## Management Study of Cross Border M&A in Post Deal Stage: When Chinese Company Acquired German Company

## A DISSERTATION

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## Management Study of Cross Border M&A in Post Deal Stage: When Chinese Company Acquired German Company

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

by

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#### DECLARATION

I certify that except where due acknowledgement has been made, the work is that of the author alone; and the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the dissertation is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work paid or unpaid, carried out by a third party is acknowledged; and, ethics, procedures and guidelines have been followed.

Signed:

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#### Abstract

George J. Stigler, the 1982 Nobel Laureate in economics, once said that 'There are no large American companies that have not grown somewhat by merger, and probably very few that have grown much by the alternative method of internal expansion (George J. Stigler, 1950).' Indeed, the history of global business development is, in a sense, a history of mergers and acquisitions.

The history of China's cross-border mergers and acquisitions (CBMA) began in the 1980s. The first impressive CBMA in China took place in 1984 when the Bank of China Group and the China Resources Group jointly acquired the Hong Kong Kangli Investment Co., Ltd. This acquisition initiated China's overseas mergers and acquisitions (M&A).

Since 1972, when China and Germany established diplomatic relations, and especially after China started to reform and open up in 1978, the economic relationship between the two countries has become increasingly close and Germany has become one of the most important trading partners and investment destinations of Chinese enterprises. The ongoing Made in China 2025 policy and the Industry 4.0 initiative in Germany are important strategic measures for the development of the manufacturing industry in the new round of scientific and technological revolution and industrial transformation currently taking place. To develop its Made in China 2025 polar, China drew significant inspiration from Germany's relevant experience and helped Chinese enterprises to discover the main reasons China invests in Germany.

Greenfield investment is China's main strategy for investment in Germany, but in recent years, M&A have increased. China's state-owned enterprises are the main players in CBMA with high-tech manufacturing as the target industry preference. The synergy generated from CBMA helps meet the needs of self-existence and development for the Chinese acquirers. In addition to this, most Chinese acquisitions in Germany are triggered by the following reasons. Through acquisition, China hopes to

1) achieve the perfection of the industrial chain through CBMA and further increase the value of Chinese enterprises;

2) expand the business scale globally, realising scale advantages and enhancing market competitiveness;

- 3) diversify and extend business to disperse business risk for enterprises; and
- 4) improve the overall market layout and make up the shortcomings the enterprise has in a certain product region.

After decades of CBMA progress, China has drawn attention as a strong emerging economy whose enterprises have become noticeable on the world stage. Compared to the pre-deal activities, the post-deal integration has attracted more and more attention from scholars and practitioners in recent years: 'According to some data, about 60% of

M&A cases are not successful. Among which, roughly 50% of failures are caused by bad treatment to enterprise's culture, mechanism of choosing and using personnel' (Deepark K. Datta, 1991).

Much of the existing literature has concentrated on general CBMA topics. Seldom has the specific focus been on the study of post-deal integration, especially in relation to China's investment in Germany. Learning from real practice and the current conceptualization of post-deal integration in order to give enterprises an easy-to-follow model for post deal integration is the major purpose of this dissertation.

Using four specific research questions, three research objectives, and a clear research scope as its guide, this dissertation employs a qualitative method to find the answers, achieve targets, and create a complete concept for post-deal integration for when a Chinese company acquires a German company.

The three case studies selected brought practical experience to the CBMA practitioners. The analysis of these three cases is in a standard structure for comparison. When evaluating the integration performance, both finance and operation perspectives were considered. The interview contents were quoted in the case analyses to better illustrate the ideas presented and in order to increase readers' understanding of the cases. Interviewees with diverse roles were selected from both Chinese and German companies in order to give a more comprehensive and objective impression of the cases.

At the end of the case studies is the comparison and integration of the process and the results. The integration process is observed in the short term, middle term, and long term. A proposed integration checklist by different corporate functions is provided for further analysis of the integration performance of the three selected cases. After the summary of case studies, the pre-set hypotheses are tested and their implications discussed.

To find the gap in the theory of the targeted research field, 267 scholarly works were systematically collected from different English and Chinese academic databases by applying keywords such as 'cross border mergers and acquisitions', 'post-deal integration', and 'Chinese acquisition in Germany'. When the research scope was narrowed down to the post-deal integration stage after a Chinese company acquired a German company, it was found that some general or fragmental research has been done but that this research lacks a comprehensive and systematic concept which can guide the practitioners through the difficulties of post-deal integration and help them achieve successful integration in the end.

Combing the findings from the in-depth case studies and statistical analysis of historical data, the answers to the chosen research questions are given in Chapter 8.

Moreover, a summary of the limitations and recommendations for further research are

given at the end of this dissertation.

#### **Chapter 1 Introduction**

#### 1.1 Background

According to the data from PitchBook, from 2010 to 2018, the global mergers and acquisitions (M&A) transaction market showed a gradual increase and turned to a flat trend for transaction amounts and transaction numbers. North America and Europe are still the most active regions for M&A transactions in the world, which is consistent with their current position in the global economy.

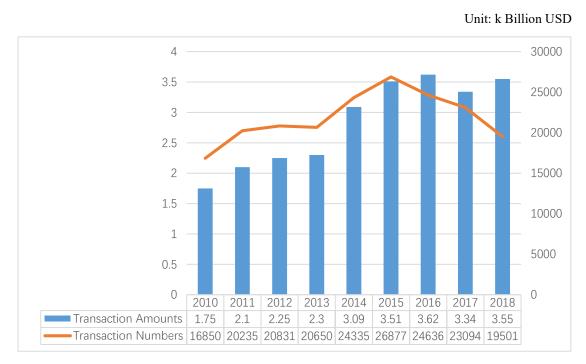


Figure 1 Global M&A market transactions and growth, 2010–2018

Resource: PitchBook, 2019

In contrast, against the backdrop of RMB stabilisation and the irreversible trend of cross-border cooperation, Chinese acquirers are still actively engaged in strategic outbound M&A activities despite the impact of trade frictions between China and the United States and increased scrutiny by the Committee on Foreign Investment in the United States.

Over the past four decades, China has experienced a high-speed and far-reaching economic development. Along with the growing trend of globalization and economic integration, China has gradually become a remarkable emerging economy on the world stage. This was directly manifested through the trend of China's inward and outward foreign direct investment (FDI) over the past years. Although the absolute value of the amount and number of China's outbound M&A transactions are not significant in the global data, the growth trend and investment direction are notable.

Looking back at the eight years since 2010, China's outboard M&A transactions followed an increasingly steady pace in terms of annual transaction amounts and transaction numbers until they peaked in 2017. However, in 2018, the transaction numbers decreased to 488, and the transaction amounts also declined for the first time in the past years. The transaction amounts decreased to \$89.8 billion in 2018, a 50.2% year-over-year decrease.

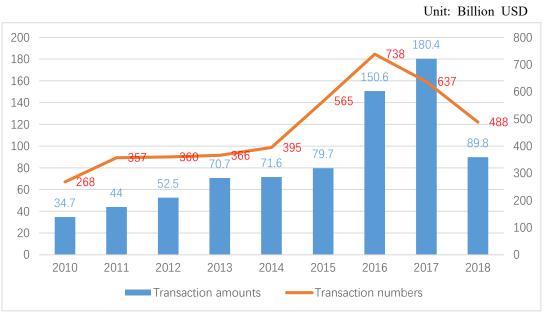


Figure 2 China's CBMA transaction amounts and numbers, 2010–2018

EY Research (EY Research, 2019) has shown that Germany's advanced manufacturing enterprises have become one of the biggest targets of Chinese enterprises in crossborder mergers and acquisitions (CBMA). The data from 2018, for example, showed that Germany was the most attractive acquisition location in Europe for the Chinese. Even though the acquisition deal numbers in 2018 across the top ten countries were in a downturn compared to 2017, the Chinese acquisition deal numbers in Germany still ranked the highest. In terms of investment volume, Germany was ahead of other European countries in 2018, with a deal volume of \$10.7 billion.

Of the European countries targeted by the Chinese for M&A, the data of the seven countries with the largest number of transactions in 2018 were selected for comparison. Germany's data was obvious in both transaction amounts and transaction numbers. In 2018, the top five areas in which Chinese CBMA took place were Europe, Southeast Asia, North Asia, Latin America, and North America. Out of these five areas, the highest transaction amounts and numbers occurred in Europe (www.chyxx.com, 2019). The transaction amounts in Europe accounted for 34% of Chinese CBMA in 2018. In terms of transaction numbers, Europe accounted for 33%.

Source: www.chyxx.com, 2019

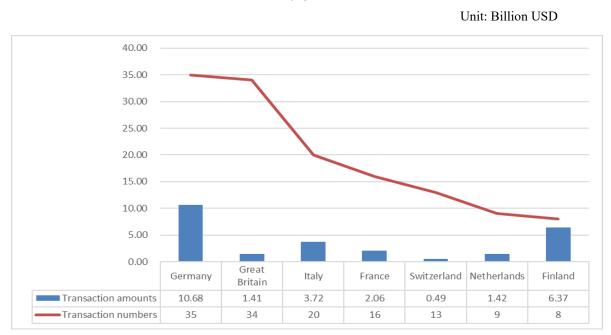


Figure 3 The seven European countries with the largest number of M&A by China-based buyers in 2018

Source: EY Research, 2019

Looking through the deals that happened in 2018 in Germany, the manufacturing industry was the most interesting to the Chinese acquirers, making up 37% of the total acquisition deal numbers that year.

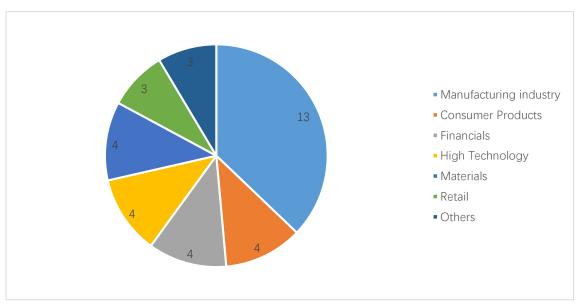


Figure 4 M&A transaction numbers in Germany by industry in 2018

Chinese companies continue to be particularly interested in German industrial companies, which fits with China's present industrialization efforts.

Source: EY Research (2019)

#### 1. Made in China 2025 vs. German Industry 4.0

Made in China 2025 and the German Industrie 4.0 (Industry 4.0) are both important strategic measures for the development of the manufacturing industry as a part of the new round of scientific and technological revolution and industrial transformation currently taking place. However, the two strategies are different in both their technical and industrial approaches and the contents of their strategic ideas.

China designed three steps to realise its industrial policy, Made in China 2025.

**Step 1: China will strive for 10 years to become a powerful manufacturing country.** By 2020, it will attain a high level of industrialization. China's status as a powerful manufacturing nation will be further consolidated, and the level of manufacturing informatisation will be greatly improved. In this step, China will master several core technologies in key areas, further enhance its competitiveness in the dominant areas, and greatly improve product quality. China will make significant progress in digitalisation, networking, and the intellectualisation of the manufacturing industry. The energy consumption, material consumption, and pollutant emissions of key industrial players will decrease significantly.

By 2025, China will greatly improve the overall quality of the manufacturing industry, significantly enhance its innovation ability, significantly improve the labour productivity of its working-age population, and take a new step in the integration of industrialization and informatisation. The energy consumption, material consumption, and pollutant discharge of key players will be further reduced on a global level. China will form a number of multinational corporations and industrial clusters with strong international competitiveness and significantly enhance its position in the global industrial division of labour and value chain.

Step 2: By 2035, China's manufacturing industry as a whole will reach the middle level of the world's manufacturing power camp. China will greatly improve its innovation capability, make major breakthroughs in key areas, and significantly enhance the overall competitiveness of the industry. It will lead the global innovation that has been developed in the targeted industries to achieve total industrialization of the manufacturing industry.

On December 28, 2018, the "2019 China manufacturing power development index report" was released at the fifth China Manufacturing Power Forum by the Strategic Consulting Center of Chinese Academy of Engineering, the research centre for the development of the equipment manufacturing industry, run jointly by the Chinese Academy of Mechanical Sciences and the National Industrial Information Security Development Research Center. The report showed that China's manufacturing industry ranks fourth in the world, just after the United States, Germany, and Japan. The

manufacturing productivity of China is less than 20% of the manufacturing productivity in the U.S. China is still far behind the United States, Germany, and Japan in terms of quality benefits, structural optimization, and sustainable development (<u>www.thepaper.cn</u>, 2020). Therefore, step 2 aims to have China caught up to Japan and Germany by 2035 in these aspects.

Step 3: One hundred years after the founding of New China, China will further consolidate its position as a powerful manufacturing country, and its comprehensive strength will allow it to enter as a top global contender in manufacturing. Major areas of the manufacturing industry have innovative leadership and obvious competitive advantages, and China will build a leading technology and industrial system.

Germany has the advantage of stable politics, strong manufacturing, and R&D capability, which are very attractive to China, a developing country that is experiencing a national industrial revitalization and significant scientific and technological development. China needs a role model to learn from in order to catch up and Germany provides this model perfectly.

## 2. Political hints from the booming business cooperation between China and Germany

Besides the attractiveness of Germany's advanced and modern real economy of Germany, the current political environment has also led to the booming business cooperation between China and Germany. At the beginning of 2017, Peter Navarro, the director of the White House National Trade Commission under Donald Trump, stated publicly that 'Germany uses the euro artificially to control the exchange rate, just like the previous Deutsche Mark, in order to expand the trade surplus between Germany and its trading partners'. Harold James, a professor at Princeton University in the United States, argues that this shows that the Trump administration's trade war will not only be directed against China and Japan, but also against Germany, an American ally in Europe. Although German Chancellor Angela Merkel immediately refuted the accusation, stating that, in the face of the threat of the U.S. trade war, German politicians and businesspersons must be prepared. Sigmar Gabriel, Germany's vice-premier until 2019 has suggested that the EU should focus its economy on Asia in case Trump fully implements trade protectionism. According to the data Reuters released on February 23, 2017, China surpassed France and the United States as Germany's largest trading partner in 2016.

