REFLECTIONS ON CORPORATE SOCIAL RESPONSIBILITY IN CHINA – REALIZATION IN CHINESE SUPPLIER FIRMS

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1. **INTRODUCTION**

1.1 **RESEARCH FOCUS**

China’s ongoing liberalization after 1978 and its entry into the World Trade Organization (WTO) in 2001 have contributed to China’s increasing integration into the world economy and its quickly growing economic power. This development has changed the global economy. Various areas are affected: financial and trade flows are shifting, resource demands and prices are rising, international labor markets are changing, and new consumer markets are emerging (e.g., Weikert, 2011). China has become the most important supply chain base in the manufacturing sector (Hong et al., 2006). Chinese supplier firms are integrated into the majority of global supplier networks.

Recent business scandals, substandard products, human rights abuses, labor related issues such as minimum wages, living conditions, and child labor as well as environmental pollution (e.g., Sarkis, 2003; Zhu et al., 2005; Lübecke et al., 2007, Zutshi et al., 2009; Démurger et al., 2009) highlight the increasing demand for responsible behavior and business practices of Chinese firms (e.g., Ip, 2009; Lin, 2010). The scientific discourse on corporate social responsibility (CSR) started in the second half of the 20th century and has a long history in Western nations (Carroll, 1999). Bowen’s (1953) seminal book ‘Social Responsibilities of the Businessman’ initiated the debate on this topic. The field of CSR has grown significantly in management research. A great diversity of research areas concerning CSR issues has emerged and theories, approaches, definitions, and subcategories have been developed over time (Garriga/Melé, 2004). In the beginning, philanthropy and employee matters were in the focus of the CSR discussion. Later on, social and environmental issues have become increasingly important in the CSR debate (e.g., Carroll, 1999; Kolk et al., 2010). The stakeholder perspective has broadened the firms’ attention to several groups whose interests need to be considered (e.g., Freeman, 1984; Donaldson/Preston, 1995; Mitchell et al., 1997). Subsequently, strategically oriented CSR approaches were discussed by several scholars (e.g., Porter/Kramer, 2006; McWilliams et al., 2006;
Margolis et al., 2007). Academic research on CSR and its different dimensions has concentrated on companies in North America and Western Europe (Moon/Shen, 2010). However, scholarly attention on CSR needs to be adapted to the development of the global economy and to emerging nations such as China (Ewing/Windisch, 2007).

Matten and Moon (2008) distinguish between explicit and implicit CSR approaches. Within Western liberal market economies, CSR tends to be an explicit element of corporate values and corporate policies. In contrast, among coordinated market economies such as China CSR is more an implicit element of the institutional framework of companies (Matten/Moon, 2008).

In general, established research findings and implications of studies in Western nations are hardly applicable to China and Chinese supplier firms. Research on CSR patterns in China must take into account China’s distinct political and economic system, cultural background, economic development stage, management motivation, and behavior.

Chinese supplier firms do not foster CSR practices by themselves. The economic interests of China in the global market act as external push factors (Lin, 2010). Large Chinese firms which operate in the global market have adopted business practices resembling those of their Western counterparts (Tang/Li, 2009). Due to listing at foreign stock exchanges or investments by foreign investors large Chinese companies have to fulfill common publicity requirements (Zheng, 2006). This is not the case for small and medium-sized Chinese companies. Meanwhile, Western buyer firms have started to require social and environmental standards as criteria for supplier selection (e.g., Egels-Zandén, 2007; Seuring/Müller, 2008; Lam, 2009; Van Tulder et al., 2009). In future, compliance with such requirements of Western buyers will be increasingly important for Chinese supplier firms in order to survive in competition (Lin, 2010).

As a result of its economic growth, China faces enormous environmental and social issues which act as pull factors for CSR (Lin, 2010). The situation and the serious societal problems pose challenges for the legitimacy of the Chinese government. Therefore, the ruling Chinese Communist Party (CCP) is supporting and promoting CSR (e.g., See, 2009; Lin, 2010). In 2005, a resolution on the development of a ‘Harmonious
Society’ in China was published by the CCP. But See (2009) states that this resolution will not widely promote CSR in the private sector.

According to Kolk et al. (2010) the academic research on CSR in China is limited, its determining factors need to be examined, and the perspectives on this topic have to be broadened. This doctoral thesis aims to make a step towards closing the existing research gap by providing insights into CSR-related aspects in China. Like most research on CSR, it has an explorative nature (Moon/Shen, 2010). The purpose of this thesis is to discuss general issues and approaches for CSR in China and to identify influencing factors and challenges for the implementation of CSR practices.

1.2 STRUCTURE OF THE DOCTORAL THESIS

This cumulative dissertation is a compilation of three publications and two working papers which are summarized under the topic ‘Reflections on Corporate Social Responsibility in China’. The way of CSR realization in China is analyzed on different levels. The objective of this doctoral thesis is to consider determinants which influence the extent and shape of CSR measures in Chinese firms. The following five articles are contextually linked and combined into one complete work. In the course of this doctoral thesis, a variety of different research methods are applied in order to answer the respective research questions of the individual papers.

The first and second article focus on the extent and content of CSR communication of large Chinese companies. The extent of CSR communication is used as an indicator of realized CSR measures. In both articles, the data are gathered by website analyses of corporate websites. The first article compares of CSR communication of German and Chinese listed firms. The second article examines the CSR communication of large Chinese and Indian companies. First insights into the shape of CSR realization practices in China are gained by these articles. However, the majority of Chinese firms is small and medium-sized and not listed or does not operate internationally. Therefore, the third article raises the topic of CSR realization in Chinese supplier firms and focuses on small and medium-sized enterprises (SME) which are integrated in global supply chains of Western buyer firms. The determinants which influence the shape and the extent of CSR measures are analyzed in depth on the basis of experts interviews. The most
limiting factors for CSR measures in Chinese supplier firms are extracted. The fourth and fifth article address recent nation-specific phenomena in China which may have an influence on CSR practices. Especially, the impact of these phenomena on the working conditions as part of CSR practices are analyzed on the basis of extensive literature reviews. The fourth article deals with the persistent labor shortage in the coastal regions of China. Due to the shortage, the competition among supplier firms for workers is increasing. The improvement of working conditions may assist supplier firms to attract sufficient labor to maintain their business. The labor shortage and the resulting increased production costs in the manufacturing firms in China’s coastal region provoke manufacturing firms to consider relocation of their factories. The potential impact of relocation processes on the working conditions is theoretically deduced in the fifth article.

![Fig. 1: Articles of the Doctoral Thesis](image)

In the following, the structure as well as the content of the individual articles are explained in more detail. Moreover, chapter 1.3 provides a summary table that gives an overview of the various approaches and findings of the individual articles.

**The first article** (‘CSR Communication in Germany and China - A Comparative Study of CSR Website Reporting’) provides a general introduction to the subject of corporate social responsibility in China. The paper was written in an early stage of the doctoral project and represents a first approach to the topic.

In general, the scientific literature on CSR realization is focused exclusively on CSR measures in Western nations (Birch/Moon, 2004). Due to the increasing impact of

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China on the world economy, an increasing number of scholars have started to discuss corporate responsibility in Chinese firms (e.g., Jensen, 2006; Ewing/Windisch, 2007; Gerson, 2007; Lübcke et al., 2007; Peiyan et al., 2007; Qi-Jun, 2007; Qu, 2007; Roper/Weymes, 2007). The majority of scientific contributions considers aspects of CSR in China from a theoretical perspective. In this context, Bendell and Cohen (2006) state that a discussion on corporate responsibility in China exists, but that information on what kind of companies implement which kind of CSR measures can rarely be found.

The objective of article 1 is to outline the character and shape of CSR measures in China. Due to the author’s German background, Germany, a developed nation with a liberal market economy, and China, an emerging nation with a state-directed economy, are compared with regard to the respective understanding and extent of the realization of CSR. Such a comparison can by design only highlight the most basic characteristics of Chinese CSR measures.

Based on the scientific literature on CSR in Germany and China, testable propositions are developed in 2007. Since there are various motives for companies to take CSR measures, no analysis will be able to detect a single underlying principle for the implementation of CSR programs within German or Chinese companies (P1).

Furthermore, as stated by the F.A.Z Institute (2005) and a study of Bertelsmann (2005), German companies do not focus on one or only a few CSR measures. Therefore, it seems obvious that German companies use a set of different measures to accept their responsibility (P2).

The Confucian philosophy is still an important determinant of the Chinese culture and influences the shape of CSR measures (Warner/Zhu, 2002). Furthermore, the CSR discussion in China is at an early stage. Therefore, Chinese companies will focus on only a few measures such as philanthropic programs, sponsorships, health/safety programs and environmental programs (Gerson, 2007) (P3).

Maignan and Ralston (2002) identify three stakeholder groups which are addressed by corporate communication and CSR measures in Western countries. Inherent to the character of a firm, companies have to address requirements of their shareholders as
well. This leads to the assumption that German corporate stakeholder communication concerning CSR focuses on communities, customers, employees, and shareholders (P4). Stakeholder management in the Western sense is not common in Chinese companies (e.g., Jackson/Li, 2003; Jensen, 2006). The Confucian and communist heritage favor to the consideration of the community and of employees’ needs. Moreover, Chinese companies shape their communication strongly according to the requirements of foreign investors (Zheng, 2006). Therefore, the fifth proposition assumes that Chinese companies mainly address community, employee, and shareholder issues with their CSR activities (P5).

The comparison between German and Chinese companies was carried out in 2007 through a website analysis based on the seminal article and proved methodology by Maignan and Ralston (2002). Chambers et al. (2003) state that the more a firm reports on CSR the more this firm is seriously engaged in this topic. Silberhorn and Warren (2007) use the methodology of Maignan and Ralston (2002) to examine how CSR is defined in Germany and the UK. However, comparative empirical research on CSR practices in China and Western nations is rare in the scientific literature. Tang and Li (2009) also use the methodology of Maignan and Ralston (2002) to compare CSR communication of Chinese and global corporations. Another article provides an analysis of CSR stakeholder practices in the US and China based on institutional environments and organizational culture (Lo et al., 2008).

In general, the website analysis provides first insights into CSR practices in China and presents a starting point for further empirical research. Article 1 emphasizes the degree of CSR communication and identifies CSR activities realized as well as stakeholder groups addressed. The CSR activities of German corporations are used as a reference to analyze the level of CSR achievements in China and to show differences between these two countries regarding the characteristics of CSR programs.

The key results of article 1 are that CSR measures of Chinese firms are in the fledgling stages and differ significantly from those of German ones. Chinese companies focus on the implementation of codes of conduct, the management of environmental impact, and sponsorships for education and disaster relief. CSR measures taken by Chinese
firms were in a phase of alteration from normative considerations to increasing implementation. The comparison between CSR activities in German and in Chinese firms shows significant differences. However, the cultural, economic, social, and environmental circumstances in China are unique. Therefore, a simple transfer of Western CSR practices to Chinese firms does not seem to be feasible. CSR activities have to address the specifics and demands of the respective nation.

From a more developed research perspective, the comparison of two completely different nations which have particular cultural, political, and economic frameworks seems to be questionable. Baughn et al. (2007) state that economic and political conditions influence the level of CSR practice. This statement is corroborated by the findings of article 1 which points out that there are significant differences between CSR practices in Germany and China.

Article 1 is one of the first scientific contributions which uses the accepted method of Maignan and Ralston (2002) for the Chinese context. Lo et al. (2008) and Tang and Li (2009) show that such comparisons are increasingly common and used in other scholarly publications. The differences need to be highlighted in order to understand the differing CSR approaches of Western nations and China. Such understanding is important for subsequent articles which analyze the challenges for Western buyer firms to implement CSR measures in Chinese supplier firms. As a starting point, article 1 provides a good basis for further scientific contribution on CSR in China. Moreover, the importance of more comprehensive explorative research on CSR in Chinese firms is highlighted through this article.

However, Ingenhoff and Kölling (2011) argue that it is more useful to choose similarly advanced nations for the comparison of CSR measures and the development stage of CSR practices. The potentially limited comparability of Germany and China of article 1 is balanced by article 2.

The second article (‘CSR Communication Intensity in Chinese and Indian Multinational Companies’2) is an expansion of article 1. China and India belong to the so-called BRIC

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economies. BRIC is an acronym and refers to the nations Brazil, Russia, India, and China. All of these seem to be at a stage of increasing economic development and experience high economic growth rates (Goldman Sachs, 2001). Comparing two nations in the stage of growing economic development seems to lead to more stronger results than comparing completely different nations such as Germany and China.

An increasing number of firms publish information about their corporate ethically and socially responsible practices to generate positive reactions among their stakeholders such as foreign investors (Moring/Schultz, 2006), enhance marketing efforts, and legitimize their corporate image (Birch/Moon, 2004; Ringov/Zollo, 2007). In developed economies, such as the United States and Western European countries, corporate CSR communication is often used to highlight the commitment of firms concerning responsible behavior (Esrock/Leichty, 1998; Hooghiemstra, 2000). Among the developing economies, CSR and the related CSR communication have been studied less so far (Alon et al., 2010). However, but now CSR in such nations is receiving increasing scholarly attention (e.g., Chapple/Moon, 2005; Kimber/Lipton, 2005; Roper/Weymes, 2007, Baughn et al., 2007; Wanderley et al., 2008, Alon et al., 2010).

According to Baugh et al. (2007), the economic development influences the extent of CSR practices in a nation. China has a much higher level of economic development than India, measured by income per capita (China 5,184 US Dollars, India 1,527 US Dollars) and the economic growth rate (China 9.4 % in 2011, India 7.4 % in 2011) (IMF, 2012). Therefore, higher CSR standards could be expected in Chinese firms than in Indian ones. Yet this is inconsistent with reality (e.g., Baskin, 2006). This raises the question of what further factors beyond a country’s economic development stage might influence the shape and the extent of CSR practices.

In article 2, the major factors that affect CSR communication of Chinese and Indian firms are analyzed. Here, CSR communication is used as an indicator for the extent of CSR. For this purpose, a model that simultaneously examines the role of country-level, industry-level, and firm-level indicators is provided. The main contribution of this article is that it shows, besides industry and company variables, that the governance environment in a country is an important factor for the shape of CSR communication.
The paper also aims at shedding light on the practical issues of product quality and safety facing the international community by providing an appreciation of why Chinese and Indian firms adopt different levels of CSR and what forces are behind these differences.

The intensity of CSR communication of Chinese and Indian firms is analyzed with a regression model where corporate communication on CSR is defined as the dependent variable. Again, the method of Maignan and Ralston (2002) is used in order to measure CSR communication on corporate websites. The independent variables are: the governance environment (whether the nation is rule or relation-based), the industry (whether manufacturing or non-manufacturing sector), and the firm characteristics (Board composition, CEO duality, and firm size).

The following hypotheses are developed based on existing literature and are tested in the course of the analysis. On the country level, the governance environment affects the intensity of CSR communication; firms operating in a more rule-based (or less relation-based) environment will show a higher intensity of CSR communication than firms in a more relation-based environment (H1). From the existing problem areas and discovered scandals that are reported in the media it can be concluded that on the industry level in emerging economies, firms in the manufacturing sector will have a higher intensity of CSR communication than firms in knowledge-intensive sectors (H2). The following hypotheses focus on the corporate level. The form of firms’ corporate governance influences the character of CSR practices. Firms with a higher percentage of outside board members (as a proxy for their corporate governance) will have a higher intensity of CSR communication (H3a). Firms with CEO duality will have a lower intensity of CSR communication (H3b). Budget restriction may lower the extent of CSR practices and communication. Therefore, larger firms will have a higher intensity of CSR communication (H4).

Chaudhri and Wang (2007) analyze CSR communication in Indian IT companies by counting the number of pages which were devoted to CSR. In a second step the type of the CSR documents or information was examined (Chaudhi/ Wang, 2007). The contribution of Baskin (2006) is one of the first studies on CSR communication in
emerging nations. The analysis is simple: firms are analyzed as to whether they provide any form of CSR information on their websites. The extent of their reporting is examined in four categories: 1) corporate social investment/philanthropy, 2) business ethics, 3) environment, and 4) human resources (Baskin, 2006). Wanderley et al. (2008) analyze the influence of the country of origin and the industry sector on CSR communication in emerging nations including China and India. They use only five indicators to evaluate the firms’ CSR communication (Wanderley et al., 2008). The second article applies the more sophisticated method of Maignan and Ralston (2002). As mentioned above this method is also used by other scholars to compare Chinese CSR communication with other nations’ (e.g., Lo et al., 2008; Tang/Li, 2009). Alon et al. (2010) expand on the approach of the second article by including Russia and Brazil in the analysis.

Article 2 is among the first scientific contributions to statistically test the factors which determine CSR communication in the Chinese context. The main theoretical contribution of this article is to introduce a three-level perspective and test that CSR communication relies not only on firm and industry-specific factors, but also on the governance environment. In general, the analysis shows that Chinese firms have a lower CSR communication intensity than Indian firms. Using CSR communication intensity as an indicator for CSR realization it can be concluded that Chinese corporations are less active regarding CSR implementation. An interesting and important message from this study is that changes in CSR by companies in emerging markets might be slow, because the respective country’s informal governance environment is slow to change.

Ingenhoff and Kölling (2011) identify further methods to analyze internet-based CSR communication of firms: 1) survey of users of CSR communication offers in order to collect data on demographic characteristics, user habits, and expectations, 2) qualitative content analysis of CSR communication in order to detect structure and design of contents, 3) analysis of social networks in order to examine relationships among users and the ways of information diffusion.
Even if the method of Maignan and Ralston (2002) is also used by other scholars, it has certain limitations. For example, reputation and risk management as motivating principles for CSR are completely neglected. Scholars such as Brammer and Pavelin (2006) analyze the reputational effects of firms’ CSR practices. Bebbington et al. (2008) point out that CSR communication is part of the reputational risk management process.

The key result of article 1 and 2 is that CSR realization in China is still in the fledgling stage. However, it does not provide any explanation. The nature of business practice has changed. Nowadays, supplier-based manufacturing takes place across national borders. Therefore, the concept of CSR is no longer an internal corporate issue. Moreover, the entire supplier network needs to be encompassed (Andersen/Skjøett-Larsen, 2009).

Article 1 and 2 focus on CSR in listed or large Chinese companies. However, small and medium-sized firms are the key engine which is driving the growth of the Chinese economy. In 2009, 10.3 million companies were registered in China. More than 99 percent were SME (Xinhua, 2009). Therefore, aspects of CSR realization and challenges in SME which produce for large Western buyer firms need to be analyzed in order to provide a more complete perspective on CSR in China.

The focus of the third article (‘Corporate Social Responsibility in Chinese Supplier Firms’3) is the realization of CSR in Chinese supplier firms which are integrated in the supply chains of Western buyer firms.

In the course of the establishment of global supply chains, China has become the most important supply chain base in the world, with a large manufacturing sector (Hong et al., 2006). This development is reflected in statistical data. For example, 44.6 % of the Chinese GDP in 2010 was generated in the industrial sector (UNdata, 2012).

Western buyer firms often impose codes of conduct (CoC) on their Chinese suppliers which are frequently based on general environmental and social standards (e.g. Welford/Frost, 2006; Andersen/Skjøett-Larsen, 2009). Regular audits should support

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compliance with the codes. Practice shows that in many cases codes of conduct are not implemented by the Chinese supplier firms. The reasons for this are manifold. The suppliers face different required standards from various buyer firms and some suppliers are simply not able to obey the requirements due to the costs incurred (Krueger, 2008). Others consciously breach the CoC (Jiang, 2009).

