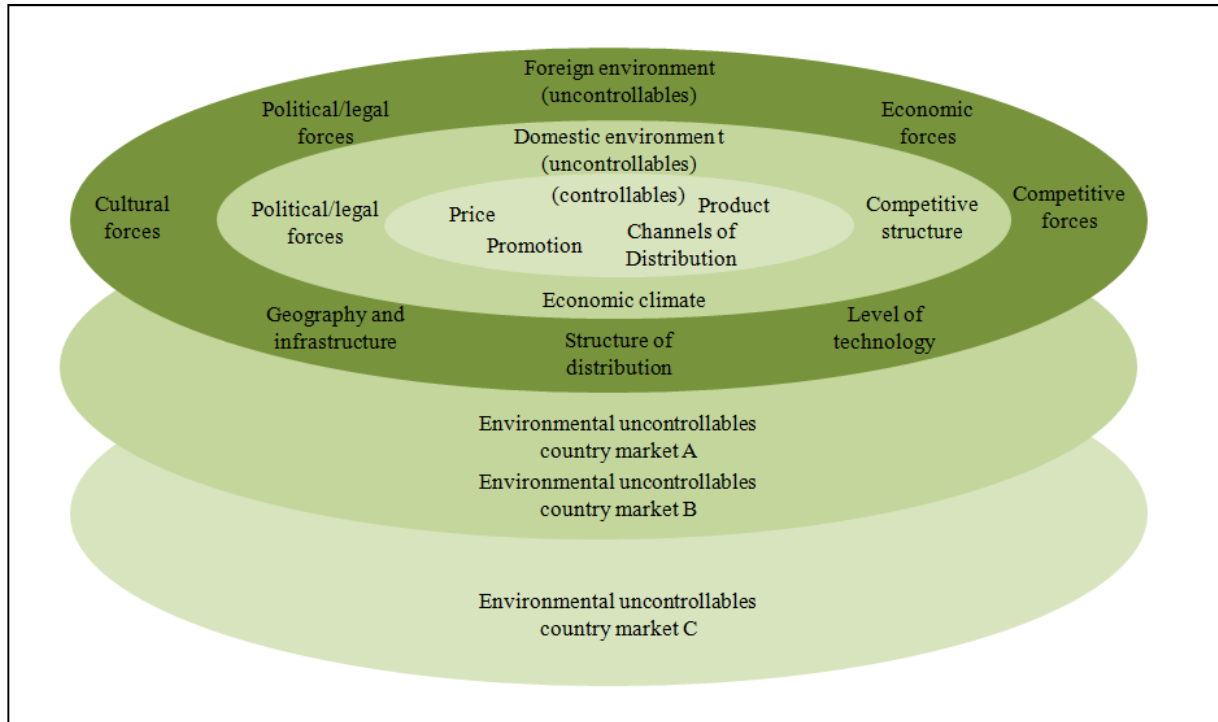


Figure 2: The international marketing task, Ghauri and Cateora (2010: 11)

Summarizing, it can be said that international marketing research is an important step in the international marketing process to which enough attention should be paid, because a deep understanding of the international target market is a cornerstone for the success of the internationalization process. As it is shown in the concepts of Baack, Harris and Baack (2012) or Ghauri and Cateora (2011) there are numerous important factors which need to be taken into account when conducting research.

2.4.INTERNATIONAL MARKETING STRATEGY

International marketing research is not alone decisive for the successful step abroad. After collecting the data it is vital to derive the right strategy for the internationalization process. In this part there will be shown some different approaches to the process of internationalization and the different entry modes, to show the complexity of establishing the right international marketing strategy.

One popular theoretical approach to the process of internationalization is the Uppsala approach, also called stage model or establishment chain model, which reflects to the work of Johanson and Vahlne (1977) and Johanson and Wiedersheim-Paul (1975) on four case studies of Swedish SMEs. As Lee and Carter (2012: 223) describe this model of the Nordic School in Sweden, it is a gradualist or incrementalist approach, since “internationalization is considered a learning process based upon a gradual accumulation of experimental knowledge in foreign markets, and it acknowledges the lack of complete information and the importance of risk or uncertainty in managerial decision-making.” Also Ghauri and Cateora (2010: 264) work with this model and mention that “the firm first grows in the domestic market and then expands into close-by foreign markets. The obstacles to internationalization include a lack of knowledge of foreign markets and resources. The psychic distance, that some markets are perceived far away and difficult due to different culture and environments, is considered another obstacle.” Both pairs of authors, Lee and Carter as well as Ghauri and Cateora, are explaining the stages of the model in five steps:

- No regular export
- Export via representatives (e.g. agent)
- Joint Ventures
- Sales Subsidiary
- Production / Manufacturing subsidiary

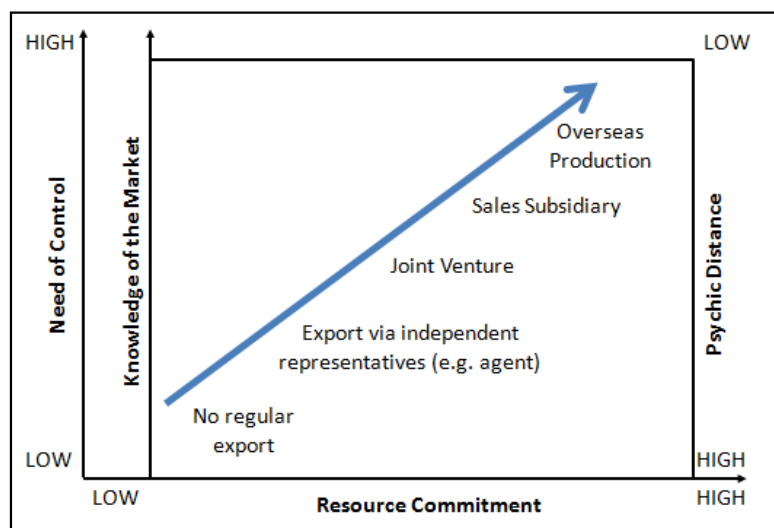


Figure 3: The establishment chain model (Ghauri and Cateora: 2010)

Summarized, it can be said that with a growing knowledge of foreign markets a company is considered of committing more resources with setting up own facilities through foreign direct investment.

Czinkota and Ronkainen (2007: 282) developed a similar approach in which they say that “even though some firms go international from the start, most of them do so gradually. New activities in an unfamiliar environment increase a firm’s risk. Therefore, companies must prepare their activities and adjust to the needs and opportunities of international markets in order to become long-term participants.” Their concept of the process of internationalization is shown in Figure 4.

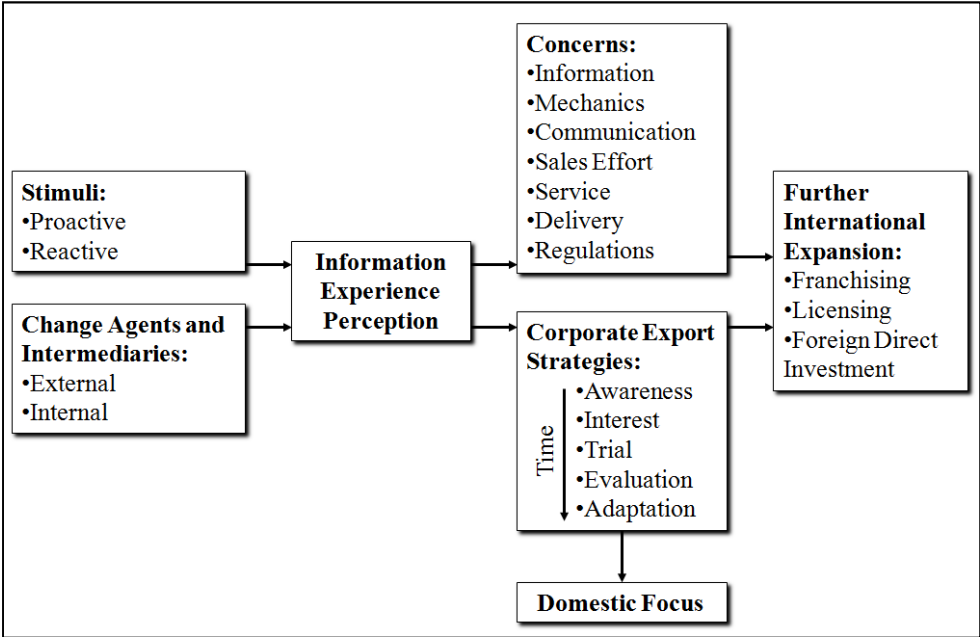


Figure 4: A Model of International Entry and Expansion (Czinkota and Ronkainen, 2007)

According to this theory there are proactive and reactive stimuli to internationalize (see also 2.2) and internal and external change agents (e.g. managers and customers) which also influence the process of internationalization. The process itself is gradual. After first only conducting domestic business, the company’s management may become aware of opportunities in foreign markets. After different phases of interest, trial and evaluation the company’s strategy will be adapted to the new international environment or it may withdraw from those activities. First, companies will interact in the new market without direct investment, through intermediaries and under certain circumstances will establish business with direct investment (Czinkota and Ronkainen, 2007).

Lee and Carter (2012: 229) also explain another interesting model, the industrial network approach. This model proposes that companies internationalize by utilizing their business network. It explains that a organization is engaged in a network consisting of partners, customers, suppliers, distributors etc. which begins within the domestic market. Through this network the company eventually develops business relationships to networks in other countries.

Additionally there is also the model of the born global, which does not follow the traditional pattern of incremental internationalization. A born global would have an approach of doing business internationally right from the beginning and derive a great portion of its revenues from international sales within a short period of its inception (i.e. within two years) (Lee and Carter: 2012).

When considering the different models of the country entering process, also the different entry modes play an important role. Ghauri and Cateora (2010: 275) are mentioning that “when a company makes the commitment to go international, it must choose an entry strategy. This decision should reflect an analysis of market potential, company capabilities, and the degree of marketing involvement and commitment management is prepared to make. A company’s approach to foreign marketing can require minimal investment and be limited to infrequent exporting with little thought given to market development. Or a company can make large investments of capital and management effort to capture and maintain a permanent, specific share of world markets. Both approaches can be profitable.” Baack, Harris and Baack (2012: 57) mention that with the decision of the entry mode the company has to balance the different levels of control, cost and risk.

There is a variety of different modes of entry with advantages and disadvantages linked to a company’s strengths and weaknesses and its general strategy.

EXPORTING

By using this entry mode, a company still operates from its domestic country and delivers directly to its customer in the foreign market or uses a sales representative. This strategy is very easy to implement and also linked to a low investment risk. It can be installed without any further restructuring of the company (Ghauri and Cateora: 2010, Baack, Harris and Baack: 2012)

PIGGYBACKING

When applying this kind of strategy, a company uses the distribution facilities of another company to export its product to a foreign country. For the exporting company (carrier) this can have the advantage to broaden the product lines, to share the transport costs or to make profit with another company's (supplier) products. For a small company as supplier this can also be a chance to bring its product to foreign countries more easily.

LICENSING

Ghuri and Cateora (2010: 276) mention about licensing that “patent rights, trademark rights and the right to use technological processes are granted in foreign licensing. It is a favorite strategy for small and medium-sized companies although by no means limited to such companies. Not many confine their foreign operations to licensing alone; it is generally viewed as a supplement to exporting or manufacturing, rather than the only means of entry into foreign markets. The advantages of licensing are most apparent when capital is scarce, when import restrictions forbid other means of entry, when a country is sensitive to foreign ownership, or when it is necessary to protect patents and trademarks against cancellation for non-use. Although this may be the least profitable way of entering a market, the risks and headaches are less than for direct investments.; it is a legitimate means of capitalizing on intellectual property in a foreign market.”

FRANCHISING

By utilizing a franchising strategy, companies can increase the level of control over operations in another country, compared with exporting or licensing. According to Baack, Harris and Baack (2012: 59) “a contract describes the business model in franchising relationship. In return for an upfront fee, signees obtain access to the company's colors, images and products, which offers greater control over the marketing process by the parent company. The risk to the parent company lies in a poor franchisee. The signee to the contract could ignore it or make decisions that hurt the company. The parent company would encounter the costs associated with inspecting and maintaining franchise locations at acceptable levels. Those that do not meet standards are warned, and if the units are not of sufficient quality, the relationship will be terminated.”

JOINT VENTURES

A joint venture (JV) is the cooperation of the company which wants to enter a country with a domestic partner. This cooperation involves the founding of a new legal entity, the joint venture, which is partially owned by the partners (can be two or more partners). The categories of joint ventures are often differentiated by the split of ownership (49/51 per cent, 50/50 per cent, etc.). This is also often regulated by the law in the target country (e.g. a foreign company is not allowed to own more than 49% of a company in a country). The advantages of this mode of entering a country are for example to make use of the partner's knowledge about the market and regulations, to diminish cultural and legal obstacles, etc. However, this type of strategy requires a high level of commitment to the foreign operation (Baack, Harris and Baack: 2012, Ghauri and Cateora: 2010).

STRATEGIC ALLIANCES

According to Baack, Harris and Baack (2012: 60) "a strategic alliance represents a formal agreement between companies to work together to achieve a common goal." Typically this kind of cooperation evolves from other modes of entry. "A joint venture arrangement may grow into a more trusting, goal-sharing partnership. Wholly owned subsidiaries, over time, may establish strategic alliances with members of the distribution channel. (...) With less financial commitment than either a wholly owned subsidiary or a joint venture, and with fewer formal legal ties between companies than a joint venture, strategic alliances contain less risk. The entry mode contains less control by the parent company. This increases exposure to a potential partner leaving or stealing technology."

WHOLLY OWNED SUBSIDIARY

With a wholly owned subsidiary a company commits itself to a 100% ownership stake in a business in a foreign country. This also implies a high level of cost and risk in the foreign market. Wholly owned subsidiaries can further be divided into acquisitions of existing companies in the country or greenfield investments, in case of which the company builds the subsidiary from the ground up. A wholly owned subsidiary may be established to profit on low-cost labour in the target country or to avoid high import taxes or quota, reduce high transport costs or to gain access to raw materials (Baack, Harris and Baack: 2012, Ghauri and Cateora: 2010).

3. THE COMPANY AND ITS ENVIRONMENT

3.1.THE COMPANY: SENMICRO GMBH

Senmicro GmbH was founded in 2008, is situated in Amstetten, Austria and develops, produces and markets innovative measuring procedures and sensor systems, primarily for the paper, cardboard and pulp industry. While writing this work it had six employees and reported a revenue of around one million EURO per year. According to the European Commission Senmicro therefore can be seen as a Micro enterprise (European Commission, 2003). Although Senmicro is a young and small company it develops its internationalization strategy since the beginning of 2011. So far the company has business activities in Austria, Switzerland, Slovenia, Hungary, Slovakia, Czech Republic, Germany, Netherlands, Belgium, Poland, Finland, Italy, Spain, France and Turkey. During the time of writing it was planned to enter Sweden, Norway, Russia and Ukraine. For entering and doing business in these countries Senmicro is utilizing sales representatives. This strategy should, if possible, also be applied in future businesses.

After covering these countries Senmicro is planning to look for new markets overseas. As the company has limited resources for its expansion strategy it needs to be well prepared to enter new markets. This is why this dissertation can provide essential value for Senmicro. On exploring the possibilities in the new markets utilizing international marketing research, the resources of Senmicro can be allocated in the best way.

3.2.THE PRODUCT: COMPACT MOISTURE DETECT

The focus of this dissertation is on the COMPACT MOISTURE DETECT (CMD) which is an innovative sensors system developed, produced and marketed by Senmicro. The CMD is detecting and measuring moisture during the process of producing paper, cardboard or pulp. This information is important for paper producers to adjust the machines during the production process and therefore optimize it. This device is based on a state of the art technology and is significantly smaller and more robust than similar products of competitors. Therefore, the CMD can be assembled at places within paper machines where measurements have not been possible before. The in this way additionally gathered information is interesting for the users to produce paper more efficiently and at higher quality. This device can be seen as additional module which can be easily integrated into existing paper production systems.



Figure 5: Compact Moisture Detect

Value Chain:

Developing, production, marketing and implementation at the customer’s site are all key activities within Senmicro. Only the production of the metal case of the device is outsourced.

3.3.BUSINESS ENVIRONMENT AND COMPETITION

The business in which Senmicro is operating can be described as sensors development and production industry. The business field can be narrowed further as the company is dealing with a niche segment in sensors development, as they are specialized in sensors for the paper and pulp industry. The environment in which Senmicro is doing business is further explained by utilizing Porter’s five forces which are depicted in Figure 6 (Porter, 2008).

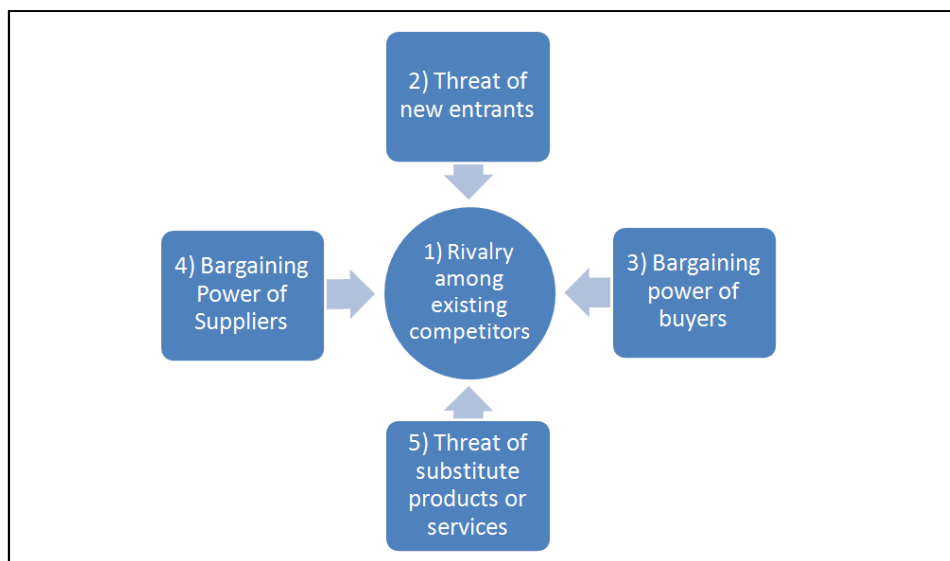


Figure 6: Porter's five forces (Porter, 2008)

RIVALRY AMONG EXISTING COMPETITORS

As the sensors development industry, especially for the paper producing industry, is a small niche market, there are no industry overviews available. Nevertheless, there are some important players in the market of sensors development for the paper industry like Honeywell and the Process Sensors Corporation, both situated in the United States of America, which can be provided as examples for the industry environment. Both are well established companies in the market. Honeywell, for example, was already founded in 1885, employs approximately 132,000 people worldwide and is a Fortune 100 company (Honeywell, 2012). Process Sensors Corporation was founded in 1996 and claims itself being the world leader in advanced NIR (near infrared) process moisture measurement (Process Sensors Corporation, 2012). Compared to these companies, Senmicro which was founded in 2008 and has 6 employees, looks very small. However, the Austrian company has come up with an innovation by building a much smaller device which can also run in places of paper machines where the gadgets of the competition do not work. Of course, there is a threat of these companies coming up with a solution similar to that one of Senmicro, but the workings of the CMD are patented and therefore providing a similar product is not easy for the established companies too. To summarize, even though there are some big players in the business, Senmicro has a good strategic position in the business environment and does not need to fear competition.