#### 1.2 Motivation and research objectives

The motivation for this research is from my past professional experience. In two of the three deeply analysed cases in chapter 6, 'Case Study Analysis and Findings', I was involved as a professional. As an assigned C-level manager in Germany, I have realised

significant self-growth through the long process, but still have many questions in mind. The huge cultural difference between countries and corporate levels, the different stages of management development, the different legal environments, and the complicated post-deal integration process are all worthy of in-depth study in order to help resolve practical issues related to Chinese M&A in Germany.

When I was trying to learn from existing theories and real cases, I did not find a systematic and comprehensive guide to explain the process of post-deal integration when a Chinese company acquired a German one, and there seems to be no Chinese company that has completed the journey of real integration up to now.

Since there is no ready-made guide available for reference, I decided to make one myself. The three main research objectives for this study are as follow:

1) Supplement the existing theory on the CBMA post-deal integration method;

2) Detect and elaborate on the issues from practice; and

3) Provide recommendations for Chinese and German entrepreneurs that help to solve the detected issues

#### **1.3 Research questions**

To achieve the research objectives and reach the ultimate goal of forming a whole new guide to aid CBMA post-deal integration, three specific research questions are addressed based on knowledge gleaned from the relevant existing theories.

Before describing the CBMA guide, chapter 7 introduces the three dimensions of integration strategy, which include general integration strategy, personnel integration strategy, and task integration strategy. The three research questions selected each address one of the three dimensions and are to be considered as the most critical points.

**Question 1 (personnel integration strategy):** Does cultural difference have a positive or negative impact on cross-border management after a Chinese company has acquired a German target company? What kind of problems arise? To what extent are these problems worsened or improved due to the culture-specific reasons?

**Question 2 (general integration strategy):** We assume that the complete integration of the Chinese acquiring and German target companies is the final aim of an M&A process. What speed of integration is to be recommended to arrive at a successfully integrated company? For what reason?

**Question 3 (task integration strategy):** What kinds of synergies are likely to be expected in the long run? How powerful might these synergies be? What can Chinese management at the headquarters and the management at the subsidiary do to foster these synergies?

The research questions and preliminary answers are addressed before each in-depth case analysis, and this allows us to see the adaptability of the answers in reality.

#### 1.4 Research methodology applied in this research

Since there are no systematic array numbers of relevant literature about Chinese CBMA in Germany, and this topic requires open discussions with employees from both Chinese and German companies to support the final research findings, this study uses the qualitative research method.

In addition to the qualitative research method, large amounts of quantitative data were collected, classified, analysed and summarized for the financial analysis of three case studies and the historical data analysis of Chinese and German FDI trends.

During the research process, I developed three hypotheses and the sample selection criteria and designed a conceptual research model. In addition to the historical data analysis, the case study and cross-case comparisons will be the most used methods for accomplishing the goals of this study. In each case study, I tried to involve different levels of employees from both the acquirer and the acquired company to achieve a comprehensive research result without prejudice. The questionnaire was prepared in advance but left some questions open discussion at the end to ensure that the interviewees' ideas were not limited by framed questions. I translated the interview contents with the Chinese employees into English. The anonymity of both the employees and the companies was maintained according to the wishes of the respondents.

#### 1.5 Structure of this dissertation

This dissertation consists of eight chapters.

Chapter 1 is a brief outline of this dissertation. It gives an overview of the background, research motivation, and objectives, and gives the research questions and methodology employed.

Chapter 2 addresses the specific research questions and objectives, which were derived from practice. It also discusses the research scope and purpose. The historical data of inward and outward FDI after the Second World War from both China and Germany are presented and analysed. The study of historical data showed that Chinese CBMA in Germany have been booming in recent decades.

Chapter 3, gives an extensive review of relevant literature on CBMA in general and is sorted and presented by different dimensions. Some major definitions in this dissertation are given and the research questions are addressed. At the end of the chapter,

I point out the limitations of previous research and the urgency to have a comprehensive guide for post-deal integration when a Chinese company acquires a German one.

Chapter 4 focuses on the institutional environment for CBMA in China, introducing the relevant policies released by the Chinese government, the reasons why CBMA is booming, the obstacles that both the state owned enterprise (SOE) and the private owned enterprise (POE) encountered in the historical deals, and the lessons gained from these deals.

Chapter 5 outlines the research methodology applied in this dissertation. It also details the case study design, including the case selection criteria, research model setup, and case study design. The main part of this chapter is the three in-depth case studies that follow the case selection criteria.

Chapter 6 contains the main research content, which includes three in-depth case analyses. The structure of each case study is identical, starting with background information and followed by financial and operational observation over a period of five to eight years. In addition, after the single case analyses, there is a cross-comparison of the three cases to reveal the generality and individuality among them.

In Chapter 7, a comprehensive CBMA integration guide applicable to Chinese companies acquiring German companies is created. The integration process was considered by each corporate function to discuss the integration strategy, personnel integration, and task integration. The integration team and working mechanism, process and schedule, and integration steps for each corporate function are broken down in detail. At the end of the chapter, the integration guide was extracted and summarized.

Chapter 8 is the conclusion of this dissertation where I give an overview of all the information presented in previous chapters. Because the ultimate target of this dissertation is forming a reference or instruction guide for Chinese and German entrepreneurs working together on the post-deal integration, this should somehow be reflected in the research questions. However, as the ultimate goal is a guide, the three research questions are not completely aligned with the way the conclusion is presented. Recommendations for entrepreneurs are presented in this chapter as well. Finally, this chapter states the limitations of this research and gives recommendations for future research.

#### **Chapter 2 Research objectives and questions**

Managing the post-deal stage well is critical to achieving a successful CBMA result. Integration is an important step after deal completion in the observed cases. The process of moving the integration forward is commonly a headache for both the acquiring and the acquired company. In many of the discussions on the influencing factors in the postdeal integration stage, cultural difference was commonly cited as a major issue. Realising synergy in the post-deal stage is an important goal for acquirers, but if the synergy can exist needs to be determined first. Integration is a dynamic and long-term process that must be approached as a whole but worked on with functions with concrete conditions. Current literature reflects on these problems but does not offer a theoretical and systematic solution for the difficulties that these problems cause for CBMA integration.

At the same time, due to the lack of theoretical guidance, the problems encountered in practice have not been well summarised and researched. This means that similar problems occurred in multiple cases of Chinese CMBA in Germany during the post-deal integration stage. Because these issues were not resolved in a timely and effective way, this ultimately led to a high rate of failure of Chinese CBMA in Germany.

The problems encountered in practice have not been satisfactorily solved, which has led to writing this dissertation and also to the research objectives. In order to determine the research objectives in chapter 7 of this dissertation, three of the hottest discussions in the existing literature were used to develop the main research questions. These three research questions were selected from the most critical factors in the three dimensions of the CBMA post-deal integration strategy. These factors informed the creation of the guide.

#### 2.1 Research Objectives

As mentioned in chapter 1, the motivation for this dissertation came from the unresolved practical issues related to Chinese CMBA in Germany. The ultimate research objective is to form a new guide for CBMA post-deal integration that can be used by entrepreneurs. The new comprehensive guide will be a systematic supplement for the existing fragmentary theories. The creation of the guide requires much effort to be put in detecting and elaborating on the practical issues related to CMBA.

# **Objective 1: Supplement the existing theory on the CBMA post-deal integration method.**

Identifying the critical issues encountered in the CBMA post-deal stage will be the first step, followed by applying the existing theories and experiences to find the solution to these issues.

#### **Objective 2: Detect and elaborate on the issues from practice.**

The new guide will be generated for Chinese and German entrepreneurs who are dealing with problems in the post-deal stage and act as a supplement to current theory and case studies.

# **Objective 3: Provide recommendations for Chinese and German entrepreneurs to help them solve the detected issues.**

The comprehensive guide for post-deal integration contains steps with multiple dimensions that are easy for entrepreneurs to implement.

#### 2.2 Research Questions

Three research questions were developed from the dimensions of integration strategy, the answers to which inform the new guide to Chinese CMBA in Germany.

Cultural difference is a popular topic in recent cross border management studies. Scholars have defined culture in multiple layers and dimensions. For example, culture was defined as 'the system of shared beliefs, values, customs, behaviors, and artifacts that the members of society use to cope with their world and with one another and that are transmitted from generation to generation through learning' (Kwon, BoHun, Kim, ChilYoung, 2007). But more famous definitions are from Geert Hofstede and Edgar Schein.

'Culture is the collective programming of the human mind that distinguishes the members of one human group from those of another. Culture in this sense is a system of collectively held values'.

- Geert Hofstede

'Culture is the deeper level of basic assumptions and beliefs that are shared by members of an organization, which operate unconsciously and define in a basic 'taken for granted' fashion an organization's view of its self and its environment'. – Edgar Schein

Geert Hofstede's definition came from his extensive survey at IBM and, through the years, he has added new concepts to the definition. In this dissertation, the definition of culture from Hofstede is applied as the basic theory of cultural comparison between the Chinese and Germans. Chapter 7 will introduce the impact of culture on the CBMA post-deal stage, as well as new ways of looking at the different layers of culture.

The first research question related to the impact of culture is related to the general strategy of CBMA post-deal integration.

Question 1: Does cultural difference have a positive or negative impact on cross-

border management after a Chinese company has acquired a German target company? What kind of problems arise? To what extent are these problems worsened or improved due to culture-specific reasons?

A country layer and corporate layer are sometimes addressed in recent cultural research, which both come into play for the individual. An individual is the carrier of the culture and culture is reflected in individual behaviours. The cultural differences between the East and the West are obvious. In the case of post-deal integration during CBMA, the integration process can be blocked or can even fail because of cultural conflicts. Therefore, most scholars regard cultural differences as leading to resistance in CBMA post-deal integration, which has a negative effect.

What are the specific difficulties brought by cultural differences in the post-deal integration of Chinese CBMA in Germany? This question will be answered with the help of three in-depth case studies in Chapter 6.

In Chapter 6, the observation of culture will take place in the following areas:

- 1) Management and leadership style
- 2) Company value, mission, and vision
- 3) Staff code of conduct and labour law

Put another way, I would like to understand how Chinese management can work with German culture in the post-deal stage and vice versa. Besides the negative impact that was detected in practice, a positive impact from cultural difference occurs when people decide to respect each other's culture and would like to learn from it and adopt the parts that they found to be good and helpful.

Therefore, it is important to realise the cultural differences as early as possible, and fully consider their positive and negative impacts in the integration strategy in order to minimize the negative impact and strengthen the positive. In doing so, the two companies can smoothly begin the integration and even work to make the cultural difference contribute to the development of the integrated organization.

Question 2: We assume that the complete integration of the Chinese acquiring and German target companies is the final aim of an M&A process. What speed of integration is to be recommended to arrive at a successfully integrated company? For what reason?

Most of the acquirers consider integration to be an important task after acquisition. In the case study, a German manager in an acquired company noted that all the Chinese managers addressed integration but they did not make it clear as to what exactly they wanted to integrate. It sounds like the Chinese acquirers were very eager to announce or emphasize the integration after the deal, which gave the impression that integration should be implemented as fast as possible.

We assume that integration is a must after the completion of CBMA, but it must be determined on a case-by-case basis what will be integrated, to what extent the integration will be implemented, and at what speed the integration strategy will be implemented.

In chapter 7, three dimensions of strategy are addressed, and integration speed is one of the key considerations for developing an integration strategy.

As in the case analysis in Chapter 6, the speed of integration must be discussed in conjunction with the characteristics of various functional departments in the enterprise. That is to say, any strategy that arbitrarily determines the overall speed is wrong. In other words, when discussing the appropriate integration speed, it is necessary to make clear the enterprise department to be integrated, to understand the main functions and business characteristics of the department, and to decide whether to implement rapid integration or to give a certain time based on the actual situation in order to achieve the best integration effect.

Chapter 6 gives a relevant in-depth case analysis and the reasonable integration speed of each department in the manufacturing industry will be analysed in chapter 7.

# Question 3: What kind of synergies are likely to be expected in the long run? How powerful might these synergies be? What can Chinese management at the headquarters and the management at the subsidiary do to foster these synergies?

It is not too much to regard the realisation of synergy as the main driving force of CBMA because synergy involves a wide range of aspects. Since this dissertation focuses on the manufacturing industry, synergy used to be found in operational functions such as the R&D, procurement, marketing and branding, and manufacturing processes.

In the meantime, synergy from management integration should not be neglected. This is also relevant to the first research question that looks at cultural differences as a double-edged sword. Integrating the management team and improving cooperation by learning from each other is critical to ensure stable and effective development in the post-deal stage.

As chapter 7 states, synergy is part of the task strategy in the post-deal integration stage, since the integration strategy should be determined before the deal completion. Before integration starts, it is necessary to determine what synergy both companies could realise, what the cost to achieve these synergies is, and what is the steps to reach these synergies are.

It is necessary for Chinese management to judge the direction of achieving synergy as early as possible in order to determine the strategy and implementation steps, measure the relevant cost and benefit, and fully communicate with the target company. Based on a consistent understanding of the identification and realisation of synergies, the management of China and Germany will work together to achieve synergy in the postdeal stage. In this way, sufficient communication and thoughtful preparations become the guarantee of synergy, and the execution of the established strategy becomes necessary to foster synergy.

These three research questions will be discussed in the three dimensions of the integration strategy in chapter 7. Through the in-depth case analysis in chapter 6, much will be learned about integration from practice and the final answers will be summarised in chapter 8.