Therefore, the general framework for CSR in Chinese supplier firms has to be analyzed. What may be reasons for resistance and non-compliance regarding CoC and standards? This poses the question of whether imposed instruments such as CoC and standards can actually address the prevalent challenges in China. At the same time, deriving options for managerial action to successfully implement CSR practices in Chinese supplier firms is of major interest.

Article 3 analyzes the process of CSR realization in supplier firms and provides an overview of the individual process elements. It makes a considerable contribution by: 1) providing a comprehensive literature review regarding the implementation of CSR within the supply chain, 2) analyzing the process elements of CSR realization in a multi-perspective view, considering not only the buyer companies but all participating parties, 3) considering sanction and incentive mechanisms as important elements within the overall supply chain management process, and 4) pointing out the great importance of raising awareness for CSR on the supplier side and of a dialogue between all participating parties before and during the implementation process.

In the course of the analysis four propositions are developed which are subsequently examined via expert interviews. The cultural differences between Chinese producers and Western buyer firms are significant. Therefore, cultural differences regarding the business mentality and missing CSR awareness may inhibit the realization of CSR measures in the supplier firms (P1). The price pressure from Western buyer firms has a strong influence on Chinese supplier firms. Therefore, cost pressure linked to employee compensation and working conditions is the main challenge for CSR practices in China (P2). A further proposition considers the motivation and drivers for international buyer firms to engage in CSR practices in China. Risk management to protect the image and reputation of a firm is the main trigger for the engagement in
CSR measures in the supply chain (P3). There is still opportunistic behavior of Chinese supplier firms concerning the compliance with CoC. Dialogue and exchanges of experience with suppliers lead to a greater acceptance of CSR measures in the supply chain (P4).

As mentioned above, several scholars use internet-based CSR communication of large Chinese firms in order to derive and examine the realization of CSR (e.g., Peiyuan et al., 2007; Lo et al., 2008; Tang/Li, 2009). Large listed corporations have certain publicity requirements. However, such information is not available from small-scale supplier firms. Qualitative techniques such as case studies (e.g., Yu, 2008; Kolk et al., 2010) and in-depth interviews (e.g., Ewing/Windisch, 2007) are often used in this research field. For example, Yu (2008) provides a case study on a Chinese supplier firm of Reebok and points out that the implementation of a code of conduct can have a negative impact on the employees in manufacturing firms. Ewing and Windisch (2007) use in-depth interviews to examine CSR policies, practices, and motivations of Chinese firms.

For article 3, eleven semi-structured interviews were conducted with a diversified group of supply chain experts including corporate representatives of large focal firms, representatives of NGOs, and managers of Chinese suppliers. Essential parts of the interviews are: challenges in China, triggers and motivations for CSR in the supply chain, implemented CSR instruments, control mechanisms and sanctions, and reactions of suppliers.

Most Chinese suppliers consider CoC as external interference with their authority and as a driver of additional costs. The results support the underlying assumption that a standard-based CSR approach without the creation of CSR awareness in the supplier firms has little prospect of success and may lead to non-compliance of the suppliers. The step-by-step implementation of CSR measures in combination with dialogue, exchange of experience, trainings, and incentive and control mechanisms will increase the degree to which CSR will be realized in the supplier firms. New initiatives by Western focal firms and NGOs engage suppliers in a dialogue and provide training to explain the benefits of CSR and create awareness, thus indicating a shift from a purely
standard-based approach to more dialogue-orientation to support the compliance with CoC.

The small sample size of the interviewed supply-chain experts in article 3 could be questioned. Therefore, the findings might be of limited generalizability. However, the article provides a deeper insight into the challenges and processes of CSR realization in Chinese supplier firms. The explorative findings could be enhanced by a quantitative analysis of audit results of Chinese supplier firms. The author of this doctoral thesis is currently conducting such a quantitative analysis supported by the audit company Intertek. In addition, further research should include structural and political developments in China, as an alteration of the firms’ environment may influence the shape and extent of CSR practices in Chinese firms.

Since summer 2009, China has faced a persistent shortage of migrant workers and an accompanying lack of unskilled labor in labor-intensive industries in the southeast provinces. The fourth article (‘Competing for Unskilled Workers in Southeast China - Will It Mean Improvements in Working Conditions?’) focuses on this recent phenomenon and the potential effects of the improvement of the working and living conditions on migrant workers.

Manufacturing firms in the coastal regions are particularly strongly affected by the labor shortage. Only few recent studies discuss the labor scarcity. Most of these aim at proving that China has already reached the Lewisian turning point (e.g., Islam/Yokota, 2008; Chen/Hamori, 2009; Chan, 2010; Huang/Jiang, 2010; Zhang et al., 2010). The model of Lewis (1954) states that in developing countries the agricultural sector is the source of labor for the growing industrial sector. When rural labor become scarce, industrial wages begin to rise. Some scholars see the development of the wage level in the coastal provinces as evidence that the Lewisian turning point has been passed (e.g., Islam/Yokota, 2008; Chen/Hamori, 2009).

In this context, a number of important questions arise. How could such a shortage of unskilled workers occur? What are the main driving factors for such a development?

What might be the consequences for affected firms in the manufacturing industry? How can manufacturing cope with and react to this situation?

In order to answer these research questions, an influencing factor model is developed which includes the main driving forces for the labor shortage in China. The individual elements of the model are deduced from statistical data and existing studies. Only few scholars have examined the reasons why rural workers do not migrate to the coastal region to the same extent as before. Migrant workers have been analyzed concerning their age profile, gender, and level of education (e.g., Chen/Hamori, 2009, Zhang et al., 2010). Factors which influence the migration decision of workers and thus labor mobility have also been studied in the literature. The most relevant factors are migration costs, inter-provincial borders in China, and inter-provincial wage differentials (e.g., Laing et al., 2005; Poncet, 2006; Li 2010). Further, the role of migrant networks and communities has been considered as crucial for migration decisions (e.g., Menjivar, 1995; Zhao, 2003; Bao et al., 2009; Wang, 2010). In general, there is no comprehensive overview of the influencing factors. Here, the article presents a first step to fill in the research gap. The impact and implications of the labor shortage on the micro-economic level has not been considered sufficiently by recent studies either. The labor shortage leads to competition between manufacturing firms. Low-skilled and semi-skilled workers have become a limited resource and strategically important for manufacturing firms in China’s coastal regions. First, the potential levels of competition for workers are identified. Second, approaches and measures for manufacturing firms are developed to enable them to cope with such competition.

The analysis identifies the main factors which support the development of labor scarcity and can be classified by levels. First, the driving factors on the national level are: 1) the hukou system which limits the migration within China, 2) the demographic change as a result of the one-child policy, 3) the still increasing demand for cheap labor, 4) the government stimulus program intended to provide infrastructure development in western and central Chinese provinces, and 5) the growing tertiary sector. Second, the driving factors on the individual level are: 1) the adverse working conditions in the factories and increasing living costs in southeast China, 2) the increased availability of higher education, 3) the access to the internet and mobile
communication between workers which increases information on job alternatives, and 4) the jobs in western and central Chinese provinces. This leads to changes in the migration destinations of migrants.

The labor scarcity results in an increased competition for workers among manufacturing firms in the southeastern provinces of China. Manufacturing firms in the coastal regions have to decide whether to face the competition for labor or to relocate the production plants to other regions. Based on individual decision-making processes of migrant workers, three potential levels of competition can be classified: 1) workers have to decide whether to migrate, 2) workers have to make the decision where to migrate, and 3) workers have to choose a firm for which they want to work. These three levels determine the further levels of competition for manufacturing firms and define starting points for measures to cope with the competition.

Manufacturing firms have to set incentives for workers in order to stimulate migration to the eastern provinces over long distances. In a next step, the respective industrial center has to be an attractive alternative to other industrial centers. As a further step, manufacturing firms have to provide competitive job offerings in order to attract the workers. In the first and second step, firms have to act collectively to set incentives for workers to migrate and to choose a certain region. In the third step, the manufacturing firms are faced with inter-firm competition with other manufacturers in the same region.

The findings presented in article 4 imply that one can expect a short-term improvement of the working condition for migrant workers. Manufacturing firms need to fulfill current orders of Western buyer firms. In order to attract labor, they will temporarily offer wages higher than the minimum wage level and improved working conditions, including better housing. A fundamental structural change in China has already started and a consolidation of the labor-intensive sector will take place in the long-run. Due to the high wages and the global price pressure, labor-intensive industries may relocate their factories to China’s central or western provinces (Hille, 2011). Moreover, some manufacturing firms will move to low-cost neighboring
countries. Some manufacturing firms started already to consider replacing workers by machines (Tse/Hendrichs, 2011).

Ge and Yang (2011) underline that a neoclassical framework is more appropriate in order to study and explain the labor shortage in China. The developed model which includes the main driving factors for the labor shortage provides a starting point for further research. The identified levels of competition are based on theoretical considerations and the existing literature. Thus, article 4 has a strong explorative character. The single factors need to be tested by empirical surveys. An empirical study of migrants and the decision determinants for their migration behavior needs to be conducted. Moreover, the current competitive situation of Chinese manufacturing firms should also be texted empirically. The applied competition perspective on the firm level has to be broadened.

From a macro-economic perspective, the measures developed in article 4 undermine the political measures of the Chinese government to support the development of the central and western provinces. The measures of the government and the development of the central and western provinces have favorable effects for the Chinese society as a whole and balance the primarily one-sided urbanization of the southeastern provinces. Further research should also include the intention of the Chinese government and the political ends of the industrial change.

The fifth article (‘The Movement of Factories to the Chinese Hinterland or to Low-Cost Countries: Renewed Struggles for Appropriate Working Conditions Ahead?’
5) broadens the scope of the article 4. It provides a theoretical analysis of the impact of production plants relocation on the working conditions in the new manufacturing plants.

Since the 1980s, China has been a preferred target country for outsourcing and production measures because of its cheap labor force (Zhang/Huang, 2012). China has a remarkable reputation as a low-cost manufacturer, but foreign investors and customers critically question working practices and conditions (Lübcke et al., 2007). In the last two decades, there have been efforts, especially by foreign buyer firms, to

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5 Working paper, presented at the ICCSR 8th Annual Symposium – Corporate Social Responsibility in China, Nottingham University, Ningbo Campus, July 11th 2011.
improve working conditions in Chinese supplier firms in order to maintain their own reputation in their western markets (e.g., Fang et al., 2010; Kolk et al., 2010; Schneider/Schwerk, 2010).

The production in China has become increasingly expensive (Fang et al., 2010), especially in the coastal regions. According to the China Manufacturing Competitiveness Study, 50% of the interviewed MNE were planning to relocate or expand their manufacturing plants within China or to a foreign country during the next 5 years (AmCham/Booz & Co., 2010). The industrial relocation has already started away from the coastal regions (Huang et al., 2011). For example, Dell plans to open a second operations center with manufacturing, sales and services in Chengdu (Jing, 2010). Furthermore, Hewlett Packard and Foxconn have already started to move parts of their manufacturing processes to Chongqing (e.g., Jing, 2010; Hille, 2011).

In this context, interesting questions arise. What does the factory movement to the Chinese hinterland or to foreign low-cost countries mean for the working conditions? Do we have to expect a worsening in the relocated factories, or will the working conditions improve with relocation?

The article 5 examines the motivation of companies to relocate their manufacturing plants to the Chinese hinterland or to low-cost countries and draws conclusions to what this means for the level of working conditions in the new manufacturing plants. Based on research of existing literature, three different scenarios are developed: working conditions 1) will be stable, 2) will be improved, or 3) will become worse. Based on the analysis of the various motives of companies to relocate, determining factors for the occurrence probability of the three scenarios are derived.

The potential impact of the relocation trend on working condition in the newly built manufacturing plants is neglected in recent scientific literature. Zhao and Yin (2011) analyze the industrial relocation in the early 1990s only with regard to energy consumption and environmental externalities. Wang and Pei (2010) examine the relocation of Shenzhen’s hi-tech industries and identify the most relevant reasons for this development. The study of Platts and Song (2010) focuses on the total cost which arise from sourcing in China. Kumar et al. (2009) go further and study the major cost
drivers in China and identify alternative nations for contract manufacturing. The reputational risks and costs for international companies through poor working conditions in supplier firms are not included in the above mentioned articles.

In article 5, triggers to relocate away from Chinese coastal regions are identified: 1) the labor shortage in labor-intensive manufacturing clusters, 2) the high costs in the coastal regions, 3) new markets in the inland provinces, 4) demand for land for the expansion of business, 5) resource supply in the inland provinces, and 6) political measures and incentives.

Classical motives for relocation such as market seeking and resource seeking do not lead to a clear estimation of occurrence probabilities of the developed scenarios. Other motives, such strategic moves, the industry cluster or the political measures by the Chinese government do not predict the scenario occurrence probability either. Therefore, further determinants to predict the scenario occurrence probability have been considered and their potential impact estimated. For the following factors a positive impact on working conditions in relocated firms is assumed: high revenue share from Western buyer firms, company size, ownership share of the Chinese state, and long-term orientation of the management. Labor-intense production, buyers' deviation tolerance from CoC and strong low cost orientation might have a negative impact.

What makes the approach presented in article 5 a novel one is the consideration and estimation of the impact of relocation processes on the working conditions. Based on the theoretical assumption in article 5, temporary struggles for appropriate working conditions seem inevitable in some firms. These struggles may be more limited in duration and in their range than in the past. Relocation away from China’s coastal region to the Chinese hinterland or low-cost countries is a current phenomenon and is barely addressed by academic research. The theoretical framework presents an appropriate starting point for further empirical and a variety of qualitative as well as quantitative analyses. Future research may examine whether there is learning a curve observable from the experience of building factories in the coastal regions of China. The relocation and industrialization of the Chinese hinterland will be of interest in future academic discussion in future.
1.3 **SUMMARY OF THE CONTENT OF THE ARTICLES**

<table>
<thead>
<tr>
<th>Article</th>
<th>Research Focus</th>
<th>Methodology</th>
<th>Data</th>
<th>Hypotheses/Propositions/Objectives of Investigation</th>
</tr>
</thead>
</table>
| 1       | CSR communication of German and Chinese listed companies | Empirical Quantitative Website analysis | 28 German corporate websites 29 Chinese corporate websites | P1: There exists no single underlying principle for the implementation of CSR programs within German and Chinese listed companies.  
P2: German listed companies use a set of different processes for the realization of CSR.  
P3: Chinese listed companies focus on four processes to realize CSR: philanthropic programs, sponsorships, health/safety programs and environmental programs.  
P4: Stakeholder issues discussed on German corporate websites focus on communities, customers, employees, and shareholders.  
P5: Chinese listed companies address in particular community, employee, and shareholder issues with their CSR activities. |
| 2       | CSR communication intensity in Chinese and Indian MNE     | Empirical Quantitative Website analysis Regression analysis | 33 Indian MNE corporate websites 35 Chinese MNE corporate websites | H1: The governance environment affects the intensity of CSR communication in a society; firms operating in a more rule-based (or less relation-based) environment will show a higher intensity of CSR communication than firms in a more relation-based environment.  
H2: In emerging economies, firms in the manufacturing sector will have a higher intensity of CSR communication than firms in knowledge-intensive sectors.  
H3a: Firms with a higher percentage of outside board members (as a proxy for their corporate governance) will have a higher intensity of CSR communication.  
H3b: Firms with CEO duality will have a lower intensity of CSR communication.  
H4: Larger firms will have a higher intensity of CSR communication. |
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<tr>
<th>Article</th>
<th>Research Focus</th>
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<th>Data</th>
<th>Hypotheses/Propositions/Objectives of Investigation</th>
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<tbody>
<tr>
<td>3</td>
<td>CSR in Chinese supplier firms</td>
<td>Empirical Qualitative Semi-structured interviews</td>
<td>11 supply chain experts</td>
<td>P1: Cultural differences in the business mentality and missing CSR awareness inhibit the realization of CSR measures in the supplier firms. P2: Cost pressure related to employee compensation and working conditions is the main challenge for CSR practices in China. P3: Risk management to protect the image and reputation of firms is the main trigger for engaging in CSR measures in the supply chain. P4: Dialogue and the exchange of experience with suppliers lead to higher acceptance of CSR measures in the supply chain.</td>
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<tr>
<td>4</td>
<td>Impact of competition for labor on the working conditions in southeastern China</td>
<td>Theoretical Influencing factor model</td>
<td>Literature review</td>
<td>Analysis of the driving factors for the labor shortage in southeast China. Analysis of different competition levels for labor.</td>
</tr>
<tr>
<td>5</td>
<td>Impact of relocation of production plants to the Chinese hinterland or low-cost countries on the working conditions</td>
<td>Theoretical Scenario development</td>
<td>Literature review</td>
<td>Analysis of reasons why manufacturing firms relocate from Chinese coastal region to the hinterland. Analysis of the impact of plant relocation on working conditions. Development of three different scenarios. Anticipation of the occurrence probability of the three scenarios according to the various determining factors. Development of propositions concerning the occurrence probability of the scenarios on the potential development of working conditions.</td>
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Tab. 1: Research Focus, Methodology and Objectives of the Articles
<table>
<thead>
<tr>
<th>Article</th>
<th>Novelty</th>
<th>Findings</th>
<th>Publication in:</th>
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<tbody>
<tr>
<td>1</td>
<td>Application of the methodology of Maignan/Ralston (2002) for Chinese firms and Analysis of motivating principles for CSR measures, realized CSR practices, and considered stakeholder issues</td>
<td>CSR practices of Chinese firms are at fledgling stage (differ significantly from those of German firms). There is no clear evidence for the CSR motivation in Chinese firms. Chinese firms focus on implementation of codes of conduct, management of environmental impact, and sponsorships for education and disaster relief. Chinese firms pay most attention to their shareholders. The community is the second-most important stakeholder group. The protection of the environment is the most addressed topic.</td>
<td>Lattemann, Christoph and Kupke, Sören (Eds.), International and Inter-Organizational Governance, Wissenschaftlicher Verlag Berlin, 2010, pp. 45-76.</td>
</tr>
<tr>
<td>2</td>
<td>Application of the methodology of Maignan/Ralston (2002) for Chinese and Indian firms and Analysis of country-level, industry-level, and firm-level factors which influence the shape of CSR</td>
<td>Indian firms show a higher level of CSR communication intensity. More-rule based (or less relation-based) governance environment has a positive impact on CSR. Firms of manufacturing sector communicate more on CSR practices than firms of other sectors. The proportion of outside board members influences CSR positively and leads to a higher CSR communication intensity. CEO-duality has a negative impact and lowers the CSR communication intensity. Larger firms provide more communication on their CSR practices.</td>
<td>Corporate Governance: An International Review, 17 (4), Wiley-Blackwell, 2009, pp. 426-442.</td>
</tr>
<tr>
<td>3</td>
<td>Development of a vicious circle for CSR realization in Chinese supplier firms and Analysis of implemented instruments for CSR, control mechanisms, reaction of supplier firms, and incentive mechanisms to support the CSR realization in Chinese supplier firms</td>
<td>On the basis of the stakeholder approach a vicious circle is identified which presents a barrier for the CSR realization in Chinese supplier firms. Included stakeholder groups are the Chinese government, buyer firms, supplier firms, employees of supplier firms and consumers. Codes of conduct are the most frequently implemented instrument for CSR and compliance with CoC is usually controlled via audits. Chinese supplier firms predominantly focus on compliance with codes and on passing audits. CoC do not address all identified challenges in Chinese supplier firms. Most Chinese supplier firms consider CoC as external interference with their own authority and as additional costs. Dialogue and experience exchange with Chinese suppliers lead to higher awareness and acceptance of CSR practices.</td>
<td>Zeitschrift für Betriebswirtschaft, ZFB-Special Issue 1, Gabler Verlag, 2010, pp. 39-59.</td>
</tr>
<tr>
<td>Article</td>
<td>Novelty</td>
<td>Findings</td>
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<td>4</td>
<td>Development of a model of the driving factors for the labor shortage in China. Identification of the different levels of competition for migrant workers. Deduction of implications and action alternatives for manufacturing firms.</td>
<td>Driving factors for labor shortage on the national level are: 1) the hukou system, 2) the demographic change, 3) increasing demand for cheap labor, 4) the government stimulus program, and 5) the growing tertiary sector. Driving factors on the individual level are: 1) the working and living conditions, 2) the increased availability of higher education, 3) the access to the internet, and 4) the jobs in western and central Chinese provinces. Manufacturing firms have to set incentives for workers in order to stimulate long distance migration to the eastern provinces. The respective industrial center has to be an attractive alternative to other industrial centers. Manufacturing firms have to provide competitive job offerings in order to attract the workers.</td>
<td>Working Paper, presented at the 4th China Goes Global Conference, Harvard University, Cambridge, October 8th 2010.</td>
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<td>5</td>
<td>Scenario development, whether relocation might lead to stable, better, or worse working conditions in the new production plants. Development of hypotheses regarding the factors that will influence the working conditions in manufacturing firms in the Chinese hinterland.</td>
<td>China-specific triggers to relocate away from coastal regions are: the labor shortage in labor-intensive manufacturing clusters, high costs in the coastal regions, new markets in the inland provinces, demand for land for expansion of business, resource supply in the inland provinces, and political measures and incentives. Three different scenarios concerning the further development of working conditions are developed: working condition will remain the same (stable), will be improved (better), or will deteriorate (worse) due to the relocation. Classical motives for relocation such as market seeking and resource seeking do not lead to a clear estimation of occurrence probabilities of the respective scenario. Other motives such strategic moves, the Industry cluster or the political measures by the Chinese government do not predict the scenario occurrence probability. Further determinants to predict the scenario occurrence probability are considered. For the following factors a positive impact on the working conditions in relocated firms is assumed: high revenue share from Western buyer firms, company size, ownership share of the Chinese state, and long-term orientation of the management. Labor-intensive production, buyers‘ deviation tolerance from CoC and strong low cost orientation might have a negative impact. Temporary struggles for appropriate working conditions seem inevitable.</td>
<td>Working Paper, presented at the ICSR 8th Annual Symposium – Corporate Social Responsibility in China, Nottingham University, Ningbo Campus, July 11th 2011.</td>
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Tab. 2: Novelty, Findings, and Publication of the Articles
2 CSR COMMUNICATION IN GERMANY AND CHINA – A COMPARATIVE STUDY OF CSR WEBSITE REPORTING