THREAT OF NEW ENTRANTS

As Senmicro itself is still a small company for which it was possible to enter the international playground of sensors developers for the paper and pulp producing industry within only a few years, it seems that entry barriers for new competitors are low. However, for Senmicro it was possible to establish a barrier by taking out a patent on the CMD, what makes it harder for new entrants to come up with a similar solution. But the patent could somehow also be avoided by new players by inventing around the existing solution. Therefore it can be said, that the threat of new entrants is moderate.

BARGAINING POWER OF SUPPLIERS

The bargaining power of suppliers can be neglected from Senmicro's point of view, as the entire device is designed, developed and produced by the employees themselves, using standard electronic parts. The only outsourced part is the metal case of the CMD for which they have a local partner.

BARGAINING POWER OF BUYERS

There are two different kinds of buyers for the CMD which have to be seen differently.

First, the paper, pulp and cardboard producing companies, which buy the device to enhance the quality of their product and lower production costs. As, so far, none of the competitors is able to provide a similar product, Senmicro has a monopoly position in this niche market. Therefore the buyers have not many possibilities to choose between suppliers and therefore do not have high bargaining power.

Secondly, there are the producers of machinery for the paper production. Two of these players are for example the German Voith and the Scandinavian Metso. Those companies on the one side are developing their own sensors which they integrate in their machines, and on the other hand they are also purchasing from sensors developers. They, for example, could invest in developing a similar product themselves or decide for purchasing from Senmicro. Therefore, they have some purchasing power, but of course it is also difficult for them to develop a similar device without harming the patent of Senmicro.

THREAT OF SUBSTITUTE OF PRODUCT OR SERVICE

The threat of substituting the infrared sensors by any other product is low. The higher threat for Senmicro is the possibility of potential customers of doing nothing instead of purchasing and implementing the CMD. This is, because in the end the companies will still produce paper, pulp and cardboard also without this device. For some companies the quality increase or the lowering of the production costs is maybe not justifying the necessary investment.

To sum up the Porter's five forces for the sensors development industry, in which Senmicro is operating, despite the fact that it is a very young company in an industry with established players, Senmicro has a good position for further development in the future especially as it has developed an innovation which was not available so far and cannot be copied easily as it is protected by a patent.

3.4.THE GLOBAL PAPER PRODUCTS MARKET

As Senmicro is one element of the supply chain of the paper products industry it makes sense to have a closer look on the development of this segment, as the development of the paper products market is also influencing the development of Senmicro.

DEFINITION OF THE PAPER PRODUCT MARKET

“The paper products market includes newsprint, non-newsprint printing and writing paper and other paper. Newspaper is uncoated paper (...) used primarily for printing newspapers. Non-newsprint printing and writing paper includes paper for books, and magazines, typewriters and home/office printers, posters and related uses. The other paper and paperboard segment covers all other categories, such as sanitary and household (e.g. paper towels, toilet tissue) wrapping and packaging paper and paperboard, and construction (e.g. paper for sealing, underlay, etc.). Products such as wood pulp are excluded” (Marketline, 2012: 7).

The CMD of Senmicro can be used in the production of every of these segments and improve their production efficiency.

ANALYSIS OF THE PAPER PRODUCT MARKET

The last years and the forecasts for the next years in the paper products industry show a picture of both situations, decline and growth. In the years between 2007 and 2011 the global paper products markets showed a compound annual growth rate (CAGR) of 3,7% and reached a volume of \$384,9 billion in 2011. Comparing two important regions, the European market reached a value of \$92,7 billion by experiencing a compound annual growth rate of change (CARC) of -1,7% while the Asia-Pacific region showed a CAGR of 9,8% and reaching a volume of \$175,4 billion. In 2011, the Asian-Pacific market accounted for 45,6% and Europe for 24,1% of the global market. (Marketline 2012)

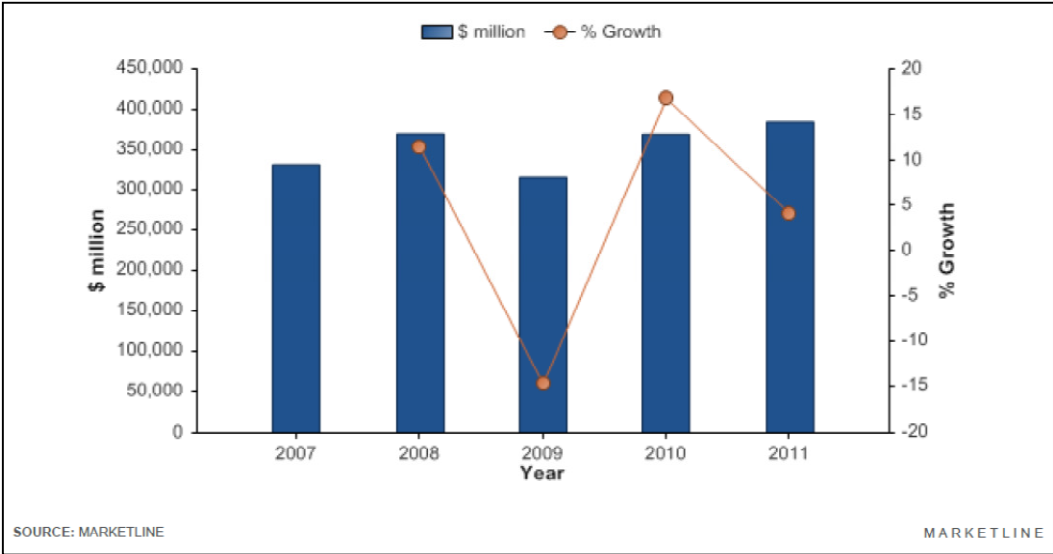


Figure 7: Global paper products market value: \$ million, 2007-11 (Marketline 2012)

The detailed growth figures are shown in Figure 7, the geographic segmentation is pictured in Figure 8.

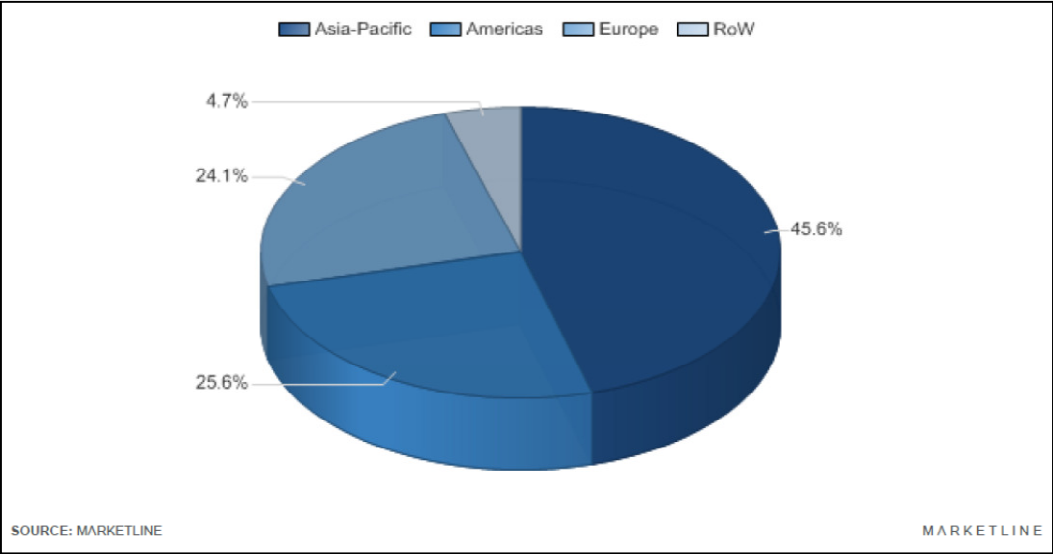


Figure 8: Global paper products market geography segmentation: % share , by value, 2011 (Marketline 2012)

For the future growth is expected in the industry. For the period of 2011-2016 a CAGR of 7,3% and a market value of \$547,2 billion by the end of 2016 are expected. Comparing the two regions Europe and Asia-Pacific again, Europe’s market is expected to grow again and reach a CAGR of 3,1% while the growth in Asia-Pacific is even expected to increase to a CAGR of 10,7%. Therefore they are forecasted to reach respective values of \$108,1 billion and \$291,3 billion in 2016.

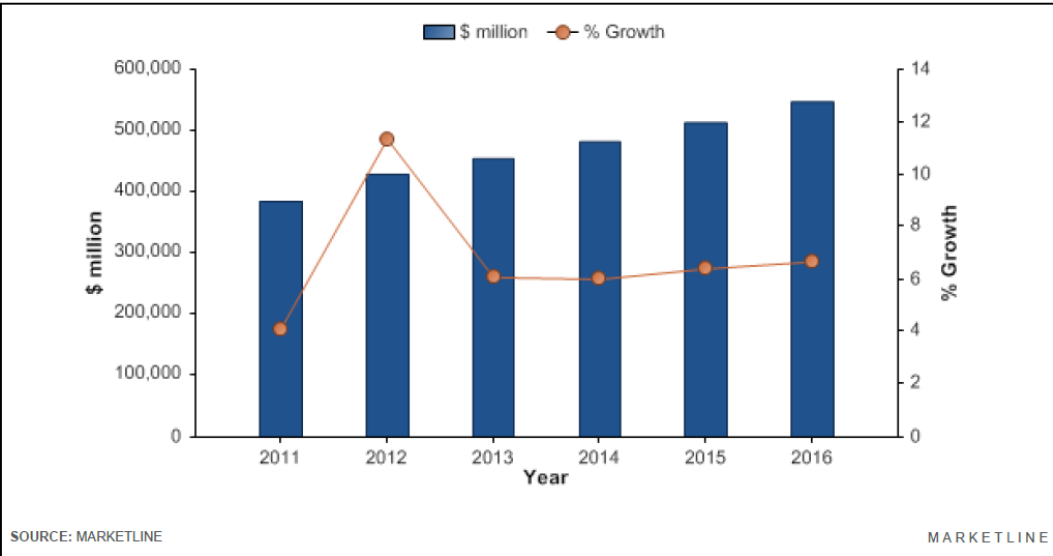


Figure 9: Global paper products market value forecast: \$ million, 2011-16 (Marketline 2012)

A further important detail about the global paper product market is the fact that it is very fragmented and the degree of rivalry is assessed as strong, due to moderate growth, in recent years, large players and high production costs. Especially the dependence on energy suppliers and their increasing prices put paper product producers under pressure. (Marketline 2012)

Observing this market environment with growing rivalry on the paper product market, and the Asia-Pacific region gaining in importance, it seems obvious that the plan of Senmicro to go there and provide a solution for a more efficient production with higher quality is promising. The CMD is a possibility for paper product producers to increase their competitiveness within the industry and especially the Asian countries look promising as their companies have already gained a substantial share in the global market. Additionally the market there is expected to grow faster than for example in Europe.

3.5.IMPORTANCE OF THIS PROJECT FOR SENMICRO

As it was already pointed out before, Senmicro is a young and small company with small resources. Despite this fact, the company was able to continuously expand its business throughout Europe within around 18 months. According to the management the step outside Europe is a new kind of challenge as the situation is getting more complex regarding distance (psychic and geographically), business practices and market size. For example, whereas conducting business meetings with new customers within Europe is not a problem as they are just a couple of hours away, the same situation becomes more complicated when looking at the Asian market.

To efficiently use the company's sales resources in future markets, the next country to enter must be chosen wisely. Therefore, it is necessary to conduct deep marketing research on possibilities for future market entries. That is why this thesis is of vital importance for the company's management team, as they currently do not have the resources for doing this kind of deep research on their own.

4. RESEARCH METHODOLOGY

The project research and analysis is executed in three major steps, which will be explained further in this chapter.

1. Senmicro's management has already reflected some countries which could be promising for future development. In a first step there is conducted a brief research on these given countries, which are stated on Table 2. Data will be collected and indicators are giving an overview on economic, political and legal situation in these countries as well as the situation especially in the paper industry there. Utilizing this data the countries will be compared with each other and the most promising country will be chosen.

Asia
China
Japan
South Korea
Taiwan
Indonesia
Vietnam

Table 2: Set of countries for research

2. After choosing one of the six countries, there will be done further research on the attractiveness of this market by utilizing the PESTEL model. Within this phase, besides secondary information also primary information will be gathered through interviews.
3. Finally, in the third step, a recommendation about the right entry strategy and a guideline how the company's strategy has to change to increase the probability of being successful in the new market will be developed.

A detailed explanation about the methodology of the research will be given now in the following subchapters.

4.1.SELECTING A COUNTRY

Type of Indicator	Indicator	Source
<i>Economic Indicators</i>	Size of Economy	CIA World Factbook
	Economic Growth	CIA World Factbook
	Share of Industry on GDP	CIA World Factbook
	Industrial Production Growth Rate	CIA World Factbook
	Inflation Rate	CIA World Factbook
	Unemployment Rate	CIA World Factbook
	Investment	CIA World Factbook
	Index of Economic Freedom	The Heritage Foundation
	Global Competitiveness Index	World Economic Forum
	Financial Development Index	World Economic Forum
	Global Enabling Trade Index	World Economic Forum
	Human Development Index	United Nations Development Program
<i>Political Indicator</i>	Voice and Accountability	World Bank
	Political Stability and Absence of Violence	World Bank
	Government Effectiveness	World Bank
<i>Legal Indicators</i>	Regulatory Quality	World Bank
	Rule of Law Indicator	World Bank
	Control of Corruption	World Bank
	Corruption Perception Index	Transparency International
<i>Paper Product market indicators</i>	Number of paper producing companies	BIRKNER International Paper World
	Produced tons of paper products	FAOSTAT
	Increase in paper production 5yr	FAOSTAT
	Increase in paper production 10yr	FAOSTAT
	Average of produced tons of paper products by company	Birkner / FAOSTAT

Table 3: Economic, political, legal and paper product market indicators for comparing attractiveness of countries

As already mentioned above, the six countries will be analyzed and compared. This happens by conducting research on general economic, political and legal indicators as well as specific indicators for the paper products market (see Table 3) for the given countries to specify which

of the countries should entered. The indicators are a combination of key economic figures and calculated indices which are published by different entities like the World Economic Forum or the World Bank. The indicators were chosen upon research and personal discussion with the responsible managers at Senmicro. First the variables, which were chosen to do research on are explained further. Afterwards, in chapter 4.1.5, there follows an explanation on how the data will be assessed for choosing the most attractive country.

4.1.1. ECONOMIC INDICATORS

SIZE OF ECONOMY

To assess the size of the economy in this work the Gross Domestic Product divided by the given population in each country (GDP per capita) is used. Utilizing the GDP per capita makes the economic size better comparable between the countries.

ECONOMIC GROWTH

The growth of each given economy is measured by the broadly used GDP growth rate. This figure “gives GDP growth on an annual basis adjusted for inflation and expressed as a percent.” (CIA Factbook, 2012)

SHARE OF INDUSTRY ON GDP

The GDP of a country is compounded from the three sectors agriculture, industry and service. In this work the size of the share, which the industry sector is contributing to the GDP is interesting, as Senmicro’s potential customers are operating in this sector. Therefore a bigger percentage of GDP coming from the industry means a higher probability of a sufficient market size for Senmicro can be assumed.

INDUSTRIAL PRODUCTION GROWTH RATE

This figure “gives the annual percentage increase in industrial production (includes manufacturing, mining and construction)” (CIA Factbook, 2012). For the selection of the right country to look in, this number gives an insight in the target market in a broader sense, as the targeted paper industry is also part of this segment.

INFLATION RATE

The inflation rate shows “the annual percent change in consumer prices compared with the previous year’s consumer prices” (CIA Factbook, 2012).

UNEMPLOYMENT RATE

This figure “contains the percent of the labor force that is without jobs” (CIA Factbook, 2012)

INVESTMENT

This figure “records total business spending on fixed assets, such as factories, machinery, equipment, dwellings, and inventories of raw materials, which provide the basis for future production. It is measures gross of the depreciation of the assets, i.e., it includes investment that merely replaces worn-out or scrapped capital” (CIA Factbook, 2012). This number is a broad view on the area in which as Senmicro operates. It is true that these numbers can arise in other segments than the paper and pulp industry, but it gives a first insight in the overall investment environment.

INDEX OF ECONOMIC FREEDOM

This index is measured by The Wall Street Journal and The Heritage Foundation since 1995. It is based on Adam Smith’s theories about liberty, prosperity and economic freedom. 10 freedoms – from property rights to entrepreneurship – are covered in 184 countries (The Heritage Foundation, 2012).

THE GLOBAL COMPETITIVENESS INDEX

This index is published by the World Economic Forum and measures the global competitiveness by including a weighted average of many different components, each measuring a different aspect of competitiveness. These components are grouped into twelve pillars which are Institutions, Infrastructure, Macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication and innovation. For this thesis the 2011/12 edition is used which covers data from 142 economies. The index counts from 1 to 7 with 1 as lowest and 7 as highest possible score (Schwab, 2011: 3ff).

THE FINANCIAL DEVELOPMENT INDEX

This index from the financial development report 2011 provides scores and ranks for 60 of the world's leading financial systems and capital markets. According to the report, financial development is the factors, policies and institutions that lead to effective financial intermediation and markets, as well as deep and broad access to capital and financial service. Therefore, the financial development index is compounded by the seven pillars institutional environment, business environment, financial stability, banking financial services, non-banking financial services, financial markets and financial access. The lowest score of this index is 1, the highest is 7. (World Economic Forum, 2011)

THE GLOBAL ENABLING TRADE INDEX

The Enabling Trade Index (ETI) was developed within the Supply Chain and Transportation Industry Partnership program of the World Economic Forum. It measures the extent to which individual economies have developed institutions, policies, and services facilitating the free flow of goods over borders and to destination. The ETI is compounded by 4 sub indexes A, B, C and D which are computed by 9 different pillars as shown in Table 4. The index measures 132 countries and counts from 1 to 7, with 7 as the highest possible score (Lawrence, Drzeniek Hanouz and Doherty, 2012: xv).

Sub indexes	Pillars
A: market access sub index	Domestic and foreign market access
B: Border administration sub index	Efficiency of customs administration
	Efficiency of import-export procedures
	Transparency of border administration
C: Transport and communication infrastructure sub index	Availability and quality of transport infrastructure
	Availability and quality of transport services
	Availability and use of ICTs
D: Business environment sub index	Regulatory environment
	Physical security

Table 4: The sub indexes and pillars of the ETI (Lawrence, Drzeniek Hanouz and Doherty, 2012: xv)

HUMAN DEVELOPMENT INDEX

The Human Development Index (HDI) is published by the United Nations Development Program (UNDP) and measures development by combining indicators of life expectancy, educational attainment and income. The HDI covers 187 countries and is expressed as a value between 0 and 1 with 0 as worst score (United Nations Development Program, 2012).