#### **Chapter 3 Literature Review**

#### 3.1 Overview

Before starting to write this dissertation, around 300 relevant academic papers, business articles, books, and news articles were reviewed. The main search tools included Google, Google Scholar, Baidu and Vienna University online library. In the first selection phase, the defined keywords for searching included 'cross-border mergers and acquisitions', 'China', 'Germany', 'post-deal', 'integration', 'culture', 'leadership', 'policy', and 'synergy'. By applying different combinations of these keywords, 188 articles were selected. In the second selection phase, I expanded the search scope by introducing more keywords, including 'policies', 'strategy', 'failure', 'politics', and 'statistics'. Through this expansion, I selected 53 additional articles. The rest of the articles were selected occasionally when writing a certain chapter that needed additional relevant theory to support it or when I needed more knowledge on a research method.

All the literature was written between 1986 and 2019. Besides the general research on CBMA, the primary focus of the literature was related to how the post-deal stage was explored in different research streams, covering topics such as industry, culture, finance, law, strategy, synergy, technology, HR, supply chain, and leadership.

This scholarship can be further categorized into ten different types of research, including bank research, books, company presentations, conference papers, consulting firm research, government announcements, journals, university publications, statistical data, and internet resources.

A comparative analysis of the different research streams indicated that the general research contained 103 articles which studied more than one aspect of CBMA. Most of this research dealt with how to integrate the acquired company. In other words, 'integration' was the most common focus of current scholars and practitioners. Another significant focus of the CBMA post-deal research was 'culture', and this topic comprised 16% of the total reviewed literature. Twelve articles focused on the next most common topic, 'synergy'.

This chapter will concentrate on these three key aspects. After going through and summarising what has been explored and presented, the general concept of CBMA in the post-deal integration strategy will be created in chapter 7.

#### 3.2 Theoretical Framework

#### **3.2.1** Definition and Reflection of Culture

One of the most famous Dutch academics, Geert Hofstede, conducted an extensive survey at IBM by applying his five dimensions of culture in the mid-1970s. His

definition and five dimensions of culture are broadly applied in culture study.

'Culture is the collective programming of the human mind that distinguishes the members of one human group from those of another. Culture in this sense is a system of collectively held values'. – Geert Hofstede

To make the above definition simpler, culture can be understood as a system to differentiate between in-group and out-group people. Culture has certain social attributes that can keep people together and that can differentiate people from each other as well. One could even say that culture is social glue.

#### 1. Different levels of culture

In the 42 reviewed articles about culture, national culture was addressed the most: 'We can conclude that the culture differences and changes can be attributed to national culture difference' (Ingela Jöns, Fabian J. Froese, Yong Suhk Pak, 2007). One Chinese scholar has introduced the different levels of culture in the research paper: 'According to Yifan and Feng (2011, p.66), cultural can be divided into several levels: nations, organizations, industries and so on.' The same paper defined corporate culture as 'the way you do things in your organization' (Kwan Chee Wei, Director Human Capital Group, Watson Wyatt Singapore, 2002).

Subdividing culture into different levels helps in the analysis of the impact of cultural differences on post-deal integration, and to clarify whether the cultural differences at each level are unique in their impact of CBMA post-deal integration processes.

Based on scholarship and practice, cultural impact can be observed on two levels: country culture and corporate culture. In response to cultural differences at different levels, different strategies to promote strength and avoid weaknesses in CBMA integration are needed.

#### 2. Communication

Some people define culture as communication or symbolic communication. Communication cannot be a complete definition of culture, but there is no doubt that communication is one of the most critical components of culture. Furthermore, communication is a way to express and exchange culture among different parties. This is especially obvious in the CBMA post-deal stage: 'It is a fact that cross-cultural management practices will benefit greatly from cross-cultural communication and cross-cultural training' (Keyong Dong, Ying Liu, 2010).

Spigarelli, Mucelli, and Alon write that 'Communications and interactions are often frustrating. In coordinating human resources, there is a lack of managerial skills from an international and "group" perspective. .... a timetable for implementing strategic and

operational goals is lacking. Decision-making power is highly concentrated, but the most serious problem is related to feedback: information is not shared and the information-flow process is unidirectional' (Francesca Spigarelli, Attilio Mucelli, Ilan Alon, 2013).

Based on the above, the ways that communication works in the CBMA post-deal stage can be summarized as follows:

- 1) Communication is a part of managerial skills;
- 2) communication is important in delivering strategy and operational goals;
- 3) transparent and effective communication is critical.

#### 3. Leadership and management style

When observing the second level of culture (corporate culture), the definition of corporate can be understood as the way things are done in an organization (Kwan Chee Wei, 2002). To some extent, the top leaders are the corporate culture makers not only because they are the creators of the corporate mission and vision, but also because their encouragement and discouragement of certain behaviours give a clear indication of what the corporate culture should be to the employees.

Obviously, Chinese and German management and leadership styles are very different. Even though China has reformed and opened up, and more Chinese professional managers have accepted and practiced the western management style, but the Chinese style of management is still ingrained in Chinese SOEs and POEs. In fact, in 1992, 'in 100 failed or troubled mergers, 85% of executives who were surveyed said the major problem was differences in management style and practices' (Kwan Chee Wei, 2002).

In the reviewed literature pool, there is no specific summary of the different leadership and management styles between the Chinese and the Germans, but some articles have mentioned that this difference is a major problem for successful integration in the postdeal stage. The different interests between SOEs and POEs regarding CBMA have been detected by some scholars. Chinese outbound investments are a manifestation of China's state-led economic system. Their motives may not always be guided purely by commercial objectives but are plausibly shaped by China's national interests. It bears noting that Chinese private companies are also intertwined with China's state-capitalist system through their dependence on a network of state-controlled financial vehicles (Björn Conrad and Genia Kostka, 2017).

The next section summarises relevant research regarding the differences between western and eastern management styles.

#### a) Different constraints and incentives

Western management focuses on individuality training to motivate people and meet the needs of individual employees. Incentives mainly focus on giving material satisfaction, encouraging innovation, and challenging acceptance. The management focuses on clear rewards and penalties, clear division of labour, and standardized work allocation.

In comparison, the Chinese management style seeks to cultivate and attach the spirit of the employee to collectivism and group cooperation. Incentives are based on the realisation of common goals, so as to obtain the embodiment of personal values and the satisfaction of various needs.

#### b) Different relationships in daily work and ways of making decisions

Cultural differences in leadership and management style have attracted the attention of some scholars. These scholars have pointed to leadership seeming to undergo a type of crisis due to the management's slow decision making and the centralization of decision-making powers. Downward communications are formal and unsatisfactory (Han Nguyen and Brian H. Kleiner, 2003).

The power distance between the manager and subordinates in Western enterprises is small. Equal discussion of different opinions is common in the daily operation, dependent on who knows the problem best and who has the most say. Managers do not just give orders to subordinates, but also listen to what they have to say. The hierarchy is not completely insignificant.

The Chinese style of management is quite different from the Western style. In the Chinese SOEs and POEs, the hierarchy is clear and significant. People respect titles and positions, managers are not good at authorizing subordinates, and there is a large power distance between the managers and subordinates. Usually, the top management will make a decision and give orders to the subordinates for execution. 'Doing accordingly' is strictly required. The greater the power, the more privileges are enjoyed, and the subordinates usually have a strong attachment to their superiors.

#### c) Different mind-sets in running the business

The acquired companies bear more suspicion towards Chinese SOEs than POEs because of the political aims the SOEs may have and their mind-sets in running the business.

The main bodies of enterprises engaging in M&A are Chinese SOEs, which monopolize certain industries. Because SOEs are considered far from being mature in terms of equity structure, management mode, and management concept, and compounded by their competitiveness fostered in the atmosphere of monopolization, risks are higher for them when it comes to CBMA (Yang Weizhi, 2011).

#### 3.2.2 The conceptualization of culture and culture distance

# 1. Impact of culture distance between Germany and China on post-deal management

There are many discussions in scholarship about the impact of culture difference on CBMA post-deal integration. Most of the arguments hold a negative view but some argued that it is possible to bring about a positive impact.

Before reviewing the different statements from the literature, Hofstede's (1997) fivedimensional measure of cultural values will be introduced. This is used to measure the culture difference among different societies broadly. The five dimensions of cultural values are as follows.

a) Power distance index (PDI): The index measures the degree of inequality that exists in a society.

b) Individualism/collectivism (IDV): The index measures the extent to which a society is individualistic. Individualism refers to a loosely knit social framework in a society in which people are supposed to take care of themselves and their immediate families only. The other end of the spectrum would be collectivism, which occurs when there is a tight social framework in which people distinguish between in-groups and out-groups; they expect their in-groups (relatives, clans, organizations) to look after them in exchange for absolute loyalty.

c) Masculinity/femininity (MAS): The index measures the extent to which the dominant values are assertiveness, money and things (achievement), and no care for others or for quality of life. The other end of the spectrum would be femininity (relationship).

d) Uncertainty avoidance (UAI): The index measures the extent to which a society feels threatened by uncertainty or ambiguous situations.

e) Long-term orientation (LTO): The index measures the degree to which a society does or does not value long-term commitments and respect for tradition. Long-term traditions and commitments hamper institutional change.

Dimensions	China	Germany
Power distance index (PDI)	80	35
Individualism/collectivism (IDV)	20	67
Masculinity/femininity (MAS)	66	66
Uncertainty avoidance (UAI)	40	65

#### Table 1 Hofstede country scores of China and Germany

Long-term orientation (LTO)	118	31
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Source: clearlycultural.com

Based on this table for the five Hofstede dimensions, the cultural difference between China and Germany can be interpreted.

a) Germany has a lower PDI than China, which means that it is an individualistic society that does not have a large gap between the wealthy and the poor. Germany emphasizes equality and individual ability more than China. Comparably, China is a collectivist society, with an emphasis on social classes, superiors, and subordinates. Such a society pays more attention to rights, prestige, and wealth.

b) Germany can be considered as individualistic with a relatively high IDV score (67). In contrast, China shows strong collectivism (20). In a collectivist society, the collective always takes precedence over the individual. The society encourages everyone to rely on each other and consider the interests of the collective first. In this case, responsibility (such as social responsibility or family responsibility) tends to be shared. If there is achievement, it is the result of joint efforts, not emphasizing the role of individuals. If there are any difficulties, society should share them. 'Maverick' is usually a derogatory term in a collectivist society.

c) China has the same MAS score (66) as Germany which is higher than the sample average (50). In terms of masculinity, these two cultures share the same value. In a masculine society, more attention is paid to male rights. Chinese people often say that 'outside the male, inside the female' defines the social roles of the different genders. In such a patriarchal society, men are usually more powerful than women and have more rights. In a patriarchal society, competition, rights, and material achievements are valued.

d) In Germany, there is a reasonable high UAI (65) compared to China (40), which shows that Germans are not keen on uncertainty, but plan everything carefully to avoid any uncertainty. In Germany, society relies on rules, laws, and regulations. Germany wants to keep its risks to a minimum and proceed with changes step by step (clearlycultural.com). Societies with lower UAI scores regard the existence of risk, instability, and diversity as inevitable, and are willing to face risks or accept challenges. But compared to all the observed countries, Germany is average in this respect.

e) LTO is the fifth dimension of the Hofstede scale and based on a Chinese value survey which was distributed across 23 countries. With an understanding of the influence of the teachings of Confucius on the East, China has the highest score (118) among all the observed countries. A long-term oriented society wants to determine what the facts are based on time and circumstances. This kind of society is better at improving the traditional to cater to the current situation, likes long-term investments, and has the patience to achieve results over a longer period of time. A society with a low LTO score

usually has a more standardized view of things. This kind of society follows traditions and its future planning is short-term, requiring fast results.

According to the comparison of the scores between China and Germany in the above Hofstede model, it can be concluded that there are obvious differences in the scores of four dimensions, which clearly reflects the cultural differences between the two countries. Most of the scholars that noted the negative impact of culture difference based their claims on quantitative and qualitative analysis. Some argued that the cultural match or mismatch between the parties shaped their ability to successfully integrate and share resources, which, in turn, affected their ability to realise synergies (David M Brock, 2005).

Some scholars came to negative conclusions regarding the positive effect of national culture distance on CBMA performance and noted the mediating effect of the national culture distance effect on the relationship between knowledge transfer and CBMA performance (Mohammad Faisal Ahammad, Shlomo Yedidia Tarba, Yipeng Liu, Keith W. Glaister, 2014).

It is good to see that others argue differently and even encourage practitioners to seek cultural synergy in the differences. Some scholars argued that culture should not simply be seen as an obstacle to doing business across countries. Culture can provide tangible benefits and can be used competitively (Anne-Marie Søderberg and Nigel Holden, 2002).

In addition to the above arguments for positive and negative cultural impact, some scholars believed national cultural distance showed no significant effect on knowledge transfer or CBMA success (Mohammad Faisal Ahammad, Shlomo Yedidia Tarba, Yipeng Liu and Keith W. Glaister, 2014).

The main goals of cultural integration involve alleviating the sharp contradictions caused by culture distance and making both parties recognize the differences in each other's culture and work to integrate the good parts of other party's culture into a more united corporate culture.

# 2. Well managed corporate culture and guided individual behaviour will support post-deal integration greatly

A corporation is made up of individuals, so guiding individuals in adopting the appropriate corporate culture is critical in post-deal integration. In most of the cases of Chinese CBMA in Germany, obtaining advanced technology is an important target for the acquirer. The advanced technology is not documentation-based but people-based, so research on individual behaviour and how it is informed by cultural influence makes great sense in order to better support successful post-deal integration.

Similar to what has been explored regarding the impact of country culture, scholars and practitioners expressed different opinions on the impact of corporate culture as well. Some of the findings indicated that organizational culture distance has a negative impact on CBMA performance (Mohammad Faisal Ahammad, Shlomo Yedidia Tarba, Yipeng Liu, Keith W. Glaister, 2014).