Anna-Maria Schneider

In: Lattemann, Christoph and Kupke, Sören (Eds.), International and Inter-Organizational Governance, Wissenschaftlicher Verlag Berlin, 2010, pp. 45-76.
3 CSR COMMUNICATION INTENSITY IN CHINESE AND INDIAN MULTINATIONAL COMPANIES

Christoph Lattemann, Marc Fetscherin, Ilan Alon, Shaomin Li, and Anna-Maria Schneider

4 CORPORATE SOCIAL RESPONSIBILITY IN CHINESE SUPPLIER FIRMS

Anna-Maria Schneider and Anja Schwerk

5 **COMPETING FOR UNSKILLED WORKERS IN SOUTHEAST CHINA - WILL IT MEAN IMPROVEMENTS IN WORKING CONDITIONS?**

Anna-Maria Schneider and Stefan Altmann


5.1 **INTRODUCTION**

After the introduction of economic reforms and the open-door policy in 1978, China has become the largest producing nation and the second largest exporter in the world. Rural migrant workers have contributed substantially to this economic growth and the success of China. Migrants are hard-working, semi-skilled or low-skilled laborers who produce the inexpensive “made-in-China” products that are available all over the world (Wang, 2010). Therefore, the cheap labor force of migrant workers is one of China’s main location advantages.

Rural migrant workers represent approximately 11 percent of China’s population of 1.3 billion people. Even if they are employed, rural migrants often suffer from lower wages, poorer working conditions, and less governmental protection (Fix et al., 2009). Such workers are predominantly concentrated in the southeastern provinces (Chan, 2008), where export-oriented, labor-intensive industries are located.

The global economic crisis of 2008 and 2009 affected China and its industry significantly. Many factories had to close down with mass layoffs being the consequence. Facing closures, some factory owners fled without paying their laid-off workers the required compensation and wage arrears (Cai/Chan, 2009). In the beginning of 2009, an estimated 20 to 23 million rural migrant workers had lost their jobs in the economic downturn (Fix et al., 2009).

Through the revitalization of global demand during the autumn/winter season 2009 and the Christmas trade, a consolidation of both the producing industry and the
Chinese supplier firms could be observed. As of 2010, the situation has reversed, with Chinese manufacturers concentrated in the southeastern provinces facing a remarkable shortage of migrant workers. Chinese manufacturers lack up to 40% of their labor force capacities. Some manufacturers are weeks behind on their schedules because they cannot find enough workers; they are closing down production lines and consider raising prices (Bradsher, 2010). For example, Foxconn which employs around one million workers in China, was heavily affected by the labor scarcity. Foxconn had to pay increased wages (30%) as a result of the labor shortage and to cope with social conflicts among its workforce (Tse/Hendrichs, 2011). According to media reports, some factories in the industrial center Guangdong have hired illegal workers from Vietnam and other neighboring countries (Chan, 2010). Manufacturing firms such as Foxconn have decided to relocate manufacturing processes to other Chinese provinces (Hille, 2011) and started to consider using robots to replace workers (Tse/Hendrichs, 2011). The essential resource for the producing sector, namely hard-working low-skilled migrant workers, has turned into a limited resource of strategic importance, with Chinese manufacturers increasingly competing over migrant workers.

Since 1978, worker migration in China has received considerable scholarly attention. The phenomenon of migrant workers in China is unique because of both their large number and their special status in the Chinese society, due to China’s hukou policy (Wang, 2010). Several researchers have focused on social aspects, such as the economic and social status of migrant workers in society (Li/Li, 2007). Especially, stigmatization of this population group and their working conditions as well as wage ratio are examined by the scientific literature (e.g., Wong et al., 2007; Meng/Bai, 2007; Démurger et al., 2009; Du/Pan, 2009; Messinis/Cheng, 2009; Wu, 2010).

There is a new development among migrant workers. They demand decent working conditions (Hannan, 2008), start to fight for their rights, and against compelled proletarianization (Chan/Pun, 2008). The most recent academic contributions focus on the impact of the global financial crisis on the employment and living conditions of migrant workers (e.g., Cai/Chan, 2009; Fix et al., 2009; Wang, 2010).
Only few recent studies discuss this phenomenon of the current shortage of migrant workers in the coastal regions of China; and those scientific contributions that do, aim to prove that China has already reached the Lewisian turning point (e.g., Islam/Yokota, 2008; Chen/Hamori, 2009; Chan, 2010; Huang/Jiang, 2010; Zhang et al., 2010). This model states that in developing countries the agricultural sector is the source of labor for the growing industrial sector. When the rural labor become scarce the industrial wages begin to rise. The development of the wage level in the coastal provinces is seen as evidence by some scholars that China has reached the Lewisian turning point and this is often analyzed in a quantitative manner (e.g., Islam/Yokota, 2008; Chen/Hamori, 2009). The study of Huang and Jiang (2010) goes a step further and analyzes the impact of the Lewisian turning point on China, and anticipates its future development.

In order to examine reasons why rural workers do not migrate to the coastal region as they did before, studies have analyzed the group of migrant workers with regard to age profile, gender and level of education (e.g., Chen/Hamori, 2009, Zhang et al., 2010). The labor supply and demand side has been examined as well (e.g., Chan, 2010). Different factors that influence the migration decision of workers and thus labor mobility within China have been studied. Relevant factors are migration costs, inter-provincial borders in China, and inter-provincial wage differentials (e.g., Laing et al., 2005; Poncet, 2006; Li 2010). Further, the role of migrant networks and communities have been considered crucial for migration decisions in the literature (e.g., Menjivar, 1995; Zhao, 2003; Bao et al., 2009; Wang, 2010).

In general, the following questions arise: how could such a shortage of unskilled workers occur; what are the main driving factors for such a development, and what might be the consequences for affected firms of the manufacturing industry; and how can manufacturing cope with and react to this situation.

The main driving forces for the shortage of labor are not sufficiently considered in the current scientific literature. Only single aspects are considered by the scholars, but a comprehensive overview of the relevant factors that derive this labor scarcity is missing. Furthermore, the impact of the labor scarcity on the micro-economic level and its implications for the affected manufacturing industry are neglected in the literature.
Approaches and measures helping manufacturing firms to cope with the current situation and increasing competition for workers are not sufficiently developed in the literature. Our contribution takes the first steps toward filling this research gap using an exploratory research design.

After considering some basic facts concerning migrant workers and labor shortage, theoretical approaches to the topic are described. For the purpose of answering the research questions, we introduce a simplified influencing factor model based on statistical data and existing studies. The model provides a comprehensive overview of relevant factors and contributes to understanding the labor shortage phenomenon and its development. Labor is an important production factor in the labor-intensive manufacturing industry. The current labor scarcity results in increased competition for workers among manufacturing firms in the southeastern provinces of China. In our contribution we identify the different potential levels of competition for workers. Implications of this competition are deduced. We derive potential actions alternatives for manufacturing firms to cope with the situation and to attract workers. Competition for semi-skilled and low-skilled worker and its implication are widely neglected in the management literature. This contribution strikes a new path to analyze the labor shortage and to focus unskilled labor as strategically important resource. Our analysis contributes to the development of implications and measures for the manufacturers firm in order to overcome the current situation of labor shortage.

5.2 Migrant Workers in China

The economic success of China has relied heavily on internal labor migration. To foster economic development, special economic zones and production centers have been established in the coastal regions, which have caused significant labor demand (Messinis/Cheng, 2009). Currently, there are no reliable statistics to quantify the total amount of migrant workers in China (Chen/Hamori, 2009). The numbers of migrant workers mentioned in the literature vary between 130 and 220 million (e.g., Shi, 2008; Chan, 2008; Fix et al., 2009; Chen/Hamori, 2009).

The Chinese hukou system, introduced in 1958, is intended to restrict migration between rural and urban areas. The system separates the Chinese population into
either agricultural (rural) or non-agricultural (urban). Every Chinese citizen is tied to a particular place to work and reside (Wang, 2010). The main institutional barrier to migrate is the exclusion of rural citizens from the urban welfare system, which provides food rations, housing, medical care, social services, education, childcare, and pensions for urban citizens (e.g. Liu, 2005; Chan/Buckingham, 2008; Démurger et al., 2009; Dongfang, 2010). The hukou system has been modified over the years allowing rural citizen to work in urban centers since the mid-1980s (Chan, 2009). However, severe limitations to a free movement of people remain, one of them being the risk of losing the family’s plots if these are not sufficiently taken care of (The Economist, 2010b).

Through the gradual loosening of administrative restrictions on labor mobility between rural and urban areas, the number of migrants has soared significantly over the last three decades (Démurger et al., 2009). In the late 1970s, less than 2 million Chinese moved away from their home towns in order to work elsewhere. Later, the number of rural migrants increased from about 30 million in 1989 to 62 million in 1993 (Shi, 2008). In 2006, the Chinese National Bureau of Statistics quantified a total of 132 million rural workers in Chinese cities (NBS, 2007). According to the NBS’s Peasant Worker Statistical Monitoring Survey, there were 229.78 million peasant workers in China at the end of 2009. 145.33 million (63.2%) of these workers were employed outside of their own rural or urban townships. 84.45 million (36.8%) were migrant workers in local areas (NBS, 2009).

In general, there are two overlapping migration streams. The first stream runs from rural to urban areas and is mainly caused by the income disparity (Shi, 2008). The second main migration stream links western and central provinces rich in labor force to southern and eastern provinces with export-oriented, labor-intensive industries (Chan, 2008). In 2008, 37.6 percent of the rural migrants originated from provinces in central China and 32.7 percent from the western provinces (Boxun, 2009). However, even from economically more developed eastern provinces large numbers of rural migrants seek to find jobs in the large cities (Shi, 2008).
5.2.1 Working and Living Conditions of Migrants

Most of the booming industries depend on a cheap labor force of migrant workers. Nevertheless, due to the restrictions of the hukou system, the movement of workers within China is restricted, controlled and in some ways illegal (Széll, 2010). Due to the hukou system, rural migrant workers are discriminated against in the urban labor markets and regarded as socially “second class” in urban societies (Shi, 2008). They do not have the similar social rights (Herd, et al., 2010). The hukou system hinders migrant workers to move upward socially or to assimilate into the urban population (Chan, 2010). Caused by the social stigmatization of migrants, these workers are easily exploited by their employers, and do not have sufficient social protection (Széll, 2010). There is a lack of formal channels for migrant workers’ grievances and demands (Dongfang, 2010). Migrants are predestinated as low-cost laborers (Chan, 2010). The analysis by Li and Li (2007) shows that overall migrant workers work much longer hours than local workers, while their average income is much lower compared to that of the locals.

Since the Chinese government set a minimum wage level in 2004, the majority of factory owners have been paying their workers only the legal minimum wage. However, the cost of living in cities such as Shenzhen and Guangzhou are much higher than the wages of migrant workers (Dongfang, 2010).

Factory owners prefer young rural migrant workers in order to take advantages of their physical abilities, such as trainable dexterity to handle fast-paced, repetitive assembly work and endurance for long working days (Chan, 2010). Moreover, the work attitude in the sense of obedience to orders and unpretentiousness, e.g. to live in dormitories or barrack-type shelters for long periods, are desired worker attributes for employers (Chan, 2010).

Furthermore, migrant workers accept long distance movement between rural and urban areas inside China. They are isolated from their familiar social surroundings. Migrants usually visit their hometowns and families only once a year, namely during the Chinese New Year, at the end of January and beginning of February (Fix et al., 2009).
For the export economy and the manufacturing sector, migrants are a highly mobile and flexible workforce which ensures the adjustment of products and production volumes to changing global demand.

5.2.2 SHORTAGE OF LOW-SKILLED WORKERS IN SOUTHEAST CHINA

In spring 2004, first signs of potential labor shortage occurred (Inagaki, 2006). Since 2005, a first persistent shortage of unskilled workers has been observable (Zhang et al., 2010). In the Pearl River Delta and the Yangtze River Delta the lack of workers was most acute (Barboza, 2006). The external shock, the financial crisis of 2008 and 2009, resulted in decreased global demand for Chinese products (Zhang et al., 2010). Moreover, the external shock led to bankruptcies of numerous export-oriented firms. Millions of migrant workers who had been working in the labor and export-intensive industries lost their jobs (Fix et al., 2009). The shortage of labor was temporarily alleviated (Zhang et al., 2010).

In the summer of 2009, the shortage of migrant workers reappeared in China. Companies faced difficulties finding workers and had to invest extensively in recruiting (Kwan, 2010). Especially the labor-intensive, low-profit clothing, textile, footwear, and toy manufacturing as well as the electronic assembly sectors were affected by the shortage (Hannan, 2008).

In the beginning of 2010, the situation became even more precarious for Chinese manufacturers. After the Chinese New Year and Lantern Festival millions of migrant workers formerly employed on China’s southeastern coasts did not return from their annual holidays at home. Instead of returning south or east, many found new jobs in China’s central and western provinces. For example, in the Pearl River Delta around six millions migrant workers were employed before the Chinese New Year. After the holidays, only about half of the migrants returned to the factories (Tsang, 2010). To attract workers, factories have raised wages by more than 20 percent in recent months (Bradsher, 2010). Moreover, this labor force slump forced manufacturers to improve working and living conditions and to introduce career prospects (Tsang, 2010).
5.3 **Theoretical Approaches to Labor Migration and Scarcity**

Labor issues such as labor migration and scarcity can be examined from the perspective of labor economics. Scientific contributions on labor economics mainly focus on nations or regions such as the US or Western Europe and issues related to these developed countries (Frölich/Haile, 2011). Labor markets in developing countries have different shapes and structures than labor markets in Western nations. According to Frölich and Haile (2011), labor market issues in developing countries arise from large urban informal sectors, large agricultural sectors, big population growth, a distinct rural-urban migration, small and medium-sized production units, limited social and health insurance, poor education systems, and poverty.

In general, there are macro-economic and micro-economic approaches to analyze labor economics. Macro-economic approaches study the interrelations of labor markets, good markets, financial markets, and international trade (e.g., Ohlin, 1933; Markusen/Venables, 2000) as well as industrial sectors (e.g., Lewis, 1954). The impact of these interrelations on national variables such as income level, employment ratio and the GDP is also analyzed in this macro-economic approaches. Labor is an important production factor for nations and may generate a comparative advantage. Therefore, aspects such as the factor endowment of a nation and factor mobility within or between countries are examined by various macro-economists (e.g., Krugman, 1991; Friedberg/Hunt, 1995; Markusen/Venables, 2000; Ottaviano et al., 2002; Pflüger, 2004; Li, 2010).

Micro-economic approaches concentrate on the role and behavior of individuals and single firms with regard to labor market issues. The individual motivation, skills and preferences influence migration decisions and are analyzed on a micro-economic basis (e.g., Harris/Todaro, 1970; Poncet, 2006; Russek, 2010). In order to categorize the labor market in a developing nation such as China, Fields (2011) emphasizes that new approaches need to be developed, which include the particular local set of labor market conditions. This contribution analyzes labor scarcity in China less from the perspective of labor economics than from a management perspective. Unskilled labor is considered a limited resource for Chinese manufacturing firms. The resource-based
view (Barney, 1991) accentuates the importance of labor as an input factor of the manufacturing sector.

Besides the resource-based view, other relevant labor economics theories are described in order to provide a comprehensive theoretical introduction to the topic of labor migration and labor scarcity in China.

5.3.1 LEWISIAN STRUCTURAL CHANGE MODEL

In the face of repeated labor shortages several scholars have started to discuss whether China has reached the Lewisian turning point (e.g., Cai et al., 2007; Meng/Bai, 2007; Park et al., 2007; Islam/Yokota, 2008; Chan, 2010; Garnaut, 2010; Knight et al., 2010; Zhang et al., 2010).

The Lewis model is a seminal multi-sector labor market model in the context of the economic development of nations (Fields, 2007). In his model, Lewis (1954) assumes that at early stages of an economy’s development, there is an unlimited supply of labor. This unlimited labor force will keep labor prices (i.e., wages) down and supports the economic development of the country (Tignor, 2004). The model is based on labor market dualism. Lewis distinguishes between the traditional agricultural or rural sector and the modern industrial or urban sector (Fields, 2004). The traditional agricultural sector is the continuous and unlimited source of labor force for the industrial sector (Fields, 2004). According to Lewis, in developing countries, industrial wages begin to rise once the supply of surplus labor from the rural areas starts to decline (Lewis, 1954).

Developed nations such as Germany or the US have long overcome the development stage where the agricultural sector has a strong impact on the GDP. In these cases, the Lewisian model is no longer applicable. China, however, still has characteristics of a developing nation. Therefore scholars apply the Lewisian model to the Chinese context (e.g., Knight et al., 2010; Zhang et al., 2010).