4.1.2. POLITICAL INDICATORS

These indicators are derived from the Worldwide Governance Indicators which are published by the World Bank and show scores from -2,5 to +2,5. A high score indicates a good result for the country. Details are explained below.

VOICE AND ACCOUNTABILITY

This indicator is “capturing perceptions of the extent to which a country’s citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and free media.” (Kaufmann, Kraay and Mastruzzi, 2010: 4)

POLITICAL STABILITY AND ABSENCE OF VIOLENCE

This index is describing “perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism.” (Kaufmann, Kraay and Mastruzzi, 2010: 4)

GOVERNMENT EFFECTIVENESS

Government effectiveness is “capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies.” (Kaufmann, Kraay and Mastruzzi, 2010: 4)

4.1.3. LEGAL INDICATORS

The first three legal indicators also come from the Worldwide Governance Indicators by the World Bank with scores between -2,5 and +2,5. The higher the score, the better the result. The last indicator in this area is published by the well known NGO Transparency International with a score from 0 to 10 with 0 indicating very corrupt countries and 10 a very clean country.

REGULATORY QUALITY

This indicator is measuring "perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector and development." (Kaufmann, Kraay and Mastruzzi, 2010: 4)

RULE OF LAW INDICATOR

The rule of law indicator is "capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence." (Kaufmann, Kraay and Mastruzzi, 2010: 4)

CONTROL OF CORRUPTION

This index is "capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests." (Kaufmann, Kraay and Mastruzzi, 2010: 4)

CORRUPTION PERCEPTIONS INDEX

The Corruption perceptions index (CPI) is published by Transparency International and measures the perceived levels of public sector corruption in 183 countries and territories around the world. It is a combination of polls, drawing on corruption-related data collected by a variety of reputable institutions. (Transparency International, 2012)

4.1.4. PAPER PRODUCT MARKET INDICATORS

NUMBER OF PAPER PRODUCING COMPANIES

This number is important when comparing the different countries because it shows the number of potential customers for Senmicro. Sufficient information for this indicator is found in the database of Birkner International Paper World by searching for "Producers of pulp, mechanical pulp, paper and board" and the respective country (Birkner, 2012).

PRODUCED TONS OF PAPER PRODUCTS

The data about production of paper products in the regarding countries provides more information on the market size for Senmicro. It is obvious that the more paper is produced in

a country, the bigger is the probability that there is a need for the CMD. This data was gained from the Food and Agriculture Organization of the United Nations (FAOSTAT) for the year 2011.

INCREASE OF PAPER PRODUCT PRODUCTION 5YR AND 10 YR

The increase of the production of paper products shows the development of the market in the different countries and therefore the attractiveness for Senmicro. Of course, a bigger increase shows a higher market attractiveness. The comparison between the 5 years (from 2006 to 2011) and 10 years (from 2001 to 2011) increase should show if the growth is still vital or is slowing down, because that is also an important indicator for the attractiveness. This data is also computed from the available data of FAOSTAT. The detailed calculation can be found in ANNEX 3.

AVERAGE OF PRODUCED TONS OF PAPER BY COMPANY

This number is computed by dividing the number of produced paper products of each country by the number of companies in each country. It shows if there are many companies producing only small amounts of paper or if there is only a small number of companies with high volume output. This computing is not entirely accurate, but it gives an idea of the structure in the market. The input data is gained from the number of paper producing companies of Birkner and the produced tons of paper products of FAOSTAT.

4.1.5. THE PROCESS OF DATA ASSESSMENT

After collecting data for the above mentioned indicators, the countries will be ranked according to their value in each indicator. E.g. the country with the highest prospected economic growth in per cent will be ranked first in this indicator. For the Corruption Perception Index on the other hand the country which was awarded the lowest score by Transparency International, will be ranked first, and so on.

After ranking all the countries in each of the 24 indicators, the countries will be awarded a score from 1 to 6, according to their rank. Therefore, the country which is ranked first in economic growth will be awarded 6 points. The country on the last rank only 1 point. To get the most attractive country, all the scores of each country could be added up and the country with the highest score would be the country to choose. But as not each indicator has the same importance to Senmicro's management, the indicators have to be weighted first.

A suggestion on a weighting scheme in form of a presentation will be given to the two management members who are in charge of the internationalization process, including the already known preferences of them. In first personal talks about the assessment process they already mentioned that they prefer a high weighting on the market and economy topic. After the presentation of the weighting, including eventual changes and computing the weighted score of each indicator and country will be computed by multiplying the given score (1 to 6) with the weighting (0 to 100%). Summing up then the weighted scores will provide the final score of each country. Based on the these scores, the author together with the management will choose the most attractive country in a personal meeting.

4.2. COUNTRY RESEARCH AND IN DEPTH INTERVIEWS

This research will be guided by the PESTEL analysis model (PESTEL stands for political, economic, social, technological, environmental and legal factors), which is a well known method for analyzing the macro-environment of a company. Utilizing this structure, the thesis is able to draw a detailed picture about the targeted country and possible issues there. Examples for factors which should be considered in the PESTEL analysis according to the Pestel Analysis Community are shown in Table 5.

Political	Bureaucracy, Corruption, Environmental Law, Freedom of the Press, Government Type, Government Stability, Labor Law, Political Change, Political Stability, Regulation/Deregulation, Social/Employment Legislation
Economic	Business Cycle Stage, Consumer’s Disposable Income, Economic Growth, Exchange Rates, GDP Growth, Globalization, GNP Growth, Interest Rates, Inflation Rate, Labor Costs, Labor Supply, Likely Economic Change, Unemployment Rate
Social	Health Consciousness, Population Growth Rate, Age Distribution, Career Attitudes, Perception of Safety, Educational Infrastructure, Social Mobility, Employment Patterns, Attitudes to Work
Technological	Degree of Automation, Emerging Technologies, Impact of Internet, Reduced Communication Costs, Rate of Technological Change, R&D Activity, Technology Incentives, Technology Transfer
Environmental	Weather, Climate, Climate Change
Legal	Antitrust Law, Consumer Law, Discrimination Law, Employment Law, Health and Safety Laws

Table 5: Examples for content of the PESTEL analysis (PESTEL Analysis, 2012)

The research for this step starts with collecting secondary data about the country, but will be accomplished much more in detail. Furthermore also primary data through interviews is contributing to a complete set of information. Interviews were held with

- Mr. Hayo Geyer, CEO of V.I.T. Papertec, a German company with a subsidiary in China (7.12.2012)
- Ms. Christina Schösser, AUSSENWIRTSCHAFT AUSTRIA Fernost/Ozeanien, Austrian Chamber of Commerce, Far East and Oceania (21.1.2013)

4.3.STRATEGY DEVELOPMENT

This part will deal with the information gained by researching in the country and will explain the developed entry strategy, which Senmicro should follow to enter the market. This strategy will evolve from the gained knowledge about the country together with meetings with the company's managers who are responsible for the market entry process.

4.4.MEETINGS WITH SENMICRO

Throughout the process of selecting a country, doing research on this selected country and developing a strategy for Senmicro. Monthly meetings are held with Senmicro's Sales Managers Reinhard Wassermayr and Astrid Klauser, in order to include questions and concerns into the thesis, which are important for the company. Additionally, these meetings give the management status updates on the research and gathered information.

5. COUNTRY SELECTION

5.1.COLLECTING AND RANKING DATA

After collecting the data for the indicators listed in chapter 4.1 this data was ranked for each indicator. The detailed listing of the data and the ranking can be found in ANNEX 1 and ANNEX 2. In order to get comparable values for the countries, each country got a score for each indicator, e.g. having the highest GDP growth was awarded 6 points whereas the lowest growth rate received 1 point. A graphic interpretation of this procedure can be found in Figure 10.

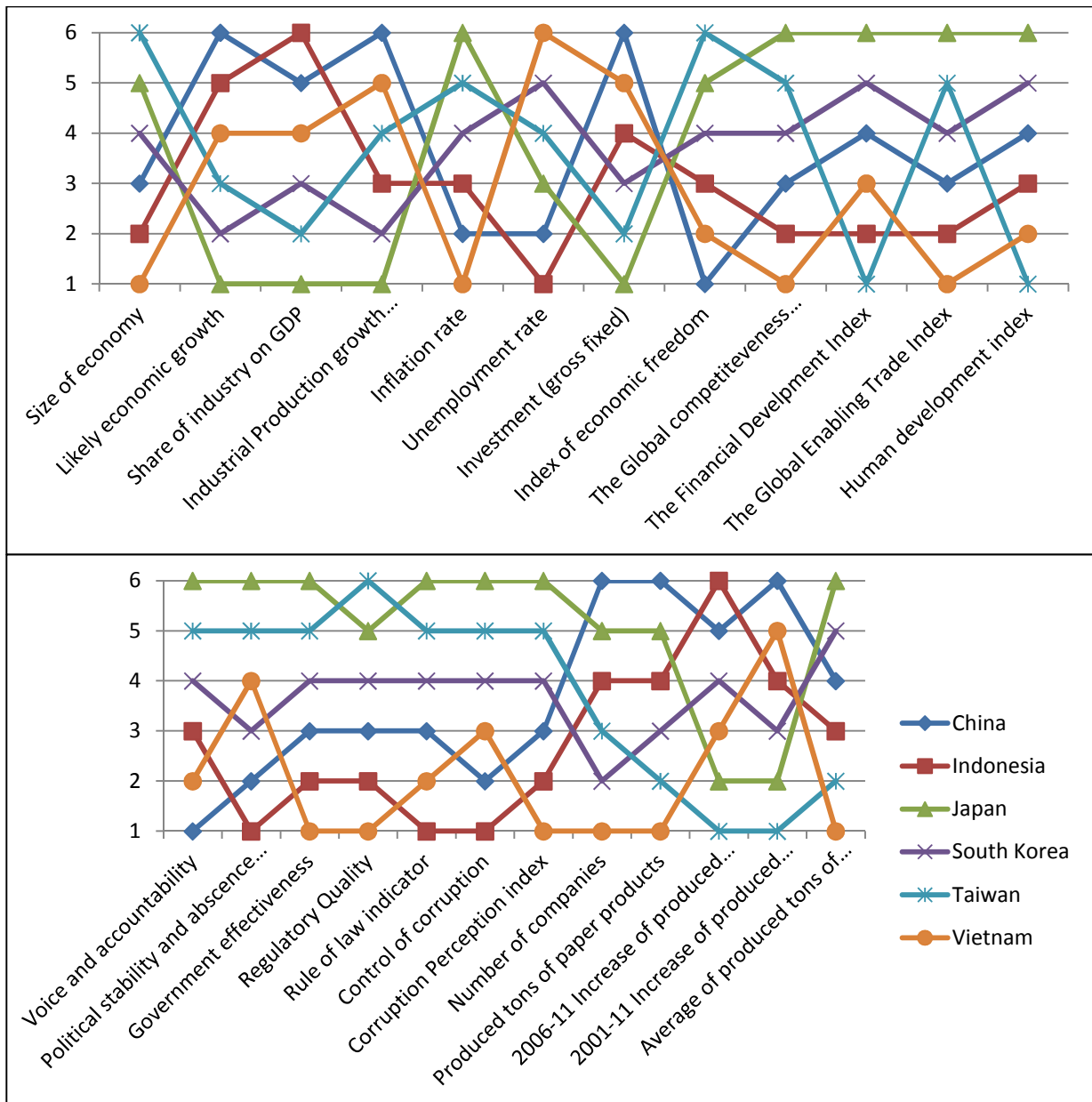


Figure 10: Graph of Indicator scorings

In the upper part of the graph can be found the scoring on economic indicators and in the lower one the scorings of the political, legal and market indicators. Whereas this picture shows plenty of information to interpret, major findings can be observed in it. Japan, for example, shows outstanding results in the political, legal and some of the economic indicators. On the other hand it shows weak results on other economic indicators and the market indicators. China for example shows both, high and weak results in the economic indicators, ranges in the lower middle when it comes to the political and legal indicators and was awarded high scores in the market indicators. Indonesia scored mostly in the middle and low range, but reached the top score twice (Share of industry on GDP and 5 year market development). South Korea was never able to reach the top score, whereas it mostly ranged in the upper middle range (16 times score 4 or 5). Taiwan, again, was able to score the highest value three times (size of economy, index of economic freedom and regulatory quality), but on the other side also showed some weak performances. Some of them result from the fact that for the indicators Financial Development Index, Human Development Index and for the 5 and 10 year market development it was not possible to retrieve data for Taiwan. This is due to the reason that there are some political tensions between China and Taiwan and not every indicator-publishing institution acknowledges Taiwan's independency. This issue was discussed with Senmicro's management that in such cases it will be awarded the lowest scores. Vietnam as the last country to analyze, was also able to score the highest value once as it had the lowest unemployment rate, but on the other hand it scored the lowest value ten times.

The above graph shows already a plausible picture on the advantages and the downsides of each country. But collecting this data was only the first step on the way to find the most attractive country. In the next step the different indicators have to be weighted according to their importance.

5.2.WEIGHTING THE INDICATORS

For Senmicro's management, not every indicator has the same importance for the decision on the country. That is why each indicator got a weighting according to its importance. After the first meetings with the two responsible sales managers, in which the indicators themselves have been discussed, there was already found a direction for the weighting. For the management the indicators considering the paper market and the economic situation were

playing a major role for their decision about a market entry. After collecting the data, the weighting as it can be seen on Table 6 was presented to Senmicro's management.

<i>Indicator</i>	<i>Weighting</i>	<i>Indicator</i>	<i>Weighting.</i>
Economic Indicators	39%	Political Indicators	9%
Size of Economy	8%	Voice and Accountability	3%
Likely Economic Growth	8%	Political Stability and Absence of Violence	3%
Share of Industry on GDP	2,5%	Government Effectiveness	3%
Industrial Production Growth Rate	2,5%	Legal indicators	12%
Inflation Rate	2%	Regulatory Quality	3%
Unemployment Rate	2%	Rule of Law Indicator	3%
Investment (gross fixed)	1,9%	Control of Corruption	3%
Index of Economic Freedom	3%	Corruption Perception Index	3%
Global Competitiveness Index	3%	Paper Industry Indicators	40%
Financial Development Index	3%	Number of Paper Producing Companies	8%
Global Enabling Trade Index	3%	Produced Tons of Paper Products	8%
Human Developmetn Index	0,1%	Increase of Paper Product Production 5yr	8%
		Increase of Paper Product Production 10yr	8%
		Average of Produced Tons of Paper Products by Company	8%

Table 6: Overview of indicator weighting

The two managers of Senmicro designed their own weighting before the presentation. In their approach the major difference was that there was even more importance given to the Paper Industry Indicators, namely 50%. In a following short discussion the management agreed on the above given approach, as it still reflected their need for a proper inclusion of their preferences.

5.3.RESULT AND DISCUSSION

Combining the scores for the countries with the weighting of the indicators gives the weighted scoring which can be found in detail in ANNEX 2. After summing up the weighted scoring the countries can be ranked according to their scores as it is pictured on Table 7.

Country	Final Score
Japan	4,255
China	4,193
South Korea	3,527
Taiwan	3,399
Indonesia	3,254
Vietnam	2,372

Table 7: Final score of the countries

As it can be seen from the table, Japan has got the highest score with 4,255 followed closely by China which scored 4,193. As the difference is only 0,062 points, the differences between the two countries should be observed more in detail. For that reason, the detailed information about the two countries is given on Table 8. To visualize the better scoring country for each indicator, the better value and scoring for each indicator is printed in bold. In the direct competition between the two countries Japan would win 16 indicators and China would wrap up the other 8 indicators. But, as mentioned above, the weighting of each indicator plays a major role and not even the weighting procedure can answer all questions.

As it can be seen on Table 8, Japan is scoring better mostly in the political and legal as well as some economic indicators. China has the better scores in almost all Paper Industry Indicators, which have the highest importance for Senmicro`s management. Furthermore some differences between the two countries are bigger than the scoring would suggest. For example is the scoring of the produced paper products (and therefore of the market size) not offering a true picture about the differences between Japan and China. In the scoring procedure China got 6 points followed by Japan with 5 points as the two countries revealed the largest and second largest number in produced tons of paper products. What this scoring is not picturing adequately is that production reached 103.101.000 tons in China and 26.578.000 tons in Japan. Therefore, despite the fact that China`s production is almost four times bigger than Japan`s, Japan was awarded only one point less than China. The same is true for the number of paper producing companies in each country. In China with 661, there are four times more

companies operating in the paper products market than in Japan with 154. But with the ranks 1 and 2 the difference in the score was just one point (Japan received 5 points, China 6).

	Japan			China		
	Value	Score	Weighted Score	Value	Score	Weighted Score
Size of economy	\$ 35.200	5	0,4	\$ 8.500	3	0,24
Likely economic growth	-0,7 %	1	0,08	9,2%	6	0,48
Share of industry on GDP	27,3 %	1	0,025	46,8 %	5	0,125
Industrial Production Growth Rate	-3,5 %	1	0,025	13,9 %	6	0,15
Inflation Rate	-0,3 %	6	0,12	5,5 %	2	0,04
Unemployment Rate	4,6 %	3	0,06	6,5 %	2	0,04
Investment (gross fixed)	20,9 %	1	0,019	54,2 %	6	0,114
Index of Economic Freedom	71,6	5	0,15	51,2	1	0,03
Global Competitiveness Index	5,4	6	0,18	4,9	3	0,09
Financial Development Index	4,71	6	0,18	4,12	4	0,12
Global Enebling Trade Index	5,08	6	0,18	4,22	3	0,09
Human Development Index	0,901	6	0,006	0,687	4	0,004
Voice and Accountability	1,05	6	0,18	-1,65	1	0,03
Political Stability and Absence of Violence	0,87	6	0,18	-0,77	2	0,06
Government Effectiveness	1,4	6	0,18	0,12	3	0,09
Regulatory Quality	0,98	5	0,15	-0,23	3	0,09
Rule of Law Indicator	1,31	6	0,18	-0,35	3	0,09
Control of Corruption	1,54	6	0,18	-0,6	2	0,06
Corruption Perception Index	8	6	0,18	3,6	3	0,09
Number of companies	154	5	0,4	661	6	0,48
Produced tons of paper products	26.578.000	5	0,4	103.101.000	6	0,48
Increased Paper Production 5yr	-17%	2	0,16	33%	5	0,4
Increased Paper Production 10yr	-16%	2	0,16	65%	6	0,48
Average of produced tons of paper products by company	172.584	6	0,48	155.977	4	0,24
Summarized Score		108	4,255		89	4,193

Table 8: Detailed result for Japan and China

Another important difference can be seen in the growth of the markets. Whereas China's paper production showed a vital growth of 33% in the last 5 years and 65% in the last 10 years, Japan's paper production showed a decrease of 17% respectively 16% in the same periods. The difference was integrated in the scoring procedure by awarding Japan the second lowest scores.

After presenting the above mentioned final score together with the restrictions and issues found in the direct comparison, these outcomes were discussed with the two responsible managers at Senmicro. Because of a favorable situation and forecasted development for China in the indicators which are the most important ones for the management's decision, the final decision was made towards **China**.