Some studies have found that cultural differences at the organizational level are positively associated with social conflict, but that national cultural differences can decrease social conflict. Furthermore, both organizational and national cultural differences are positively associated with knowledge transfer. This analysis shows the importance of disentangling the various effects that cultural differences have on international acquisitions. It also suggests that national cultural differences are less of a problem in international acquisitions than is usually assumed (Eero Vaara, Riikka Sarala, Günter K. Stahl\* and Ingmar Björkman, 2012).

# **3.2.3** Managing the cultural differences and achieving a positive result in CBMA integration

As mentioned before, culture is one of the top three topics in the CBMA discussion. After I went through the relevant articles, I found many different arguments and opinions, but, more practically, I found that pinpointing an effective way to perceive that the other culture is attractive and, therefore, worth adopting should be explored.

Chinese management communicates its main goals differently from German management. German subsidiaries are highly concerned about the transparency of top goals, but the Chinese are indirect in terms of communicating and solving problems. This difference was considered a cultural problem due to national culture incompatibility (Jing Liu, Xiaohuan Chen, 2015).

One very important finding was that the successful acquisitions were those where culture difference was considered a complementary resource instead of an obstacle. When German firms felt free, respected, and supported by their Chinese acquirers, they initiated the necessary change themselves (Jing Liu, Xiaohuan Chen, 2015).

It may be that many CBMA activities of Chinese enterprises in Germany seem too casual and random to the acquired German company, especially with no cultural integration strategy in place from the beginning. This lack of a strategy will make cultural integration lead and a successful result difficult (Yanan Yang, 2016). Vague statements like 'show respect', 'keep distance', or 'force them to change' are neither enough nor correct.

Some scholars detected positive experiences from cases of Chinese CBMA in Germany. They considered the large cultural distance between the two countries to be a complementary factor as the Chinese benefited from learning the German way of conducting business. Additionally, the German side also tended to learn from its Chinese acquirers, which stabilised the top management teams during this co-learning process (Jing Liu and Xiaohuan Chen, 2015).

#### 3.3 The conceptualization of integration

#### **3.3.1** The necessity of integration

Integration involves making changes in the functional activity arrangements, organizational structures and systems, and cultures of combining organizations to facilitate their consolidation into a functioning whole (Jing Liu, Xiaohuan Chen, 2015).

Empirical studies pointed out the positive relationship between integration and economic performance after deal completion by using a quantitative research method. These studies found that the higher the degree of integration of the acquired firm within the acquiring firm, the higher the economic performance after the acquisition (Harbir Singh and Maurizio Zollo, 1999).

The literature also pointed to some key steps for integration. Integration should be

1) driven by a crystal-clear vision of the new organization, including its intended mission (core purpose), strategy, and essential values;

2) owned and executed by and with key stakeholders;

3) fluidly coordinated and flexibly self-adjusting;

4) continually providing communication laterally, as well as vertically, across the system and in sync with the needs of ongoing day-to-day operations;

5) open, interactive, and responsive to feedback; and

6) cognizant of human needs for inclusion, order, self-control, and choice (Nils Bohlin, Eliot Daley and Sue Thomson, 2000).

Additionally, a number of fields should be considered in the integration including finance, information technology, supply chain/procurement, marketing and sales, internal audit/risk, and compliance functions (Protiviti Risk and Management Consulting, 2016).

Regarding the levels of integration, Shrivastava (1986) mentioned that post-acquisition integration can be executed on three different levels, depending on the acquisition circumstances. The first level is procedural (legal and accounting integration), the second level is physical (the integration of production lines and technology), and the third level is management- and socio-cultural integration (changes in the organisational structure, the development of the organisational culture, and the selection of the management) (Sladjana Savovic, 2012).

In recent years, with the gradually increasing activity of CBMA, more and more people are paying attention to the effects of post-deal integration. As mentioned above, there

are many related fields of research, such as the importance of integration, which fields need to be integrated, and how to integrate. It is clear that post-deal integration is necessary for CBMA.

#### 3.3.2 The approaches of integration in CBMA

Some scholars defined the integration approach by two dimensions: speed and scope. Kavanagh and Ashkanasay (2006) have incorporated both speed and scope into their classification of integration approaches. They distinguished among three main integration approaches based on the means by which the target company was acquired: immediate, incremental, and indifferent (Fabian Jintae Froese, Yong Suhk Pak, Li Choy Chong, 2008).

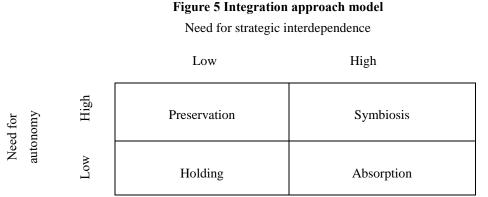
A commonly used model for acquisition integration approaches reveals four types of integration approaches:

1. Preservation: acquirers keep the acquired firms intact, high autonomy is granted, and resources are provided if needed.

2. Symbiosis: acquirers must simultaneously ensure boundary preservation and boundary permeability. Target firms enjoy a certain degree of autonomy. Integration is a gradual process.

3. Absorption: acquirers dissolve the boundary between the two firms, assimilate the acquired firms into their own operations, totally consolidate the operation of the two firms, and apply a high-level integration and low level of autonomy for the target firms. The integration speed is high.

4. Holding: acquirers have no intention to integrate and value creation is achieved through financial transfer, application of general management skills, or risk-sharing (Jing Liu, Xiaohuan Chen, 2015).



Source: Haspeslagh and Jemison 1992 p.148 (Jing Liu, Xiaohuan Chen, 2015)

The relationship between integration and corporate strategy was detected when focusing on the preservation or absorption approach. The preservation approach had a positive effect on performance for multinational firms (Sue Claire Berning, 2015).

#### 3.3.3 The determinants of integration depth and speed in the post-deal stage

Chapter 6 will show that integration certainly took place after CBMA in the three case studies. Further research on what factors impact the depth and speed of integration would help to find regular patterns that lead to a successful CBMA post-deal integration.

Savovic (2012) has addressed the topic of 'the success factors of the post-acquisition integration of companies' and summarized the success factors as an integration strategy, the composition of the integration team, communications, the speed of the integration process, and the uniformity of measurements (Sladjana Savovic, 2012). Integration speed was particularly emphasized as a success factor of the post-acquisition integration of companies (Sladjana Savovic, 2012).

Homburg and Bucerius (2006) argued that internal relatedness (management style, strategic orientation, performance) and external relatedness (target market and market position) jointly affect the relationship between post-acquisition performance and integration speed. High speed could lead to better performance when higher internal relatedness comes with lower external relatedness. However, integration speed has a weak influence on post-acquisition performance when internal and external relatedness are both high or both low. High-speed integration is especially beneficial when it comes to reducing customer uncertainty after acquisition. Slow integration can leave a time period for mutual learning and trust-building between the acquired and acquiring firms (Homburg and Bucerius, 2006). However, for high-tech firms, the first and primary motivation for acquisitions is to obtain new technologies in order to combine them with their own business and create innovations. Hence, in this case, slow integration speed could be risky for the acquirers (Lin, 2012) (Jing Liu, Xiaohuan Chen, 2015).

The depth and speed of integration are discussed in some academic papers, especially in terms of the relationship between the speed of integration and the types of enterprises, which lays a foundation for not generalizing the speed of integration. However, this scholarship had no in-depth discussion of the different integration speeds that each department of an enterprise should adopt.

#### 3.4 The conceptualization of synergy

#### 3.4.1 The concept of synergy

Achieving synergy is one of the important targets for the acquirer when making the decision of CBMA. KPMG showed that there are multiple reasons why companies merge or seek to acquire other companies. Most of these reasons relate to growth, synergy, diversification, horizontal and vertical integration, defensive measures, and pressure to do a deal (KPMG, 2011).

The easiest way to describe synergy is that it occurs when the profitability of the

combined entity is more than the profit that would have been generated by the two firms independently (David M. Brock, 2005). There are three kinds of synergy. Financial synergies include reduced overhead costs as well as tax benefits (Mirvis & Marks, 1992). Production synergies can be achieved through economies of scale, increased purchasing power, and the elimination of inefficient product lines or their transfer to more efficient factories (Kitching, 1967). Technological synergies are realised by transferring technology products or technical processes, or combining sales forces and/or distribution channels for the sale of complementary product lines (Kitching, 1967; Salter & Weinhold, 1979; David M. Brock, 2005).

A more straightforward statement on the relationship between synergy and CBMA motivation is that motivation can be described as practical, psychological, or opportunist. The objective of all related M&A is to achieve synergy, or what is commonly referred to as the 2+2=5 effect (Susan Cartwright, 2015).

More specific aspects of synergy, such as cultural synergy, have been proposed to help build corporate culture and transfer management between cultures (Chen, Ying-Chang, Wang, Wen Cheng, Chu, Ying Chien, 2011).

With the increase of CBMA, the Chinese acquirers have realised that synergy creation is a long-term target which cannot be expected in the short run. The length of this period of synergy creation varies by acquisition. This long process of synergy creation could be, on average, five to ten years. There is no manual for the M&A process, only a general approach, and each M&A process is customized. It was also found that the predeal phase cannot truly be separated from the post-deal phase. The M&A process includes three different important parts: the strategic intent phase, the due diligence phase, and, finally, the integration phase. To achieve successful integration, it is important to set up a special management group which will focus on the creation and realisation of synergies and to focus on motivating and assisting managers through offering new and exciting challenges (Matilda Andersson-Thunberg, Tobias Fjellman, Jonatan Partin, 2008).

#### 3.4.2 The possibility of creating synergy and how to create it

Since creating synergy is an important target for at least for the acquirer in CBMA, theoretically, each CBMA case should have the possibility to create synergy with the precondition that the CBMA decision is made correctly.

In a case study of the Geely-Volvo acquisition, it was stated that whether the expected synergies were reached or not could be a measurement of a CBMA success. Synergy realisation was further defined as the realisation of expected financial synergy, management synergy and consistency, and its own development strategy. Only if all of these things are realised does the M&A make sense (Zhilin Gao, 2015).

Roland Berger (2014) revealed that synergy could be created in the process of integration and each synergy requires a different level of integration. Market synergies often require that the two organizations decide how to split different markets between themselves. Cost synergies tend to require a merger of at least parts of the two organizations or a clear definition of continuous interaction. Both market and cost synergy represent a deeper level of integration than sales synergy (Roland Berger, 2014). Besides integration, resource sharing was also mentioned in realising synergy. Some argued that resource sharing can lower costs if it improves the efficiency of either firm, but sharing also has its pitfalls. For example, costs may rise due to greater coordination requirements or the need to compromise an activity's design to make sharing possible (Brock, David M, 2005).

Talent synergy was addressed when discussing human resources integration in CBMA. This is a key factor in achieving the synergy effects of the CBMA (Haiyan Yan and Hua Jiang, 2005). Because most of the M&A triggered by the advanced technology the target company hold, keeping the technical and management talents after M&A matters a lot to the success of the deal.

Even further, a case study of the TCL-Videocon acquisition revealed three ways of synergy realisation including 1) cost saving from consolidating and restructuring purchasing, production marketing, administration, and logistical activities; 2) revenue increases by reducing competition in the existing market, entering a new market, and cross-selling; and 3) transfer and creation of know-how (Zhongjin Wu, Yukun Zhu, 2010).

Min Hang (2002) has summarized some critical points related to creating synergy after CBMA: 1) Good strategy integration is a vital precondition for pursuing M&A synergy realisation; 2) Well-integrated organisation has a substantial influence on the final synergy realisation of the M&A; 3) Integration of assets is crucially decisive to the M&A synergy realisation; 4) Successful business operation integration provides a reliable guarantee to the M&A synergy realisation; and 5) Human resources integration is paramount to ensuring M&A synergy realisation (Min Hang, 2002).

As mentioned above, there is much research on synergy in the existing literature. This is helpful for further research on where to achieve synergy, what synergy can be achieved, and how to achieve it. In chapter 7, the realisation of synergy for each department will be analysed.

#### 3.5 The key factors for creating a successful CBMA post-deal integration

More than 50% of Chinese CBMA in Germany have failed, mostly due to the mismanaging of the post-deal integration. A survey of the scholarship reveals a number of key factors behind successful CBMA integration.