Some scholars argue that the Chinese economy is approaching the Lewisian turning point (e.g. Cai et al., 2007; Park et al., 2007; Zhang et al., 2010), which would indicate an end to China’s unlimited labor supply. In this regard the scientific literature is
inconclusive. There are studies which find migrant labor scarcity and rising migrant wages (Park et al., 2007; Cai/Meiyun, 2008), while other contributions suggest that there is still a remarkable pool of low-skilled labor available in the rural sector. For example, Knight et al. (2010) find that there is a large pool of non-migrants with a high probability of migrating, but that there are perception-based reasons for not doing so. Wang and Mei (2009) argue that the labor shortage in China’s coastal regions is rather a relative and structural shortage due to low wage rates. An absolute labor shortage, i.e., a gap between supply and demand of labor, is not observed (Wang/Mei 2009).

Chan (2010) differentiates two groups of rural labor, young and older workers. In certain age classes the abundant supply of workers still exists. However, in export-oriented industries, mostly young and flexible workers (ages 16-30) are employed. Due to the increasing demand for labor in the export-oriented sectors, young rural workers have become scarce (Chan, 2010). For young rural labor the Lewisian turning point seems to be approaching.

5.3.2 MOTILITY OF LABOR AS A PRODUCTION FACTOR

The Heckscher-Ohlin model (Ohlin, 1933) predicts the patterns of trade and production based on the respective factor endowments of countries or regions. Assuming two countries dispose of the same technology, trade will be driven by the factor endowments of the countries. In general, the model states that countries will export goods which are produced with the abundant and cheap production factors available in the country. Meanwhile, goods which would have to be produced with the scarce production factors of a country will be imported from other countries. If the factor endowments are not so different, a price equalization between the countries will occur over time. Concerning migration, Friedberg and Hunt (1995) state that in case of migration into a certain region, the supply of labor will increase. This will lead to a shift toward more labor-intensive production while the factor prices will remain unchanged.

Labor-intensive production requires a substantial amount of labor (often unskilled workers) to produce industrial products. Labor is used in a higher proportion than capital (capital refers to equipment, machinery, vehicles etc.). Especially the manufacturing sector comprises labor-intensive production. The Chinese Standard of
Industrial Classification classifies the manufacturing industries and products. The categories are among others food manufacturing, textiles, apparel, leather products, timber and bamboo products, furniture manufacturing, basic chemicals, plastic products, metal products, transport equipment, electric equipment, and electronics (Chen et al., 2009).

If migration of unskilled workers is driven by wage differentials, there will be an equalization of wage levels across regions over time (Li, 2010). However, Li (2010) shows that such labor price equalization does not occur in the case of China. Wage differentials across Chinese provinces remain. This leads to the assumption that the Chinese labor market is not fully integrated. Labor migration within China is still restricted by the hukou system (Chan/Buckingham, 2008). But there is an ongoing integration process and due to reforms of the hukou system the number of rural migrant workers has increased significantly (Ge/Yang, 2011). Nevertheless, China is partitioned into provinces with several political jurisdictions. The provincial borders separate labor markets and limit the mobility of labor (Li, 2010). Due to the restrictions, internal migration in China has many of the characteristics of migration across borders. These restrictions increase the cost of migration especially for long-distance migration (non-neighboring provinces) and support inter-provincial wage differentials (e.g., Poncet, 2006; Li, 2010).

The new economic geographic (NEG) model based on the seminal work of Krugman (1991) attempts to explain the regional concentration of manufacturing firms. Factor mobility and production linkages are the main elements of such models to explain the agglomeration of economic activity in certain regions (Russek, 2010). Several scholars, such as Krugman (1991), Ottaviano et al. (2002), and Pflüger (2004), assume differences in mobility between different types of labor. The mobile group includes skilled labor (often self-employed), while the immobile group consists of unskilled peasant workers who are bound to their region of origin (Russek, 2010).

According to the human capital theory which was introduced by Schultz (1961) and Becker (1964), skills of workers and their productivity can be improved by education and training. Higher education and improved skills allow workers to find work in
different economic sectors (Fields, 2011). The return on education is reflected in increases in realized wages (Ge/Yang, 2011).

The likelihood of migration correlates with the level of education. Skilled workers can more easily adapt to new regions, languages, and cultural particularities of new destinations (Russek, 2010). Moreover, skilled workers are less frequently subject to poverty constraints. However, more recent work from Docquier and Marfouk (2006) shows that migration of unskilled labor does exist and should not be neglected by research. The migration of millions of semi-skilled and low-skilled workers in China (Zhao, 1999b) is a point in case.

According to Ge and Yang (2011), a neoclassical framework which includes the rational choice of individuals seems to be most appropriate to explain the labor market developments in China. The Harris-Todaro model is one of the best-known economic models regarding migration decisions. Harris and Todaro (1970) set up a seminal framework concerning rural-urban migration. The main idea of the model is that migration from rural to urban areas will occur as long as the urban income is expected to be higher than the rural income. Therefore, migration decisions by workers are based on expected income differentials between rural and urban areas. Despite the higher urban unemployment rate it can be economically rational to migrate if the expected urban income exceeds the expected rural income.

Most migration within China is illegal and migrant workers continue to live a marginalized life in urban areas (e.g., Démurger et al., 2009). Despite the migration costs, the income differentials between rural and urban areas remain high. This generates incentives for rural workers to migrate to urban areas (Laing et al., 2005). The mobility of low-skilled workers in China is strongly influenced by the expected income, the migration costs, the conditions of the labor market, the possibility to find a job (e.g., Laing et al., 2005; Poncet, 2006; Ge/Yang, 2011), and the existing networks among migrants (Zhao, 2003). However, in the course of the economic integration within a country, low-skilled labor tends to return to its region of origin (Russek, 2010).
After the consideration of theoretical approaches in the field of labor economics, labor will be further examined from a management perspective. Beyond the resource-based view of the firm (Barney, 1991; Peteraf, 1993; Peteraf/Barney, 2003) with its focus on sustained competitive advantage that does not really include questions of actual competitive interaction (Markman et al., 2009), the acquisition of resources and the competition among firms for scarce resources has attracted little scientific attention. Barney (1986) pointed out that acquiring resources (or strategic factors) on the market requires superior expectations or simply luck, because otherwise the resource’s price will be equal to its economic value, leaving the acquirer with zero profits. Based on these realizations, additional research has looked at the kind of information required to improve one’s expectations on a resource’s actual value (Makadok/Barney, 2001). However, these approaches concentrate on the seller-buyer relationship and include competitors only as possible alternatives. Moreover, much of the scarce existing literature is focused on technological resources, for instance concerning the difficulty of trade in knowledge (Teece, 1980) or a potential deterrent effect on competitors’ activity (Clarkson/Toh, 2010).

Where human resources are concerned, the scientific literature has mainly focused on the effects of the loss of key employees (Gardner, 2002, 2005; Aime et al., 2010), the learning effects resulting from inbound employee mobility (Song et al., 2003; Rosenkopf/Almeida, 2003), and the effects of persisting social networks after employee mobility (Somaya et al., 2008). All these cases are based on the loss of key technology or business employees to competitors.

An actual scarcity of semi-skilled and low-skilled workers, and the resulting consequences for resource positions and competition, is a new issue that has hardly been studied. Usually, the supply of basic labor is considered practically unlimited, which means that labor is not critical and, lacking a strategic element, not a resource at all (Barney, 1991). This changes, however, when firms are unable to perform due to the scarcity of labor (e.g., Bradsher, 2010). In such cases, attracting and retaining workers becomes very much strategic, and consequently also an element of competitive interaction. However, the question of how to attract or retain unskilled
workers, and the importance of doing so, has attracted little scientific attention, with a study of employees of fast food chains presenting a rare exception (Cappelli, 2000).

Basic micro-economic theory, which connects a positive-slope labor supply function and a negative-slope labor demand function through the price mechanism resulting in equilibrium wages (Varian, 2006), is usually applied to markets for unskilled labor. However, given the strategic element when low-skilled labor has become scarce, it is obvious that a purely price-based model ignores major aspects of the dynamic processes at work. In particular, workers are human beings with needs and desires who cannot simply be bought or sold with the highest bidder winning, but who must be attracted and retained with the wage level being only one element in a more complex equation.

On the general resource level, competition for resources between firms which have a common resource base has usually been overshadowed by competition on common product markets (e.g., Chen, 1996). However, recent research points out that competitive interaction does not require product market contact, as long as there is an interaction on factor markets due to resource similarity (Markman et al., 2009). In other words, there is competitive interaction between firms which usually do not consider themselves competitors, because in order to function these firms all require the same resource. Competitive intensity in such cases is traced back to the versatility and the mobility of the resource in question, the first concept meaning the resource’s usability in different contexts, the second describing the resource’s transferability from one firm to another. Markman et al. (2009) conclude that resources that have high versatility and mobility will be more likely to become the subject of competitive interaction than other resources. Applied to the scarce resource of unskilled labor, one can easily see that a factory worker can quickly adjust from one basic manual task to another. The versatility of basic manual labor makes it basically available for any firm relying on manual labor.

In addition, factory workers have proved to be extremely mobile, moving from factory to factory, depending on the availability of work (The Economist, 2010b). This mobility also applies to the search for the most attractive employer. In consequence, given the
versatility and mobility of low-skilled labor, we can expect both increased leverage for workers concerning their individual and collective well-being, and intensified competitive interaction by producers for factory workers.

Therefore it is important to analyze what the drivers of this new situation in the labor market are, what the consequences might be and how manufactory owners can handle with increased competition for unskilled workers.

5.4 **CHINA-SPECIFIC DRIVING FORCES BEHIND SHORTAGE OF UNSKILLED WORKERS**

There are few studies on China’s current labor shortage, most of them analyzing whether the Lewisian turning point has been reached in China (e.g., Cai et al., 2007; Meng/Bai, 2007; Park et al., 2007; Islam/Yokota, 2008; Chan, 2010; Garnaut, 2010; Knight et al., 2010; Zhang et al., 2010). For example, Zhang et al. (2010) conduct a quantitative empirical study on long-term rural wage data. The wage data provide the only explaining determinant for reaching the Lewisian turning point and hence for the labor shortage. Chan (2010) differentiates and analyzes rural labor according to supply (China’s population structure, working age groups) and demand (growth of the export sector, job offers). Still, none of the existing models gives a clear and comprehensive overview of driving forces and implications of the labor shortage.

The influencing factor model fills the existing research gap and provides an explanation for the shortage phenomenon and its potential effects. Figure 8 summarizes the driving forces behind the labor shortage in the southeastern provinces of China which will be discussed in the following.

The phenomenon of labor shortage has consequences for manufacturers in the southeastern coastal regions both in the short-to-medium and in the long run. Due to the revival of the global economy, full order books and pressure by buyer firms, manufacturers seek to meet their orders and have to compete for labor. In order to attract workers, manufacturers must provide higher wages, better working conditions as well as reliable career prospects.

The main competition for workers among manufacturing firms takes place within China. But competition for workers between the Asian countries and respective
migration flows do exist as well. In general, there are no official numbers on outward migration of Chinese population. According to the estimation of the Development Research Centre on Migration, Globalisation and Poverty (Migration DRC) around 6 million people left China in 2000 (Ducanes/Abella, 2009). It can be assumed that the present outward migration is much higher. The majority (64%) migrate to other Asian countries such as Japan, North and South Korea, Indonesia, Malaysia or Philippines (GMOD, 2007). This can be explain by the spatial vicinity and the related lowered migration costs. However, this contribution focuses on the competition for workers within China.

![Diagram](image)

Fig. 2: Influencing Factors and Implications of Labor Shortage

In the long run, a structural change of southeast China can be expected and has already started. Labor-intensive industries have started to move their factories to lower-cost regions. The different drivers and implications for manufacturing firms are described in more detail in the remaining parts of the paper.

5.4.1 

**HUOKU SYSTEM IN CHINA**

The hukou system is a key instrument of the government to regulate and restrict population mobility in China. It also determines the entitlement of citizens to public
welfare and urban services (Chan/Buckingham 2008). The hukou system categorizes Chinese-born citizens regarding their socio-economic eligibility and residential location. The first hukou category is type and divides the population into agricultural (rural) and non-agricultural (urban) (e.g., Liu, 2005; Chan/Buckingham, 2008). The second category indicates the official and permanent residence. Each Chinese citizen has to be registered in exactly one place. That means that in addition to the agricultural and non-agricultural categorization, the population is divided into locals and non-locals. Based on the hukou system there are two types of migration: hukou migration, i.e. formal transfer of local residency, and non-hukou migration, i.e. no formal right of residency at the destination (Chan/Buckingham, 2008). Since the 1980s, migration between rural and urban regions has increased. In the mid-1980s, a more flexible hukou policy was adopted (Lui, 2005). However, the majority of migrants who are working in the manufacturing sector are non-hukou rural migrants. Due to the hukou system these workers still have less rights than urban local workers and are often treated as second-class workers (Démurger et al., 2009). The hukou system still has a negative effect on the migration flows from rural to urban regions (e.g.; Chen/Hamori, 2009; Zhang, 2010).

5.4.2 DEMOGRAPHIC CHANGE

China’s long-established one-child policy, introduced three decades ago in order to limit population growth, now results in decreasing numbers of young citizens between 15 and 29, who constitute the bulk of migrant workers, with a particularly sharp fall predicted after 2011 (The Economist, 2010a, b). China is starting to realize unintended consequences of the one-child policy, e.g. the fast aging of its population (Germain, 2009), a great stress on pension systems, a massive gender imbalance through the long-standing cultural preference for boys, and the depletion of the pool of laborers (Yao, 2011). The Chinese government has been considering a relaxation of the family planning policy towards a two-child policy. After the end of the 12th Five-Year Plan period (2011-2015) the family planning policy may be adjusted (Yao, 2011). In the coming years, however, manufacturers will have to cope with the effects of the one-child policy.
5.4.3 Demand for Unskilled Workers

With the increasing export-orientation of Chinese firms the demand for unskilled labor has been growing and China has become the world’s production facility. Initially, the global financial crisis had a negative effect on the Chinese economy. Worldwide demand for Chinese exports decreased (see figure 9) and led to a reduction in domestic industrial production. Factory closures and layoffs in southeast China caused an increase in the unemployment rate (Wang, 2010). The decrease in order volumes of Western buyer firms contributed to price pressure on and increasingly strong competition among Chinese supplier firms.

![Exports in USD bln](image)

(Source) National Bureau of Statistics of China, China Statistical Yearbook 2010

Fig. 3: Development of Export Volume in China

Recent reports show that following considerable consolidation efforts, demand has been increasing again. The OECD (2010) confirms a marked increase in the export of goods and services by Chinese firms in 2010. This development will continue over the next years (OECD, 2010). Hence, export-oriented manufacturers are faced with rising order volumes from Western buyers. Subsequently, the demand for low-skilled workers has increased considerably (Chan, 2010) and will probably continue to do so in the future.

Export-oriented industries are often located in the coastal regions of China due to the better infrastructure and closeness to seaports to ship the products all over the world. Since the first occurrence of labor shortage in the manufacturing sector in 2005 and given the increasing demand for young flexible workers, the wage level in the coastal
regions has risen significantly. Particularly in Guangdong, wages have more than doubled from 2004 to 2009 (see figure 10).

Fig. 4: Wage Levels in the Manufacturing Sector

5.4.4 Stimulus Package of the Chinese Government

The second driving force concerns the recent introduction of government programs intended to provide infrastructure development in western and central China where most of the unskilled workers have been migrating from (Wong et al., 2007). In order to cope with severe external shocks of the financial crisis and to maintain economic growth, the Chinese Government launched a US$ 586bn (RMB 4tn) economic stimulus package on November 10th, 2008. In the course of this stimulus package, a series of policy measures have been adopted to stimulate domestic demand, adjust the local
economic structure, and improve the livelihood in China. Measures ranged from infrastructure investment to environmental protection measures and disaster relief projects (Cai et al., 2010). Especially the inland regions have benefited from this government stimulus.

For potential migrant workers from provinces in western and central China, such infrastructure programs provide a number of jobs and pay sufficiently to increase the individual attractiveness of staying closer to one’s home instead of migrating toward the industrial centers in the south and east. There are now more potential destinations for workers who are willing to migrate, including some closer to their homes and families.

Southeast China has been hit hard by the financial crisis due to its high dependence on overseas markets for exports. One consequence of the stimulus package has been a noticeable increase in the disparity between high growth in the west and low growth in the south and east (Kwan, 2010). The Chinese New Year, the period when most Chinese migrant workers visit their home provinces, was the most crucial point and provided an opportunity not to return to the industrial centers or to search for job alternatives closer to the respective home provinces.

5.4.5 Growing Tertiary Sector

The importance of the tertiary sector in the Chinese economy has steadily increased during recent years. The producing sector with little more than minimum wages, long working days and bad working conditions is no longer very attractive for migrant workers, leading many to look for job alternatives in the service sector.

For a long period of time, service sector development lagged behind the global development because the Chinese national economic development strategy gave priority to industry, especially heavy industry, in order to force industrialization. Since 1978, the Chinese government has initiated economic reforms and opened up, and the service sector has gradually gained more attention (Cheng/Blanchard, 2009). This can be considered a structural change that has begun within the Chinese economy.
In the 11th Five-year Plan (2006-2010) of the Chinese government, speeding up the development of the tertiary sector and increasing the share of this sector in the GDP are essential components (Cheng/Blanchard, 2009). The increased importance of the tertiary sector is shown in table 13.

<table>
<thead>
<tr>
<th></th>
<th>Primary sector</th>
<th>Secondary sector</th>
<th>Tertiary sector</th>
<th>GDP (100 million Yuan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share on GDP in 1990 in %</td>
<td>41.7</td>
<td>41</td>
<td>17.3</td>
<td>18,667.8</td>
</tr>
<tr>
<td>Number of employed persons at year-end 1990 in %</td>
<td>60.1</td>
<td>21.4</td>
<td>18.5</td>
<td></td>
</tr>
<tr>
<td>Share on GDP in 2000 in %</td>
<td>4.4</td>
<td>60.8</td>
<td>34.8</td>
<td>99,214.6</td>
</tr>
<tr>
<td>Number of employed persons at Year-end 2000 in %</td>
<td>50.0</td>
<td>22.5</td>
<td>27.5</td>
<td></td>
</tr>
<tr>
<td>Share on GDP in 2009 in %</td>
<td>4.5</td>
<td>52.5</td>
<td>42.9</td>
<td>340,506.8</td>
</tr>
<tr>
<td>Number of employed persons at year-end 2009 in %</td>
<td>38.1</td>
<td>27.8</td>
<td>34.1</td>
<td></td>
</tr>
</tbody>
</table>

(Note) Share of the contributions of the three strata of industry to the increase of the GDP refers to the proportion of the increment of the value-added of each industry to the increment of GDP. (Source) National Bureau of Statistics of China, China Statistical Yearbook 2010.

Tab. 3: Share of the Contributions of the Three Strata of Industry

Massive structural changes are thus on the way and are supported by the Chinese government’s stimulus package. The growth of the tertiary sector has increased its labor demand. The working conditions and physical strains are different and likely improved compared with jobs in the secondary sector, while the level of income is often higher. Furthermore, jobs are no longer concentrated in southeast China, but distributed all over the country (The Economist, 2010b). Therefore, migrants increasingly search for job alternatives in the tertiary sector.