6. COUNTRY ANALYSIS - CHINA

For many companies the People's Republic of China is an interesting country because of its vast size and the opening up of the communist country during the last decades. However, companies are still facing various challenges due to the centralized government, corruption and other obstacles. The most important facts about China's attractiveness and hurdles from a business point of view is given in this part of the work. First, a short overview is given on figures of the country and after this, the country analysis utilizing the PESTEL model guideline is given.

As China is a booming economy and numerous companies went there and are still entering this extensive market, an excessive number of secondary information out of books and publications is available on this topic. For example institutions like the OECD, the European Union Chamber of Commerce in China (EUCCC) or the Austrian Chamber of Commerce (Wirtschaftskammer Österreich - WKO) are regularly publishing reports on economic development in China and effects on European or Austrian businesses in China. From this huge amount of sources available, this chapter is providing the most important information for the management of Senmicro to get an overview on the economy, the market and possible obstacles and problems when entering this market. For a better understanding and comparability the collected information is set also in comparison with Austria (Senmicro's domestic area) or Europe (the current markets), where it makes sense. The gathered secondary information is supplemented with primary information received from interviews.

6.1.OVERVIEW

6.1.1. BRIEF HISTORY OF CHINA

Through the last millennia China has shown a tremendous history with its dynasties and emperors. But this brief overview should concentrate on the last century where the foundations for today's economic development of China are lying.

The Republic of China (ROC) was founded on January 1st, 1912 and shortly afterwards the Qing emperor issued an imperial abdication edict, which brought an over two millennia imperial rule in China to an end. At that time the country was led by Kuomintang (the Nationalist Party or KMT). In 1921 the Communist Party of China (CPC) was founded. Throughout the following years the relationship between the two parties changed between ally and enemy. Eventually the CPC took over the control of China's mainland in 1949 and

founded the People's Republic of China (PRC) as it is known today on October 1st, 1949, after which date the communists under the lead of Mao Zedong established an autocratic socialist system. In the first years of the PRC the focus lied on restoration of the ruined national economy which the CPC had inherited. First, all the industrial and business establishments owned by the previous government and bureaucrat-capitalists were confiscated by the 'people's government'. In 1958, Mao Zedong launched a campaign known as the 'Great Leap Forward'. Hereby, the Chinese government tried to industrialize the country what caused neglect of agriculture and devastation of woods what finally ended in famines and erosion damages. The cultural revolution, which officially took place from 1966 to 1976, brought even more chaos. After the death of Mao Zedong, his successor Deng Xiaoping provided the base for China's dynamic economic development by introducing the policy of "reform and opening up". Since then, for much of the population living standards have improved dramatically and the room for personal choice has expanded, yet political control remains tight (WKO, 2012a and CIA World Factbook – China, 2012 and Liu, 2009).

The above should give a brief overview on the historical events which also led to the today's situation in China. When doing business in China it is useful to study more on this topic, because, as Ambler and Witzel (2001: 36) comment on this topic: "In China, history is important if only for the reason that *the Chinese themselves believe it is*. Recognizing this is key to understanding China."

6.1.2. FACTS AND FIGURES

As introduction into the topic, some important facts and figures about the People's Republic of China are shown on Table 9.

Geography	
Area	9,6 million km ²
Land boundaries	22.117 km
Natural resources	Coal, iron ore, petroleum, natural gas, mercury, tin, tungsten, antimony, manganese, molybdenum, vanadium, magnetite, aluminum, lead, zinc, rare earth elements, uranium, hydropower potential (world's largest)
People	
Population	1,3 billion (July 2012 estimation)
Ethnic groups	Han Chinese 91,5%, Zhuang, Manchu, Hui, Miao, Uighur, Tujia, Yi, Mongol, Tibetan, Buyi, Dong, Yao, Korean, and other nationalities (2000 census)
Religion	Daoist (Taoist), Buddhist, Christian 3-4%, Muslim 1-2%
Age structure	0-14 years: 17,4% 15-64 years: 73,5% 65 years and over: 9,1%
Population growth rate	0,481%
Urbanization	Urban population: 47% of total population Rate of urbanization: 2,3% annual rate of change
Government	
Legal system	Civil law influenced by Soviet and continental European civil law systems; legislature retains power to interpret statutes
Political parties	Communist Party of China or CPC; eight nominally small parties ultimately controlled by the CPC
Economy	
Currency	Renminbi yuan (RMB)
Exchange rate	1 Euro = 8,22351 Chinese Renminbi yuan (January 11 th , 2013)
GDP (purchasing power parity)	\$ 11,44 trillion (2011 est.) \$ 10,48 trillion (2010 est.) \$ 9,486 trillion (2009 est.)
GDP – real growth rate	9,2 % (2011 est.) 10,4% (2010 est.)

	9,2 % (2009 est.)
GDP – per capita (PPP)	\$ 8.500 (2011 est.) \$ 7.800 (2010 est.) \$ 7.100 (2009 est.)
GDP composition by sector	Agriculture: 10% Industry: 46,6% Services: 43,3%
Labor force	795,5 million
Unemployment rate	6,5 %
Public debt	43,5% of GDP
Inflation rate (consumer prices)	5,5% (2011 est.) 3,2% (2010 est.)

Table 9: Facts and figures on the People's Republic of China (CIA World Factbook – China, 2012)

6.2.POLITICAL FACTORS

This part of the country analysis on China is dealing with the political situation in the Asian country. The focus is, of course, on the economic effects which can be also important for Senmicro. After an overview on the political system in China and the latest changes in the government, an analysis on the topic regulation and deregulation can be found.

6.2.1. GOVERNMENT AND POLITICAL SITUATION

Today, China is a one-party state, governed by the Communist Party of China. The central government is located in Beijing, there are 23 provinces, four self-governing municipalities and five autonomous regions directly under the central government and one special administrative region (Hongkong). Below the level of provinces there are more tiers of government: in urban areas the city, district and neighborhood levels and in rural areas the county, township and village level (Ambler and Witzel, 2001).

During the work on this thesis the Communist Party of China revealed its new leaders which will lead the country during the next decade. As this transformation on top of the government caused a lot of speculation about the future course of the Chinese government, a short summary about prospects and expectations in the new leadership is given here. The new Politburo Standing Committee (PSC), which is the all important decision making body, was presented on November 15th, 2012 and consists of:

- Xi Jinping (59 years), Head of the Communist Party of China, chairman of China's Military Commission and President (in March)
- Li Keqiang (57), Premier (in March)
- Zhang Dejinag (65), Head of National People's Congress
- Yu Zhengsheng (67), Head of Chinese People's Consultative Conference
- Liu Yunshan (65), Head of Propaganda Department
- Wang Qishan (64), Secretary of the Central Commission for Discipline Inspection
- Zhang Gaoli (65), Executive Vice Premier

This announcement of change in the Chinese leading team is of importance as a transfer in power takes only place every ten years. According to observers of this special event no particular changes will take place in the future orientation of the country as the new PSC is strongly tied to the old government and mainly consisting of protégées of the former leading team. Different authors of press articles believe that the predecessors Hu Jintao (69 years) and Jiang Zemin (86 years) will have huge influence in the new government. Thus, no big changes in the current path are anticipated. This means that the process of incremental economic liberalization will be maintained and almost no changes in the political system will take place. This development was disappointing many China experts, who hoped that a more reform oriented team will be set into power in order to accelerate the opening of China's economy in order to force the pace of the stagnating economic growth (Badkar, 2012 and Rabinovitsch, 2012 and The Economist, 2012a and The Economist, 2012b and The Economist 2012c).

6.2.2. POLITICAL INDICATORS

In this part the political indicators gained about China for the selection process will be compared with Austria and other European countries, which are Senmicro's current most important markets, in order to show differences between these markets and the target market.

	China	Austria	Germany	Italy	France	Spain	Finland
Voice and Accountability	-1,65	+1,41	+1,31	+0,94	+1,20	+1,10	+1,54
Political Stability and Absence of Violence	-0,77	+1,19	+0,86	+0,59	+0,61	+0,13	+1,38
Government Effectiveness	+0,12	+1,66	+1,53	+0,45	+1,36	+1,02	+2,25

Table 10: Political indicators for China and selected European countries (World Bank, 2012a)

As it can be observed on Table 10 there are major differences between China as Senmicro's target market and the selected European countries. As already explained in chapter 4.1.2 the scale is counting from -2,5 to +2,5 with higher scores as better results. From those figures it can be concluded that China shows weak performance in the areas of giving people the possibility to contribute to the political development, what is not surprising when comparing democracies with a communist state. Furthermore the possibility of terrorism, political violence or the destabilization is higher in China than in the compared countries. The last indicator shows that for example public services, policy formulations and the integrity of the government is also weaker in China than in Europe.

This overview on political indicators should provide Senmicro's management an insight in order to deal with the political situation in China carefully.

6.2.3. REGULATION AND DEREGULATION

Although China's political system is moving towards a more market oriented one and therefore also industries and markets get more and more deregulated, there are still many obstacles for foreign companies due to bureaucratic barriers and restrictions. A good overview on the regulation in China is given by the OECD with its product market regulation (PMR) indicators which is briefly discussed in the following (OECD, 2010).

According to the OECD economic survey in China (2010:103), the "PMR indicator system summarizes a large number of formal rules and regulations that have a bearing on competition. These regulatory data cover most of the important aspects of general regulatory practice as well as range of industry specific regulatory policies particularly in network sectors." The different information is aggregated into three broad regulatory areas:

- State control
- Barriers to entrepreneurship
- Barriers to international trade and investment

A comparison between the overall indicator of product market regulation between China and other countries can be viewed in Figure 11 (The indicator score runs from 0 to 6, representing the least to most restrictive regulatory regime). This graph reveals that despite the deregulation effort undertaken in China, the country is still very restricted in comparison with Western countries, where Senmicro is currently concentrating its business activities.

Therefore, Senmicro’s management has to bear in mind that they can face bureaucratic problems when entering the market.

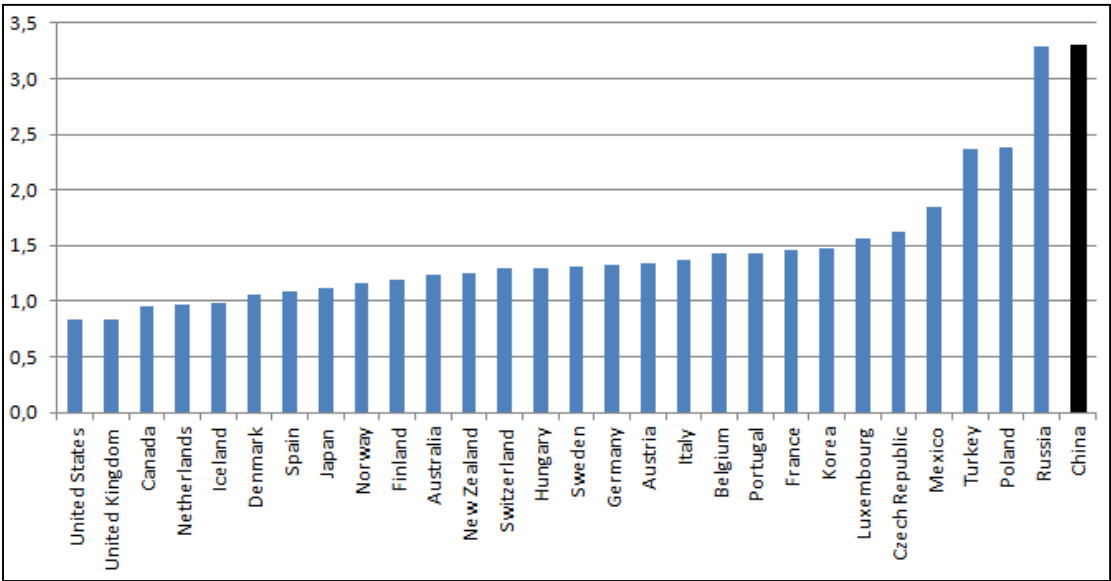


Figure 11: The overall indicator of product market regulation, 2008 (OECD, 2010)

Whereas the above graph shows the overall indicator on product market regulation, the following Figure 12 provides a detailed view on the underlying three components of this indicator, again in comparison with other regions in the world.

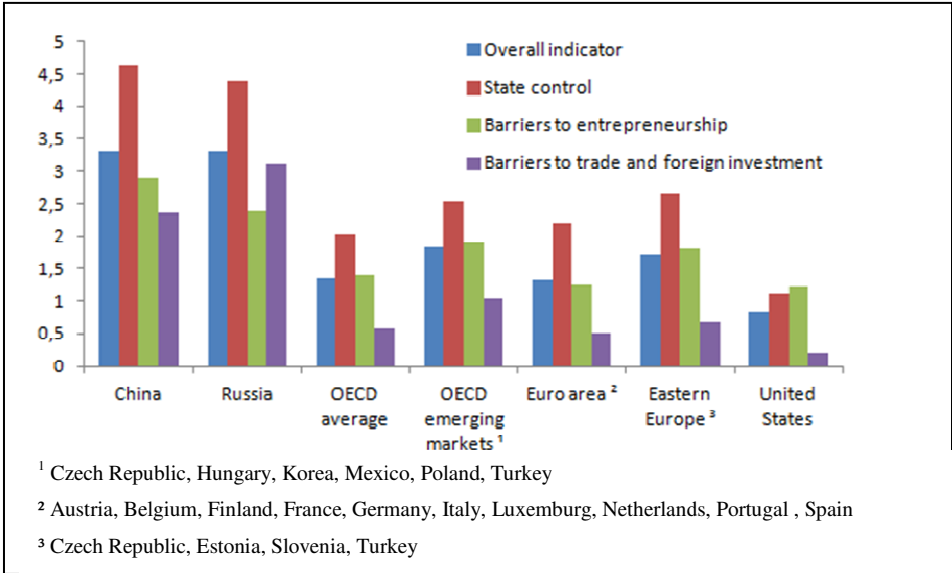


Figure 12: Product market regulation in China, an international comparison, 2008 (OECD, 2010)

From this graph it can be observed that the barriers to trade and foreign investment are more deregulated than the other areas. This is drawing a more positive picture for Senmicro, as they

will probably be confronted with these barriers. Nevertheless, the data on regulation in China reveals that conducting business in China is very different to Western regions, therefore the step to enter this market will be a challenge for Senmicro's management.

6.2.4. CONCLUSION

From this chapter it can be observed that a company should look at the political situation in China with prudence. Although much has been done in the last decades in order to open up the country's economy and many companies are rushing into the new market, there is still a long way to go to observe Western standards in their political environment, if this will ever be the case. The new government will follow the direction of the last decades of incremental development and will probably make no great leaps towards complete economic freedom nor will they close the country again.

6.3.ECONOMIC FACTORS

This part of the thesis deals with the economic situation in China, the economic ties between Austria and China, and the paper producing industry as market for Senmicro. The first part shows only an overview on general economic data as it is established knowledge that China's economy is booming and will grow throughout the next years. Therefore the focus will be on the business in China from an Austrian point of view and an analysis on the paper products market as thorough as possible, as this knowledge is of huge value for Senmicro's management.

6.3.1. OVERVIEW ON CHINA'S ECONOMY

China's economy is prospering, especially in comparison with European countries which are representing Senmicro's current markets. Proof of this fact can be observed in Figure 13 which is showing the annual GDP growth during the last ten years in China on the one hand and the European Union's 27 countries on the other hand.

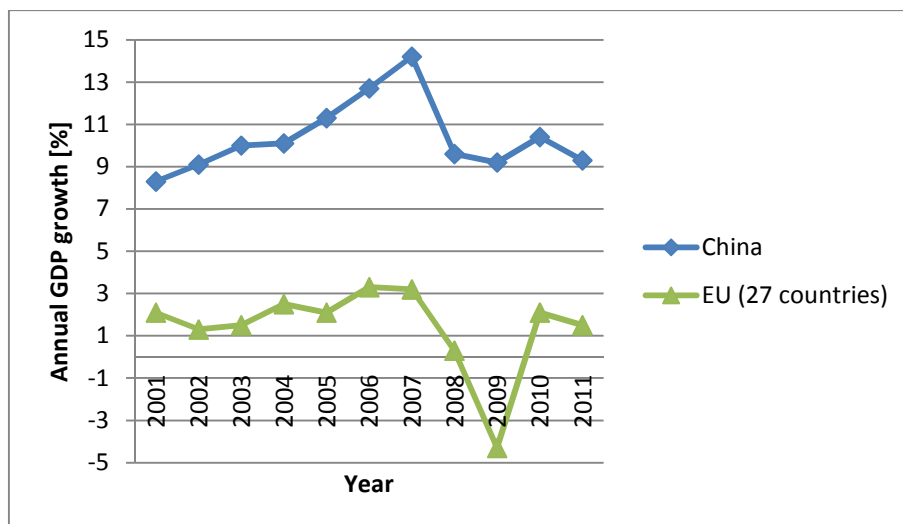


Figure 13: Annual GDP growth rate for China and the EU (2001-2011) (EUROSTAT, 2012 and World Bank, 2012)

The Figure 13 shows that China's economy grew with an average of 10,4% per year during the ten year period performed much better than of the European Union with an average of 1,4%. Furthermore it can be observed that China still grew during the year of the financial crisis in 2009, whereas the European Union suffered from a decrease in growth by 4,3%. The exact figures of the annual data can be found in ANNEX 5. Therefore it can be assumed that Senmicro would work in a much more economical prospering surrounding in China than it is doing right now in Europe.

Some other economic facts about China were already mentioned when comparing China with the other Asian countries. The economic indicators published by the World Economic Forum should be mentioned here again, to underline the strong economic performance of China. Like in the chapter before, on Table 11 again, China is compared with the European countries, which are the most important markets for Senmicro.

	China	Austria	Germany	Italy	France	Spain	Finland
The Global Competitiveness Index	4,90	5,14	5,41	4,43	5,14	4,54	5,47
The Financial Development Index	4,12	4,11	4,33	3,85	4,44	4,24	4,11
The Global Enabling Trade Index	4,22	5,12	5,13	4,36	5,03	4,79	5,34

Table 11: Economic indicators for China and selected European countries (Lawrence, Drzeniek Hanouk and Doherty, 2012 and Schwab, 2011 and Word Economic Forum, 2011)

As it can be seen on this table, the reliable World Economic Forum ranks China amid Senmicro's currently most important countries. Only in the Global Enabling Trade Index is showing the lowest score of the seven observed countries. A very interesting detail out of the Financial Development Report is that from 2010 to 2011 China was able to climb from the worldwide rank 22 up to 19 and thereby overtake Austria (rank 2010: 19; rank 2011: 20) and Finland (rank 2010: 20; rank 2011: 21). These data also supports the picture of China as a promising country for the future. (Lawrence, Drzeniek Hanouk and Doherty, 2012 and Schwab, 2011 and World Economic Forum, 2011)

6.3.2. DOMESTIC COMPETITION FOR SENMICRO

As already mentioned in chapter 3.3 there is no fierce competition for Senmicro, whether in the current markets, nor in China due to the fact that the CMD is a innovative sensors system for the paper industry, which is not available on the market from any other sensors producer in the world. Therefore, a competition analysis is unrewarding in this case.