For example, consulting company Roland Berger lists six key success factors:

1. Fine-tune globalization strategies to the new business environment;

2. Define ambitious but achievable PMI targets;

3. Create an internationally capable organization using:

a) People, especially leaders, who are capable of working internationally and

b) A governance model that can steer overseas business operations and performance as intended;

4. Chose the level of integration;

5. Manage the foreign psychological side of the M&A. The Chinese acquirers took the following actions:

a) Installed a central coordinator who planned all communication activities;

b) Actively engaged with the media to inject a positive tone in reports;

c) Hired the retired CEO of the acquisition target, benefiting from his reputation;

d) Messaged, called, or visited customers in the first days of the acquisition, leaving no room for attacks from competitors;

e) Created visible congruence between its messages (e.g., long-term commitment to the European plant) and the execution of its promises (e.g., investment in new plant equipment);

6. Apply systematic PMI organization and processes (Roland Berger, 2014).

Sladjana Savovic has summarised the opinions of historical scholars regarding the success of CBMA as follows (Sladjana Savovic, 2012):

a) According to Shrivastava (1986), post-acquisition integration can be executed on three different levels, depending on the acquisition circumstances. The first level is procedural (legal and accounting integration), the second level is physical (the integration of production lines and technology), and the third level is management- and socio-cultural integration (changes in the organizational structure, the development of the organizational culture, and the selection of the management).

b) De Noble et al. (1988, 51-59) listed the following factors: having a clear and precise vision prior to the end of an acquisition, forming a cross-fertilized management team, having a continued focus on employees, managing cultural differences, maintaining the interconnectedness of the strategy, and understanding the structure and the speed of implementation.

c) The study 'Making Acquisitions Work: Capturing Value A' er the Deal' (Harbison et al. 1999) facilitated the development of a value framework, composed of three elements: vision, architecture, and leadership, which are of essential importance for the success of post-acquisition integration.

d) The study 'Merger Integration: Delivering on the Promise' (Adolph et al, 2001), gave four key principles necessary for the success of post-acquisition integration: the

communication of a vision for value creation, the seizure the defining moments to make explicit choices and trade-offs (defining the character and speed of an integration process), the simultaneous execution against competing critical imperatives, and the employment of a rigorous integration planning process.

e) The report 'A' er the Merger: Seven Rules for Successful Post-Merger Integration' stressed several important factors in the post-acquisition phase, including the early placement of integration managers, clearly defined roles, and fast and efficient communications with employees in order for them to be properly oriented towards achieving corporate goals (Habeck et al, 2000).

f) Epstein (2004) emphasized five success drivers of post-acquisition integration: a coherent integration strategy, a serious integration team, good communication, the speed of integration, and aligned measures

KPMG mentioned that one of the most important aspects of managing successful postmerger integration is proactively addressing the risks associated with the people and the organization. Most of these risks can be grouped into six broad categories: people cost risk, structure risk, talent risk, culture risk, regulatory risk, and engagement risk. Each risk category may have multiple dimensions (KPMG, 2011).

### 3.6 Limitations of previous research

CBMA have been widely addressed by scholars and professional consultants over the past few decades. As Chinese CBMA cases increased, post-deal integration has attracted the attention of more practitioners and observers. The existing literature on CBMA post-deal integration focuses on various functions such as culture, finance, HR, and leadership. Fragmentary research coupled with limited consideration of cases Chinese CBMA in Germany has inevitably resulted in several limitations.

1. There is a lack of comprehensive and systematic corporate functional analysis on single cases of post-deal integration for Chinese CBMA in Germany.

2. There is a lack of observation of the possible synergy from an operational perspective.

3. Chinese SOEs and POEs have very different corporate culture levels which need to be further discussed separately.

4. As theories serve as the basis for practice, a guide for the overall post-deal integration process is needed to provide recommendations for practitioners.

There is a pressing need to create a comprehensive and integrative guide for post-deal integration for Chinese CBMA in Germany to fill in the theory gap and provide practical recommendations for entrepreneurs.

### Chapter 4 Institutional environment for CBMA in China

During the high-speed economic development stage, the laws, regulations, and administrative system promulgated by the Chinese government are important environmental factors for the emergence of CBMA. As the main force of China's economy, Chinese SOEs went abroad as pioneers to carry out CBMA. As a supplement to the SOEs, Chinese POEs, in accordance with their own development needs, adapted to the changes of domestic and foreign economic cycles and also began to look for suitable foreign targets, further increasing Chinese CBMA.

In addition to discussing the political environment and various laws and regulations issued by the Chinese government, this chapter will elaborate on the internal and external factors that promote the CBMA of Chinese enterprises. Further analysis of the experience and lessons learned from nearly 40 years of CBMA as the main force behind Chinese enterprises is presented at the end of this chapter.

The history of China and Germany's inward FDI and outward FDI shows that the different stages of China's social development coincide with its changes in inward and outward FDI, and with the evolution of inward and outward FDI in Germany. This explains why German enterprises have become one of China's favourite targets for CBMA.

# 4.1 Historical review of Germany and China's inward and outward FDI

# 4.1.1 An overview of Germany's inward and outward FDI after World War II

The history of German FDI after WWII can be tracked starting in 1952 and this history can be divided into three stages (Jincheng Lin, 1986).

# 1. The early 50s to late 70s: Gradual recovery and growth

The rapid economic growth in this period created a strong demand for capital which limited the growth and scale of overseas investment. It was not until around the late 60s that the Federal Republic of Germany started to encourage overseas investment. Since then, the scale of private foreign direct investment has expanded significantly.

The following table summarises the inward and outward FDI of Germany in the 1970s and the following figure tracks the trends.

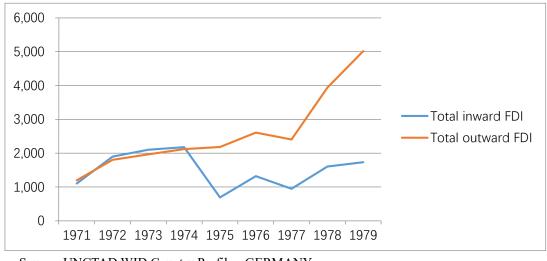
	-						Unit: milli	on USD				
Inward investment						Outward investment						
Year	Equity	Reinvested earnings	Intra-company loans Tota		Equity	Reinvested earnings	Intra-company loans	Total				
1971	495	211	397	1,103	629	252	319	1,200				
1972	1,364	423	110	1,897	1,083	292	429	1,804				
1973	1,821	413	(132)	2,102	1,311	320	333	1,964				
1974	1,959	156	62	2,177	1,345	449	328	2,122				
1975	899	(163)	(45)	691	1,260	450	471	2,181				
1976	1,055	12	254	1,321	1,526	516	567	2,609				
1977	633	(241)	558	950	1,841	2	564	2,407				
1978	1,064	302	237	1,603	2,884	701	354	3,939				
1979	529	1,009	194	1,732	3,760	586	670	5,016				

Table 2: FDI flows by Type of investment, 1971–1979

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Source: UNCTAD WID Country Profile: GERMANY

#### Figure 6 German FDI trends, 1971–1979



Source: UNCTAD WID Country Profile - GERMANY

Germany's total outward FDI increased over the nine years and this increase served as the basis for the next 10 years of fast growth. Compared to the outward FDI, the inward FDI is far behind.

#### 2. The early 80s to late 80s: Rapid growth

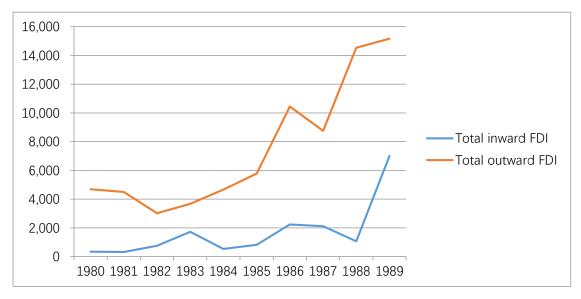
Table 3 German FDI flows by type of investment, 1980–1989

Unit:	million	USD
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		Inward	investment	Outward investment				
Year	Equity	Reinvested earnings	Intra-company loans	Total	Equity	Reinvested earnings	Intra-company loans	Total
1980	510	(608)	440	342	3,595	310	785	4,690
1981	936	(1,339)	723	320	4,055	(530)	976	4,501
1982	1,017	(483)	226	760	2,514	(645)	1,152	3,021
1983	835	242	647	1,724	2,825	198	647	3,670
1984	725	(152)	(43)	530	2,969	1,079	618	4,666
1985	464	179	179	822	2,769	1,566	1,450	5,785
1986	544	677	1,020	2,241	7,628	1,464	1,354	10,446
1987	31	1,798	289	2,118	6,145	715	1,898	8,758
1988	(1,563)	105	2,522	1,064	9,593	3,488	1,452	14,533
1989	2,879	1,776	2,358	7,013	11,290	2,576	1,312	15,178

Source: UNCTAD WID Country Profile: GERMANY





Source: UNCTAD WID Country Profile: GERMANY

The uptrends of inward and outward FDI are shown in the figure above. The gap between inward FDI and outward FDI indicates Germany was a net exporter of investment during that period. In 1989, Germany has over \$8 billion in investment surplus, exceeding the US and ranking third after Japan and the UK.

#### 3. The early 90s to early 00s: Wave growth

Table 4 German FDI flows by type of investment, 1990–2003

Unit: million USD

		Inward	investment	Outward investment				
Year	Equity	Reinvested earnings	Intra-company loans	Total	Equity	Reinvested earnings	Intra-company loans	Total
1990	3,198	(953)	759	3,004	19,555	3,389	1,539	24,483
1991	545	2,151	2,051	4,747	18,807	2,893	1,280	22,980
1992	409	(4,759)	2,234	(2,116)	16,891	31	1,810	18,732
1993	3,622	(3,359)	138	401	13,907	973	2,264	17,144
1994	4,218	(820)	3,892	7,290	15,134	1,682	2,123	18,939
1995	8,727	(2,457)	5,716	11,986	32,230	2,158	4,711	39,099
1996	3,225	(4,531)	7,735	6,429	24,193	6,086	20,472	50,751
1997	5,701	(462)	7,556	12,795	25,535	3,579	13,611	42,725
1998	6,505	(569)	17,700	23,636	61,047	5,746	23,136	89,929
1999	24,959	(5,758)	36,426	55,627	89,404	4,694	15,525	109,623
2000	121,284	(5,391)	94,193	210,086	62,246	(1,542)	(960)	59,744
2001	26,835	(18,370)	12,369	20,834	66,558	(16,017)	(14,039)	36,502
2002	26,629	(12,276)	21,195	35,548	43,577	(15,311)	(18,977)	9,289
2003	31,521	(6,198)	(14,056)	11,267	25,226	(1,560)	(22,143)	1,523

Source: UNCTAD WID Country Profile: GERMANY

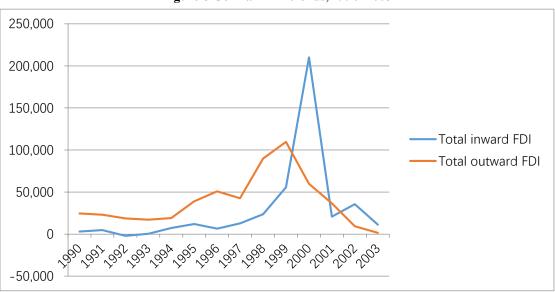


Figure 8 German FDI trends, 1990–2003

Source: UNCTAD WID Country Profile: GERMANY

After the reunification of East and West Germany in 1990, the outward FDI turned down, due to needing to support the construction of East Germany. Along with the increase of investment in East Germany and the consistency of the tax burden between East and West, the outward FDI began to rise again a few years after reunification. In the same observation period, the inward FDI reached its peak in 2000 and fell immediately after that.

# 4.1.2 An overview of China's inward and outward FDI and economic development

The history of China's FDI began in the middle of the 80s, a couple of years after the country reformed and opened. As shown in table 5 and figure 9 both the inward FDI and the outward FDI trended upwards. To support economic development and national construction, the Chinese government introduced and implemented many preferential policies after opening the door to the world. Attracted by the huge market and low labour cost in China, more and more developed countries came into China to invest, mostly through greenfield investment. Before 2007, China's inward FDI was predominant compared with its outward FDI. I will focus on tracking the stages of China's outward FDI since the middle of the 80s in the following analysis.

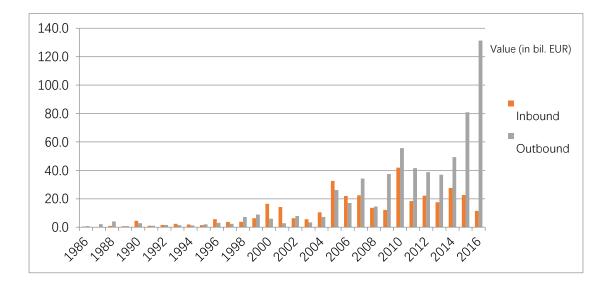


Figure 9 Chinese (including HK) M&A, inbound and outbound, 1986–2016

 Table 5 Chinese (including HK) M&A, inbound and outbound, 1986–2016

												Uni	t: Billi	on EU	J <b>R</b>	
Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Inbound	0.5	0.1	0.9	0.7	4.5	1.0	1.6	2.4	2.0	1.5	5.7	3.7	3.9	6.4	16.5	14.3
Outbound	0.8	2.2	4.1	0.9	2.9	1.0	1.6	1.5	1.3	2.1	3.0	2.4	7.2	8.9	6	2.8
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Inbound	6.3	5.7	10.5	32.5	22	22.4	13.7	12.2	41.9	18.4	22.2	17.6	27.7	22.6	11.6	
Outbound	7.9	3.4	7.2	26.2	17	34.2	14.6	37.4	55.7	41.6	38.7	36.9	49.4	80.9	131.3	

Source: IMAA Institute

Some Chinese scholars have divided the history of Chinese CBMA into different stages.

This paper will also use these four stages.

# 1. Initial stage, 1984–1991

In the early 80s, some large Chinese enterprises began to explore multinational operations through overseas M&A. At the beginning of 1984, the Bank of China Group and the China Resources Group jointly acquired the Hong Kong Kangli Investment Co., Ltd., which marked China's first overseas M&A. One year later, the Shougang Group acquired 70% of the Masta Engineering Design Co., Ltd. for \$34 billion.

In the initial stage, most of the Chinese enterprises seeking overseas M&A were largescale enterprise groups. These groups were the strongest and most profitable economic entities.

# 2. Development and exploration stage, 1992–2007

After 2012, China began to accelerate its pace of overseas M&A. The China Offshore Oil Co., Ltd., TCL Group, Qingdao Haier Co., Ltd., and China Chemical Corporation successfully acquired a number of targets in Europe and America. Some notable characteristics of Chinese CBMA during this period can be summarized as follows.

i) China's SOEs, especially the central controlled enterprises, became the main force of CBMA. This involved companies such as Petro China and CNOOC.

- ii) The targets mostly fell in the regions of Asia-Pacific, Europe, and America.
- iii) The acquirers mostly mainly concentrated on secondary industries.

iv) The number of overseas M&A in the manufacturing industry accounted for about half of the total transactions.