5.4.6 LIVING COSTS AND WAGES

There is a forth factor which explains the shortage of labor in southeast China. Over the last years, the cost of living in regions like Guangdong has increased significantly while wages have not increased to the same extent. For example, a worker of Foxconn in Shenzhen earns 1,500 yuan a month (including overtime), but after paying for rent, food and clothing there has hardly any money left (Dongfang, 2010).

Moreover, migrant workers are often paid at minimum wage level. Migrant workers’ income differs frequently from the income of local workers (Du/Pan, 2009). As the
average wage in the coastal regions has increased significantly, the ratio of minimum wage to average wage has declined (Du/Pan, 2009). Thus, migrants do not benefit from wage increases as do local workers and have to cope with rising costs of living.

This contributes to many migrant workers’ decision to stay closer to their home towns where, due to the stimulus package, they may find jobs more easily. For instance, 48.8% (70.92 million) of the rural workers now migrate within their home province. This number increased from 2008 to 2009 by 8.2% (5.35 million) (BSR, 2010). They do not earn the same amount of money but this is more than compensated by lower living costs than in China’s southeastern regions and closeness to the respective home provinces (Tsang, 2010).

<table>
<thead>
<tr>
<th></th>
<th>Eastern region</th>
<th>Western region</th>
<th>Central region</th>
<th>North-eastern region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income in urban households</td>
<td>23,153</td>
<td>15,523</td>
<td>15,539</td>
<td>15,842</td>
</tr>
<tr>
<td>Net income in rural households</td>
<td>7,155</td>
<td>3,816</td>
<td>4,792</td>
<td>5,456</td>
</tr>
<tr>
<td>Living expenditures in urban households</td>
<td>14,619</td>
<td>10,641</td>
<td>10,031</td>
<td>11,128</td>
</tr>
<tr>
<td>Living expenditures in rural households</td>
<td>5,148</td>
<td>3,238</td>
<td>3,622</td>
<td>4,148</td>
</tr>
</tbody>
</table>

(Note) Annualized per capita data in Yuan (2009)

Tab. 4: Annual Income and Expenditures of Urban and Rural Households (2009)

Table 14 provides an overview of annual income levels and living expenditures in different parts of China. These data show that in the eastern provinces the net income is higher than in western and central regions. However, with migrant workers being paid less than local workers, the average income in the eastern region probably significantly overstates a migrant’s income. At the same time, costs of living are higher in the eastern provinces. Consequently, the gap between the eastern and the other provinces concerning income after paying for the cost of living can be expected to have decreased recently.

Around 145.33 million peasant workers in China are employed outside of their own rural or urban townships. In general, the number of migrant workers increased from 2008 to 2009 (4.36 million), but the destinations of the migrants started to change (BSR, 2010). The majority of migrant workers is still absorbed by the eastern provinces.
But the proportion of workers who migrate inter-provincially or trans-regionally has decreased over time (Xinhua/Kun, 2007).

In 2009, the number of migrant workers in the eastern provinces of China declined by 8.88 million people compared to the previous year (see table 15). Especially, the Pearl River Delta were strongly affected by change of migration flows. The number of migrant workers fell by 22.5% from 2008 (42.36 million) to 2009 (32.82 million) (e.g., Kwan, 2010; BSR, 2010). The Yangtze River Delta is another example, the number of migrant workers decreased by 7.8% from 2008 (30.54 million) to 2009 (28.16 million) (BSR, 2010). By contrast, the number of migrant workers increased by 6.18 million people in the central provinces. In the western provinces there was an inflow of 7.75 million migrant workers.

<table>
<thead>
<tr>
<th></th>
<th>East</th>
<th>West</th>
<th>Central</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of migrant workers in million</td>
<td>90.76</td>
<td>24.77</td>
<td>29.40</td>
<td>145.33</td>
</tr>
<tr>
<td>Year-on-year change in million</td>
<td>-8.88</td>
<td>6.18</td>
<td>7.75</td>
<td>4.92</td>
</tr>
<tr>
<td>Year-on-year growth in percent</td>
<td>-8.9</td>
<td>33.2</td>
<td>35.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Wages of migrant workers (Yuan/ month)</td>
<td>1422</td>
<td>1350</td>
<td>1378</td>
<td>1417</td>
</tr>
<tr>
<td>Year-on-year change (Yuan/ month)</td>
<td>70</td>
<td>75</td>
<td>105</td>
<td>77</td>
</tr>
<tr>
<td>Year-on-year growth in percent</td>
<td>5.2</td>
<td>5.9</td>
<td>8.3</td>
<td>5.7</td>
</tr>
</tbody>
</table>


Tab. 5: Number of Migrant Workers and Wage Level by Region (2009)

Moreover, the rate of increase in wages in 2009 was higher in the central (5.9%) and western provinces (8.3%), than in the eastern region (5.2%). In terms of wage levels, regional differences have thus been diminishing. Hence, there are fewer incentives for farmers from the central and western regions to migrate to the eastern costal region to find jobs.
The majority of Chinese citizens live in rural areas. At the same time, people living in poverty are concentrated in rural areas as well (Zhang/Minxia, 2006). Migrant workers often originate from such regions. The Chinese government has committed to universally introduce nine-year compulsory education among school-aged children everywhere in China. Long-term objectives were poverty reduction, productivity increase, and sustainable development of rural regions (Zhang/Minxia, 2006). The process of promoting compulsory education started in 1986 with the Law for Compulsory Education and is supported by special funding from the Chinese central government (Zhang/Minxia, 2006). Due to these measures there has been a considerable reduction of illiteracy among youths and adults (Zhang/Minxia, 2006). Xinhua and Kun (2007) confirm that the educational level of migrant workers has increased. In comparison with other social groups in China, the educational level of migrants is still low (Xinhua/Kun, 2007).

However, in China a sharply increased demand for higher education among young people is observable (Tsang, 2010). Since 2000, the number of first-year students at Chinese universities has almost tripled, from 2.2 million to 6.4 million in 2009 (Bradsher, 2010), thus providing another alternative for potential migrants and increasing migrant scarcity.

**5.4.8 UTILIZATION OF MODERN INFORMATION AND COMMUNICATION TECHNOLOGY**

Due to increasing diffusion of broadband access in China and growing internet usage by citizens, workers are better informed about wages, working conditions, workers rights and job opportunities.

The number of internet users in China has reached 420 million in 2010 (CNNIC, 2010). The number of rural citizens who use the internet reached 115 million, i.e. 27.4% of all internet users in China (CNNIC, 2010). Workers gather information concerning the economic development of certain regions and compare job opportunities in these regions. Furthermore, they can exchange experience regarding working conditions and wages in different firms and industries.
In China, the utilization of mobile phones is the prevalent way to exchange information (Inagaki, 2006). Migrant workers keep contact with their families and friends in the home provinces through mobile phones. The number of mobile subscribers grew to 833.1 million in 2010 (Reuters, 2010).

5.5 IMPLICATIONS FOR MANUFACTURERS IN SOUTHEASTERN CHINA

Manufacturers are in a precarious situation and need to attract sufficient work force to meet the orders of their buyer firms. In general, manufacturing firms have to decide whether to maintain the production facilities in southeastern China or to relocate to alternative production locations. Such decision is dependent on the firms’ ability and financial resources to pull out of the competitive pressure.

If manufacturing firms decide to remain in the southeastern provinces of China they have to face competition for labor force. In order to derive implications for manufacturing firms the three levels of individual decision-making of migrant workers need to be considered. These three levels determine the further intensity of competition for manufacturing firms and define starting points for measures to cope with the competition. These individual decision levels are (see figure 11): 1) workers have to decide whether to migrate, 2) workers have to make the decision where to migrate to, and 3) workers have to choose a firm for which they want to work. In the
following, the factors and measures that enable firms to actively influence the competitive position on each of these different levels are analyzed in more detail.

Labor shortage is deemed a macro-economic problem. In order to reply to the consequences of labor shortage and to develop measures to counteract this trend, measures have to be developed and applied on different levels: country or province, industry, and company level.

This contribution concentrates on the micro-economic view and the manufacturing firms’ sphere of influence. The following focuses on the deduction of implications and the development of potential measures in order to cope with the increased competition for migrant workers. First, appropriate measures of manufacturing firms of an industrial center are recommended in order to set incentives for workers to migrate to eastern provinces and to choose a certain industrial center. Second, measures on the company level are discussed to finally attract the migrant worker. The industrial center and the corporate level were chosen because manufacturing firms might exert influence on these levels. We do not make recommendations for any political measures by the Chinese government or province governments in this contribution.

5.5.1 Incentives for Workers to Migrate

In 2010, the Ministry of Human Resources and Social Security had interviewed 9,081 migrant workers and asked whether they will return to the coastal regions after the Spring Festival or not. At that point in time, 8% of the interviewed workers had already decided not to return, 30% were undecided, and 62% stated they were going to return to the coastal regions to work (Xinhua, 2010).

In general, a citizen from a rural community will migrate to an industrial center only if migrating is more attractive than staying in the home province. Concerning the potential to stimulate additional migration as such, it can be expected that measures on an individual firm will level have barely any effect: such individual stimuli might benefit rivals more than the acting firm, creating a free-rider problem. The individual firm has to bear the costs for stimulating migration. After arrival, migrant workers could be poached by the rivals. Hence, all of the following proposed actions should be
expected to be most beneficial on a level of collective firm action, either on a provincial or on a regional level.

5.5.2 REDUCE MIGRATION COSTS FOR WORKERS

According to the neoclassical model of migration (Harris/Todaro, 1970), migration cost is a decisive factor in an individual’s migration decision. Migration cost can be calculated from the difference between expected income from migrating and from staying in the home region, both weighed by the probability of finding work in the respective region. It also includes the direct cost of migrating, such as travel expenses. Especially for long-distance migration costs are an important decision factor (Poncet, 2006). On this basis the workers decide whether to migrate within a province, to a neighboring province or to a non-neighboring provinces. Given that the Chinese government’s stimulus program has been investing heavily in rural regions (e.g., Bradsher, 2010), both the expected income level and the probability of finding work in the rural home region or a neighboring province have risen recently.

In addition, in the southern industrial centers the scarcity of available workers (Bradsher, 2010) suggests that the probability of finding work after migration will be close to 100%. Consequently, firms can be expected to collectively act in order to reduce migration costs. Here, leverage concerning migration cost is the overall wage level, which has risen considerably in recent months, and investment in reducing the cost of direct migration, such as repayment of travel expenses by joint agencies or signing bonuses (Bradsher, 2010), the latter potentially with delayed payment in order to reduce fluctuation during the year (Cappelli, 2000).

5.5.2.1 STRENGTHEN NETWORK EFFECTS

Many studies have pointed out that a main factor in an individual’s migration decision is the existence of a community of migrants from the potential migrant’s home region in the industrial center in question, providing first-hand information on migration reality and options (e.g., Menjivar, 1995; Zhao, 2003; Bao et al., 2009; Wang, 2010).

The study of Zhang (2010) show that 24.5% of the permanent migrants (born in other cities) and 59.5% of the temporary migrant workers (born in rural areas) obtained their
jobs through relatives, friends or other personal contacts. Labor, personnel and organization offices are more often used by permanent migrants (52.7%) than by temporary migrants (9.1%) in order to get a job (Zhang, 2010). A further interesting finding of this study is that temporary migrants prefer to use one single channel to obtain a job, rather than to use various options simultaneously, such as employment agencies, answering to job ads, organizations’ offices, and personal contacts (Zhang, 2010).

Consequently, firms could act on a regional level by leveraging the existing community of migrants by offering them small premiums for every newly migrating individual added to the industrial center’s labor market from their respective home region through their intermediation.

5.5.2.2 Advertise Directly in Rural Regions

In the past, manufacturing firms had to only wait for workers, but today new recruiting concepts and channels need to be applied. Wu (2010) showed that members of rural households without migration experience of any household member prefer local non-farm work to migration, while in households with migration experience migration is a much more likely option. Even if local non-farm work is not available, people without direct access to migration experience tend to prefer to remain unemployed instead of migrating. This suggests that a huge potential of labor is yet untapped and that these people could be motivated to migrate by targeted (collective) advertising and direct job ads. Beyond access to migration experience, several studies (e.g., Stark/Taylor, 1989, 1991; Zhao, 1999a) imply that rural non-migrants who match the typical profile of migrants could be well targeted by direct local advertising.

There are various new recruiting practices which can be employed in the rural areas with abundant labor supply. Appropriate measures might include sending recruitment representatives to the rural areas, mandating job agencies, hosting job fairs, cooperating with local vocational schools or publishing job information (such as wage, benefits and corporate culture) with support by local governments (BSR, 2010). Furthermore, job ads should be released to the public via local websites and flyers (BSR, 2010).
5.5.2.3 Lobby for Further Abolishment of the Hukou System

While the hukou system has lost its importance during recent years (Bao et al., 2009), many elements remain that inhibit the free movement of rural citizens to urban centers. In particular, changes to the system could permit young people to remain in the urban labor market when they want to start a family, whereas today they often have to return to their local communities to do so (Wu, 2010). This might explain why today not even half as many rural citizens in their 40s (11%) than those between 16 and 30 (24%) choose to migrate (The Economist, 2010a).

Due to the hukou system, migrants still do not have similar social rights as local workers or only limited access to social services. Access to social services influences the migration decision of workers with young children, with a higher age or with an elderly parent (Herd et al. 2010). The removal of social services barriers is an incentive for migrants to settle to a certain region (Herd et al. 2010). Collective lobbying efforts by manufacturing firms to the central government could therefore be important to enable a political decision that facilitates an extension of the labor market.

5.5.3 Increase Attractiveness of an Industrial Center

Once a worker from a rural community has taken the decision to actually migrate, he or she can choose between a considerable number of industrial centers. Naturally, firms from one industrial center must be interested in attracting as many migrants as possible to their location in order to strengthen the local labor supply as much as possible. Consequently, there is competition between the different local labor markets, so that firms should act collectively on a regional level in order to out-compete firms from other industrial centers.

5.5.3.1 Lobby for Higher Minimum Wages

Not only the decision to migrate, but also migration cost can be an important factor in an individual’s choice of the migration destination (e.g., Harris/Todaro, 1970; Poncet, 2006). Consequently, a rational model would expect a migrant to choose the destination which minimizes his or her migration cost. This means that the wage level and the probability to get employed in a region should be a decisive factor for an individual’s choice, assuming travel cost from a rural region to any industrial center is
similar. This means that collectively raising the wage level should be useful to attract additional migrants to an industrial center. Official minimum wages, which differ from region to region, signal a minimum income level to potential migrants. Thus, lobbying the regional administration for a raise in minimum wages might help to make an industrial center more attractive than alternative industrial centers and that potentially without additional cost, if firms usually pay more than minimum wages anyway. Recently, significant rises in the minimum wages in Beijing (The Economist, 2010a) and respective considerations in Guangdong (Bradsher, 2010) show that local governments already act accordingly, while this may still only mean catching up after raises were postponed during the financial crisis (The Economist, 2010a).

5.5.3.2 Support Network Effects and Advertise in Rural Regions

The importance of existing migrant communities in an industrial center was already pointed out above. Again, paying premiums to established migrants for attracting additional migrants to an industrial center’s labor market might be a useful means to leverage existing communities.

Beyond using existing communities, collective action should also be able to identify whether there are rural regions without links to an existing migrant community in an industrial center. In such cases, recruitment activity in the respective rural regions could lead to an initial establishment of a new migrant community, resulting in additional recruitments after other migrants follow the first-movers.

Investments in advertisement in the rural regions are not only important to motivate rural citizen to migrate: they are crucial in influencing the destination choice of migrant worker. The migration destination choice is a decision that is taken before a worker arrives at an industrial center. The decision is influenced by the rural population’s knowledge on and public opinion about an industrial center. Therefore, collectively launched image campaigns in rural regions’ TV, radio stations and newspapers may increase the attractiveness of an industrial center.
5.5.4 COMPETITIVE JOB OFFERINGS FOR MIGRANT WORKERS

Once a migrant worker has decided to migrate and selected an industrial center as migration destination, the local manufacturing firms start to compete for his or her labor. According to the study of the Ministry of Human Resources and Social Security published in 2010, the reasons for migrant workers not to return to their former employer are: low wage (49%), too much overtime (18%), no development/career possibilities (14%), no trainings (12%) (Xinhua, 2010). These aspects provide starting points for competitive measures to attract migrant workers.

5.5.4.1 OFFER HIGHER WAGES OR OTHER BENEFITS

Higher wages and other benefits are the most prominent way for a firm to increase its own attractiveness compared to that of its competitors. Resulting from their heterogeneous resource positions and capabilities (Barney, 1991), firms have heterogeneous abilities to make use of productive resources (Capron/Chatain, 2008; Adegbasan, 2009). Consequently, some firms are able to pay more for a resource than others, due to their idiosyncratic ability to use that resource productively. This must also be true for the resource of labor, where one would expect a greater inter-industry than intra-industry effect. That means that the rise of the tertiary sector may be related to service firms’ greater productivity per unit of manpower.

The study of Backes-Gellner and Tuor (2010) points out that high wage levels significantly reduce job vacancy rates. Manufacturing firms which pay wages above the average can recruit labor force more easily. Paying more for labor is not necessarily limited to increased wage levels. Equally possible are the use of signing bonuses and other bonuses, provided insurance, monetary and non-monetary fringe benefits, and the provision of career options beyond the factory line. Backes-Gellner and Tuor (2010) show that workers prefer monetary fringe to non-monetary fringe benefits.

In particular, bonuses might be a possibility of reducing worker fluctuation if they are paid out with a time delay (Cappelli, 2000). Likewise, workers parting for their annual holidays in their home provinces could be promised return bonuses for returning to the same employer afterwards or free travel tickets for returning. Similarly, low-qualification firms in Western countries, such as Burger King, experienced positive
results in partnering with firms requiring candidates for vocational trainings, by sending the most productive employees on to start a career at the partner firm and at the same time generating a pull-effect concerning applications for its own jobs (Cappelli, 2000). At the same time, awards or bonuses for long service or above-quota production can reduce the fluctuation as well (BSR, 2010).

National and regional laws act as a natural limitation to what is possible here, as do customers’ willingness to accept price increases and investors’ willingness to accept lower margins. Consequently, targeted lobbying measures might be useful here, in particular concerning investors and customers, which might be more susceptible to an individual firm’s arguments than to those of government agencies. Another interesting question in this context concerns the options of Western customer firms of the Chinese industrial firms. If Western firms have alternative sourcing options (e.g., textiles from Vietnam or Cambodia), Chinese industrial firms will be unable to share the increased cost burden with their customers through increased prices.

Typically, a firm’s non-wage related competitive actions on the open labor market are not monitored by competitors. In particular, even if a competitive action is identified by chance, competitors usually do not react, or at best, imitate the first-mover’s action (Gardner, 2002). Therefore, activity on the open labor market can result in a competitive advantage that is not quickly identified by other firms.

5.5.4.2 **Improve Working and Living Conditions**

Cost pressure on the global market is still applied by the buyer firms and costs are crucial in the supplier selection process. The cost pressure limits the extent to raise wages. In their study Backes-Gellner and Tuor (2010) point out that companies might gain competitive advantage through employer signaling. Manufacturing firms need to differ from their competitors through other aspects in order to recruit sufficient work force. Working and living conditions at the manufacturing firm might be a distinguishing feature for workers. Therefore, the firms have to be transparent concerning the working and living conditions.