6.3.3. ECONOMIC INTEGRATION BETWEEN CHINA AND AUSTRIA

The business relationship between Austria and China is developing well. In 2011 the trade volume between the two countries accounted for more than 9 billion Euro with 2,9 billion Euro of Austrian exports to China and 6,4 billion Euro of imports from China. These numbers were results of annual increases of exports and imports of 4 and 17,7% respectively.

More than 500 Austrian companies are already present in China and are promoting export to and imports from China. The most important export category for Austrian companies is machinery and equipment. In this category the exports of special machinery increased by 98% and paper machines by 62% in 2011. Also a strong demand showed synthetic fibers with a plus of 83% as well as measurement and medical devices with 42% increase (WKO, 2012a).

These numbers reveal opportunities for Senmicro's Compact Moisture Detect as there is increasing demand for Austrian paper machines and measurement devices, two categories in which the description of their new Austrian product fits as it is a device integrated in paper machines and measuring moisture of paper.

The overall opinion of Austrian companies which are already conducting business in China is positive. As a survey, published by the Austrian Chamber of Commerce in China, shows, 93% of all participating Austrian companies expect positive growth for their business within the next two years. Furthermore, this survey revealed, that the most important reasons for Austrian companies to enter the Chinese market are market size reasons. 66% of the respondents said that the size of the market in terms of number of projects was ‘very significant’. Another 27% stated that this was a ‘significant’ reason (WKO, 2012b)

This information shows that Austrian companies are flowering in China and that prospects for the future are positive, especially in the area, where Senmicro is doing business.

6.3.4. PAPER PRODUCTS MARKET IN CHINA

To find sufficient and correct market data in China is a difficult task and many companies are suffering with this problem. Ambler and Witzel (2001: 13) for example mention that in comparison with years ago there is excessive information available today, but it is not reliable. Information from the web can be misleading as “both China itself and the rest of the world publish more statistics about the Chinese economy and trade than anyone can assimilate.” This can be backed by a survey on German businesses in China (GIC and EAC, 2008), in which 43% of the respondents answered that availability of market data is a problem and 14% even said it is a major problem.

Nevertheless, this chapter is giving an insight on the market for Senmicro – the paper products producing industry – as reliable and comprehensive as possible. The paper products market is a good indicator for Senmicro, as those companies producing paper are those implementing the CMD. Therefore a better development in the paper industry is a sign for opportunities for Senmicro.

THE SIZE AND GROWTH OF CHINESE PAPER INDUSTRY

Figure 14 shows the development in paper production in China in comparison with the 15 countries in which Senmicro is already active. These countries, referred to as current markets are Austria, Switzerland, Slovenia, Hungary, Slovakia, Czech Republic, Germany, Netherlands, Belgium, Poland, Finland, Italy, Spain, France and Turkey.

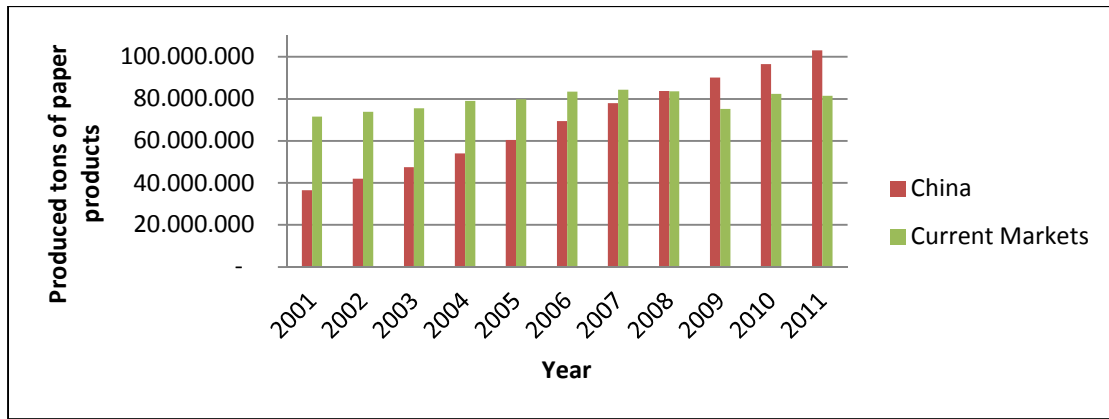


Figure 14: Development of paper production (2001-2011) (FAOSTAT)

This comparison is providing a clear picture of the development in the different regions. Whereas the paper production in the current markets is stagnating on a level of around 80 million tons per year, China showed substantial growth from less than 40 million tons in 2001 to more than 100 million tons in 2011. 2008 was the first year in which companies in China produced more paper than those in all the 15 countries together which are comprising Senmicro's current market. This also means that a market entry in China would imply more than a doubling of the potential market for Senmicro.

The figure above already indicates, that market growth in China is also bigger than in the current markets. A detailed picture on this is given in Figure 15.

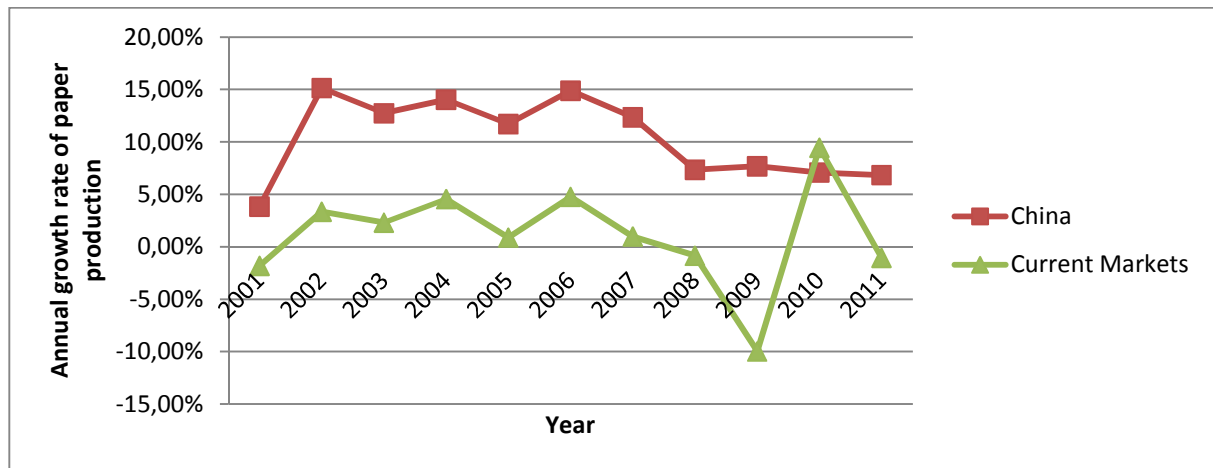


Figure 15: Annual growth rate of paper production (2001-2011) (FAOSTAT)

As this graph shows, during the last ten years the paper production in the current markets only grew on low levels underneath 5% per year (except 2010) or production was even decreasing, whereas China's paper production industry showed annually increases of more than 10% between 2002 and 2007 and still around 7% within the last 4 years. In an average the paper

production in China and the current markets grew by 10,33% and 1,15%, respectively. However, although China's paper industry is vitally growing, the graph shows also that this development is stagnating. Despite this, with the vast size of this potential new market and in comparison with the current markets, this shows essential opportunities for Senmicro in the Chinese market.

During the next years the growth of the paper industry is expected to grow further also caused by the high domestic demand in China. This domestic demand on paper in China will even grow faster as the per capita consumption of paper is still far behind western countries. Therefore, despite the high production volume in China there is still a need for import. But other trends like energy saving, environment protection or quality improvement are also forecasted (Zhuang, Ding and Li, 2006 and China Paper/China Forest, 2009).

A not so enthusiastic opinion for the growth of the Chinese is given by Mr. Hayo Geyer, whose company is selling to Chinese paper producers. According to him, the growth of paper production will not sustain on the current level, as the development during the last decade was also backed by different subsidies of the Chinese government. However, also without further extensive growth, these are important trends indicating opportunities for Senmicro's product.

GEOGRAPHIC CONCENTRATION OF THE PAPER INDUSTRY

As China is a huge country it is also necessary to have a look on the location of the main industry players. According to Zhuang, Ding and Li (2006: 12) "in 2005, eleven provinces in China reached paper and paperboard production of one million Mts or higher. They were Shandong, Zhejiang, Guangdong, Henan, Jiangsu, Hebei, Fujian, Hunan, Anhui, Sichuan and Guangxi. They contributed about 88,62% of the total paper production in China. Among them, the top four provinces in paper production were Shandong, Zhejiang, Jiangsu, and Guangdong. The eastern region of China takes a lead in total production (73,7%), followed by the middle region (21,5%), and the western (5,2%). Shandong's paper production has been on top in China for eight consecutive years (23% in 2005)." Also a report by PWC (2005: 10) mentions that "the industrialized east coast is home to some of China's biggest paper manufacturers. Shandong is especially important; it accounts for 21% of the country's paper production."

6.3.5. CONCLUSION

From this chapter it can be summarized that there are many possibilities for Senmicro's management to find business in China. As the paper industry in the Asian country is already exceeding their current markets by annual production volume and still growing at high percentage rate, chances are good for Senmicro that the move to China will pay off. As the new market is also geographically very big it would also be advisable to concentrate on the eastern region of China which is responsible for the biggest share of total production.

For further information on the paper products market in China the 'Almanac of China Paper Industry 2012' would be recommended. This report published by the China Technical Association of Paper Industry probably contains valuable information about the market but could not be considered due to budget restrictions of the author.

6.4.SOCIAL FACTORS

This part of the work is dealing primarily with the cultural characteristics of the Chinese and its major differences to the European, especially the Austrian, culture.

6.4.1. HOFSTEDE'S CULTURAL DIMENSIONS

The work of Geert Hofstede on the topic of differences on national cultures and his theory on 'national cultural dimensions' is well known in the area of international business. He conducted one of the most comprehensive studies of how values in the workplace are influenced by culture. Between 1967 and 1973 he collected data within the company IBM in more than 70 countries. The dimensions of national culture which he derived from his research are:

- Power Distance (PDI),
- Individualism versus Collectivism (IDV),
- Masculinity versus Femininity (MAS),
- Uncertainty avoidance (UAI) and
- Long-Term orientation (LTO)

From the five dimensions above, the first four were implemented by Hofstede deriving from his research, the last one was added in 1991, based on a research by Michal Bond (Hofstede,

2012). A general overview and the difference on the scoring of the two countries in each dimension can be seen in Figure 16. As is pictured, in the dimension of masculinity versus femininity the two countries are close together but in the other dimensions the gap in the score is much bigger. A short explanation on each dimension and a comparison between the two countries follows below.

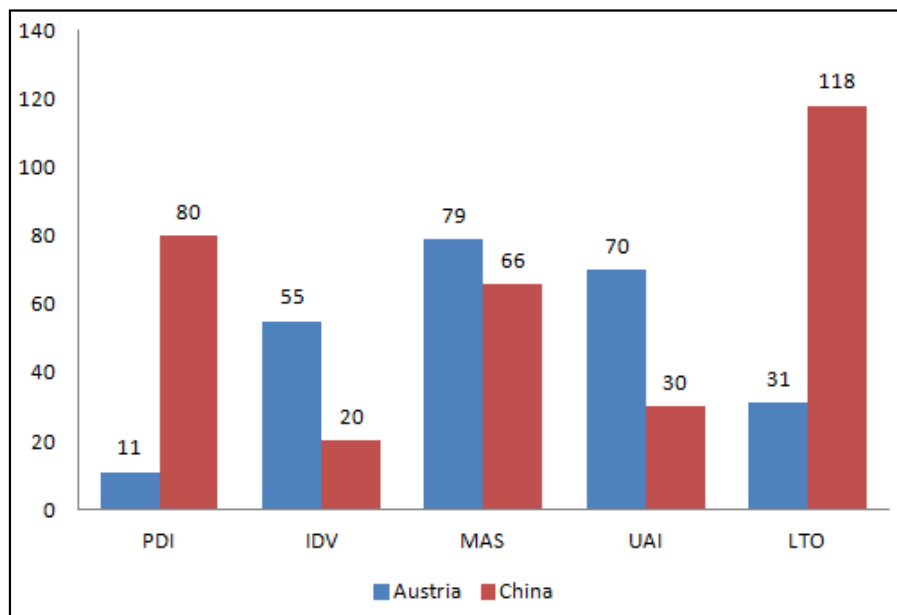


Figure 16: National Culture Dimensions Austria vs China (Hofstede, 2012b and Hofstede, 2012c)

POWER DISTANCE

As Hofstede, Hofstede and Minkov (2010: 61) explain, this dimension can be defined as “*the extent to which the less powerful member of institutions and organizations within a country expect and accept that power is distributed unequally*. Institutions are the basic elements of society, such as family, the school, and the community; organizations are the places where people work.”

In this cultural dimensions the two countries are very different, as Austria has a very low power distance (11) and China sits in the higher rankings (80). This means that in Austria power is decentralized and management trusts on the skills of their subordinates and even asks them for advice, whereas in China the subordinate-superior relationship tends to be polarized and there is no defense against power abuse by superiors. Formal authority and sanctions are normal in Chinese businesses in contrast to Austrian businesses where control is generally disliked. Summarizing, it can be stated that Chinese believe that inequalities between managers and those led are acceptable and Austrians are the opposite as superiors as

well as subordinates see themselves on an equal level of power (Hofstede, 2012b and Hofstede, 2012c).

This difference is important when conducting business in China. The Austrian approach of equality within the management team for example can confuse Chinese business partners which are expecting more hierarchy. Additionally Austrians should respect this point especially when dealing with a Chinese committee consisting of different levels.

INDIVIDUALISM VERSUS COLLECTIVISM

Hofstede, Hofstede and Minkov (2010: 92) define this dimension as follows: *“Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after him- or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty.”*

Also in this dimension the two countries show very different results. China can be considered a collectivist society whereas the Austrians show an individualistic behavior. This means that in China a person is born into a close community what effects business in the way that whom you know often is more important than what your skills are. So, to be in the right group has a positive effect on hiring and promotion and being out-group can be very negative for ones career. In Austria on the other hand there is a loosely-knit social framework in which individuals are expected to take care of themselves and their close family and friends. Hiring and promotion is supposed to be decided on achievements and experience rather than on relationships (Hofstede, 2012b and Hofstede, 2012c).

The collectivist orientation of Chinese business reflects for example in the fact that relationship is very important to conduct business in China. First there is the need to build up a strong relationship between potential partners before real business transactions can take place. But a foreigner probably can never be fully integrated in a Chinese in-group. Thus Senmicro’s management should invest in building up business relationships in China in order to profit from the collectivist thinking.

MASCULINITY VERSUS FEMININITY

According to Hofstede, Hofstede and Minkov (2010: 140) this dimension can be defined as follows: *“A society is called masculine when emotional gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success, whereas women are*

supposed to be more modest, tender, and concerned with the quality of life. A society is called feminine when emotional gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life.”

Both societies can be considered as masculine and therefore success oriented and driven. Therefore, in both countries people have a ‘live in order to work’ aspiration. Managers are expected to be decisive and people tend to work longer to satisfy their customers instead of going home to the family earlier (Hofstede, 2012b and Hofstede, 2012c).

Due to the similarity in this dimension a similar understanding on hard work can be expected what makes negotiations a bit easier in this respect.

UNCERTAINTY AVOIDANCE

Hofstede, Hofstede and Minkov (2010: 191) define uncertainty avoidance as *“the extent to which the members of a culture feel threatened by ambiguous or unknown situations. This feeling is, among other manifestations, expressed through nervous stress and in a need for predictability: a need for written and unwritten rules.”*

In this dimension the two countries are again very different. The scores show that the Chinese are much more comfortable with uncertain situations. Their language is even full of ambiguous meanings that can be difficult for Western people to follow. Their tolerance of ambiguity can be also seen in their entrepreneurial spirit and that they adapt fast to new situations. Austrians on the other hand tend to be more fixed to written and unwritten rule and have an inner urge to work hard, to be precise and punctual. Before deciding, Austrian consider each possibility and analyze every information available. Furthermore, innovations are often resisted because the outcome would be unclear (Hofstede, 2012b and Hofstede, 2012c).

Especially for Senmicro’s management this difference in the two countries cultures should not cause problems. Senmicro’s Compact Moisture Detect is a very innovative gadget and as Chinese tend to be open minded to innovations and projects with uncertain success, there is a high probability that the new product will be well accepted in Chinese paper producing companies.

LONG-TERM ORIENTATION

As Hofstede, Hofstede and Minkov (2010: 239) mention, *“long-term orientation stands for the fostering of virtues oriented toward future rewards – in particular, perseverance and thrift. Its opposite pole, short-term orientation, stands for the fostering of virtues related to*

the past and present – in particular, respect for tradition, perseverance of “face”, and fulfilling social obligations.”

China is a highly long-term and Austria short-term oriented. Short-term oriented societies like Austria for example exhibit great respect for traditions, a relatively small propensity to save and impatience for achieving quick results. Countries like China with a long-term orientation believe that traditions can be adapted to new situations and investments tend to be long-term projects like real estate. This dimension can be considered as a global difference between Western countries which tend to be short-term oriented and Eastern countries, which more often show long-term orientation.

Also this difference tends more to be an advantage for Senmicro’s management than a disadvantage. As Chinese think more in the long-term they are more likely to invest in a product like the Compact Moisture Detect which enables a company to profit in the long-term by saving energy and producing higher quality.

This comparison between the cultures of Austria and China shows more differences than similarities in the two societies. Only in the dimension of masculinity versus femininity the two countries can be considered similar. The management of an Austrian company like Senmicro has to consider those differences when thinking about entering the Chinese market, because neglecting the facts stated above can cause misunderstandings between Austrian and Chinese managers. But those differences can also reveal advantages for an Austrian company as the low uncertainty avoidance and the long-term orientation can promote the investment in a product like the Compact Moisture Detect.

6.4.2. THE IMPORTANCE OF ‘GUANXI’ IN CHINESE BUSINESS

The Chinese term Guanxi refers to the extensive role of ‘interpersonal relationships’ in Chinese business, politics and society in general. According to Liu (2009: 49) guanxi “includes the following four elements:

1. connections through family, home town, school, workplace or simply friendship;
2. obligations at appropriate times and places;
3. a reciprocal relationship whereby obligations are mutual; and
4. the importance of long-term relationships.”

This kind of relationships can be of importance when doing business in China. As an implication for Senmicro this means that the management must build up a relationship within China to conduct business there. As Ambler and Witzel (2001:25) suggest: “The first meetings with go-betweens, hosts and other contacts may not yield anything more than a view names. Track these down, using existing relationships to build new ones. Exploit the system: contacts lead to contacts. This will take time, and it will be hard work, but a few days in China will equate to several weeks of research at home. With these new relationships, depth matters more than quantity.”

