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Cooperation and Technological Endowment in International Joint Ventures: German Firms in China

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Foreword

High growth rates and the absolute size of the Chinese market have contributed to a dramatic rise in foreign direct investments by German firms in China. However, the investment boom has been accompanied by critical reports that point out the difficulty of protecting intellectual property in China and that German as well as other foreign investors regularly face local diffusion of technical knowledge.

The resulting fear of knowledge drain influences the market entry behaviour of (potential) German investors into China: They either refrain from technologically sophisticated investments or only invest after careful consideration of various influence factors. The dilemma that German firms face relating to market entry to China has been expressed by Heinrich v. Pierer, the former CEO of Siemens AG by the words “The risk of not being present in China is larger than the risk of being present”

A frequent choice for market entry to China is the international joint venture with a Chinese partner. While the use of international joint ventures has been the only legally allowed market entry form in many industries until well into the 90s, today investors are free to choose a market entry form to a large extent. With the exception of strategically significant industries, foreign investors can found 100% foreign-owned subsidiaries on Chinese soil.

International joint ventures are regarded as adequate market entry forms if complex technological knowledge is to be transferred to the new location. However, international joint ventures also represent an easy way for Chinese firms to absorb technological knowledge without authorization and to either use it themselves or to provide access to it to third parties.

Michael Hoeck investigates the character and the degree of technology transfer into international joint ventures, using the example of German industrial firms in China.

The two central research questions that are investigated by the author are „What factors influence the sophistication of the technological endowment that an international joint venture in China receives from its German parents?“ and „In what way do strategic considerations regarding inter-firm cooperation and knowledge sharing influence the foreign investor’s technology transfer behaviour?“. His work presents a sophisticated and detailed analysis of the topic and presents novel insights to both researchers and practitioners.

Mannheim, September 2008

Prof. Dr. Michael Woywode

Preface

The topics ‘international technology transfer’ and ‘costs of benefits of knowledge sharing between firms’ have widely been discussed in both theoretical literature as well as management press. The abundance of literature (well over 10.000 research articles) that has been created – with accelerating speed since the end of the 70s - has first discouraged me from trying to find new insights. It also struck me that history seems to repeat itself – much literature in the 70s describes the worries of U.S. firms when investing in the former low cost country Germany.

However, the topic is today as relevant as ever and as far as I can judge, several factors make the recent Chinese case a special one. It is the speed of economic developments, the size of the Chinese economy, and the fact that decisions by foreign investors are strongly guided by a foreign investment framework designed by the Chinese government to absorb as much technology as possible the shortest possible time.

From a theoretical perspective, recently developed or improved frameworks of cooperation and knowledge exchange have not been tested empirically to a sufficient degree, so the case of German industrial firms in China provides a good opportunity to gather additional evidence.

I therefore hope that my analysis on the behaviour of German investor firms with respect to the sophistication of technology deployed to international joint ventures in China and the degree of insight granted to local Chinese partners finds interested readers – both researchers and practitioners.

The time spent as a research assistant at the Economics Faculty of RWTH Aachen University under the supervision of Prof. Dr. Michael Woywode has contributed greatly to my formation as both a researcher and as a person. I therefore thank above all Michael Woywode for his various forms of guidance and the freedom he provided me with. I also thank my former colleagues Dr. Garnet Kasperk, Dr. Markus Helfen, Achim Oberg and Dr. Matthias Hansch as well as my “extended set” of supervisors, namely Prof. Dr. Oliver Lorz, Prof. Dr. Eberhard Feess, and PD Dr. Markus Reihlen.

This work is dedicated to both my parents as well as my wife. My parents have supported me from day one and I am fortunate to still benefit from their guidance and advice today. Finding and marrying my wife Patricia is probably the most important outcome of my PhD time, and she has fulfilled me with happiness and great optimism for all developments to come. She also has been my most important sparring partner and is probably the person who dedicated the most time and effort to support my work. Finally, I greet the crowd of Nuffield College at Oxford University, who welcomed me with great hospitality during the time I spent there when finishing my thesis.

Munich, September 2008

Michael Hoeck

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List of Abbreviations

ADB	Asian Development Bank
AG	Aktiengesellschaft
ASEAN	Association of Southeast Asian Nations
B2B	Business to Business
bn	Billion
BoD	Board of Directors
BOT	Build-Operate-Transfer
CEO	Chief Executive Officer
CJV	Contractual Joint Venture
Co.	Corporation
CPC	Communist Party of China
DC	Developed Country
DSU	Dispute Settlement Understanding
EJV	Equity Joint Venture
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GNP	Gross National Product
IC	Intellectual Capital
IJV	International Joint Venture
IMF	International Monetary Fund
IP	Intellectual Property
IT	Information Technology
ITT	International Technology Transfer
JV	Joint Venture
LDC	Least Developed Countries
MEF	Market Entry Form
MNC	Multinational Corporation
MNE	Multinational Enterprise
MOFCOM	Ministry of Commerce of the People's Republic of China
MOFERT	Ministry of Foreign Economic Relations and Trade of the People's Republic of China
NBS	National Bureau of Statistics of China
R&D	Research & Development
TNC	Transnational Corporation
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
TRPM	Trade Policy Review Mechanism
USSR	Union of Soviet Socialist Republics
WFOE	Wholly Foreign-Owned Enterprise

WTO World Trade Organisation