Improvements in working conditions through increased number of free days, limited overtime, introduction of health and safety measures, provision of educational
measures may assist manufacturing firms to differ from others firm. In China, a new generation of migrants with higher expectations has become the main body of manufacturing workers (Hannan, 2008). The possibility of apprenticeship trainings increases an employer’s attractiveness for workers (Backes-Gellner/Tuor, 2010). The chance for unskilled and semi-skilled workers to gain skills and to upgrade their career options contribute to the workplace attractiveness as well as to the motivation and loyalty of workers (BSR, 2010).

Furthermore, the establishment of a corporate culture and the development of personal relationships with workers can reduce labor fluctuation. The Chinese corporate daily routines are often strongly influenced by hierarchical thinking. The improvement of management-employee relationship can enhance workers’ sense of belonging (BSR, 2010). The introduction of employment contracts, employee satisfaction surveys, employee suggestion system, feedback and labor dispute processes are appropriate instruments to build up a relationship between the management level and the workers (BSR, 2010). Moreover, fair and respectful treatment of and communication with workers can positively influence the working atmosphere so that the loyalty of workers may increase (BSR, 2010).

Manufacturing firms often provide their workers with room and board. Workers spend most of their time on the manufacturing premises. The accommodations are characterized by cramped living rooms and missing private space. Up to 20 workers share a room. Bathrooms are used commonly by roommates, floor mates or even whole living units (Pun/Smith, 2007). The leisure time activities and facilities are restricted as well. Moreover, workers often have to pay for housing and food (National Labour Committee, 2010). Improvements of the accommodations for workers, decrease of the wage deduction for room and board, better food as well as improvements of leisure facilities might be appropriate measures to attract more workers. Such improvements need to be published in order to provide an advertising effect for the manufacturing firm.

Migrants often leave their children in the home provinces, where the children are raised by their grandparents. Around 11 million children have already followed their
parents to the coastal regions (Xin, 2011). However, they often do not find places in public schools and have to attend private schools, which are expensive, smaller and often not well equipped (Xin, 2011). Of course compulsory education of children remains a governmental issues. However, offers to families and married couples that they can stay together might increase the attractiveness of a manufacturing firm as well. Support in finding a school or paying part of the private school fee, or family housing options are potential measures.

5.5.4.3 RAID A COMPETITOR’S EMPLOYEES

Poaching employees from a regional competitor may be possible when workers return from their holidays once a year, but should also be possible during the year. For an individual, changing employers is unproblematic as the cost of transfer is low, since the worker does not have to move to another region or even city (Gardner, 2002). As raiding workers from another firm strengthens the own productivity (Gardner, 2002) and at the same time inhibits the target firm’s productivity (Bradsher, 2010), such practices are particularly critical among firms from the same industry, which compete not only on the labor market, but also on the product market (Capron/Chatain, 2008).

A raid can be seen as an aggressive action against a competitor, which might result in retaliatory action. However, even identifying worker raids is usually difficult unless a firm actively pays attention to that possibility, or the attempted raid is openly visible (some firms put large advertisements in open view near a competitor’s premises (Gardner, 2002)). Possible measures to identify attempted raids include exit interviews and paying bonuses to employees who inform their employer about attempts to lure them away.

If an attempted raid are identified, a firm may decide not to react, to take internal measures to inhibit future raids, or to take external retaliation. Which alternative is chosen usually depends on the extent of threat resulting from the loss of the employee/s and on the transferability of these employees’ abilities (Gardner, 2002). While both factors can be expected not to play a big role in the competition for Chinese factory workers, the scarcity of the resource may nevertheless lead to responses that would not be chosen in other circumstances. Due to its aggressiveness,
external retaliation (through law suits, counter-raiding or the severing of business ties) is seldomly chosen (Gardner, 2002).

5.5.4.4 **Focus on New Worker Groups**

Typically, firms in industrial centers have been trying to employ only young workers, due to the physical requirements of factory work (Bradsher, 2010). A lack of workers should motivate firms to adapt their processes so that older workers (older than 30), but also migrant groups that may not have been targeted so far (such as women in male-dominated industries), can be employed. Older rural labor has not reached the Lewisian turning point, as was pointed out above. This worker group might be less educated, but they will work for a lower wage rate (Chan, 2010). Firms which manage to access these groups gain advantages on the labor market, as the demand for these newly targeted worker groups will likely be less strong than the overall demand.

![Diagram](image)

Fig. 6: Overview of Competitive Implications of Labor Shortage

5.5.5 **Relocation of Production Facilities**

Already in the original model, one consequence of reaching the Lewisian turning point is predicted to be an increased attractiveness to relocate production facilities to alternative locations that are not subject to worker scarcity, resulting in increased wage levels (*The Economist*, 2010a). Consequently, if competition for workers is strong, structural changes both among China’s regions and abroad may result. The
A manufacturing firm may relocate their production facilities within China to the central or western provinces or to foreign low-cost countries such as Vietnam or Indonesia (The Economist, 2010b). The relocation to countries with sufficient labor supply may lower competitive pressure and wage level increases. Nonetheless, it has to be mentioned that relocation is connected with additional costs, which are not affordable for all manufacturing firms. Furthermore, relocation of production facilities demands a mid-term to long-term planning phase. Figure 12 provides an overview of the results of our analysis and comprises all four action alternatives of firms to survive in the competition for migrant workers.

5.6 CONCLUDING REMARKS

The influencing factors for the shortage of labor can be divided into two categories, the national level and the individual level. The Chinese hukou system, demographic changes, ongoing demand for low-skilled and semi-skilled workers, the large stimulus package of the Chinese government and the growing tertiary sector with increasing labor demand have an impact on the labor shortage in southeast China. On the individual level, there are several influencing factors that lead to a change of the migration destination of workers. The increasing cost of living in southeast China and improving job opportunities in China’s central and western provinces speed up the labor shortage in southeast China. Due to the increased level of education and, related to it, life expectation, young people search for job alternatives where they do not have to work as hard for higher wages. Moreover, the access to more information via modern information and communication technologies increases the degree of information of migrant workers. Therefore, they are better informed concerning wages, working condition and job alternatives throughout China.

The labor shortage has short-to-medium run and long-run implications. In the short-to-medium run, factory owners have to compete for migrant workers to fulfill current orders of Western buyer firms. In order to attract the migrants they will temporarily offer wages that are higher than the minimum wage level and improved working conditions, including the housing situation.
In the long run, a structural change of the coastal regions is to be expected. The manufacturing sector relies on the production factor of cheap labor. Due to the high wages and the global price pressure, labor-intensive industries may relocate their factories to the central or western provinces in China. Furthermore, some firms will move to low-cost neighboring countries. Other firms started to consider to invest in machine and other equipment to replace workers.

Manufacturing firms that do not have the capital base to afford factory relocation or investment in machines will stay in the eastern provinces. As a result, many manufacturing firms will seek to maintain their production facilities in southeastern China. These firms have to counteract the shortage of labor and the related competition for unskilled workers. For this, three general levels for measures need to be considered. First, they have to incentivize workers to leave their home provinces and to migrate over long distances to the eastern provinces. Second, the respective industrial center has to be an attractive alternative to other industrial centers to attract migrants. Third, firms have to provide competitive job offerings in order to attract the labor. On the first and second level, firms have to act collectively to set incentives for workers to migrate and to choose a certain region. On the third level the manufacturing firms are faced with inter-firm competition with other manufacturers in the same region. Increases of the wage level, the improvement of working conditions and the introduction of human resource management instrument give manufacturing firms the opportunity to stand out in the competition for workers.

This contribution provides a theoretical consideration on the shortage of unskilled labor in the manufacturing, export-oriented sector in the coastal regions of China. In order to strengthen the explanatory power of the labor shortage model, including influencing factors and resulting issues for companies, the findings of this contribution need to be corroborated by empirical studies. To follow up the explorative methodology, initial case studies of factories that are affected by labor shortage seems useful. In particular, the managers of the export-oriented firms should be interviewed concerning their strategies to face the shortages and to avoid the negative consequences for the manufacturing firms. It is of interest whether managers use one of the competition strategies mentioned above or if they use a combination of those.
Furthermore, other decision alternatives of the managers can be discovered in future research. Hence, an empirical study on the attitude of migrant workers and their decision-making process as well as determinants for their job choice should be conducted. There are several studies on the topic of migrant workers in China, but they often only use official statistics. In order to gain insights into the decision-making process, field studies are necessary. Findings of the empirical studies may lead to the alteration of the theoretical framework and the derived implications of our contribution.

From a macro-economic perspective, the developed measures in this contribution undermine the political measures of the Chinese government to support the development of the central and western provinces. The measures of the government and the development of the central and western provinces have favorable effects for the Chinese society as a whole and balance the primarily one-sided urbanization of the southeastern provinces. The current competitive situation of Chinese manufacturing firms should be analyzed from the perspective of political science as well.
6 THE MOVEMENT OF FACTORIES TO THE CHINESE HINTERLAND OR TO LOW-COST COUNTRIES: RENEWED STRUGGLES FOR APPROPRIATE WORKING CONDITIONS AHEAD?

Anna-Maria Schneider


6.1 INTRODUCTION

Since the economic reforms and its opening to the world in 1978, China has been industrializing rapidly. In the last three decades, China has been a preferred target for outsourcing measures by international companies because of its cheap labor force and low-wage manufacturing of consumer goods (Fang et al., 2010). The economic reforms supported especially the development of the coastal regions. Special economic zones (SEZ) have been established in this regions (Wen, 2004). Therefore, the coastal provinces were prioritized destinations for outsourcing measures. These outsourcing activities supported the development of China as the world’s workbench.

In recent years, sourcing in the coastal regions of China has become increasingly expensive (Fang et al., 2010). The labor shortage in the southeastern provinces promotes the competition for unskilled workers and leads to rising production costs in the labor-intensive manufacturing sector (see chapter 5). Rising prices for energy and raw materials have an additional negative impact on the production costs (Huang et al., 2011).

The rising costs of production may induce manufacturing firms to look for cheaper production locations in other regions of China or in lower-cost countries such as Vietnam and Indonesia (The Economist, 2010a). The industrial relocation has already started in the developed coastal regions of China (Huang et al., 2011).
The less industrialized central and western regions of China seem to provide much more labor force. By relocating to those regions, factory owners can benefit from the higher labor supply, lower wage rates and lower production costs, e.g. through lower electricity costs and tax reduction (Jing, 2010). An additional reason for the relocations of factories is to increase market reach to fast-growing second- and third-tier cities in the western provinces (Jing, 2010).

For example, in addition to its flagship center in Xiamen, East China, the multinational IT company Dell plans to open a second operations center with manufacturing, sales and services in Chengdu, Sichuan province in Southwest China (Jing, 2010). Hewlett Packard has already started to move its manufacturing processes to Chongqing’s Xiyong Micro-electronics Industrial Park (Jing, 2010). Foxconn has also responded to the relatively high production costs in the coastal regions and decided to relocate the low-end manufacturing processes to the industrial park in Chongqing (Hille, 2011).

While China has a remarkable reputation as a low-cost manufacturer, foreign investors and customers are skeptic about working practices and conditions (Lübcke et al., 2007). In the past 15 years, there have been efforts, especially by foreign buyer firms, to improve working conditions in Chinese supplier firms in order to maintain their own reputation in their western markets. Buyer firms have imposed codes of conduct on their Chinese suppliers which are often based on general environmental and social standards (Seuring/Müller, 2008). In general, codes of conduct and audits are the most frequently implemented instruments to ensure appropriate working conditions in supplier factories (Schneider/Schwerk, 2010). During the last 15 years, small but continuous improvements in working condition in Chinese supplier firms could be observed.

In this context, the question has to be raised what the factory movement to the Chinese hinterland or to foreign low-cost countries will mean for the working conditions. Will there be a worsening of working conditions in the relocated factories have to be expected, or will the working conditions improve with relocation? What determining factors influence the shape of working conditions?
This contribution presents theoretical considerations on the alteration of working conditions due to the relocation of factories. First, the motivation of companies to relocate their manufacturing operations within China or to low-cost countries is described and examined. In a second step, the effects of relocation on the working conditions are discussed. Three different scenarios (stable, better, and worse working conditions) are developed based on research of the existing literature. Subsequently, the general determining factors which shape working conditions are identified. The occurrence probability of the three scenarios is anticipated according to the various determining factors. Based on these theoretical considerations, hypotheses concerning the occurrence probability are developed. The relocation of factories within China or away from China is a new phenomenon. Therefore, the developed hypotheses are the basis for further studies. Future research is needed to prove the validity of the hypotheses.

6.2 FACTORY RELOCATION TO THE CHINESE HINTERLAND OR LOW-COST COUNTRY

6.2.1 GENERAL MOTIVATION FOR THE RELOCATION OF FACTORIES

The academic research on international production focuses basically on the question of whether multinational firms establish production plants in foreign markets (Fisch/Zschohe, 2012). In traditional theories (e.g., Lewis, 1954; Dunning, 1994, 1997) of the management literature, different general motivations and types of foreign direct investment are distinguished to explain why companies make foreign direct investments and build or acquire factories in a certain region or foreign country. These general motivations may also be applicable to the relocation of factories from one location to another.

In general, intended cost savings and strategic business expansions are the main reasons for relocation (e.g., Chan et al., 1995; Wen, 2004). This is in line with Dunning’s well-known classification of motivations for foreign direct investment (e.g., Dunning, 1994, 1997) which distinguishes resource-seeking and market-seeking motives to invest in a foreign region or country. Resource-seeking companies invest in order to get access to physical resources such as oil, raw materials and agricultural products, human resources such as unskilled or semi-skilled labor, or technological capacity and
organizational skills. Market-seeking companies invest to enter an existing market or establish a new one (e.g., Dunning, 1994, 1997).

Dunning (1994, 1997) made a finer distinction of foreign direct investments through the concepts of efficiency-seeking and strategic asset-seeking investments. The efficiency-seeking motive aims to increase efficiency through integration of firm-specific assets, production processes, and regional markets. In some cases the motive for investment in a certain region is strategic asset-seeking. The firm expects to acquire particular resources and capabilities in the target region which may sustain or enhance the firm’s core competency and may strengthen its position in the regional and global market. Strategic assets range from networks and innovatory capabilities to managerial expertise, organizational procedures, distribution channels, and market knowledge (e.g., Dunning, 1994, 1997).

Lewis’ (1954) model explains why companies in labor-intensive industries tend to relocate their manufacturing plants in particular to developing countries. Lewis (1954) assumes that in the early stages of an economy’s development there is an unlimited supply of labor. This unlimited labor force will keep labor prices (i.e., wages) down and support the economic development of the country (Tignor, 2004). The Lewis model is based on labor market dualism. Lewis distinguishes between the traditional agricultural or rural sector and the modern industrial or urban sector (Fields, 2004). The traditional agricultural sector is the continuous and unlimited source of labor force for the industrial sector (Fields, 2004). Further development of countries, structural change, declining birth-rates, and higher education levels result in a lack of unskilled labor in developed countries. Continuing economic growth still correlates with high demand for unskilled and semi-skilled labor. Therefore wages begin to rise in developing countries once the supply of surplus labor from the rural areas starts to decline (Lewis, 1954). Increasing labor costs consequently lead to higher production costs (Lewis, 1954). With regard to labor-intensive industries, developed countries had lost their competitive advantage in the last decade (Wang/Pei, 2010). Therefore, companies from labor-intensive industries started to move their plants to developing countries or regions with an unlimited labor supply.
Since the 1980s, China has been a preferred target country for outsourcing and production measures because of its cheap labor force. The American Chamber of Commerce in Shanghai and Booz & Company (2010) jointly conducted the China Manufacturing Competitiveness Study on MNE with manufacturing plants in China and examined why companies invest in China and establish manufacturing plants. The results of the study show that access to the Chinese local market, labor cost savings, access to the Asian market, material cost savings, and strategic moves against global competitors are the main reasons to establish a factory in China. Further reasons are access to quality labor and utility cost savings (AmCham/Booz & Co., 2010).

6.2.2 China-specific triggers to relocate away from coastal regions

6.2.2.1 Labor shortage in labor-intensive manufacturing clusters

Industrial clusters are predominantly located in the eastern and coastal regions of China. Wang and Mei (2009) identify labor-intensive clusters among these industrial clusters which are more affected by the labor shortage than other technology-based manufacturing clusters. Manufacturing firms of the Chinese export industries, such as clothing and textiles, footwear, toys, bicycles, etc. operate in these labor-intensive clusters (Wang/Mei, 2009). According to Wang and Mei (2009) 90% of the labor-intensive clusters are located in 15 provinces (see table 16).

The importance of manufacturing clusters for the respective provinces is illustrated by the GDP ranking. Regions with high numbers of manufacturing clusters retain their position in the rankings of 2005 and 2009. Provinces such as Jiangxi were superseded by other provinces with enormous economic growth and industrial development. For instance, the province Inner Mongolia gained importance and grew in terms of GDP (NBS, 2010). In 2005, Inner Mongolia was ranked 21 and in 2009 15 (NBS, 2006; 2010).

In 2004, first indications of an imminent labor shortage could be observed (Inagaki, 2006) and in 2005, the labor shortage became apparent in the industrial centers at the coastal regions (Zhang et al., 2010). This situation is reflected in the increase of wage levels. In the coastal provinces the wage levels have increased significantly over the last five years. Figure 12 shows the wage level development for the four biggest provinces in terms of GDP and number of labor-intensive clusters.
<table>
<thead>
<tr>
<th>Provinces</th>
<th>Number of clusters 2005</th>
<th>Population of the province (million) 2005</th>
<th>Population of the province (million) 2009</th>
<th>GDP of province (100 million yuan) 2005</th>
<th>GDP of province (100 million yuan) 2009</th>
<th>GDP Ranking in China 2005</th>
<th>GDP Ranking in China 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhejiang</td>
<td>136</td>
<td>48.98</td>
<td>51.80</td>
<td>13,417</td>
<td>22,990</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Guangdong</td>
<td>73</td>
<td>92.48</td>
<td>96.38</td>
<td>22,557</td>
<td>39,483</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>70</td>
<td>74.75</td>
<td>77.25</td>
<td>18,599</td>
<td>34,457</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Shandong</td>
<td>53</td>
<td>91.94</td>
<td>94.70</td>
<td>18,367</td>
<td>33,897</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Fujian</td>
<td>45</td>
<td>35.35</td>
<td>36.27</td>
<td>6,555</td>
<td>12,237</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Hebei</td>
<td>37</td>
<td>68.51</td>
<td>70.34</td>
<td>10,012</td>
<td>17,236</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Henan</td>
<td>25</td>
<td>93.80</td>
<td>94.87</td>
<td>10,587</td>
<td>19,480</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Hunan</td>
<td>25</td>
<td>63.26</td>
<td>64.06</td>
<td>6,596</td>
<td>13,059</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Hubei</td>
<td>24</td>
<td>57.10</td>
<td>57.20</td>
<td>6,590</td>
<td>12,961</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Sichuan</td>
<td>15</td>
<td>82.12</td>
<td>81.85</td>
<td>7,385</td>
<td>14,151</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>9</td>
<td>43.11</td>
<td>44.32</td>
<td>4,057</td>
<td>7,655</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Anhui</td>
<td>7</td>
<td>61.20</td>
<td>61.31</td>
<td>5,350</td>
<td>10,063</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Liaoning</td>
<td>7</td>
<td>42.21</td>
<td>43.19</td>
<td>8,047</td>
<td>15,213</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Heilongjiang</td>
<td>6</td>
<td>38.20</td>
<td>38.26</td>
<td>5,514</td>
<td>8,587</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Shaanxi</td>
<td>4</td>
<td>37.20</td>
<td>37.72</td>
<td>4,231</td>
<td>7,358</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total number</strong></td>
<td><strong>536</strong></td>
<td><strong>930.21</strong></td>
<td><strong>949.52</strong></td>
<td><strong>147,864</strong></td>
<td><strong>268,827</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Note) The numbers of clusters are according to Wang and Mei (2009) calculation and research. The data concerning Population and GDP were supplemented by the author.