6.4.3. CULTURAL EFFECTS ON NEGOTIATING IN CHINA

As Senmicro’s management will face the challenging task of negotiating with Chinese businessmen when entering the new market, the hurdles and possible problems which can occur in this process are explained in this part of the thesis. Chung (2011: 49) for example explains that “negotiating with Chinese is difficult. Here are some reasons why:

- Coming from different cultures, different rules in negotiations apply. They can catch people by surprise.
- Chinese are generally tough negotiators. Tactics they use may not be identified by Westerners and hence it is only recognized when a firm conclusion is drawn.
- Chinese are new on the international negotiating platform and Westerners often do not recognize them as experienced negotiators; their capacity is often underestimated.
- Chinese are very quick learners and often learn and use the Western style of negotiating to their own benefit.
- China is taking negotiations much more seriously than companies of the West. Negotiation is taught as a subject in most Chinese university business courses. The newer universities are also better equipped, with computer labs for example, to train students.

Problems commonly encountered by Western business people in negotiations are:

- There is no predetermined time for negotiations. They may be long or short, and negotiations that have continued for weeks, months and sometimes years may suddenly be fast-tracked after a banquet with someone who was previously not on the

scene. This can be particularly difficult for Western negotiators when they are on a mission and guided by a timeframe.

- Negotiations with Chinese are never concluded. When a contract is signed and an agreement is reached, it is not the end of the negotiation. Issues that have been negotiated or not negotiated may surface at any time before and after the signing. Anything is subject to negotiation and renegotiation. Contracts symbolize the beginning of a long-term cooperative relationship rather than steps and details to be followed. When contracts are signed, few details are usually included. This is not a matter of respecting or not respecting a piece of paper; rather it is recognized that circumstances change constantly and flexibility is essential.
- Chinese now enforce clauses in contracts only to the benefit of themselves and to put Westerners in a difficult position.”

This quote out of the work of Chung (2011) is a good summary of the biggest issues concerning negotiation. The management of Senmicro has to be aware of this possible obstacles and keep them in mind when they try to set up business in China. Also Mr. Hayo Geyer emphasized in the given interview on the issue about never ending negotiations. He mentioned that a concluded contract in China is like the first step stone in a business relationship and a foundation for future negotiations. According to him this is an issue a Western businessman really has to get used to as in most Western countries a written contract is like a law to the signing parties. Also Ms. Schösser mentioned exactly the same issue about Chinese and contracts.

Another important thing when talking to Chinese people is that yes not always means yes in China. According to Chung (2011: 149) “there are at least five meanings expressed in the word ‘yes’ by a Chinese speaker:

1. ‘I heard the sound you just made.’
2. ‘I am still here.’
3. ‘I can’t say no because that is too rude. I will say yes so you don’t lose face.’
4. ‘To keep harmony I will say yes. I will work out later what I will do.’
5. ‘I agree with you. I will do this. I agree to comply.’”

When keeping this different meanings of yes in mind while business meetings it can explain situations where conversation partners feel misunderstood and may get frustrated because of lack of understanding the other person.

6.4.4. BUSINESS DINNERS

Eating and drinking are very important for Chinese and Westerners should take this into account when trying to do business with them. There are a lot of rites during dinners and behaviors one should omit when having a dinner with Chinese people.

For example Westerners should learn how to use chopsticks and while using them, they should only be rested on the chopstick pillows provided (not on top of plate or bowl, not stuck into the rice), not waved in the air when not eating, and not used as a tool other than putting food to your mouth. As it is common to share the food of a dinner instead of everybody ordering his own plate, serving dishes are situated in the middle of the table. Those should never be lifted and moved towards oneself, nor should food be taken from the serving plate with chopsticks. The host's duty is to ensure that the guest will try every dish and has enough food. As an empty serving plate implies to the host that he has not provided enough food, it is impolite to finish everything. Drinking alcoholic drinks can also be an important part of business dinners. Although Chinese drink not as much wine or beer as Westerners, they have their own traditional liquor called 'bai jiu'. According to Chinese believe, drinking is also a way to know someone and build a trustworthy relationship as 'the truth reveals after drinks'. So if a guest trusts a host enough to have a good drink with them and not have to worry about 'truth coming out', it indicates the level of trust and honesty of the guest (Chung, 2011).

6.4.5. CONCLUSION

This chapter shows that Chinese and Austrians stem from very different societies. As Austrian going to China to do business, these differences have to be minded in order to not ruin ones business before even starting with it due to a lack of cultural knowledge. The information given in this chapter can help to avoid mistakes and to understand the Chinese culture a bit better. But there is much more to know.

6.5. TECHNOLOGICAL FACTORS

In this chapter important technological factors in China like patents and intellectual property rights on the one hand and norms and standardization on the other hand are explained. These are important matters for Senmicro's management as they need to know how their intellectual property is secured in China and if there is a certificate needed to sell their product in China.

6.5.1. PATENTS AND INTELLECTUAL PROPERTY RIGHTS (IPR)

When applying for the patent for the technology in the Compact Moisture Detect, the management also requested it already for the Chinese market as they already thought at that time it could be necessary in the future. This was a smart step, as entering the Chinese market without protection of the intellectual property could cause problems for the business. However, it is also important to know how the management can defend its rights if IPR infringement happens in China. Although China is often perceived as a "copying society", which is also caused by the circumstance that learning from others to develop own innovation is rooted deeply in the Chinese culture, a lot has been done by the Chinese government in order to diminish patent infringement. For example many international contracts on IPR have been ratified also by China and also the new patent law from 2009 has been a step towards more efficient IPR protection (WKO, 2012a). However, Ms. Schösser from the Austrian Chamber of Commerce stressed, that IPR laws are almost at Western standards, but the law enforcement often appears as problem. Furthermore the penalty for IPR infringement is not daunting enough to avoid it.

If it comes to a case of patent infringement, a judicial enforcement is the most important option. The courts in Beijing, Shanghai and Guangzhou have the most experience with infringement cases and it is therefore recommended to file an infringement complaint there. A solution in more simple cases would be to look for administrative enforcement by the local Intellectual Property Office (IPO), as they can be useful to mediate in an infringement case. (CISH, 2012).

6.5.2. NORMS AND STANDARDIZATION

The most important standardization certificate in China is the China Compulsory Certification (CCC) and is similar to the European CE system. Products requiring the CCC are not allowed

to be imported or used in business activities in China before a certification was passed. Such a product would be detained at the border or sent back to the sender. Even if a product does not need the CCC, problems with customs officers can occur as they may request a CCC certificate. To reduce this risk, a Clearance Certificate can be requested. According to MPR, a consulting company for certification, CCC is needed for various product groups which are listed on Table 12.

Electrical wires and cables	Circuit stitches, electric devices for protection or connection
Low-voltage Electrical Apparatus	Low power motors
Electric tools	Welding machines
Household and similar electrical appliances	Audio and video apparatus
Information technology equipments	Lighting apparatus
Telecommunication Terminal equipments	Motor vehicles
Motor vehicle tires	Safety glasses
Agricultural machinery	Latex Products
Medical devices	Fire Fighting Equipment
Safety Protection Products	Home Décor and Remodeling Products
Safety Parts and Accessories of Vehicles and Motorcycles	Toy Products
IT Products	

Table 12: Product groups which need CCC certification (MPR, 2012)

According to the management of Senmicro it is not sure if the CCC is needed for the Compact Moisture Detect. It may be a good idea to clarify if the CCC is needed before entering the Chinese market as this could avoid customs problems. Assistance for this task is offered by the Austrian Chamber of Commerce and several international agencies. Another approach is given by Mr. Hayo Geyer, who said that it may be a better idea to simply try to import the device to China, as the worst case would be that it would be rejected at the border. Additionally the requirements in the certificate can change from one case to another and therefore a beforehand requested certificate in the end may be also refused. Also Ms Schösser from the Austrian Chamber of Commerce emphasized that the CCC can cause many problems with this sort of products as Chinese bureaucracy can be very complicated.

Since it is not clear what would be the best way to clarify this issue, Senmicro's management maybe should get in contact with other institutions as well and then consider the information available in order to find the best way for them.

6.5.3. CONCLUSION

Summarizing this part it can be said that Senmicro's management has to face some technological legal issues. As the CMD's patent also covers the Chinese market, Senmicro's technology is secured theoretically. Still, Chinese companies are often perceived to copy a lot, but the times have changed and Senmicro has good chances to work in China without infringement. The other issue to resolve is the China Compulsory Certificate. In order to handle this topic, the company's management should retrieve more information and should clarify internal, if the best way would be to request the CCC beforehand and risk that it would yet be rejected or to test it more practically by sending the device to China and see what happens.

6.6.ENVIRONMENTAL FACTORS

This chapter focuses on the energy and environment policy and the situation of deforestation in China. The first topic is important as the Compact Moisture Detect is a component in the paper industry which among others helps to decrease input factors in production. Therefore an overview on this topic can provide relevant information. The latter topic gives information on the wood supply in China and possible effects on the growing paper industry in China.

6.6.1. ENVIRONMENTAL PROTECTION

China's government is more and more concentrating on turning its economic boom also more environmentally sustainable. According to Binhui and Tao (2010: 3) "the paper industry is the main pollution emission and also the major energy consumer. It emits 20% of industrial wastewater and more than 30% of the COD (Chemical Oxygen Demand) at an annual contribution of 1% of the gross industrial output value. The water used per ton of paper is up to 100 cubic meters, which is 10 times of the world average level. The paper industry ranked the first in the top five water consumption industries, and it consumes nearly 10% of industrial water. Therefore, the paper industry is the key industry to pollution control." Also

in a report of PwC (2005: 7) the environmental problem caused by the paper industry is mentioned and says “the domestic pulp and paper industry is a major source of industrial contamination.” Due to this reason several laws have been passed in order to restrict the pollution caused by this industry. As Binhui and Tao (2003: 4) mention “many policies, such as the policies on energy saving, the policies on the elimination of backward production capacity, the policy for paper industry development, the new standards on pulp and paper industry water pollutant discharge, and the light industry restructuring and revitalization plan, all put forward the requirements of pollution treatment and elimination of backward production capacity to the paper industry.” Also Xu (1999) identified the paper industry as the largest rural polluter in China. The author mentioned that one important step to decrease paper production caused pollution already taken by the Chinese government was to close over 1.000 small paper mills with annual production of less than 5.000 tons. Furthermore in a survey Xu observed the effects of pollution levies on the paper producers. His findings are that levies imposed by the Chinese government forced the companies to implement modern technology for less pollution. Higher levies showed even more effects.

This described development in environmental protection in the paper industry could foster the need of the Compact Moisture Detect as it helps paper producing companies to use resources more efficient.

6.6.2. ENERGY POLICY

In terms of Energy, China is also facing a future challenge. Along with its economic growth also the energy consumption grew constantly. In the last decade China’s industries and inhabitant often experienced black outs in power supply. Therefore, the Chinese government made huge efforts and investments in order to secure the power supply for the future. Today, China is the biggest producer of energy in the world and as such is in the need of huge amounts of coal, oil etc., but the country is also investing heavily in renewable energy such as hydro, solar and wind power. As the per capita energy consumption is not yet on the level of Western countries, as many Chinese still have no access to electric energy, the Energy consumption and production in China is expected to increase further in the upcoming years (PwC, 2005 and Global Times 2012).

As the CMD supports efforts to decrease the power consumption of paper companies, the energy development in China could promote the need for this product.

6.6.3. WOOD SUPPLY

As it is stated in a report by PwC (2005: 4), China is “desperately short of wood pulp – one of the key ingredients in the paper manufacturing process”. Due to the economic advantages of developed land, large demand of commercial timber and the increase in the demand in furniture many trees get logged every year. Because of this over-felling of timber only 14-18% of China’s landmass is covered by woods what is substantially lower than the international average of 30%. This is also said to cause flooding and other natural disasters in China. Today much effort is undertaken in order to increase the share of forests on China’s maps but for the paper industry this means even more problems regarding wood-pulp supply. This is why in 2005 for example non-wood pulp fibers, which are extracted e.g. from wheat and rice straw, accounted for nearly 85% of the pulp in the paper production. Furthermore the use of wastepaper increased from 2,52 million tons in 1999 to 27,5 million tons in 2009 with annual growth rate of 30,4%. To have sufficient supply for the huge Chinese paper industry is also relying on wood pulp import, which increased from 3,8 million tons in 2000 to 14 million tons in 2011 (PwC, 2005 and China Business Challenge, 2012 and Marketinfoguide, 2012 and FAOSTAT, 2012)

6.6.4. CONCLUSION

As it can be observed in this chapter, China’s paper producing companies are facing many challenges due to new laws to protect the environment, a growing need of energy in the whole country and a shortage in wood supply. Senmicro could profit from this development in the new market as the CMD is a product which supports the paper factories to produce paper more efficient. This could reduce waste and the need of energy and wood pulp.

6.7.LEGAL FACTORS

The Chinese legal system comprises historical-traditional as well as different other legal elements such as Continental-European, Anglo-Saxon and socialist. According to the WKO, legal uncertainty and a lack in law enforcement are still obvious in the Chinese legal system. During the last 15 years, many new laws have been passed which are affecting foreign companies. Examples are the Corporation Law 1993, Contract Law 1999, Legislation Law 2000, Technology Transfer Law 2002, Trade Law 2004, Labor Contract Law 2007, Corporate

Income Tax Law 2007, VAT Law 2009. In this part of the thesis there is first a comparison of legal indicators showing a general difference in law security and law enforcement between China and Europe and afterwards dealing with some important legal issues from Senmicro’s point of view.

6.7.1. LEGAL INDICATORS

To compare the legal situation in China with that in Senmicro’s current markets, the legal indicators which were already used for selecting the most promising country in Asia will be utilized again. This time with data from China, Austria, Germany, Italy, France, Spain and Finland. The scores for each political indicator can be found on Table 13.

	China	Austria	Germany	Italy	France	Spain	Finland
Regulatory Quality	-1,65	+1,41	+1,51	+0,75	+1,11	+1,09	+1,77
Rule of Law Indicator	-0,35	+1,81	+1,62	+0,41	+1,50	+1,20	+1,96
Control of Corruption	-0,60	+1,44	+1,69	-0,01	+1,51	+1,06	+2,19
Corruption Perception Index	3,6	7,8	8	3,9	7	6,2	9,4

Table 13: Legal Indicators for China and selected European countries (World Bank, 2012 and Transparency International, 2012)

As already explained in chapter 4.1.3, the first three indicators in the table are derived from the World Bank and the last one is published by Transparency International. The ones issued from the World Bank can score from -2,5 to +2,5 with higher as better scores. The Corruption Perception Index can score from 0 to 10 with 0 indicating very corrupt countries and 10 very clean states.

The comparison in this table shows, that China is lagging far behind European standards in many things. For example it can be assumed that the policies and regulations developed by the Chinese government are not promoting development and the private sector as much as European countries, as China scores very poorly in Regulatory Quality. Also the score in the Rule of Law Indicator is worse in China than in Europe, what indicates that the confidence in police, courts, legal contracts, law enforcement and more is low in China. In a 2007 conducted survey on German businesses in China it is also mentioned that there are business challenges due to legal weaknesses. This survey showed that 76% of the participating companies had a problem or even a major problem with ‘Legal Security & Compliance with Business Terms’ and 77% had problems or major problems with ‘Bureaucracy &

Authorities'. It was reported that these companies suffered negative impact on their businesses e.g. due to the lack of competence of judges, payment behavior of public customers, political influence on legal practice, a lack in clarity of regulations or authorities' competences, communication of new regulations and so on. However, the survey also revealed that the situation is getting better and since the WTO entry of China a legal framework was established which meets international standards.

Additionally to the first two mentioned legal indicators, there are the two indicators about corruption, the Control of Corrupting Indicator and the Corruption Perception Index, which are both showing that China can be perceived more corrupt, than most European countries. But it seems that in terms of Corruption China is not much worse than Italy, where Senmicro is already doing business. However, that corruption is a big issue in China has been also reported in the above mentioned survey from 2007. According to this survey 20% of the participants said that corruption is a major problem when doing business in China and another 46% answered that it is at least a problem. But the percentage of respondents seeing corruption as a major concern is decreasing as in the 2002 and 2004 conducted surveys this percentage was 27 and 30 respectively what leads to the assumption that anti-corruption initiatives were somehow effective (GIC and EAC, 2008). Mr. Hayo Geyer from V.I.T. Papertec mentioned about corruption that it is a serious issue in China, but a company's management can decide whether they want or not take part in illegal transactions. According to him it is also not problematic to do business in China without corruption and therefore doesn't need to be an issue for Senmicro's management.

After this observation of legal indicators it can be concluded that the legal situation in China is far from European standards. When dealing with Chinese authorities and business partners, the management of Senmicro has to bear this in mind. Especially corruption seems to be a serious issue but can be avoided by Senmicro's management.

6.7.2. TAXATION IN CHINA

For a company like Senmicro, which is doing business in China for the first time it is important to know which kind of taxes can arise. Therefore, this part gives a short overview on different important taxes in China.

Representative offices, which are no corporate bodies, are subject to the corporate tax (25%) according to the "Interim Measures on Tax Administration of Representative Offices of

Foreign Enterprises” which was carried into effect in 2010. Profit is additionally taxed with a 5 per cent business tax. The basis of taxation is the profit of the commercial unit. If the profit cannot be calculated exactly, it would be estimated – at least 15% of the revenue would be assumed as profit – or calculated on basis of the costs (WKO, 2012a).

Companies which are partly or wholly owned by a foreign company are also subject to the corporate tax of 25% but not to the 5% business tax. Furthermore, there is a reduction of the corporate tax rate for companies with low profit or for companies which are categorized as a high-tech company. For those companies, the corporate tax rates are 20% or 15% respectively (WKO, 2012a).

The above shows which percentage of profits probably would have to be paid if Senmicro would set up an office in China with or without Foreign Direct Investment. If the CMD will be imported into China these regulations are not important. In that case it could be necessary that an employee of Senmicro would travel to China in order to install the CMD in the paper mill. Due to a double tax agreement between Austria and China an employee assembling in China would be subject to personal income tax if he stays in China for more than 183 days per year. It is important to know that for the calculation of this time span the authorities use the duration of the visa rather than the actual staying time. Besides the personal income tax, with assembling and installing projects also the corporate tax of 25% and a business tax of 3 to 5% are becoming relevant. However, due to the double taxation agreement, projects with a duration of less than six months are no subject to the corporate tax (WKO, 2012a).

These different forms of taxation rules are important for Senmicro’s management when choosing the mode to enter China.

6.7.3. CONCLUSION

From this part of the thesis it can be seen that in terms of legal factors China is still lagging behind European standards. Initiatives have been started but it still needs some time until negative effects of the legal deficiencies disappear. Another point shown is the differences in taxation depending on the entry mode chosen. These things have to be taken into account when Senmicro enters the Chinese market.

6.8.PESTEL SUMMARY

This big part of this thesis is full of important information for Senmicro's management. It shows the various differences e.g. in cultural regards between the European and the Chinese market as well as political and legal challenges stated by other institutions which have already gained experience in this foreign market. Moreover it offers an overview on the opportunities due to the development of the paper industry itself or new environmental laws and regulations affecting it.

To sum it up, it can be said that Senmicro's management will face challenges, some serious, some not so. But the opportunities lying in this country outweigh the possible difficulties.