- v) The overseas M&A were mainly in horizontal businesses.
- vi) The proportion of overseas M&A in foreign direct investment increased.
- vii) The scale of transactions increased.

At this stage, Chinese enterprises actively explored the overseas markets and constantly accumulated experience from CBMA and international operations.

# 3. Bottom hunting stage, 2008–2012

After the global financial crisis happened in 2008, developed countries faced the dilemma of market downturn and demand decrease. Some enterprises that held intangible resources such as brand and technology were in low ebb, and the market price of the stock had fallen sharply along with the market value of the enterprises. This economic downturn provided unprecedented opportunities for Chinese enterprises to go abroad for CBMA. Some Chinese enterprises seized the favourable opportunity to acquire overseas companies at cheap prices and started down the international development path.

In this stage, China's macro policy changed from 'steady' to 'positive'. By 2010, the fiscal investment promised to be about RMB 4 trillion in order to boost domestic demand to make up for the shortage of foreign demand and prevent an economic downturn. At the same time, the monetary policy changed from 'moderately tight' to 'moderately loose'. A series of macro policies intended to stimulate consumption and investment also supported Chinese CBMA.

After the financial crisis, Chinese enterprises showed a strong industry preference in mining and energy for CBMA and started to make large-scale investments in these industries. In 2011 and 2012, the number of Chinese CBMA reached its peak. At the same time, the global CBMA transactions showed a downward trend.

Taking 2012 as an example, China's CBMA involved 18 first-class industries. In terms of industry distribution, energy and mining rank the highest with 41 transactions, as shown in the following figure:

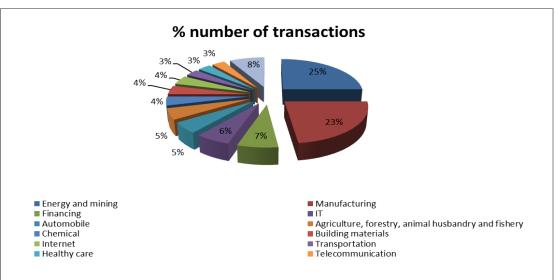


Figure 10 CBMA industry distribution of Chinese enterprises in 2012

Source: China Venture, 2013

### 4. Continued active stage, 2013 to present

Since 2013, Chinese enterprises have actively participated in CBMA. Outward FDI showed a steady growth trend over the years, and Chinese CBMA focused more and more on developed countries such as Britain, Germany, and the United States. From the perspective of the acquisition scale of M&A, the proportion of acquisition in developed economies such as Europe and the United States also increased. In terms of industry focus, Chinese enterprises are very active in the fields of medical treatment, high-end manufacturing, internet, and finance, showing a strong interest in the creative assets (e.g., patents and technology) in developed countries. Many Chinese OEM enterprises

also pursued overseas M&A to develop a high-end global value chain. Private-owned enterprises such as the Wanxiang Group and Haier Group also became a new force in overseas M&A, performing exceptionally well on the market.

### 4.1.3 The trend of Chinese CBMA in the German high-tech sector

Germany is a leading real economy and the German manufacturing industry occupies a pivotal position in the world. The rise of its national economy after two world wars was a result of its focus on being a five-pillar economy, centred around the automobile and auto parts industry, electrical and electronic industry, machinery and equipment manufacturing industry, chemical industry, and renewable energy industry.

China is still in the process of realising a modern industrial revolution. The German way of industrialization serves as a good reference for China. Germany's profound manufacturing foundation could provide Chinese investors of different sizes with a wide range of potential acquisition targets. Germany's five main industries are also very attractive to Chinese acquirers.

The ongoing German Industry 4.0 and Made in China 2025 brought the two countries into a new era of cooperation. On October 10, 2014, Mr. Keqiang Li, China's prime minister, signed the 'Outline of Action for China and German Cooperation' with Mrs. Angela Dorothea Merkel, the chancellor of Germany. The first article of the action outline clearly points out that the digitalization of industrial production is of great significance to the future economic development between China and Germany.

In 2012, the Chinese Ministry of Industry and Information Technology began to prepare its own manufacturing development plan for the next ten years. Made in China 2025 details the plans for the transformation and upgrade of domestic industries. This manufacturing development plan drew inspiration from the German Industry 4.0 to draw a clear road map for China's development in a modern industrial era.

Inspired by a series of 'going abroad' policies from the Chinese government, Chinese enterprises began paying more and more attention to the global market and gradually became aware that the advanced management experience, technology, and international market of developed economies was critical for reaching economic stability. These key capabilities are difficult to achieve by means other than acquisition.

Learning from Germany through cross-border acquisition has prevailed since 2010. China became the world's largest automobile and construction machinery market in 2009, after Chinese enterprises had enough confidence to expand in a larger market ten years after joining the WTO. At the same time, the German local enterprises became more open to Chinese acquirers after the 2008/2009 financial crisis. 'In the post-financial crisis period from 2010 to 2011, due to changes in supply-demand relationships, Chinese enterprises completed more than 20 acquisitions in Germany, six

of which were deal sizes of more than 100 million euros. This trend continued over the next few years. By the end of 2015, Chinese investors will have invested in nearly 150 M&A projects in Germany in the past six years, 19 of which were deal sizes of more than 100 million euros and the other 11 projects, although the deal sizes were less than 100 million euros, involved German target companies with more than 1,000 employees worldwide' (Xinhua.net, 2017).

The figure below shows this trend. Especially in 2015 and 2016, compared with outbound deals to Germany, the number of inbound deals from Germany was not significant.

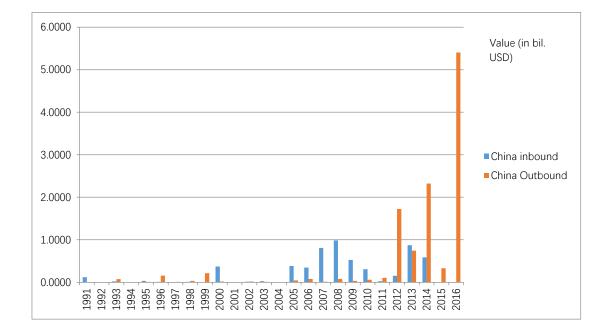


Figure 11 China's (including HK) inbound and outbound M&A with Germany, 1991–2016

Table 6 China's (including HK) inbound and outbound M&A with Germany, 1991–2016

	Unit: Billion USD												
Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Inbound	0.1173	0	0.0206	0	0.0321	0.0094	0.0003	0.0094	0	0.3715	0	0.0135	0.0257
Outbound	0	0	0.076	0	0.009	0.158	0.009	0.034	0.214	0.016	0	0.018	0.012
Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Inbound	0.0073	0.3811	0.3442	0.8065	0.9853	0.5273	0.3083	0.0247	0.153	0.873	0.5865	0	0.0002
Outbound	0	0.043	0.076	0.014	0.078	0.031	0.059	0.102	1.723	0.744	2.322	0.329	5.4

Source: IMAA Institute

It is worth mentioning that today, the European governments are even more concerned about China's acquisitions since Chinese investors often buy well-known companies which hold valuable intangible assets. Europe feels that China will threaten Europe's position as a high-value economy.

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On January 28, 2018, Matthias Machnig, German state secretary of federal ministry of economy, told the Welt am Sonntag that Germany hopes to apply legal measures to strengthen the inspection of Chinese companies' acquisitions in Germany and other European countries in order to better protect technology. 'It's important that the EU has stricter laws this year to resist mergers and acquisitions, technology or technology outflows', he said in an interview.

In mainland China, more and more voices of doubt and criticism are warning that Chinese companies have paid significantly higher prices by buying German companies, that the Chinese acquirers ignored the risks of M&A, or even that the Chinese acquirers overestimated the expansibility of German technology in the Chinese market. At present, China's capital market can still bear such prices, because the P/E ratio of Chinese companies is usually two to three times that of Western companies. But it is foreseeable that the valuation level will be gradually adjusted and normalized.

# 4.2 The political and regulatory environment for Chinese CBMA

# 4.2.1 The political environment

The political environment refers to the external political situation, national policies, and changes in corporate marketing activities. The political situation of stability and unity is not only conducive to economic development and increased incomes, but it also affects people's psychological conditions, resulting in changes in market demand. The policies and the government stipulate the development direction and the speed of the national economy is directly related to the improvement of certain social-economic activities. The analysis of China's CBMA development history shall be put into the context of the political environment which includes the national macro strategy, the derivative policies, and the external political relationships with key country partners.

# 1. 'Going out' strategy

In 2016, the "13th Five-Year Plan" reaffirmed the importance of the 'going global' strategy and emphasized the strategic approach of combining 'going global' and 'bringing in' (Xinhua News Agency, 2016).

In an open speech in New York in 2016, China's Premier, Keqiang Li, stated that 'In the early days of China's opening-up, we put most of the emphasis on "bringing in" foreign investment. But today, in this age of globalization, China needs to work with multinationals, and Chinese companies are making investments overseas. So now, we are paying equal attention to "bringing in" and "going global". For a developing country like China, it is still important to attract massive foreign investment, which helps boost the Chinese economy.'

# 2. 'Belt and Road' initiative

On September 7, 2013, China's President, Jinping Xi, delivered a speech at the Nazarbayev University in Kazakhstan, proposing the idea of jointly building the Silk Road Economic Belt. On October 3 of the same year, President Xi delivered a speech at the Indonesian National Assembly, proposing to jointly build the 21st-Century Maritime Silk Road. Together, these two proposals constituted a major part of the 'Belt and Road' initiative (people.cn, 2017).

On April 29, 2016, the Political Bureau of the Central Committee of the Communist Party of China proposed in its 30th collective study that, under the current conditions, China should put forward the 'Belt and Road' initiative, which was intended to inherit and carry forward the spirit of the Silk Road, combining China's development with the development of the countries along its border, and combining the Chinese dream with the dreams of the people of various countries along the route, giving the ancient Silk Road a new era (people.cn, 2017).

The 65 countries along the 'Belt and Road' include 10 ASEAN countries, 18 countries in West Asia, 8 countries in South Asia, 5 countries in Middle Asia, 7 CIS countries, and 16 countries in Central and Eastern countries.

Under the government's 'Belt and Road' initiative, the number of transactions by Chinese companies in overseas M&A has increased significantly, especially in the countries or regions along the 'Belt and Road'.

### 3. Supply-side reform

In 2015, at the 11<sup>th</sup> meeting of the Central Economic Leadership Group, the supply-side reform was proposed for the first time, which focused on adjustments in supply, such as actively resolving overcapacity in many industries, developing strategic emerging industries, helping companies reduce costs by introducing new policies to promote the enterprises' transportation, and upgrading and expanding effective supply to stimulate economic growth. This provides policy support for Chinese companies to ease domestic overcapacity through overseas investment and CBMA.

### 4. Made in China 2025

This is a strategic plan issued by Chinese Premier Keqiang Li and his cabinet, and it is also the first ten-year program of the Chinese government intended to implement the strategy of 'making a strong country'. The plan was announced by the State Council of China on May 8, 2015, and officially issued on May 19. It seeks to achieve the strategic goal of being a powerful manufacturing country through three steps (Ministry of Industry and Information Technology of the People's Republic of China, 2015).

First, becoming a powerful manufacturing country by 2025 means that China's comprehensive development index will be close to the level of powerful manufacturing countries such as Germany and Japan when they became industrialized.

Second, China's industrialization level will reach the middle level of the world's most powerful manufacturing countries by 2035.

Third, 100 years after the new China was founded on October 1, 1949, its comprehensive strength will be at the forefront of the world's powerful manufacturing countries.

Several characteristics of powerful manufacturing countries include having a strong industrial scale, an optimized industrial structure, good quality and efficiency, and sustainable development capability (Ministry of Industry and Information Technology of the People's Republic of China, 2015).

# 5. The complicated international political environment

China-US relations are the most important and complicated bilateral relationship in the world today. By reviewing the history of the development of China-US relations, it can be seen that the relationship between the two countries has experienced ups and downs.

China-US trade relations have developed in friction since their establishment. Despite the huge US market and the rapidly rising Chinese market, as well as the increasingly close economic and trade exchanges, these two countries have huge economic interests with each other. However, fierce trade frictions do not help the prospects of China-US economic and trade relations. A trade relationship with the US is not a simple economic decision, but a balance between economic interests and political reality. Because of this, China needs to turn its eyes to Europe. As the engine of European manufacturing, Germany is a very important business partner for China.

# 4.2.2 The drivers for increasing CBMA

On November 10, 2001, China's accession to the WTO was reviewed and approved at the Fourth Ministerial Conference of the WTO in Doha. Since China's formal accession to the WTO on December 11, 2001, CBMA in China's manufacturing industry have greatly improved in both the number of transactions and the transaction volume. CBMA have followed the 'going out' strategic policy and have become an important means of China's FDI. With the Made in China 2025 plan and the adjustment of global value chains, China's manufacturing industry will usher in a new phase of CBMA. Private enterprises play an important role in overseas M&A. The main participants in overseas M&A show that SOEs and POE go hand-in-hand.

Combining the promotion of China's One Belt One Road project, the implementation of the Made in China 2025 plan, the restructuring of the global industrial chain, and the upgrading of the global innovation chain, it is possible to understand the trends and motivations of China's manufacturing overseas M&A.

The reasons for the large-scale growth of manufacturing CBMA can be divided into external and internal aspects (Yi Shi and Peng Xue, 2018).

### 1. External reasons

# a) The economic growth in Europe and the United States is weak, and the advantages of foreign manufacturing companies are shrinking.

With its rapid economic growth, China's manufacturing industry has shown a booming trend. In recent years, the economic growth of Europe and the United States has been weak and some manufacturing enterprises have narrowed their advantages and asset prices have been underestimated. At this time, CBMA became a platform for the US and Europe to leverage China's emerging enterprises and change their development model.