(Source) Population and GDP data are from: China Statistical Yearbook 2006 and 2010; Wang and Mei (2009)

Tab. 6: Geographical Distribution of Labor-intensive Clusters

Due to the financial crisis of 2008/2009 the shortage of labor was temporarily less apparent (Zhang et al., 2010) as shown, e.g. by the stagnation of the wage level development in Jiangsu and Zhejiang. In the Pearl River Delta and the Yangtze River Delta the scarcity of migrant workers was most acute (Barboza, 2006). As a result, the wage level in Guangdong and Shandong has continuously risen. In the summer of 2009, another shortage of migrant workers became apparent and worsened the situation for manufacturing firms to find sufficient labor (see also chapter 5.2.2).
6.2.2.2 HIGH COSTS IN THE COASTAL REGIONS

Export-oriented industries are often located in the coastal regions of China since the infrastructure is better and the proximity to seaports facilitates shipment of the products all over the world. Since the first occurrence of permanent labor shortage in the manufacturing sector in 2005, and given the increasing demand for young flexible workers, the wage level in the coastal regions has risen significantly. Particularly in Guangdong, wages have doubled from 2004 to 2009 (see figure 13 and figure 10 chapter 5).

On January 1st, 2008 the New Labor Contract law and on May 1st, 2008 the Mediation and Arbitration of Labor Disputes law became effective. As a consequence of the enforcement of the new labor laws the production costs in the coastal regions continued to grow, due to increases in wages and welfare, and social insurance obligations (Wang/Pei, 2010).

Fig. 7: Wage Level Increase in the Four Most Economically Developed Provinces

Not only the lower labor costs, but also the general costs of running manufacturing operations in the inland provinces are lower than in eastern and southern China (Jing, 2010). For example, in Chongqing the costs of labor, water, electricity, and natural gas are almost 30 percent lower than in the coastal provinces (Ying, 2010). Firms are obviously incentivized to relocate to regions with lower labor and general costs.

The relocation of export-oriented factories to inland provinces of China requires a sufficiently developed infrastructure and logistics systems with a high transportation load capacity in place in order to be able to export what is produced there (Zhang/Figliozi, 2010). Local administrations realized that a good infrastructure constitutes a major incentive for companies to relocate and invest in the Chinese hinterland. For example, Chongqing has started to invest in the expansion of the airport and established a direct cargo service to the Belgian city of Liege and hence to the European market (Ying, 2010). The railway route is being expanded as well (Ying, 2010). As a result, transportation and infrastructure issues are slowly becoming less of a limiting factor for many manufacturing operations in some of the Chinese inland provinces.

6.2.2.3 NEW MARKETS IN THE INLAND PROVINCES

Even though, as discussed above, progress is being made, exporting manufactured goods from hinterland provinces is notoriously difficult due to insufficient infrastructure, long distances, and tonnage limitations for inland shipping on the Yangtze River (Bo/Chen, 2009). Firms being active in the hinterland have traditionally either mined for natural resources or produced military equipment. The factories were deliberately located far from the coasts and thus more difficult to target with air strikes by foreign attackers (The Economist, 2010b). Firms that were attracted by cheap labor and tax incentives have focused mainly on domestic demand. Only 10% of industrial production in Chongqing is exported, the rest serves to supply China’s own demand (Bo/Chen, 2009).

According to the new economic geography theory (Krugman/Venables, 1995) firms will locate their business in regions where a large market exists. Where firms are located the market will grow due to the demand for supplier firms (Wen, 2004). Concentration
of production in a certain region will require more labor and thus increase the population (Wen, 2004) which in turn leads to an increasing market.

There is high market potential in China’s inland provinces. Figure 14 shows that the market are unsaturated. Furthermore, the demand of the Chinese population is still growing.

Fig. 8: Unsaturated Consumer Goods Markets

Plants originally built to supply military equipment were frequently reconfigured to house the production of civil industrial goods (Bo/Chen, 2009). By the end of 2007, Chongqing alone had 4,451 foreign-invested enterprises and 93 Global Fortune 500 companies (Bo/Chen, 2009).

Firms from various industries have moved to the Chinese hinterland. Hewlett-Packard is planning a production facility and has established a global call center, while China’s fourth-biggest car maker ChangAn Automobile along with other automotive companies attracted the establishment of car parts suppliers in Chongqing, giving the city a share of 15% of the Chinese automobile market (Bo/Chen, 2009). It is likely due to the thus increased industrial performance that spending has been growing more steeply in China’s second- and third-tier cities (mostly located in the hinterland) than in
the coastal first-tier cities (Kynge, 2009). As a consequence, service firms such as hotel chains have been proliferating (Kynge, 2009), while supermarket chains are competing for the most valuable land slots and the best entry timing in the booming cities of the Chinese hinterland (The Economist, 2011).

6.2.2.4 DEMAND FOR LAND

Wang and Pei (2010) point out that the lack of building land is a bottleneck for the development of companies in the coastal provinces. Land for building is highly important for expansions of manufacturing operations and for the construction of new factories. In the coastal regions, industrial density is high. Therefore, building land is expensive and nearly unavailable. Renting is not a feasible alternative, because to rent land for building is costly and long-term usability uncertain (Wang/Pei, 2010). Availability of a sufficient number of building slots is a further incentive for companies to leave the coastal regions and/or to expand to the Chinese hinterland.

6.2.2.5 RESOURCE SUPPLY

In the coastal regions, not only the cost of electricity is higher than in the inland provinces. Frequently, the manufacturing plants also have to cope with unannounced power cuts. These cuts cause disruptions and damages in the production lines thus leading to sub-standard products and reduction of productivity (Wang/Pei, 2010). Power cuts are frequent in some eastern coastal provinces such as Zhejiang and Jiangsu and some southern provinces like Guangdong, Jiangxi and Hunan. Some of these provinces have already started to implement power rationing measures in order to cope with the increasing power shortage (Xinhua, 2011).

At the same time, many natural resources vital for industrial production are actually mined in China’s hinterland, which explains why Chongqing has China’s largest Aluminum processing plant as well as China’s largest acetic acid plant (Bo/Chen, 2009). Proximity to natural resources that have become scarce in the coastal regions, but are relatively abundant in the hinterland, provides firms with additional motivation to relocate.
6.2.2.6 Political Measures

The Chinese hukou system, introduced in 1958, is intended to restrict citizens’ movement between rural and urban areas. The system separates the Chinese population into either agricultural (rural) or non-agricultural (urban). Every Chinese citizen is tied to a particular place to work and reside (Wang, 2010). The main institutional barrier to migrate is the exclusion of rural citizens from the urban welfare system, which provides food rations, housing, medical care, social services, education, childcare, and pensions to urban citizens (e.g., Liu, 2005; Chan/Buckingham, 2008; Démurger et al., 2009; Dongfang, 2010). The hukou system has been modified over the years, allowing rural citizen to work in urban centers since the mid-1980s (Chan, 2009). However, severe limitations to a free movement of people remain, one of them being the risk of losing the family’s plots if these are not sufficiently tended to (The Economist, 2010b). The hukou system has thus been a major cause for labor scarcity in China’s coastal regions (see chapter 5).

Since 2007, the hinterland cities of Chongqing (a centrally administered municipality) and Chengdu (capital of the Sichuan province) have been acting as experimental zones for an urban-rural integration reform, particularly concerning changes in the hukou system. This is meant to reduce the disadvantages of the rural population (Chen, 2007; Bo/Chen, 2009). This measure shows that the political intention is to permit an accelerated urbanization and thus industrialization in the Chinese hinterland rather than in the coastal regions.

Similarly, the introduction of a healthcare plan with $125bn being invested in basic health insurance and grassroots clinics serves to reduce the Chinese’s extremely high savings rate (The Economist, 2011) and permits an expansion of disposable incomes (Kynge, 2009). In addition, it has increasingly been possible for agricultural land to be used as a collateral for loans (Kynge, 2009), again making more money available to the hinterland population. Chongqing, which is building up to be West China’s logistics hub, has also been using a reduced corporate income tax rate of 15% (compared to 25% on the national level) to attract investment (Bo/Chen, 2009).
To stimulate the relocation of manufacturing operations from coastal to western provinces tax incentives such as duty-free zones are set up and the development of industry clusters similar to those in Chongqing is supported (Jing, 2010).

Figure 15 shows the general motives for FDI and the motives for FDI in China. Furthermore, the graph includes the motives for relocation from the coastal regions in China to the hinterland or to lower-cost countries. The overlaps between the three different investment models are evident. Cost reduction and new markets are the main factors driving this development.

<table>
<thead>
<tr>
<th>General motives for FDI (Dunning, 1994)</th>
<th>Motives for FDI in China (AmCham/Booz &amp; Co., 2010)</th>
<th>Motives for relocation from coastal regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>resource-seeking</td>
<td>labor cost savings</td>
<td>labor shortage</td>
</tr>
<tr>
<td></td>
<td>material cost savings</td>
<td>labor cost savings</td>
</tr>
<tr>
<td></td>
<td>utility cost savings</td>
<td>material cost savings</td>
</tr>
<tr>
<td></td>
<td>quality labor</td>
<td>utility cost savings</td>
</tr>
<tr>
<td>market-seeking</td>
<td>access to Chinese local markets</td>
<td>access to local markets</td>
</tr>
<tr>
<td></td>
<td>access to Asian markets</td>
<td>access to Asian markets</td>
</tr>
<tr>
<td>efficiency-seeking</td>
<td></td>
<td>industry clusters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sources of supply</td>
</tr>
<tr>
<td>strategic asset-seeking</td>
<td>strategic moves against global competitors</td>
<td>political measures/incentives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(tax benefits, duty-free zones, infrastructure construction)</td>
</tr>
</tbody>
</table>

Fig. 9: Motives for FDI and Relocation

6.3 **RELOCATION AS AN ANSWER**

One consequence of the labor shortage in the coastal regions is the relocation of production facilities to alternative locations that are not subject to worker scarcity and the involved increased wage levels (*The Economist*, 2010a). The relocation is driven by the manufacturers’ market-seeking and resource-seeking strategies as seen in figure 15.

According to the China Manufacturing Competitiveness Study, 50% of 202 MNE which responded to the questionnaire were planning to relocate or expand their
manufacturing plants within China or to a foreign country during the next 5 years (AmCham/Booz & Co., 2010). The majority was planning to relocate only within China (28%), while 14% aimed to relocate or expand within and outside China, and merely 8% sought to expand or relocate out of China (AmCham/Booz & Co., 2010). In figure 16 the decision options of manufacturers and the assumed benefits and challenges of the respective decisions are summarized.

Fig. 10: Decisions Options for Manufacturers in Chinese Coastal Regions

Relocation is linked with sunk costs. According to Huang et al. (2011) the higher the sunk costs are, the smaller is the incentive for manufacturing firms to relocate. Moreover, most of the small and medium-sized companies are not able to afford the cost of relocation (Huang et al., 2011). Therefore, large firms will rather consider relocation than small and medium-sized companies.

6.3.1 RELOCATION TO CENTRAL AND WESTERN REGIONS

Given that the much less industrialized central and western regions of China seem to have many workers who may no longer be willing to migrate, but who would easily be able to work in industrial production, moving production toward those regions could solve the problem of attracting workers in sufficient numbers. Moreover, factory owners may benefit from the lower wage rates in these regions. Foxconn, for one, has started to move 200,000 jobs to inland provinces in China (Hille, 2011).

However, moving to the interior of China would require significant infrastructure and logistics systems in place in order to be able to export what is produced there (Zhang/Figliozi, 2010). Since China does not even have a national trucking service at
its disposal (*The Economist*, 2010b), and considering the strain already put on its existing system of highways causing enormous traffic jams (e.g., *The Economist*, 2010c), a radical move to the interior by export-oriented firms is still unlikely. Furthermore, the rising oil price leads to increasing transportation cost when producing in inland China. However, Zhang and Huang (2012) point out that China’s inland provinces have a good balance between low labor cost and logistic cost. Therefore, a partial relocation rather than a complete relocation of manufacturing processes to the Chinese hinterland may be a better solution (Zhang/Huang, 2012).

At the same time, many firms move inland in order to get closer to their Chinese customers there, thus profiting from the increasing spending power there and in turn contributing to that increase (*The Economist*, 2010b). In part, the resulting need for local workers even contributes to an increased attractiveness of the central and western regions for the local workers, improving the home regions’ chances in the competition for migrants (Zhang/Figlioizzi, 2010). As increases in the demand for local services can be expected to go hand in hand with rising spending power (*The Economist*, 2010b), thus contributing to the creation of attractive alternative jobs for workers, the inland regions’ surplus labor supply will naturally not last forever.

6.3.2 RELOCATION TO FOREIGN COUNTRIES

China has been a preferred target for outsourcing measures because of its cheap labor force. Just like in Japan and Taiwan before, increased competition for workers and consequently rising costs of production may induce firms to look for cheaper production locations abroad, with low-cost countries such as Vietnam and Indonesia as potential new targets (e.g., *The Economist*, 2010a, Zhang/Huang, 2012). Three factors, however, limit the appeal of foreign alternatives for China. First, regulatory instability: while the average income per person in Vietnam does not even reach 33% of the Chinese average, frequent strikes, an ambitious new labor law and significant mandatory pay rises introduced by the communist government reduce the country’s attractiveness. Second, flat pools of labor force: compared to the huge number of China’s rural population of 675 million (*The Economist*, 2011), pretty much every country in the world has rather few workers at its disposal, providing only limited relocation opportunities before all available workers have been hired (*The Economist*,
Third, infrastructure investment: while China’s interior regions may still lack the scope to cope with producing for the entire world, other countries’ infrastructures are not necessarily in better shape, requiring similar or even greater investments than in China.

According to Zhang/Huang (2012) China is still the best location choice. Chen et al. (2009) show that China has become more costly in terms of labor compensation but it has also become more productive. This results in a trend toward declining unit labor cost in Chinese manufacturing firms. In general, the less labor-intensive manufacturing processes can be carried out in the coastal regions in order to take advantage of the located industrial clusters and efficient logistic systems to supply to international markets. On the other hand, the majority of labor-intensive manufacturing processes may be performed in the inland provinces to reduce the overall productions cost (Zhang/Huang, 2012). This is in line with the findings of the China Manufacturing Competitiveness Study which reports a majority of firms that seek to expand or relocate only among Chinese provinces (AmCham/Booz & Co., 2010).

6.4 Working Conditions in Chinese Manufacturing Firms

Occupational distributions and working conditions differ between the different labor groups, namely migrant workers and local residents (Wong et al., 2007). The majority of laborers in the production plants of the coastal regions are migrant workers. Migrants accept physically demanding jobs which local urban workers disesteem (e.g., Wong et al., 2007; Démurger et al., 2009). Migrants work in the construction industry or as manual laborers in the textile, garment, toy, electronics assembly industry or in the service sector (Wong et al., 2007). They often work much longer than the legal working time allows and than their local urban counterparts do (Démurger et al., 2009).

A recent report of The National Labour Committee (2010) describes the working conditions at the KYE factory in Dongguan City, Guangdong. Workers have to work in up to 15-hour shifts, six and often seven days a week. The pace of work is extremely high. During the summer months, working conditions become even harder due to the heat in southern China. The workers are not allowed to talk to each other, to listen to
music or to use the bathroom during the working hours. Workers who make mistakes in production, are even punished, e.g. by having to clean the bathrooms (National Labour Committee, 2010). However, the case of KYE might not be singular in the manufacturing sector, as other sources find similar incidents in other firms. For example, Bradscher and Barboza (2010) report that in Honda factories as well workers are pushed to work 12 hours per day and six days a week and must perform monotonous low-wage assembly line tasks.

Crammed living rooms and missing private space is normality. Usually, between eight and 20 workers share a room. Washrooms and bathrooms are commonly used by roommates, floor mates or even whole living units (Pun/Smith, 2007). Workers frequently have to sleep on narrow double-level bunk beds (National Labour Committee, 2010).

Wages are low. For example, workers of KYE earn 0,65 USD/h, but after deductions for food at the factory they receive a mere 0,52 USD/h (National Labour Committee, 2010). A large number of migrant workers has to cope with delays in wage payment. This is a common strategy to avoid employee turnover and to tie the workers to the manufacturing plant (Wong et al., 2007).

However, the continuous scarcity of labor in the coastal regions strengthens the bargaining power of workers. Furthermore, increasing awareness of labor rights makes workers more likely to strike for their rights and for improvements of their working and living conditions, as has happened at the Honda factories in Foshan (Bradscher/Barboza, 2010).

Since the 1990s, there has been increased international concern relating to the effects of globalization and the labor standards in the global supply chains. The media and NGOs reported on sweatshops, labor rights violations and bad working conditions as well as on child labor, especially in developing countries (Pun, 2005). Massive campaigns by NGOs and the media against large footwear companies such as Nike or Adidas forced these global players to raise wages, improve working conditions, and implement codes of conduct in their factories (Harrison/Scorse, 2004).
Codes of conduct became the instrument most frequently-used by international buyer firms to manage and monitor their suppliers’ ethical and socially responsible practices (Waddock et al., 2002). Codes of conduct define required behavior, duties, and expected actions from suppliers and subsidiaries. In general, codes of conduct include rules concerning working hours and days, overtime per month, minimum wages and overtime compensation, health and safety measures and corresponding trainings, and child labor. In some cases there are specifications on physical examinations, employment contracts as well as accident and pension insurance (e.g., Egels-Zandén, 2007; Schneider/Schwerk, 2010).

Standards required by international buyer firms have had a substantial impact on the re-organization of Chinese factory management with regard to production facilities and management practices as well as working and living conditions (Pun, 2005). The implementation of codes of conduct and other CSR measures is a medium-term or long-term process that takes time to be completely implemented and realized (Schneider/Schwerk, 2010). However, the working conditions in Chinese production plants have been improved step by step over the last two decades. Pun (2005) concludes that working conditions of manufactories with codes of conduct are better than those without such codes.

6.5 Three Different Scenarios on Working Conditions

Improvements in Chinese manufacturing plants took a long time and resulted from pressure of international NGOs, media, buyer firms, and customers. Now the questions arise of whether and how working conditions will change due to the relocation or expansion of factories to the Chinese hinterland or to low-cost countries. Do we have to expect renewed struggles for appropriate working conditions because firms use the opportunity to step back from costly previous achievements? Is it impossible that we will see improvements in working conditions instead? In an attempt to answer these questions, three different scenarios concerning the further development of working conditions are constructed and discussed in detail. Particular attention is paid to the forces pushing the relocating firms in either the direction of better or of worse working conditions. For all three scenarios, we assume that the relocation or expansion of
companies will mostly take place through greenfield investments since both the Chinese hinterland and low-cost countries are barely developed to date.

6.5.1 Stable Working Conditions

The first scenario (S1) implies that working conditions will be stable during relocation or expansion. If a company has already established social standards in its manufacturing plants, it is assumed that this company will transfer these standards to the new production locations.

