

1. INTRODUCTION

1.1. BACKGROUND INFORMATION AND NECESSITY OF RESEARCH

The global impact of China as one of the world's leading production engines is growing. An increasing number of goods on the world market are produced in China. The Greater Pearl River Delta (GPRD), consisting of Hong Kong (HK) and the Pearl River Delta Economic Zone (PRD), part of the southern Chinese province of Guangdong, is to a large extent responsible for the economic growth and increasing prosperity of China. Since the implementation of the Chinese opening policy in 1979, the country has attracted foreign investments from HK and, more recently, from Taiwanese and Western firms. Due to its proximity to HK, the PRD served as an experimental zone for Chinese policy makers to coordinate foreign interests. Low production costs were the initial motivation for foreign firms to invest in or source from the GPRD. Today, the PRD is one of China's most important economic centres. The economic power of the GPRD results from the intensive interaction between HK and the PRD. Meanwhile, the GPRD is exposed to intense competition from other countries and regions which also offer attractive production conditions for global firms. Moreover, production costs in the GPRD are rising due to higher wages, higher land prices, higher electricity costs, etc. Although some firms have relocated operations to other countries, the majority of firms continue to source or set up production facilities in the GPRD. The trend has decelerated as a result of the economic crisis in 2008, but is still obvious. Firms in the GPRD seem to be able to maintain their competitiveness on the world market despite severe competition and higher production costs (FEDERATION OF HONG KONG INDUSTRIES (FHKI) 2007; FEDERATION OF HONG KONG INDUSTRIES (FHKI) 2003; ENRIGHT et al. 2005).

The new challenge of serving leading global firms provides explanations. In times of made-to-order production, shorter product life cycles, smaller batch sizes, high market volatility and especially mass production, a flexible firm and network organisation is required in order to provide speed in the production process and the necessary ability to rearrange the production process (VOLBERDA 1996). Besides cost cutting and upgrading pressure, the *flexibility of firms* is crucial for their integration into global value chains. The model of flexible specialisation and the just-in-time concept addressed this new global challenge for the first time. Although some research exists about the means of achieving flexibility (for example small-batch production, economies of scope, flexible machines, specialisation), the contribution of informal modes in interactions with business partners to smooth relations is still

underrepresented in the economic geography literature. This work aims to explain how firms in the GPRD have adapted their business organisation, especially their customer and producer relations, in order to build a flexible production network which is capable of ensuring their competitive advantage.

The concept of this work acknowledges the call of YEUNG (2007) and YEUNG and LIN (2003) for a research agenda on Asian business that integrates micro-level analysis of intra-firm governance and macro-level influences of institutional settings as well as global production networks. Existing literature studies the growth and success of firms in China and especially of the firms in the PRD (ENRIGHT et al. 2005; BERGER and LESTER 1997). Moreover, Asia-specific literature provides insights into the peculiarities of Asian businesses, such as informal institutions in guanxi networks (GIPOULOUX 2000; XIN and PEARCE 1996; ZHANG and ZHANG 2006).

The informal ties which ease and smooth relations between business partners seem to play a significant role in firm organisation. The concept of informalisation does not refer to illegality or the informal sector. It goes beyond that and touches on the personal elements of interactions which allow the avoidance of time-consuming official business procedures. This shortens firms' time to market and provides an additional opportunity for quick response which increases firms' flexibility. Until now there has been no comprehensive study of the informal way Asian firms do business and the effects of these methods on the flexibility of firms and their success. The aim of this work is to shed light on that issue, thereby filling an important gap in research.

Informal modes of interactions seem to characterise both the external and the internal organisation of firms. The competitive advantage of the GPRD is expected to result not only from a single firm's capability to organise and react flexibly to the needs of global customers, but also from the way a flexible network of firms is built. This work concentrates, therefore, on the organisation of customer producer relations along the value chain in the GPRD. Emphasis is put on the unique institutional setting in the GPRD. HK provides a legal system adapted to fit international standards, whereas firms in the PRD operate in a transitional setting.

This work could potentially be developed further within the Priority Programme 1233 "Megacity—Megachallenge: Informal Dynamics of Global Change", funded by the German Research Foundation (DFG). This would provide an opportunity to study the relevance and significance of informal modes in customer and producer relations of firms in the GPRD in order to enhance the flexibility of firms. Informal modes of governance in customer and producer relations cannot be seen as the only factor influencing flexible firm organisation, but rather as one of several possibilities. The GPRD was selected as a research region because its economic structure requires continuous adaptation to changes in global markets and to the institutional setting.

A sectoral study of the electronics industry was conducted. The novelty of the research topic suggested a concentration on a specific sector in order to exclude the influences of industry specifications. The electronics industry is the most relevant and dynamic in the GPRD. It serves as a good example of the interplay between informality and flexibility. Two company surveys were conducted in HK and the PRD, complemented by qualitative interviews with regional stakeholders.

1.2. RESEARCH OBJECTIVES AND QUESTIONS

The research objectives of this work are to discover:

1. how electronics firms in the GPRD are spatially organised and integrated into global value chains and what pressures for flexibility driven by global markets and institutional changes they have to respond to
2. which governance modes HK and PRD firms apply in customer and producer relations along the value chain and how they can be explained
3. how relevant informal modes of interactions between customers and producers are in achieving a high level of flexibility under special consideration of:
 - contact and selection processes for customers and producers
 - contractual arrangements
 - enforcement mechanisms of contracts

The main research questions addressed in this work are:

Theory-guided

- A** Which critical factors pushed the global spread of production locations, especially in the electronics industry? How does this affect the organisation of value chains? Which new challenges and risks do electronics firms in emerging economies face if they want to enter the global production network?
- B** How does the institutional environment in a region determine the behaviour of firms under special consideration of institutional change in transitional economies?
- C** How does the institutional environment and the transactional specificity affect the choice of governance modes? What governance modes can be expected in HK and the PRD?