### b) Foreign companies hope to enter the Chinese market through M&A.

Rapid entry into the market through overseas M&A is also an important reason for foreign manufacturers agreeing to be acquired by Chinese companies.

### 2. Internal reasons

### a) Enhance the brand value and expand the global market.

Few Chinese companies stand in the world's top brands list. Of the top 100 global best brands released by Interbrand, only two (Huawei and Lenovo) are from China. More and more companies have gradually realised the value and significance of brand recognition. However, it is difficult to create a well-known brand in a short period of time through its own development. CBMA can be used to obtain brand benefits and open up overseas markets. Through the acquisition of well-known foreign manufacturing companies and with the influence and sales channels of the mature brand in the foreign countries, global market share and industry influence can be effectively increased.

# b) Acquire strategic assets and restructure global industrial chains and value chains

With the transformation and upgrade of China's economy and the increasingly fierce international competition, Chinese enterprises need to move from low value-added

business activities to high value-added business activities. Facing many technical barriers and intellectual property protection measures set up by other countries, overseas M&A has gradually become an important means for Chinese manufacturing enterprises to acquire core technology, R&D facilities, human capital, and other strategic assets.

#### c) Make use of the synergy effect to achieve win-win results

The synergy effect, that is to say, 1+1>2, refers to better results achieved by CBMA through cooperating and sharing business behaviours and specific resources. The synergy effect includes three aspects, the business field, management field, and financial field. Taking the first case in chapter 6 of Sany acquiring Putzmeister as an example, in the field of operation, Sany's overseas sales increased from RMB 3.4 billion to 8.7 billion yuan in the four years after the acquisition and exceeded RMB 10 billion in 2015. By 2016, nearly half of its total sales came from overseas markets. Sany and Putzmeister cross-sell through the sharing of their marketing networks, penetrate each other's markets, and enhance economies of scale. In the field of management, Sany has reduced its R&D costs by leveraging Putzmeister's R&D achievements, reduced manufacturing costs by introducing new and high-tech manufacturing technologies from Putzmeister, and trained a large number of top-notch talents by learning management models from Putzmeister. In the financial field, after acquisition, the liquidity ratio increased from 1.17 in 2011 to 2.17 in 2013, the short-term solvency of the enterprises was enhanced, and the financial risk was further controlled. At the same time, the actual enterprise income tax rate dropped significantly, and the taxsaving effect was improved. Thus, CBMA can effectively integrate the resources of both sides, achieve complementarity, create new value, and achieve the goal of winwin.

#### d) Improvement of the economic environment and government policy support

The improvement of the domestic economic environment has created favourable conditions for the development of overseas M&A in the manufacturing industry. The reform of SOEs and the development of POEs have provided better platforms for the CBMA of Chinese manufacturing enterprises. The growth of the domestic economy and foreign exchange reserves has provided a material basis for overseas M&A. The full opening of China's financial market, the implementation of the 'going out' strategy, and the strong appreciation of RMB provided strong motivation for CBMA. Since joining the WTO in 2001, China has issued a series of policies to encourage Chinese enterprises to go abroad for M&A, combining the mature production technology with foreign advanced production conditions and superior resources. In Made in China 2025, China insists on independent development and open cooperation. In 2016, the Kuka Group, one of the four largest manufacturers of industrial robots in the world, was acquired by China Media and this promoted the connection between Made in China 2025 and the German Industry 4.0.

Furthermore, the rapid increase of Chinese acquisitions in Germany can be understood in terms of the interaction of two kinds of forces. First, in China, there is a driving force that pushes Chinese companies to expand abroad. The 'going-out' strategy was included in all three subsequent five-year programs including the eleventh (2006–2010), twelfth (2011–2015), and thirteenth (2016–2020). The key drivers of Chinese companies include growing bigger, acquiring technology and know-how, building brands, diversifying risk, and circumventing trade barriers (Jan Drahokoupil, 2017). Second, the successful historical experience of the German industrial revolution after World War II, Germany's stable social environment and sound international reputation, and the current strategy of industrial technology upgrades make Germany particularly attractive for Chinese companies.

Apart from the strength of the economy, general stability, and good diplomatic relations with China, there is another important factor that explains the constant Chinese interest in German companies: the favourable position of German companies with regard to Industry 4.0 by international comparison (Jan Drahokoupil, 2017).

### 4.2.3 Law, regulatory regime, and administration

On December 26, 2017, China's National Development and Reform Commission (NDRC), the major examination and approval for CBMA, formally issued the 'Measures for the Management of Overseas Investments in Enterprises', which shows the intention to improve market force by simplifying the process for CBMA.

The implementation of the new measures shortens the approval time from 40 working days to 30 by cancelling the step to obtain written approval from NDRC, instead launching an online reporting system. The obligation to report to local authorities was abolished as well.

Moreover, if the overseas investment via the acquirer's overseas subsidiaries or joint venture is a non-sensitive target or the deal size is less than \$300 million, the process of reporting to NDRC could be waived.

Deloitte has summarized the prevailing macro-economic strategy of the Chinese government which impacted the enterprises' CBMA positively.

Country		Immed		
strategy	2004.10	2004.10 2010.10		Impact
Going abroad	The State Development and	First proposed in the '11th Five	The '13th Five Year' reiterates	• Since its launch, the
	Reform Commission	Year'.	the importance of the 'going	'going global' strategy has
	promulgated 'The Interim		out' strategy and emphasizes	actively encouraged Chinese

Table 7 Positive impact from China's national macro strategy on overseas M&A

	Measures for the		the combination of 'going out'	enterprises to seek overseas
	Administration of		and 'bringing in'.	investment opportunities,
	Approval of Overseas			marking a new stage of China's
	Investment Projects' which			opening up;
	greatly simplified the			• In 2014, for the first time
	procedures for examination			in history, China's actual outward
	and approval of overseas			investment exceeded its foreign
	investment.			investment attraction by about
				\$20 billion and became a net
				foreign investor;
				• The Chinese government
				provides more policy to support
				Chinese enterprises' overseas
				business development, including
				simplifying the approval process
				for overseas investment.
	2013.10	2015.03	2017.05	
Belt and	President Xi Jinping first put	The State Development and	The 'belt and way'	• Supported by the
Road	forward the idea during his	Reform Commission, the	International Cooperation	government, the 'belt and road'
	visit to East and Southeast	Ministry of Foreign Affairs,	forum has aroused enthusiastic	initiative has greatly promoted the
	Asian countries.	and the Ministry of Commerce	response and opened a new	volume of overseas mergers and
		jointly issued 'The Vision and	pattern of win-win cooperation.	acquisitions, especially in the
		Action for Promoting the		countries and regions along the
		Construction of the Silk Road		Belt and Road;
		Economic Belt and the		• By December 2016,
		Marine Silk Road in the 21st		Chinese enterprises had built 56
		Century'.		economic and trade cooperation
				zones in 20 countries, with a total
				investment of \$18.5 billion.
	2015.11	201	5.12	
Supply-side	Presented for the first time at	The Central Economic Working	Conference put forward five tasks	Chinese enterprises take overseas
reform	the 11th meeting of the	for 2016: actively and steadily det	fuse overcapacity, help enterprises	investment as a way to alleviate
	Central Economic Leading	reduce costs, defuse real estate ir	iventory, expand effective supply,	domestic overcapacity.
	Group	and prevent and defuse financial	risks.	
D	D 1 '4 1 201	<u> </u>		<u> </u>

Resource: Deloitte analysis, 2017

In general, the newly launched regulations are incentives for China to continue in CBMA.

# 4.3 Management, decision-making process, and leadership of Chinese enterprises4.3.1 Leadership and management with Chinese characteristics

Compared with Western culture, Eastern culture is relatively flexible, good at adapting to the changing situation, and able to bend and stretch. People do not speak in a

straightforward way but are more introverted, reserved, implicit, and cautious, and used to paying attention to and empathizing with others. Relatively speaking, Westerners seek truth and the Eastern people are more pragmatic.

The relatively simple natural personality of the Chinese entrepreneurial group reflects the relatively simple Chinese market environment over the past 30 years. The resultsoriented business model has created a generation of authoritative managers.

Leadership with Chinese characteristics is mainly reflected in the following aspects.

**1.** Superior priority leadership. Enterprises do not need to put too many resources on internal communication and internal relations issues. This hinders the motivation of lower-level employees to innovate and change and increases the risks of higher-level decision-making mistakes.

2. Collectivist leadership. This enables the various departments of the enterprise to coordinate smoothly and avoid development imbalances. This does foster the subjective initiative of employees and to a certain extent, it increases the inertia of enterprises.

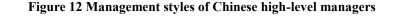
**3.** Model leadership. This makes the company more cohesive. Employees who are not adapting to the corporate culture may have to leave, leaving the employees who have the same philosophy. But once the corporate cultural spirit represented by the exemplary model proves to be unsuitable for the current environment, the transformation comes at a huge price, but the non-transformation may cause the enterprise to decline.

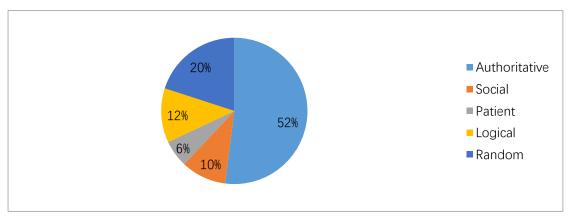
**4.** Self-cultivation leadership. This enables the continuous improvement of corporate leaders that can further bring new development ideas and vitality to the enterprise. However, it is likely that lower-level employees cannot catch up with the footsteps and ideas of the enterprise leaders. If the gap between the two is too large, it will cause resistance to the development of the enterprise.

The 'Research Report on the Leadership of Top Management of Chinese Enterprises in the Transition Period' is the first achievement of the 'Study on the Leadership Characteristics of Top Management of Chinese Enterprises' by the Leadership and Incentive Research Center of Cheung Kong Graduate School of Business. The study selected 1,906 samples from the Yangtze River Business School EMBA and EE (Executive Education Program) sample library, covering mainland China, Hong Kong, and the Macao and Taiwan regions. Topics included mainstream industries, corporate nature, private enterprises, state-owned enterprises, foreign investment enterprises, and non-profit institutions. 78% of the samples were from the highest decision-making level management of the organizations and 62% of the samples were from the highest decision-making level

education and training consulting, real estate, manufacturing, finance, retail, internet, healthcare, and electricity (Xiaomeng zhang, 2019).

The statistical results showed that the authoritative management style accounts for 52% of the overall data, regardless of the industry or region. The authoritative management style was positively related to the level of managers, meaning that the higher the position, the higher the proportion of authoritative managers. The remaining styles were distributed among the remaining shares: social 10%, patient 6%, logical 12%, and random 20%. The random style can take on characteristics of the other four types depending on the specific situation.





Source: Xiaomeng zhang, 2019

Regarding the working styles of China's high-level management, the pioneering style was 6% higher than the other high-level executive working styles, while the comprehensive management type was 3% lower as figure 13 shows.

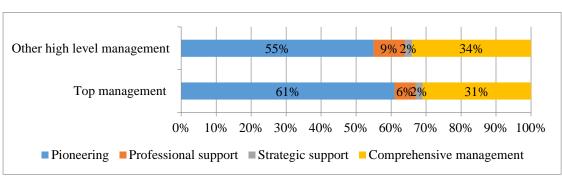


Figure 13 Working styles of Chinese high-level managers

Some Chinese managers are changing their leadership style. 63% of corporate executives tend to lessen their authoritative leadership behaviours. They aim to be no longer 'be puffed up with pride' and work to strengthen communication with others.

Source: Xiaomeng zhang, 2019

The economic environment continues to influence the development of leadership style. China's development mainly benchmarks against the United States. Both are the pioneers of the market economy. The mature business ecology of the United States contains a variety of contexts, and the natural personality and management style of the corresponding managers are also highly differentiated, in contrast to the Chinese entrepreneurs who have a simple style. This simple management style of Chinese enterprises is clearly a product of being in the primary stage of the market economy and is expected to grow with economic development.

# 4.3.2 Chinese private-owned enterprises vs. Chinese state-owned enterprises

State-owned enterprises and private-owned enterprises are the two main forces of CBMA in China. Even though they have commonalities in leadership and management style, their individuality and distinction are also obvious.

# 1. Management style and leadership characteristics

State-owned enterprises generally apply modern management systems. Their matrix management systems and processes are relatively sound. The disadvantages of their management style are unclear ownership and management rights, vague incentive mechanisms, serious party and government conflicts, and corruption.

In SOEs, major issues are more likely to be solved through collective decision-making. Collective responsibility for the consequences of decision-making implementation and the characteristics of collectivism are more obvious.

Private-owned enterprises used to apply the family-style management of traditional workshops. The management structure is relatively flat, the decision-making efficiency is high, and the incentive mechanism is clear. The disadvantage of this management style is that the big boss directly participates in management decisions too much, which is not conducive to the grassroots enthusiasm, and the management also has the influence of family nepotism.

Comparably, the leadership in POEs emphasizes individual ability more than SOEs. In the mechanism of flat management, personal leadership has a certain space to play, and the characteristics of leader decision-making and personal responsibility are more obvious.

### 2. CBMA investment decision-making process

In SOEs, there is a set of decision-making processes involving different relevant departments in the group companies from top to bottom. The decision-making process is complex and needs quite a long time to reach completion. The CBMA decision is

done cautiously, considering the risks of overseas investment and the need to preserve and increase the value of state-owned assets. At the same time, state-owned enterprises are not operating entirely for profit, so the CBMA decision-making must also take into account national interests and political objectives.

Private-owned enterprises in China also have their own set of processes for investment decisions. However, due to the flattening of the organization, management decisions are concentrated in the top management, and the process is relatively simple compared to SOEs. Moreover, the investment decisions of POEs are largely oriented towards making a profit and the political objectives are not obvious. However, some highly influential POEs do represent the national image to a certain extent on the world stage. Although they are not SOEs, they have certain links with political institutions and do not rule out the influence of politics on investment decisions.