The reason for this assumption is that compliance with international social and environmental standards is increasingly a precondition for being selected as a supplier. Global players introduce individual codes of conducts with which suppliers and subsidiaries have to comply (Andersen/Skjøtt-Larsen, 2009). Companies are often integrated in extensive supplier networks and they aim to maintain or improve their position in the network. In order to build long-term relationships with buyer firms or to become a strategic supplier, the supplier needs to be reliable and to guarantee stable conditions as to product quality as well as social and environmental requirements (Andersen/Skjøtt-Larsen, 2009). In recent years, global players and international buyer firms have set much value on social and environmental standards because investors, NGOs, unions, and the media demand such standards (e.g., Yu, 2008; Andersen/Skøjett-Larsen, 2009).

Companies which have to comply with labor standards imposed by buyer firms have already gained experience with the implementation and realization of social standards. It can be assumed that the transfer of these standards to new factories in inland China or lower-cost countries may not generate inadequately high costs due to the previous experience and the knowledge thus accumulated. Furthermore, the buyer firms still require certain global standards and codes of conduct. Companies have to meet these requirements or face their potential exclusion from the supplier network (Schneider/Schwerk, 2010).

In general, the company relocates or expands through a greenfield investment, requirements concerning social and environmental aspects can be integrated in the planning and building processes from the very beginning.
6.5.2 Better Working Conditions

The second scenario (S2) describes the situation in which companies can realize a competitive advantage due to the improvement of social standards or by establishing themselves as pioneers in high working standards and ethical worker treatment. The position as a pioneer predestines suppliers especially for buyer firms which use social compliance and ethical worker treatment to distinguish themselves from competitors or which have customers who prefer products which are made under fair working conditions (Kirby et al., 2008). For example, Esquel, a Chinese supplier of premium cotton shirts, assures its leading position in the market through its own remarkable social and environmental measures. Esquel is supplier for brands such as Hugo Boss, Gant, and Tommy Hilfiger. Esquel has chosen an offensive strategy. Its factories are certified according to the WRAP (Worldwide Responsible Apparel Production) standard, the ISO 14000 and the Oeko-tex 100 certification. Furthermore, it was a founding member of the United Nations’ Global Compact Initiative. Esquel can realize higher prices due to its product quality, its social and environmental performance, and the vertical integration of its suppliers (Kirby et al., 2008).

If a company can gain a competitive advantage, it will use the relocation opportunity to implement higher standards at the new production plants. Such a step provides it with a clean sheet on which good working conditions can be integrated into the planning process from the outset. This strategy is focused on long-term benefits from compliance with social standards. Social aspects will be implemented in the planning and mapping process of operational procedures.

6.5.3 Worse Working Conditions

The third scenario (S3) connects relocation or expansion strategies to the Chinese hinterland or low-cost countries with a considerable decline in working conditions. Companies which aim to reduce costs will relocate their factories to regions with a perceived unlimited supply of labor. The surplus of labor in these regions enables companies to benefit from lower wage levels. In a manifestation of the classic buyer’s labor market concept (as compared to the seller’s labor market emerging in the coastal
regions), workers might be willing to accept worse working conditions as jobs are scarce and the alternative occupations in agriculture yield even lower incomes.

Moreover, if buyer firms do not request social standards and only price, quality, and delivery time are crucial for the supplier selection, firms have no incentive to improve working conditions or to treat workers fairly (Zadek, 2004). Buyer firms have an interest to avoid the publication of labor rights violations in their suppliers’ factories to maintain their reputation. They prevent outsiders from opportunities to objectively appraise the situation in manufacturing plants (Pun, 2005).

6.6 Determining Factors for Scenario Occurrence

6.6.1 Impact of the General Motives

The likelihood that scenarios S1, S2, or S3 occur is determined by several factors which will be explained in the following. Having considered the general motivations to relocate in the previous parts of this contribution, the following assumptions seem to be justified.

Support of the Chinese central government or local administrations in the form of political measures sets general incentives for companies to relocate or expand to other regions. Therefore, political measures may support all three scenarios equally, but are intended to lead to the decision to relocate within China and not to low-cost countries abroad, such as Vietnam. The local administrations of inland provinces pursue duty-free policies in order to attract large companies. For example, the Chongqing Xiyong Comprehensive Bonded Zone is the largest duty-free zone in inland China (Jing, 2010). Further, a country-wide minimum wage does not exist in China. Regions and cities impose their own minimum wages (Kumar et al., 2009). Such political measures may attract in particular low-cost suppliers which seek to reduce the overall production costs.

In order to encourage the export of goods, the Chinese central government has offered tax allowances on the value added tax (VAT). The tax allowances have been criticized as an unfair competitive advantage for Chinese supplier firms in relation to suppliers from other countries. In 2007, the Chinese government was forced to reduce
and partly eliminate such allowances (Kumar et al., 2009). This incidence lead to the assumption that other countries will be restrained by the international community as well if they offer tax allowances. Therefore, the relocation away from China to low-cost countries due to tax allowances will be prevented by international trade commissions.

If a company relocates its factories solely seeking to reduce the costs of production and input factors, the occurrence of scenario three is highly probable. Labor, material, and utility cost savings are the dominant motivations. In order to keep costs down the majority of production processes will be relocated (Fang et al., 2010), in particular to regions which demand low minimum wages (Kumar et al., 2009). There is no incentive to pay workers more than the minimum wage and to invest in working conditions. It is save to assume that working conditions are likely to worsen due to relocation.

Further general motives for the relocation of factories, such as market-seeking intentions, strategic moves against competitors, or affiliation to an industry cluster in order to share knowledge, technologies, or the supplier networks suggest that scenarios one or two will likely occur. As costs are not a predominant motivation for the relocation measure, firms can be expected to stick to the tested and established improvements to working conditions and a potential improvement vector (see figure 17).

![Figure 11: General Motives and Their Impact on the Three Scenarios](image)

Based on the general motives for relocation, a sufficient differentiation of the occurrence probabilities of scenarios one and two cannot be derived. Therefore, additional determinants are examined to better predict the possible scenarios. Only distinctive cost-orientation supports the occurrence probability of scenario 3.
In order to predict the occurrence of S1, S2 and S3 further potential determinants are included in the theoretical consideration. According to Tsui (2009), company size plays an important role in predicting the probability of compliance with social standards. Relocation is linked with sunk costs. Small and medium-sized firms have naturally stronger budget constraints than larger companies. Only firms with a sufficient capital base may able to effort relocation (Huang et al., 2011). If smaller firms invest in relocation, their capital reserves will be used up. Therefore, the smaller the size of a company, the higher the likelihood that working conditions play a minor role for the company thus non-compliance is likely in case of relocation.

The external pressure from stakeholders encourages the introduction of CSR practices and codes of conduct (Park-Poaps/Rees, 2010). Stakeholder management is predominately considered by Chinese firms which have Western buyer firms or produce for Western markets (Huang/Gardner, 2007). Kolk et al. (2010) point out that buyers and their attitude toward social standards are a determining factor for the improvement of working conditions. Western buyers insist more strongly on compliance with global or corporate standards. Therefore, it is important whether a manufacturer produces for Western/international or for domestic buyer firms. Assuming the structure of clients of a Chinese manufacturing firm remains constant after relocation, the working conditions will not worsen. Moreover, the pressure from Western buyers to implement CSR practices will increase in future (Tsoi, 2010). In contrast, if the manufacturing firm relocates to capture a new market and to offer its products more to domestic clients, a worsening of the working conditions can be expected. Domestic buyer firms do not require social standards or have a higher deviation tolerance from international social standards as their Western counterparts.

The Chinese government has realized the potential long-term benefits of CSR programs including social standards and has introduced a campaign to support CSR engagement of domestic firms (Schneider/Schwerk, 2010) as well as imposed a code of ethics (Fu/Deshpande, 2012). According to Fu and Deshpande (2012), manufacturing plants aim to achieve high productivity and efficiency. Deviation from social and ethical standards may be prevented by clearly defined regulations and procedures. A strong
rule-based climate exists in state-owned companies rather than in private-owned firms. Furthermore, as ownership comes with direct control, the Chinese government obviously has more influence on state-owned companies than on private-owned firms. Therefore, it can be concluded that the ownership structure contributes to the decision whether good working conditions will be respected and transferred to new production plants. Cook and He (2010) confirm that government involvement and interventions improve CSR practices. Private-owned companies are thus more likely to ignore social and labor standards (Kolk et al., 2010) so that a deterioration of working conditions in the case of relocation seems to be more likely than with state-owned firms.

A further determining factor is the market segment for which the manufacturer produces. If the company produces premium goods, it can usually generate higher profit margins than a low-cost manufacturer. In the low-cost segment, on the other hand, small profit margins and quick returns characterize the business, so that it is vital to avoid any unnecessary cost in order to remain profitable. Cost reduction pressure in the low-cost market segment will therefore likely translate into worse working conditions in the case of relocation. Fang et al. (2010) argue that companies which seek only the cheapest production conditions are likely to leave China’s coastal regions and relocate their factories to the inland provinces and other low-cost regions. Cook and He (2010) point out that the overall costs are one of the main barriers to adopting CSR practices.

Chinese companies are still broadly perceived as low-cost manufacturers that hardly care about labor conditions (Lübcke et al., 2007). Park-Poaps and Rees (2010) identify three conditions which promote unfair employment practices in supplier firms: 1) labor-intensive and limited-automation production, 2) competitive pressure to lower production costs, and 3) complex production networks with multiple layers of subcontracting firms, which limit the control at the bottom level of the production chain. It follows that not only the market segment but also the industry itself has an impact on the level of compliance with general social standards.
The business attitude is a determining factor as well. A short-term perspective and short-term goals are prevalent among manufacturing plants in China. This business mentality affects the management processes and puts managers under pressure to meet these expectations (Lam, 2009). Positive consequences of compliance with social standards and appropriate working conditions in production plants become visible only in the medium or long term while costs are incurred immediately (Schneider/Schwerk, 2010). Companies with a strong short-term orientation are therefore more likely to shy away from the costs resulting from maintaining or even improving working conditions in the course of the move to the hinterland. However, if a company follows a medium or long-term orientation it is more likely that it will also transfer the status quo levels of working conditions to its new production facilities in the Chinese hinterland.

Many companies present glossy brochures in order to prove their engagement in CSR-related activities like the implementation of social and environmental standards along their supply chain. However, often there is a gap between the standards that are publicly expressed and advertised and the actual working conditions in supplier firms or subsidiaries (Andersen/Skøjett-Larsen, 2009). If a buyer firm easily tolerates deviations from its requested social standard, a deterioration of working conditions in case of relocation becomes more likely. Figure 18 summarizes these results.

Fig. 12: Further Determinants to Predict Scenario Occurrence
6.6.3 DERIVED HYPOTHESES FOR FUTURE RESEARCH

The determinants which are identified in figure 18 can be subsumed into seven continuous categories, which provide seven empirically testable hypotheses for future research. In the following the hypothesis are presented. Further, figure 19 provides an overview of our hypotheses and includes the assumed path-dependence.

Fig. 13: Hypotheses on Working Conditions after Factory Relocation

Western buyer firms play a significant role in enforcing social responsibility and good working conditions in their Chinese supplier firms as mentioned above. However, if codes of conduct are established, but only leniently enforced, they are unlikely to have much of an effect.

**Hypothesis 1:** The greater the revenue share a Chinese supplier firm earns from business relations with Western buyer firms are, the better the working conditions in the newly relocated factories will be.

**Hypothesis 2:** The more a Chinese supplier's buyer firm tolerates the supplier's non-compliance with codes of conduct the worse the working conditions in the newly relocated factories will be.

Cost considerations are a central element of many Chinese firms, as China’s growth has been closely related to being perceived as a low-cost producer. Firms that have overcome this perception by focusing on higher-margin premium markets and
products are thus less likely to be subjected to cost pressures that are as intense as those that low-cost producers face.

**Hypothesis 3:** The greater a Chinese firm’s low-cost orientation is, the worse the working conditions in the newly relocated factories will be.

Firms for which manual labor is a significant production input can be assumed to consider the costs of labor, which explicitly include the costs of providing good working conditions, as the main factors minimizing their margins. These firms are consequently incentivized to reduce these costs as far as possible.

**Hypothesis 4:** The greater the labor intensity of production at a Chinese firm is, the worse the working conditions in the newly relocated factories will be.

Small firms frequently do not pay proper attention to good working conditions as they face more urgent problems. Conversely, bigger firms have a greater number of employees, giving demands for improvements a greater weight.

**Hypothesis 5:** The bigger a Chinese firm is, the better the working conditions in the newly relocated factories will be.

The Chinese government is actively promoting social responsibility and better working conditions. While it has significant influence over all Chinese firms, this influence is likely to be greatest in firms in which the state holds an equity share—particularly if it is a controlling share.

**Hypothesis 6:** The greater the Chinese state’s ownership share in a Chinese firm is, the better the working conditions in the newly relocated factories will be.

A firm’s focus on short-term profitability is a main driving factor of cost saving measures and thus of the deterioration of working conditions which would otherwise incur costs. Conversely, firms subscribing to a long-term perspective may recognize value in motivating workers through good working conditions.

**Hypothesis 7:** The greater a Chinese firm’s long-term orientation is, the better the working conditions in the newly relocated factories will be.
6.6.4 RECENT EMPIRICAL RESULTS IN THE SCIENTIFIC LITERATURE

Relocation away from China’s coastal region to the Chinese hinterland or low-cost countries is a current phenomenon and lacks academic research. The scientific literature reflects predominately the incentives to relocate. The analysis of cost aspects are in the focus of the scientific contributions (e.g., Chen et al., 2009; Kumar et al., 2009, Platts/Song, 2010). The impact of relocation processes on the working condition are nearly neglected in the scientific literature. According to Cooke and He (2010), human resource related issues and human resource management (HRM) approaches in China are not sufficiently reflected in recent studies.

In order to give an exemplary impression of potential empirical findings concerning the above derived hypotheses, an analogy method has to be applied. Empirical results from studies with almost similar circumstances are used to estimate potential findings and to provide such a first impression. Nevertheless, it is important to test the above hypotheses by further empirical research.

The influence of Western buyer firms on the realization of CSR practices in Chinese supplier firms has been studied by several scholars (e.g., Van Tulder et al., 2009; Schneider/Schwerk, 2010, Park-Poaps/Rees, 2010, Tsoi, 2010). Western buyer firms have started to require social and environmental standards as criteria for supplier selection (e.g., Egels-Zandén, 2007; Seuring/Müller, 2008; Lam, 2009). Chinese companies which generate the majority of their revenues through Western buyer firms need to fulfill such requirements. Compliance will be increasingly important for Chinese supplier firms in order to survive in competition (Lin, 2010). Using expert interviews, Tsoi (2010) examines the perception of various stakeholders concerning CSR in China. According to Tsoi (2010), CSR is mainly important for predominantly export-oriented supplier firms. Chinese suppliers only implement CSR and appropriate working conditions if their Western buyer firms require them. Therefore, international buyer firms have to ensure good working practices in their supplier firms otherwise they are not realized. These findings will be applicable for the above mentioned hypotheses 1 and 2. If relocated manufacturing firms produce for international buyer firms which require appropriate working conditions they will realize such CSR practices in the relocated firms. If there is a high deviation tolerance of the buyers or it is not
requested there will be no incentives for the relocated firm to implement appropriate working condition.

Cooke and He (2010) examine CSR measures and HRM approaches in 20 companies of the textile and apparel industry in the Guangdong province. The study of Cook and He (2010) highlights that the financial performance and the company size have a strong influence on the realized HRM practices. The study exposes this relationship between company size and HRM practices for textile and apparel companies in the Guangdong province. This relation is likely to occur in relocated firms as well. Therefore, these findings indirectly support the derived hypothesis 5.

Cooke and He (2010) show the importance of HRM to motivate and develop employees and to attract new employees. Implemented CSR practices correlate positively with job satisfaction and lead to a higher commitment of worker to their employers (Brammer et al., 2007). Furthermore, investments in HRM practices and the improvement of working conditions lead to higher productivity and better organizational performance (Cooke/He, 2010). The comparative advantage of a firm is crucial to maintain the business for longer periods. The study of Chen et al. (2009) shows that firms of the manufacturing industries in the coastal regions have a higher labor productivity than in inland provinces. Newly relocated plants may increase their return on investment through maintaining and transferring their already implemented HRM practices in order to increase labor productivity. The relocated firms may benefit from the lower wage level of inland provinces and higher productivity through HRM practices. These findings and assumptions are in line with the above derived hypothesis 7. Firms with long-term orientation and the goal to increase the capital base will benefit from the transfer of HRM practices.

6.7 CONCLUSION

Labor shortage and high production costs in the coastal regions of China are among the main reasons that lead companies to consider a relocation or expansion of their manufacturing plants to other regions. Lower costs, better access to input factors and resources, and developing markets in inland China as well as political measures support the relocation of factories within China.
This contribution examines the motives of companies to relocate their manufacturing plants to the Chinese hinterland or to low-cost countries and draws conclusions as to what this means for the level of working conditions in the new production plants. Is a deterioration of working conditions in the relocated factories to be expected, or will the relocation lead to a higher level of working conditions?

The contribution presents theoretical considerations on the issue of changing working conditions due to factory relocations. Three different scenarios are discussed: 1) working conditions will be stable, 2) will improve, or 3) will become worse. Based on the various motives of a company to relocate, driving factors of the occurrence probability of the three scenarios are derived. These are then further developed into determinants which directly affect the development of working conditions in relocated factories. These driving factors are summarized in the form of seven hypotheses.

The integration and implementation of social standards and appropriate working conditions is a medium to long-term process. Many Chinese firms that face rising costs are naturally skeptical where potentially costly improvements of working conditions are concerned. This article suggests that under certain circumstances, such firms will attempt to scale back the level of socially responsible working conditions as they are simultaneously confronted with a buyer’s labor market and strong cost pressures.

However, two elements suggest that the average working conditions will not fall too far behind the average level established in the coastal regions. First, the Chinese government’s promotion of social standards, visible, for instance, in the various labor laws, is much greater than in the past, which should make outrageous misconduct by individual firms much less probable. Second, there is historical evidence from the coastal provinces, where wages and social standards began to rise significantly when demand outpaced supply. Buyers enforced compliance with social standards because their customers demanded it. As soon as the share of exports from the central and western regions rises and Western firms are present in these regions as well as the supply of workers becomes less abundant after a relocation wave, wages and working standards will rise. As this is a medium- to long-term process, however, temporary struggles for appropriate working conditions seem inevitable in some firms. At the
same time, the differences from the historical precedence suggest that these struggles may be rather temporary and more limited in their scale than in the past.

Based on the theoretical framework developed in this contribution, future research will deal with the empirical validation of these findings. The missing empirical studies in this new research field shows that there is a high potential for future research. It needs to be examined which companies will seriously relocate and which companies will maintain their manufacturing plants in the coastal regions. Concerning working conditions it has to be studied whether workers in the inland provinces have a higher tolerance to accept bad working conditions. Moreover, the set of determining factors which influence the shape of working conditions in relocated firms might be supplemented by further studies.
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Erklärung gemäß §12(4) der Promotionsordnung der Wirtschaftswissenschaftlichen Fakultät der Humboldt-Universität zu Berlin

vom 21.05.2010


Hilfe habe ich im Rahmen von §11(3) der Promotionsordnung von Herrn Professor Dr. Joachim Schwalbach im Rahmen des Betreuungsverhältnisses erhalten.

Ich bezeuge durch meine Unterschrift, dass meine Angaben über die bei der Abfassung meiner Dissertation benutzten Hilfsmittel, über die mir zuteil gewordene Hilfe sowie über frühere Begutachtungen meiner Dissertation in jeder Hinsicht der Wahrheit entsprechen.

Berlin, 03. Mai 2012

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