7. RECOMMENDATIONS AND FURTHER STEPS

This chapter is dealing with the market entry strategy and its deployment by the company. Therefore, the possible entry modes for the Chinese market and how Senmicro's company strategy would have to be adopted is observed here. Furthermore ideas for the marketing strategy are developed in this part of the work. In the end there is a recommendation for the next actions which need to be done in order to have a successful start into the new market.

7.1. POSSIBLE ENTRY MODES IN CHINA

As already explained in chapter 2.4, there are various entry modes with different resource commitment, ownership structure and degree of control available. Some of the generally known possibilities have different terms and different advantages and disadvantages in China. Therefore, some of the most important versions of foreign business activities in China are explained here. Before that, it should be mentioned that there is an important distinction between local production and the distribution of finished goods in China, where the latter is more regulated. According to Ambler and Witzel (2001: 113) "a Western firm will not generally get distribution rights unless there is at least some technology transfer also involved." As distributing the CMD in China would implicate technology transfer, the next part will concentrate on this way of setting a foot into China.

7.1.1. IMPORT AGENT

Agencies operate in China similar to anywhere else in the World. With the large Chinese market in mind and the relationship needed to conduct business in China it is important to have some form of local representation. This is not entirely the case with agents, as they appear on their own, only selling the goods in their product range (Ambler and Witzel, 2001). Therefore, utilizing a sales representative in the market will may not lead to the desired market penetration. On the other hand, selling the product via an import agent shows very low risk as no direct investment is needed. An import agent thus could be the first step into the country to test the acceptance of the product. For Senmicro this would implicate to find a trustworthy agent, who has experience in the Chinese paper market. Czinkota and Ronkainen (2006: 288), highlight that for such a concept to work, "both parties must recognize the

delegation of responsibilities, the costs associated with these activities, and the need for information sharing and cooperation.”

Another point is that Senmicro needs to be present in China for assembling the CMD into paper machines. So, if in terms of marketing Senmicro is only present via an agent, they have to fly over to China for every product that needs to be assembled. This may work with the first projects, but if the product is successful, they will probably need a permanent presence. This supports the argument, that an import agent may be a good idea in the beginning, in order to test the market, but not in the long run.

7.1.2. REPRESENTATIVE OFFICE

A representative office is no legal entity on its own and is therefore no real foreign direct investment. Nevertheless, some investment is needed to set up an office in China and to employ people there. Albeit, such an office is not allowed to conduct business on its own, it is only allowed to support and consult. Also it is not allowed to import products from the mother company (WKO, 2012a). Therefore it is actually a sales representative agency owned by the company. Thus, more control over the product can be ensured but an own sales network has to be built. If Senmicro would apply this form of entry mode, it would mean that they need to set up an office somewhere in China and start building up relationships and networks themselves. This can be a long lasting task without any help in the market. Furthermore, this office then would have no legal right to sign contracts with potential Chinese customers. This would still be done with the Austrian mother company. Therefore, a representative office has no main advantages to an import agent, but major disadvantages.

7.1.3. WHOLLY FOREIGN OWNED ENTERPRISES (WFOE)

Wholly Foreign Owned Enterprises (WFOEs) need a higher amount of investment than representative offices and contain more risk. As Ambler and Witzel (2001: 117) mention, “going straight into a WFOE, making a large investment in a market where the firm has no developed relationships or contacts, has high levels of regulation, poor infrastructure and rapid economic change, growth and uncertainty, carries a risk level which no sane banker should consider.” For a small company like Senmicro, a green-field investment like this is a too high risk in the beginning, whereas it could be a possibility when the operations in China are mature.

7.1.4. JOINT VENTURE (JV)

According to Ambler and Witzel (2001: 114), “the joint venture is a business vehicle well suited to the Chinese way of doing business, which stresses networks and collaboration. Unlike the West, where all business alliances have to be seen as temporary, Chinese joint ventures can last for generations.” Also Ghauri and Cateora (2010: 279) stress the importance of joint ventures in China as they mention that “in China, a country considered to be among the riskiest in Asia, there have been 49.400 joint ventures established in the first 15 years since they began allowing JVs.” However, a joint venture is not an easy a business model to build successfully. It involves a high amount of trust between the two parties as a lack of trust is the main reason for failure. To found a joint venture in China, Senmicro would need to find a reliable partner, in order to avoid problems of joint ventures, as Czinkota and Ronkainen (2006: 301) describe them: “Major problems can arise due to conflicts of interest, problems with disclosure of sensitive information, and disagreement over how profits are to be shared; these are typically the result of a lack of communication and planning before, during, and after the formation of the venture. As they have few knowledge about the Chinese market so far, finding such a partner is not easy and involves high risk Therefore it is probably not the best choice as an entry mode, but when they found a partner, e.g. a import agent, they trust, it could be a possibility to strengthen Senmicro’s position in the Chinese market with an own office and technology, but with the network of a partner.

7.1.5. FOREIGN-INVESTED COMMERCIAL ENTERPRISE (FICE)

The FICE is a special form of the WFOE and JV. Regular WFOEs and JVs are allowed to import goods into China, but they do not automatically have the right to distribute them. In order to distribute goods in China, a FICE is needed (WKO, 2012a). This means actually, that only companies for producing or sourcing in China and distribution abroad are not requested to be a FICE. As Senmicro wants to distribute in China, they need to found a FICE special form if they want to invest in a WFOE or JV.

7.1.6. SELECTING THE ENTRY MODE

As Senmicro is a young and small company, setting up an subsidiary like an WFOE or JV would represent a substantial investment which could risk the company’s survival in case of

failure. Therefore it is recommended to follow the Uppsala model of incrementally increasing the business activities in China and start with a reliable local **import agent**. As Ms. Schösser of the Austrian Chamber of Commerce noted, more than 90% of Austrian companies entering the Chinese market do so with a local partner. With this partner an alliance in China could be built which, later on, would lead into a contractual joint venture, in order to build a competitive company with the technical know-how of Senmicro and the market know-how of the Chinese partner. In this way, the market would first be tested to find out if the business is promising enough in China. If this partner fits to the organizational culture of Senmicro and their management evaluates the partner as trustworthy, after the first successes a joint venture could be founded in order to strengthen the position of Senmicro in the Chinese market. But this is a recommendation for the long-term. In the short-term, distributing the CMD by utilizing an import agent, like Senmicro does in the current markets, would be the best strategy.

Characteristics
Goals and characteristics
Size of the firma
Financial strength
Reputation
Trading areas covered
Compatibility
Experience in products / with competitors
Sales organization
Physical facilities
Willingness to carry inventories
After-sales service capability
Use of promotion
Sales performance
Relations with local government
Communications
Overall attitude/commitment

Table 14: Criteria for choosing an international distributor (Czinkota and Ronkainen, 2006)

In order to screen a potential intermediary and partner, an approach given by Czinkota and Ronkainen (2006: 430) could be followed as they mention, “the potential candidates must

now be compared and contrasted against determining criteria.” The two authors give an example as depicted on Table 14 and explain that “this list should correspond closely with the exporter’s own determinants of success – all the things that have to be done better to beat out competition.” Therefore, the list should be weighted according to Senmicro’s needs and potential partners should be ranked according to their performance in each characteristic. In this way, a partner in China can be found, with whom Senmicro’s management can enter the foreign market first through importing and who could be a joint venture partner in the long-term.

7.2. THE MARKETING STRATEGY

To summarize the marketing strategy of Senmicro, the model of international entry and expansion of Czinkota and Ronkainen (2007: 282), which was explained in 2.4, can be used. In case of Senmicro, proactive stimuli of market and opportunity seeking as well as the management’s intention to internationalize the business led to the decision to start the internationalization process. More information and further experience and perceptions were described in this thesis, in order to provide a clearer picture of different concerns. Thereby, the company can develop its corporate export strategy over time as described in the model. In the beginning phase, this is recommended by utilizing an import agent. After the process including awareness of business opportunities, interest, trial, evaluation and adaptation, this can lead to further international expansion including foreign direct investment such as a joint venture.

After a thorough analysis of the Chinese market, below some brief ideas for Senmicro’s management are mentioned how to promote the CMD in the Chinese market. These are some thoughts which arose from the long engagement with the topic, but cannot substitute a deeper analysis of pricing and distribution strategies, which could be topic of another thesis.

The unique selling proposition of the Compact Moisture Detect is the innovative technology, which allows the measurement of moisture during the production of paper in places of the paper machines, where it was not possible so far. Therefore there is no competitor in the market, what provides Senmicro a sole position in the market, but also a problem. So far, nobody in the Chinese paper producing market knows about this innovative product and Senmicro’s sales staff must persuade paper producing companies that they need this device. Some very strong arguments to promote the CMD are:

- Sophisticated Austrian technology, in order to modernize Chinese mills.
- Reducing pollution and therefore being in accordance with Chinese environmental regulations, by producing more efficiently.
- Decreasing the usage of energy and water and thereby reducing costs.

Therefore, the sophisticated and unique technology as well as its potential to increase the efficiency of paper mills are the biggest assets of Senmicro while negotiating. Thus, the product itself doesn't need to be adapted to the new market, but the communication strategy should focus more on the possibility of increased efficiency than on quality improvement, which is a main argument in Europe. An adaptation which took already place during the time of writing this thesis, was rebranding the CMD1 to CMD881, as the number 8 represents luck in the Chinese culture. This is only a small move, but it shows already the awareness of Senmicro's management to the Chinese market. Furthermore, it is also strongly recommended to translate information brochures into the Chinese language.

In order to find potential import agents which can bring this information to the paper producing companies to win contracts, the Austrian Chamber of Commerce can deliver substantial help as Ms. Schösser explained during the interview with her. They have seven representative offices in China and experts for every industry. Also trade fairs can bring opportunities to get in contact with the right persons. The Austrian Chamber of Commerce also gives support to companies who want to appear on fairs in China.

The pricing will of course be negotiated new for each contract, as it depends on the usage in the paper machines, but the price should be kept on a level similar to the European contracts. The Chinese can afford to invest in this technology, but they do not like to be charged higher prices than other countries. Of course, the additional cost of exporting, such as shipment, tariffs and costs of assembling need to be added, in order to stay profitable. As Mr. Geyer explained, in many industries in China, competitors dump their prices in order to gain market share and put others out of the business and that it is very risky to follow this sort of strategy. But, as there is no comparable product on the Chinese market, there is no threat for such a price development.

With this ideas about the marketing mix, the strategy can be developed further, when more information about potential import agents is gathered and first contacts to potential customers are tied.

7.3.THE NEXT STEPS

With this analysis of the Chinese market the management of Senmicro has already valuable information. In order to start successful into China the following next steps are recommended:

- Translate brochures and other useful information into Chinese.
- Prepare the staff, which is responsible for the new market, for the challenges (culture, language, etc.) waiting in China.
- Get in Contact with the Austrian Chamber of Commerce in China to get contacts of potential partners in China.
- Clarify if the China Compulsory Certificate is needed for the CMD.
- Plan a trip to China.
- Schedule meetings with potential partners and the Austrian Chamber of Commerce (Bring enough business cards)
- Select an import agent; Ask the Austrian Chamber of Commerce for guidance regarding the contract and other legal issues
- Sell the first CMD to China.

8. CONCLUSION

During this analysis many advantages and disadvantages of the Chinese market were shown. In the first part compared to the other Asian countries Indonesia, Japan, South Korea, Taiwan and Vietnam, it was shown that in terms of economic and market factors, China has enormous potential. But China has also some disadvantages, for example in terms of legal regulations and political factors. From that point of view, China is still not very developed and was in some cases also defeated by the other Asian countries, especially Japan. However, China showed the best overall performance of all analyzed countries and was chosen for further analysis.

After selecting China as the country to enter, an analysis following the PESTEL approach was accomplished. In this part, details about China regarding

- Political factors
- Economic factors
- Social factors
- Technological factors
- Environmental factors
- Legal factors

were collected and also compared with other parts of the world, especially Europe and the currently most important markets for Senmicro. This analysis showed again the substantial opportunities in this country, as, for example the paper industry in China is already bigger than in all countries together, where Senmicro is currently active. Furthermore, the Chinese paper market is still growing vitally, whereas the European ones are already stagnating. Besides these important advantages, China shows also some downsides. In comparison with the Western countries, China is lagging far behind in terms of regulation, corruption and legal security. Those are facts which cannot be neglected when seeking market opportunities in China. But the Chinese government is aware of such problems and is trying to improve. This can also be observed when looking on different published indicators and the fact, that China is improving scores and ranks from year to year. Summarizing this, it can be said that China has numerous opportunities but also threats. But in this case of Senmicro seeking for business activities in China, the opportunities outweigh the threats.

In the last part of this work the focus was on Senmicro's future in China. Putting all the information gathered about China and the knowledge about Senmicro together, it seems

obvious that they should enter the new market without big investment. Therefore it is a reasonable recommendation that it would be best to look for a reliable import agent in China first and, if this works successfully, strengthen the market position in the long-term by building a joint venture. A main issue in the phase of finding a partner is the evaluation of potential candidates. The future partner in the market is a major determinant for the success in the new market.

After collecting all the information about China and comparable markets for Senmicro, it can be summarized that their management will face numerous challenges in Asia. China is not an easy market to work in, but there is a reason why so many, also Austrian, companies already went there. If a company overcomes all obstacles, there are excessive opportunities in this huge country to be successful. Therefore, it is reasonable that Senmicro can also be successful in China.

9. REFERENCES / BIBLIOGRAPHY

- Ambler, T. and Witzel M. (2001), *Doing business in China*, London: Routledge
- Baack, D.W., Harris, E.G. and Baack, D. (2012), *International Marketing*, Thousand Oaks: Sage Publications Inc.
- Badkar, M. (2012), *Meet The New Politburo Standing Committee – China's 7 Most Powerful Men*, Business Insider, 15th of November 2012, <http://www.businessinsider.com/china-politburo-standing-committee-2012-11?op=1> (23.11.2012)
- Binhui, L. and Tao, Z. (2010), *Study on M&As Strategies of the Chinese Paper Enterprises*, Working Paper, Zhangzhou Normal University, Fujian and Beijing Jiaotong University, Beijing, China
- Birkner (2012), *Advanced search*, <http://www.paper-world.com/freiesuche.php?sprache=uk&menue=12> (1.10.2012)
- Cateora, P.R. (1996), *International marketing*, 9th Edition, Chicago: Irwin
- China Paper/China Forest (2009), *Chinese Paper Industry*, <http://www.chinapaperbeijing.com/industry.html> (23.7.2012)
- China Business Challenge (2012), *Deforestation*, <http://cbc.ourcen.com/more-on-china/deforestation/> (3.12.2012)
- Chung, M. (2011), *Doing business successfully in China*, Oxford: Chandos Publishing
- CIA World Factbook (2012), *Definitions and notes*, <https://www.cia.gov/library/publications/the-world-factbook/docs/notesanddefs.html#2004> (4.9.2012)
- CIA World Factbook – China (2012), *China*, <https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html> (7.11.2012)
- CISH – China IPR SME Helpdesk (2012), *Patents: Find your way*, <http://www.china-iprhelpdesk.eu/en/getting-started/finding-your-way-around-ipr/patents> (3.12.2012)
- Czinkota, M.R. and Ronkainen, I.A. (1993), *International marketing*, 3rd Edition, Fort Worth: Dryden Press
- Czinkota, M.R. and Ronkainen, I.A. (2007), *International marketing*, 8th Edition, Mason: Thompson South-Western
- Davis, T.R.V. and Young, R.B. (2002), *International marketing research: A management briefing*, in Business Horizons, March-April 2002
- Douglas, S.P. and Craig, C.S. (1983), *International marketing research*, Englewood Cliffs: Prentice-Hall

Douglas, S.P., Lemaire, P. and Wind, Y. (1972), Selection of Global Target Markets: A Decision-Theoretic Approach, Proceedings of the XXII ESOMAR Congress, Cannes, France, (September 1972), pp.237-251

EUCCC – European Chamber of Commerce in China (2011), *The European Business in China Position Paper 2011/12*, EUCCC

European Commission (2003), *The new SME definition*, http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/sme_user_guide_en.pdf (21.6.2012)

EUROSTAT (2012), *Real GDP growth rate – volume*, <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00115> (26.11.2012)

FAOSTAT (2012), *Food and Agriculture Organization of the United Nations*, http://faostat3.fao.org/home/index.html#SEARCH_DATA (3.12.2012)

Ghauri, P and Cateora, P. (2010), *International marketing*, 3rd Edition, Berkshire: McGraw-Hill

GIC – German Chamber of Commerce, EAC – Euro Asia Consulting (2008), *German Business Expansion in China: 2008-2012*, <http://www.kooperation-international.de/fileadmin/public/cluster/Xuzhou/GermanBusinessStudy.pdf> (3.12.2012)

Global Times (2012), *Full Text: China's Energy Policy 2012*, <http://www.globaltimes.cn/content/740169.shtml> (3.12.2012)

Göritz, L. E. (2011), *The internationalization of Small and Medium-Sized Enterprises (SMEs): A Case Study of German Business Support in China*, Dissertation to obtain the title of Doctor Oeconomiae, University of St. Gallen

Hill, J. S. (2009), *International Business – Managing Globalization*, Thousand Oaks: Sage Publications Inc.