D Under what circumstances do firms prefer informal practices over formal ones to organise their customer producer relations? How do informal interactions enhance the flexibility of firms? In answering these questions, the focus will be on:

- contact and selection procedures for customer and producers
- contractual arrangements
- enforcement mechanisms

Methods

E How can informality and flexibility be operationalised in customer and producer relations?

F Which methods are suitable for measuring informality and flexibility in customer producer relations?

Empirically-guided

G How are electronics firms in HK and the PRD integrated into global value chains? How is the division of work spatially organised between HK and the PRD?

H How well is the formal institutional environment in HK and the PRD developed? What informal institutions guide the way of doing business in HK and the PRD?

I Do HK firms organise their business relations to customers and producers in the PRD differently from their relations to customers and producers abroad? Is this a consequence of the different development stages of the institutional environment? Is there a trend toward hybrid forms of governance in China resulting from the transitional change?

J How high is the degree of informality in customer producer relations of HK-based and Chinese-based firms? Are there any differences in the behaviour of firms between the two locations? Does informal behaviour result in greater flexibility? In answering these questions, the focus will be on:

- contact and selection procedures for customer and producers
- contractual arrangements
- enforcement mechanisms

Policy-guided

- K** What implications do the research results have for policy makers and firm managers in the GPRD and what further research is needed in order to consolidate the new business concept?

1.3. STRUCTURE

The main body of this work has been divided into four parts. The first part deals with the conceptual framework (Chapter 2), the second part with operationalisation, methods and data (Chapter 3), the third part (Chapter 4, 5 and 6) addresses the empirical findings of the work, and finally, a conclusion is drawn which includes policy recommendations and further research implications (Chapter 7).

The conceptual Chapter 2 discusses how firms in emerging markets can successfully integrate themselves into global value chains under special consideration of leading Western firms' requirements for flexibility. In doing so, the focus is placed on how firms organise their customer producer relations in order to build a flexibly organised network of firms along the value chain. To answer the theoretically guided questions **A—D**, an eclectic concept is applied. The behaviour of firms is discussed against the background and interplay of the industrial dynamics and market conditions, the location of specific formal and informal institutions and firms' capabilities to deal with them. Firstly, the industrial and market dynamics implying the need for firms' flexibility are analysed using the global value chain concept of GEREFFI et al. Secondly, a discussion about the changing institutional environment in transitional economies and the interplay of formal and informal institutions guiding firms' behaviour is outlined. Thirdly, the consequences for the selection of governance modes to organise customer and producer relations will be examined. Finally, the discussion goes beyond governance modes and deals with the expected informal modes of behaviour applied in contacting and selecting customers and producers as well as in concluding and enforcing contracts. All four conceptual discussions are based on literature reviews and conclude by producing hypotheses which will be proven in the empirical part of this work.

Before analysing the empirical data, Chapter 3 describes how informal modes of interaction between customers and producers and increasing firm flexibility can be operationalised and measured using primary and secondary data and literature in order to answer research questions **E—F**. Because of the novelty of the topic (informality achieving flexibility), emphasis is placed on the collection of primary data. A standardised survey of electronics firms was conducted in HK and another in the PRD. Additionally, interviews with major players in the electronics industry in HK were organised. The collection of empirical data was supplemented by expert interviews in order to gain a deeper understanding of the processes in the

research region. This chapter also covers the assessment of research methods and a discussion about data quality and validity.

The first empirical Chapter 4 analyses the framework conditions influencing the behaviour of electronics firms in the GPRD. Firstly, the industrial dynamics of the electronics value chain are analysed through the use of primary and secondary data. Secondly, the changes to the formal and informal institutional environments in China are studied. The second empirical Chapter 5 investigates the applied governance modes of HK and PRD firms for their customers and producers as a consequence of the industrial dynamics of the electronics industry and the institutional environment in HK and China. Some governance modes are assumed to be more informal and flexible than others. Two logit models are built to identify the determinants of governance modes in order to prove or disprove respectively what has been discussed in the conceptual part of the work. The third empirical Chapter 6 goes beyond the governance modes and addresses in more detail how relevant informal modes of interactions with customers and producers are in terms of contacting and selecting, contractual arrangement and enforcement of contracts. Attention will be paid to differences in the organisation of firms in HK and the PRD in consideration of the distinct institutional environments in which they operate. After every empirical chapter, a *summary and discussion section* is included to refer to the theoretically guided hypotheses which provide the background for answering research questions **G—J**. Mirroring the empirical data with the conceptual discussion seems to be valuable in terms of providing new inputs for the refinement of theoretical concepts. Those concepts are mainly derived from experience with Western firms and tend to underemphasise the specific way in which Asian firms organise their business.

Finally, in Chapter 7 a conclusion is drawn for policy implications (research question **K**). As this work is based on fundamental research of an explorative nature, further research topics are recommended in order to improve the academic understanding of the interplay between informality and flexibility.