Hodgetts, R.M., Luthans, F. and Doh, J.P. (2006), *International Management*, 6th Edition, New York: McGraw-Hill

Hofstede, G., Hofstede, G. J., Minkov, M. (2010), *Cultures and Organizations – Software of the mind*, 3rd Edition, New York: McGraw-Hill

Hofstede, G. (2012a), *National cultural dimensions*, <http://geert-hofstede.com/national-culture.html> (14.11.2012)

Hofstede, G. (2012b), *What about Austria?*, <http://geert-hofstede.com/austria.html> (21.11.2012)

Hofstede, G. (2012c), *What about China?*, <http://geert-hofstede.com/china.html> (21.11.2012)

Honeywell (2012), *About Honeywell*, <http://honeywell.com/About/Pages/our-company.aspx> (11.9.2012)

Honeywell (2012), *Honeywell History*, <http://honeywell.com/About/Pages/our-history.aspx> (11.9.2012)

Johanson, J., Vahlne, J.E. (1977), *The Internationalization Process of the Firm: A Model of Knowledge Development and Increasing Foreign Market Commitments*, *Journal of International Business Studies* 8 No. 1, 23-32

Johanson, J., Weidersheim-Paul, F. (1975), *The Internationalisation of the Firm – Four Swedish Cases*, *Journal of Management Studies* 12, 305-322

Kaufmann, D., Kraay, A. and Mastruzzi, M. (2010), *The Worldwide Governance Indicators – Methodology and Analytical Issues*: The World Bank

Kumar, V. (2009), *Research in International Markets: Philosophical and Methodological Issues*, in Kotabe, M. and Helsen, K (Ed.) *The SAGE Handbook of International Marketing*, London: Sage Publications Ltd

Lawrence, R.Z., Drzeniek Hanouk, M. and Doherty, S (2012), *The Global Enabling Trade Report 2012 – Reducing Supply Chain Barriers*, Geneva: World Economic Forum

Lee, K., Carter, S. (2012), *Global Marketing Management*, 3rd Edition, Oxford: Oxford University Press

Liu, H. (2009), *Chinese business – Landscapes and strategies*, London: Routledge

Marketline (2012), *MarketLine Industry Profile – Global Paper Products*, May 2012

Marketinfoguide (2012), *Analysis on Chinese Papermaking Industry 2011-2012*, <http://marketinfoguide.com/2011/03/29/analysis-chinese-papermaking-industry-2011-2012/> (3.12.2012)

Menipaz, E. and Menipaz, A. (2011), *International Business – Theory and Practice*, London: SAGE Publications Ltd

Metso (2012), *Our history*, http://www.metso.com/corporation/about_eng.nsf/WebWID/WTB-041026-2256F-0E48B?OpenDocument&mid=2E8312A41D276B1FC2256F40003E464C (11.9.2012)

Morrison, J. (2011), *The Global Business Environment – Meeting the Challenges*, 3rd edition, New York: Palgrave Macmillan

MPR (2012), *What is CCC*, <http://www.china-certification.com/en/what-is-ccc> (3.12.2012)

OECD (2005), *OECD Economic Surveys – China*, OECD Economic Surveys Volume 2005/13

OECD (2010), *OECD Economic Survey – China*, OECD Economic Surveys Volume 2010/6

PESTEL Analysis (2012), *PESTEL Analysis*, <http://pestel-analysis.com/> (7.11.2012)

Phatak, A.V., Bhagat, R.S. and Kashlak, R.J. (2005), *International Management – Managing in a Diverse and Dynamic Global Environment*, New York: McGraw-Hill

Porter, M.E. (2008), *The five competitive forces that shape strategy*, Harvard Business Review, January 2008, p. 78-93

Process Sensors Corporation (2012), *The Company*, <http://www.processsensors.com/company.asp> (11.9.2012)

PWC – PriceWaterhouseCoopers (2005), *Paper and Packaging Market in China – China Risks and Rewards*, September 2005

Rabinovitch, S. (2012), *New leaders dent hopes for reform*, Financial Times, 15th of November 2012, <http://www.ft.com/intl/cms/s/0/b31db0da-2ec3-11e2-8bb3-00144feabdc0.html#axzz2D2vhx5mm> (23.11.2012)

Schwab, K (2011), *The Global Competitiveness Report 2011-2012*, Geneva: World Economic Forum

Shenkar, O. and Luo, Y. (2008), *International Business*, 2nd edition, Thousand Oaks: Sage Publications Inc.

The Economist (2012a), *Habemus Papam!*, The Economist, 15th of November 2012, <http://www.economist.com/blogs/analects/2012/11/china-reveals-its-new-leaders> (23.11.2012)

The Economist (2012b), *Time to choose*, The Economist, 17th of November 2012, <http://www.economist.com/news/leaders/21566668-will-new-line-up-top-communist-party-take-radical-approach?zid=306&ah=1b164dbd43b0cb27ba0d4c3b12a5e227> (23.11.2012)

The Economist (2012c), *Changing guard*, The Economist, 17th of November 2012, <http://www.economist.com/news/china/21566685-china-shuffles-its-leadership-putting-princeling-command-changing-guard> (23.11.2012)

The Heritage Foundation (2012), *About the Index*, <http://www.heritage.org/index/about> (31.8.2012)

Transparency International (2012), *What is the Corruption Perceptions Index*, http://cpi.transparency.org/cpi2011/in_detail/#myAnchor1 (5.9.2012)

United Nations Development Program (2012), *Human Development Index (HDI)*, <http://hdr.undp.org/en/statistics/hdi/http://hdr.undp.org/en/statistics/hdi/> (4.9.2012)

Voith (2012), *Milestones*, <http://www.voith.com/en/group/history/milestones-13690.html> (11.9.2012)

WKO – Wirtschaftskammer Österreich (2012a), *AWO-Länderreport China (2012)*, Außenwirtschaftscenter Peking

WKO – Wirtschaftskammer Österreich (2012b), *Austrian Business Confidence Study 2012*, Außenwirtschaftscenter Peking

World Bank (2012a), *Worldwide Governance Indicators*, http://info.worldbank.org/governance/wgi/sc_country.asp (5.9.2012)

World Bank (2012b), *GDP growth (annual %)*, <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?page=2> (26.11.2012)

World Economic Forum (2011), *The Financial Development Report 2011*

Xu, J. (1999), *China's Paper Industry: Growth and Environmental Policy During Economic Reform*, Dissertation project for Doctor of Philosophy, Faculty of the Virginia Polytechnic Institute and State University

Young, R.B. and Javalgi, R.G. (2007), *International marketing research: A global management perspective*, in *Business Horizons* Nr. 50, 113-122

Zhuang, Z., Ding, L. and Li, H. (2006), *China's Pulp and Paper Industry: A Review*, Working Paper, School of Economics Georgia University of Technology

10. ANNEX

ANNEX 1: Economic, political, legal and paper market indicators for the Asian countries China, Indonesia, Japan, South Korea, Taiwan and Vietnam, in order to compare their attractiveness.

Criteria	measured by	China	Indonesia	Japan	South Korea	Taiwan	Vietnam	Source
Economic indicators								
Size of economy	GDP per capita	\$ 8.500,00	\$ 4.700,00	\$ 35.200,00	\$ 32.100,00	\$ 38.200,00	\$ 3.400,00	CIA World Factbook
Likely economic growth	GDP growth	9,20%	6,50%	-0,70%	3,60%	4,00%	5,90%	CIA World Factbook
Share of industry on GDP	%	46,80%	47,20%	27,30%	39,20%	32,00%	40,30%	CIA World Factbook
Industrial Production growth rate	%	13,90%	4,10%	-3,50%	3,80%	5,00%	6,00%	CIA World Factbook
Inflation rate	%	5,50%	5,40%	-0,30%	4,00%	1,40%	18,70%	CIA World Factbook
Unemployment rate	%	6,50%	6,60%	4,60%	3,40%	4,40%	2,30%	CIA World Factbook
Investment (gross fixed)	% of GDP	54,20%	32,00%	20,90%	27,40%	21,00%	34,60%	CIA World Factbook
Index of economic freedom	1-100	51,2	56,4	71,6	69,9	71,9	51,3	http://www.heritage.org/index/explore
The Global competitiveness Index (2011-2012)	1-7	4,90	4,38	5,40	5,02	5,26	4,24	The Global Competitiveness Report 2011-2012
The Financial Development Index	1-7	4,12	2,92	4,71	4,13	N.A.	2,98	The Financial Development Report 2011
The Global Enabling Trade Index	1-7	4,22	4,19	5,08	4,65	4,81	4,02	The Global Enabling Trade Report 2012
Human development index	0-1	0,687	0,617	0,901	0,897	N.A.	0,593	http://hdr.undp.org/en/statistics/
Political indicators								
Voice and accountability	-2,5 bis + 2,5	-1,65	-0,06	1,05	0,71	0,9	-1,45	http://info.worldbank.org/governance/wgi/sc_chart.asp
Political stability and absence of violence index	-2,5 bis + 2,5	-0,77	-0,89	0,87	0,1	0,79	0,13	http://info.worldbank.org/governance/wgi/sc_chart.asp
Government effectiveness	-2,5 bis + 2,5	0,12	-0,2	1,4	1,19	1,21	-0,31	http://info.worldbank.org/governance/wgi/sc_chart.asp

legal indicators								
Regulatory Quality	-2,5 bis + 2,5	-0,23	-0,38	0,98	0,91	1,18	-0,58	http://info.worldbank.org/governance/wgi/sc_chart.asp
Rule of law indicator	-2,5 bis + 2,5	-0,35	-0,63	1,31	0,99	1,01	-0,48	http://info.worldbank.org/governance/wgi/sc_chart.asp
Control of corruption	-2,5 bis + 2,5	-0,6	-0,73	1,54	0,42	0,75	-0,58	http://info.worldbank.org/governance/wgi/sc_chart.asp
Corruption Perception index	0-10	3,6	3	8	5,4	6,1	2,9	Corruption perceptions index 2011 (http://cpi.transparency.org/cpi2011/results/)
Paper industry indicators								
Number of companies	number	661	102	154	73	84	34	birkner
Produced tons of paper products	tons	103.101.000	11.527.000	26.578.000	11.480.000	4.138.000	1.324.000	FAOSTAT
2006-11 Increase of produced tons of paper products	%	33%	37%	-17%	7%	N.A.	3%	FAOSTAT
2001-11 Increase of produced tons of paper products	%	65%	39%	-16%	19%	N.A.	43%	FAOSTAT
Average of produced tons of paper products by company	tons	155.977	113.010	172.584	157.260	49.262	38.941	FAOSTAT/birkner

ANNEX2: Score of the countries in each indicator and the score weighted according to the preferences of Senmicro's management.

Economic indicators	Weighting	China	China (weighted)	Indonesia	Indonesia (weighted)	Japan	Japan (weighted)	SouthKorea	SouthKorea (weighted)	Taiwan	Taiwan (weighted)	Vietnam	Vietnam (weighted)
Size of economy	0,08	3	0,24	2	0,16	5	0,4	4	0,32	6	0,48	1	0,08
Likely economic growth	0,08	6	0,48	5	0,4	1	0,08	2	0,16	3	0,24	4	0,32
Share of industry on GDP	0,025	5	0,125	6	0,15	1	0,025	3	0,075	2	0,05	4	0,1
Industrial production growth rate	0,025	6	0,15	3	0,075	1	0,025	2	0,05	4	0,1	5	0,125
Inflation rate	0,02	2	0,04	3	0,06	6	0,12	4	0,08	5	0,1	1	0,02
Unemployment rate	0,02	2	0,04	1	0,02	3	0,06	5	0,1	4	0,08	6	0,12
Investment (gross fixed)	0,019	6	0,114	4	0,076	1	0,019	3	0,057	2	0,038	5	0,095
Index of economic freedom	0,03	1	0,03	3	0,09	5	0,15	4	0,12	6	0,18	2	0,06
The Global competitiveness Index (2011-2012)	0,03	3	0,09	2	0,06	6	0,18	4	0,12	5	0,15	1	0,03
The Financial Development Index	0,03	4	0,12	2	0,06	6	0,18	5	0,15	1	0,03	3	0,09
The Global Enabling Trade Index	0,03	3	0,09	2	0,06	6	0,18	4	0,12	5	0,15	1	0,03
Human development index	0,001	4	0,004	3	0,003	6	0,006	5	0,005	1	0,001	2	0,002
Political indicators													
Voice and accountability	0,03	1	0,03	3	0,09	6	0,18	4	0,12	5	0,15	2	0,06
Political stability and absence of violence index	0,03	2	0,06	1	0,03	6	0,18	3	0,09	5	0,15	4	0,12
Government effectiveness	0,03	3	0,09	2	0,06	6	0,18	4	0,12	5	0,15	1	0,03
Legal indicators													
Regulatory Quality	0,03	3	0,09	2	0,06	5	0,15	4	0,12	6	0,18	1	0,03
Rule of law indicator	0,03	3	0,09	1	0,03	6	0,18	4	0,12	5	0,15	2	0,06
Control of corruption	0,03	2	0,06	1	0,03	6	0,18	4	0,12	5	0,15	3	0,09

Corruption Perception index	0,03	3	0,09	2	0,06	6	0,18	4	0,12	5	0,15	1	0,03
Paper industry indicators													
Number of companies	0,08	6	0,48	4	0,32	5	0,4	2	0,16	3	0,24	1	0,08
Produced ton of paper products	0,08	6	0,48	4	0,32	5	0,4	3	0,24	2	0,16	1	0,08
2006-11 Increase of produced ton of paper products	0,08	5	0,4	6	0,48	2	0,16	4	0,32	1	0,08	3	0,24
2001-11 Increase of produced ton of paper products	0,08	6	0,48	4	0,32	2	0,16	3	0,24	1	0,08	5	0,4
Average of produced ton of paper products by company	0,08	4	0,32	3	0,24	6	0,48	5	0,4	2	0,16	1	0,08
Totalscore	1	89	4,193	69	3,254	108	4,255	89	3,527	89	3,399	60	2,372

ANNEX3: Development of paper production in China, Indonesia, Japan, South Korea, Taiwan and Vietnam according to FAOSTAT. This data was needed for the proper comparison of the development of the paper products market in the six different countries.

Product	unit	China	Indonesia	Japan	SouthKorea	Taiwan	Vietnam
PaperandPaperboard2011	tons	103.101.000	11.527.000	26.578.000	11.480.000	N.A.	1.324.000
PaperandPaperboard2006	tons	69.394.000	7.223.000	31.097.000	10.703.000	N.A.	1.282.000
increaseabsolute06-11	tons	33.707.000	4.304.000	4.519.000	777.000	N.A.	42.000
increaserelative06-11	%	33%	37%	-17%	7%	N.A.	3%
PaperandPaperboard2001	tons	36.531.000	6.995.000	30.717.000	9.332.000	N.A.	756.300
increaseabsolute01-11	tons	66.570.000	4.532.000	4.139.000	2.148.000	N.A.	567.700
increaserelative01-11	%	65%	39%	-16%	19%	N.A.	43%

ANNEX4: Comparison of China with the currently most important markets of Senmicro in selected indicators.

	China	Austria	Germany	Italy	France	Spain	Finland	Source
Political indicators								
Voice and accountability	-1,65	1,41	1,31	0,94	1,2	1,1	1,54	http://info.worldbank.org/governance/wgi/sc_chart.asp
Political stability and absence of violence index	-0,77	1,19	0,86	0,59	0,61	0,13	1,38	http://info.worldbank.org/governance/wgi/sc_chart.asp
Government effectiveness	0,12	1,66	1,53	0,45	1,36	1,02	2,25	http://info.worldbank.org/governance/wgi/sc_chart.asp
Legal indicators								
Regulatory Quality	-0,23	1,41	1,51	0,75	1,11	1,09	1,77	http://info.worldbank.org/governance/wgi/sc_chart.asp
Rule of law indicator	-0,35	1,81	1,62	0,41	1,5	1,2	1,96	http://info.worldbank.org/governance/wgi/sc_chart.asp
Control of corruption	-0,6	1,44	1,69	-0,01	1,51	1,06	2,19	http://info.worldbank.org/governance/wgi/sc_chart.asp
Corruption Perception index	3,6	7,8	8	3,9	7	6,2	9,4	Corruption perceptions index 2011 (http://cpi.transparency.org/cpi2011/results/)
Economic indicators								
The Global competitiveness index (2011-2012)	4,90	5,14	5,41	4,43	5,14	4,54	5,47	The Global Competitiveness Report 2011-2012
The Financial Development Index	4,12	4,11	4,33	3,85	4,44	4,24	4,11	The Financial Development Report 2011
The Global Enabling Trade Index	4,22	5,12	5,13	4,36	5,03	4,79	5,34	The Global Enabling Trade Report 2012

ANNEX5: Comparison of GDP development between China, Austria, the EU countries and the EURO zone.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Average	Source
China	8,3	9,1	10	10,1	11,3	12,7	14,2	9,6	9,2	10,4	9,3	10,3818182	http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?page=2
Austria	0,9	1,7	0,9	2,6	2,4	3,7	3,7	1,4	-3,8	2,1	2,7	1,66363636	http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00115
EU(27countries)	2,1	1,3	1,5	2,5	2,1	3,3	3,2	0,3	-4,3	2,1	1,5	1,41818182	http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00115
Euroarea(17countries)	2	0,9	0,7	2,2	1,7	3,2	3	0,4	-4,4	2	1,4	1,19090909	http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00115

ANNEX6: Comparison of the development of paper production in China and the European countries which comprise Senmicro's current market from the year 2000 until 2011. The column "Current markets" reflects the sum of the paper production in the countries Austria, Switzerland, Slovenia, Hungary, Slovakia, Czech Republic, Germany, Netherlands, Belgium, Poland, Finland, Italy, Spain, France, Turkey. Source: FAOSTAT.

Year	China	CurrentMarkets	Austria	Switzerland	Slovenia	Hungary	Slovakia	CzechRepublic
2000	35.184.000	72.799.317	4.386.000	1.616.000	411.000	506.000	925.000	804.000
2001	36.531.000	71.477.537	4.250.000	1.749.530	633.000	495.000	988.000	864.000
2002	42.061.000	73.865.880	4.419.000	1.804.629	703.990	517.000	710.000	870.000
2003	47.419.000	75.566.828	4.565.000	1.818.000	416.828	546.000	674.000	950.000
2004	54.072.000	79.005.802	4.851.962	1.777.000	497.140	579.000	798.000	934.000
2005	60.405.000	79.703.411	4.950.000	1.751.000	763.000	571.000	858.000	969.000
2006	69.394.000	83.504.153	5.213.000	1.525.933	760.000	553.000	888.000	1.042.000
2007	77.965.000	84.324.564	5.199.000	1.704.733	794.000	552.000	915.000	1.023.000
2008	83.685.000	83.611.576	5.152.635	1.698.291	762.999	424.000	921.445	932.000
2009	90.117.000	75.272.500	4.605.542	1.524.469	732.000	461.000	920.977	804.786
2010	96.501.000	82.387.811	5.008.934	1.558.729	750.000	587.000	780.356	906.735
2011	103.101.000	81.522.639	4.901.164	1.375.568	787.498	777.178	748.361	828.981

Year	Germany	Netherlands	Belgium	Poland	Finland	Italy	Spain	France	Turkey
2000	18.182.000	3.332.000	1.727.000	1.934.000	13.509.000	9.129.317	4.765.000	10.006.000	1.567.000
2001	17.879.000	3.174.000	1.662.000	2.086.007	12.502.000	8.926.000	5.131.000	9.625.000	1.513.000
2002	18.526.000	3.346.000	1.704.000	2.342.000	12.789.000	9.317.261	5.365.000	9.809.000	1.643.000
2003	19.310.000	3.339.000	1.919.000	2.461.000	13.058.000	9.491.000	5.437.000	9.939.000	1.643.000
2004	20.391.000	3.459.000	1.957.000	2.634.700	14.036.000	9.667.000	5.526.000	10.255.000	1.643.000
2005	21.679.000	3.471.000	1.897.000	2.731.900	12.391.140	9.999.371	5.697.000	10.332.000	1.643.000
2006	22.656.000	3.367.000	1.897.000	2.857.100	14.189.360	10.008.360	6.898.200	10.006.200	1.643.000
2007	23.317.000	3.224.000	1.931.000	2.992.000	14.334.000	10.112.031	6.713.300	9.870.500	1.643.000
2008	22.828.000	2.977.000	2.006.487	3.055.400	13.126.000	9.467.019	6.414.300	9.404.000	4.442.000
2009	20.870.000	2.609.000	1.990.000	3.274.957	10.602.000	8.404.170	5.700.099	8.331.500	4.442.000
2010	23.072.000	2.859.000	1.973.999	3.689.302	11.758.000	9.086.755	6.193.201	8.829.800	5.334.000
2011	22.704.000	2.748.000	2.039.912	3.800.000	11.329.001	9.130.256	6.491.508	8.527.212	5.334.000