For POEs and SOEs, the CBMA decision-making process is different in the approval process, but the professional due diligence required for decision-making support is basically the same. Considering the political influence on an SOE's decision-making, in some cases, professional due diligence just serves the pre-established acquisition decision.

### 3. Political impact on management

SOEs are not purely profit-oriented and they bear a lot of social responsibility. In the CBMA investment decision-making, the willingness of politics and political parties is more obvious.

In contrast, profitability is usually the primary result of private enterprises, although as a cell of society, private enterprises are increasing the publicity of senior social responsibility as well.

# 4.4 Potential differences between state and private enterprises with respect to M&A processes and decisions

# 4.4.1 The barriers Chinese enterprises encountered in the post-deal stage of CBMA

'Research shows that the opportunity for mergers to fail is greatest during the integration process. Integration fails because of improper managing and strategy, culture difference, delays in communication, and lack of clear vision' (Han Nguyen and Brian H. Kleiner, 2003).

# 1. Culture difference between East and West

The cultural gap between the East and the West is always a hot topic addressed in the existing literature. Some of the authors assent to the positive impact, but most of the scholarship dwells on the negative aspects.

A discussion of the conflicts faced during Chinese CBMA due to the cultural differences between the East and the West can be summarized into three key points.

First, there is a conflict of standards of conduct. The West uses logical thinking, emphasizing the deductive method and practical operation. The East pays attention to the collective wisdom of thinking, the inductive method, and system thinking.

Second, there is the concept of time conflicts. In the West, working time and nonworking hours do not overlap. In the East, staff must accept the requirement of giving up dating and working overtime and on days off.

Third, there are communication conflicts. In the West, the role of the individual is emphasized, and employees speak more frankly. In the East, managers prefer informal communication and subtle expression. (Cheng Ziyong and Wang Bin, 2011)

Integrating this kind of corporate culture with the more professionalized managerial cultures of most Western companies requires an even higher than normal degree of sensitivity, determination, and flexibility (Jim Hemerling, David C. Michael and Holger Michaelis, 2006).

In terms of the pre-acquisition cultural effect, some scholars think the significant cultural differences may be a source of management resistance from target firms, which can increase transaction costs and lower the value creation of acquiring firms. For post-acquisition effects, significant cultural differences increase the difficulty of assimilation and transferring distinctive competencies between acquirers and targets. Thus, the larger the cultural difference, the more difficulty acquiring firms may have in gaining normative legitimacy as measured by informal institutions in the host country (Min Du and Agyenim Boateng, 2014).

#### 2. Difficulties in HR management

The literature stated that the management difficulties emerged in the post-deal integration. This included staff retention and appointment issues in the acquired companies and remuneration management to balance both companies.

People are always the key asset Chinese companies want to acquire through CBMA in the high-tech industry. Sometimes the difficulty is also manifested in the identification of key talents. The early appearance of the key talents named in the due diligence reports provided by third parties is entirely based on the opinions of the target company. The Chinese acquirer cannot accurately identify real talents in the short term.

# 3. Difficult to obtain the core technology of the acquired companies

Many Chinese companies use CBMA to transfer advanced technologies. The core technology transfer mostly relies on the scientist and technicians from the acquired company. This also involves integrating people in a different way.

# 4. Lack of knowledge of the law and regulations of the country in which the acquired company is located

Compliance issues happen when the law and regulations where the acquired company is located are not comprehensively understood by the Chinese acquirer. As a developing country, the construction of relevant laws and regulations in China is still not perfect compared with developed countries. In China, certain business practices are still prevalent in the absence of compliance.

Under the different corporate law framework, the top management of the company has different operational management responsibilities. For example, in China's limited liability enterprises, legal advisors bear limited joint liability for business mismanagement, while in European countries, corporate law has more stringent accountability for the consequences of poor corporate management.

# 5. Lack of Chinese management talent

A professional management team is needed to realise the general CBMA strategy.

Scholarship addressed the serious lack of Chinese management talent that can work on cross-cultural management (Bo Xu, Zhixin Deng, Bing Xia and Qiong Liu, 2002).

In the auto industry, for example, Chinese auto companies lack quality international management talents in overseas M&A. If there are no talents to coordinate the entire integration process, post-merger integration behaviour will be difficult. Therefore, the post-merger integration of human resources cannot be ignored (Wei Zheng, 2015).

Kavanagh and Ashkanasy (2006) evaluated the effect of leadership and change management strategy on M&A integration in three organizations and found that managers responsible for driving the merger process were not equipped with the necessary change management skills to ensure success. M&As are not isolated business activities (Kusewitt, 1985; Salter & Weinhold, 1979), and sophisticated change management skills are needed, as well as a clearly communicated vision from the leadership in the firm (Kavanagh & Ashkanasy, 2006; Waldman & Javidan, 2009).

Chinese managers lack a deep understanding of customers, distribution structures, and the regulatory environment in their target markets. Their management information systems, governance structures, managerial skills, and corporate processes are less well developed than in large global firms (Jim Hemerling, David C. Michael and Holger Michaelis, 2006).

### 4.4.2 The experience and lessons learned by Chinese enterprises in the past

As mentioned in section 4.4.1, the barriers encountered in the post-deal stage of CBMA brought practical lessons to Chinese enterprises even when they did not overcome them smoothly.

# 1. Cultural integration

As mentioned in the reviewed literature, the compatibility between forward-thinking western management and traditional Chinese culture might be a significant challenge (Artie W. Ng, Jay Chatzkel, K.F. Lau and Douglas Macbeth, 2012).

The failure of the two parties to resolve any cultural clash is an important reason for no further cooperation in the integration phase.

After Chinese enterprises realise the CBMA of enterprises in developed countries, in most cases, Chinese companies will retain the majority of the original management of the acquired companies and assign individual Chinese managers to participate in daily management. At the same time, they use a third-party consulting firm to train the employees on the topics related to cultural differences. In reality, the acquired companies do not gain a high degree of cultural identity with Chinese enterprises. The training content on the cultural differences is mostly superficial, focusing only on the differences between the cultures and habits of the two companies, it is impossible to give any support on this level. At the same time, it also neglects the impact of the reconciliation of individual commonalities and differences between the two enterprises upon integration.

### 2. People management

The strategy and specific implementation method of human resource integration should be determined at the time when the CBMA deal is determined. During the post-deal integration phase, the corresponding personnel arrangements should be quickly announced and implemented to avoid the instability of personnel in the initial post-deal stage. The implementation of rapid and effective human resource integration measures is the key to ensuring a smooth transition in the post-deal integration period. Most Chinese companies have measures on personnel arrangements, but the speed of integration, the integrity of the integration method, and the way these are communicated need to be further improved. Especially in the acquisition of high-tech enterprises in developed countries, advanced technology is mastered by the company's key technical staff, and equally important are the management talents in the key positions. The loss of these two types of staff during the integration period will lead to the failure of the CBMA strategy.

### 3. Technology transfer

Technology transfer is one of the targets of the Chinese acquiring enterprises in the CBMA of high-tech enterprises in developed countries. First, to achieve technology transfer, the acquiring company must fully communicate the technology integration strategy with the acquired company. Clear the positioning and cooperation between the two companies in the future will enable the acquired companies to understand the meaning of the existing technology transfer and help them be willing to cooperate. Second, technology is usually in the hands of key technical personnel, so HR integration is critical to retain key technicians and achieve the technology transfer strategy. Third, the Chinese acquiring companies should be well prepared for adequate technology acceptance in China. In addition to building a sound Chinese technical team, when it comes to plans like copying the acquired company's production line in China, the relevant material preparations should be done in advance.

# 4. Better understanding of the laws and regulations of the country in which the acquired company is located

It is a big obstacle when a Chinese company runs a business in the host country where the acquired company is located and there is a huge difference in the local laws and regulations. Even though most of the Chinese acquirers involve law firm and use them to consult when needed, this still cannot cover all the legal differences. Sometimes, the Chinese acquirers implement business practices that are legal in China but not in the host country, which brings about trouble. For example, in China, if the customer did not pay its supplier in a timely manner, the supplier waits and pushes but does not take legal action if the supplier believes it will get paid eventually. Honesty is still respected in Chinese business activities, but imperfect laws and regulation systems and the fear of losing customers make it so this type of behaviour is not always subject to corresponding restrictions and penalties. Such behaviour cannot be tolerated in the business environment in Germany.

Another example is understanding labour unions in Germany, which are often unfamiliar to the Chinese acquirers. Labour conflicts in Chinese foreign affiliates have not gone unremarked in China. Some recommendations for Chinese acquirers include learning about German labour law, complying with it, and heeding German law on establishing employee interest representative organs, such as trade unions and works councils. If the call to obey the law was not sufficient, the diplomat at several points adds that investors should also take care not to damage China's image in Germany (Jan Drahokoupil, 2017).

### 5. The right professional as a bridge to link both managements

People are always the key to achieving successful integration. Even though the integration is bidirectional, the Chinese acquiring company always takes a lead in the integration phase. Ideally, the Chinese acquirer could have professionals in each corporate function who have competency in cross-cultural management experience, are quick learners and always willing to learn, are familiar with the acquired company's local law and regulation, are a functional expert, and have no language barrier with the acquired company.

The vast difference in leadership and management between East and West makes obstacles for both parties when working together. Hofstede's five dimensions of culture measurement show that China and Germany are very different.

In the CBMA post-deal integration period, the Chinese management talents should have the ability to manage the differences of these leadership styles and management modes and become the effective communication bridge between the management of both sides. In China, such talents are still quite scarce.

# 4.4.3 The management obstacles encountered when a Western manager confronts Eastern culture

The Western leadership model puts forward the qualities necessary for excellent leadership skills, such as decision-making ability, control and judgment of the situation, interpersonal relationship and influence, ability to deal with a crisis, and passion. Undoubtedly, these are some of the common characteristics of the outstanding leadership of the East and the West. However, many successful Western leaders often bring their excellent traits to China, but they are not workable. This is because in the management practice in China, in addition to the theory of business management, there is an "invisible hand" playing a role, that is to say, cultural factors. Chinese leadership characteristics are rooted in the 'moderate' and inaction' culture and are more influenced by local characteristics such as collectivism, hierarchy, and heroic models. If black and white are used to describe the differences in leadership between the East and the West, then the leadership style of the West is made of black and white bricks. This is a straightforward way where non-black is white. Chinese leadership is more like a Taiji map. There is white in the black and black in the white. In other words, the Western leadership model is more linear, and China's leadership model is a dialectical way of combining many factors.



Only by adapting to changes in the environment by altering management approaches can an effective leadership form be created that adapts to Chinese culture through the combination of Chinese and Western cultural thinking.

#### Chapter 5 Research methodology and case study design

This chapter will present the research methodology applied and how the case studies were designed. To reach the research objectives and answer the questions stated in chapter 2, a mixed-method was used. This included a qualitative research method with a hypothesis and a statistical data analysis. Three in-depth case studies for Chinese CBMA in Germany were completed. These case studies were in the manufacturing industry and the Chinese acquirers sought advanced technology in the acquisitions. In each case study, in-person interviews with different levels of staff from both the German and Chinese parties were conducted. Additionally, an interview with a third-party lawyer and auditor were conducted to help give a more complete view of the post-deal integration process. Cross-case comparison was also used and designed to extract further findings from the case studies.

### 5.1 Research Methodology

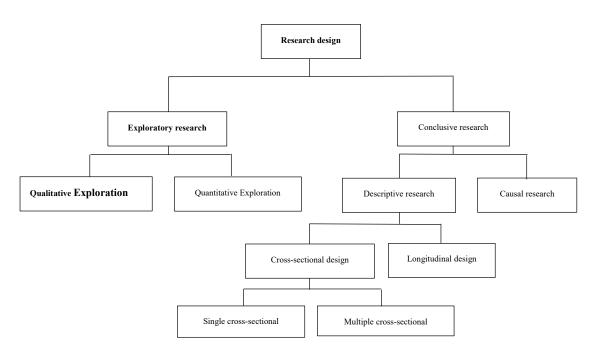
### 5.1.1 Quantitative or qualitative

A good research design guides the process from the problem statement to the results. It uses a research process to fulfil the research tasks. The research design of this study was determined through the following steps (Farhod Karimov, 2015).

- 1) Define the information needed;
- 2) Decide whether the overall design is to be exploratory, descriptive, or causal;
- 3) Design the sequence of techniques of understanding and/or measurement;
- 4) Construct and pre-test an appropriate form for data collection or questionnaire;
- 5) Specify the qualitative and/or quantitative sampling process and sample size;
- 6) Develop a plan of qualitative and/or quantitative data analysis.

Per this definition, there are two broad types of research designs, exploratory research and conclusive research. The former one could be further classified into descriptive research and causal research. Figure 15 below gives the tree of research design.

Figure 15 Research design classification



Source: Dr. Farhod Karimov, 2015

Under exploratory research, there are two ways of exploration. Applying the quantitative research strategy in the investigation mostly aims to assess a pre-stated theory involving hypothesis testing (deduction) and uses statistical data. Data collection requires closed responses. The qualitative research strategy aims to create a novel theory on the basis of complex statements or opinions. Here, the data collection permits open responses.

As stated in chapter 2, this paper is in the field of management research. Its objectives include supplementing the existing theories in the CBMA field and providing recommendations for Chinese and German entrepreneurs by detecting and solving the real practical issues.

Chinese CBMA in Germany has increased rapidly. Learning from practice and developing a theory to improve practice is a two-way goal. Research on real practice is the first step in reaching this goal. Deep insights from the case studies is the main research method, supplemented by historical data analysis. This study uses first-hand data obtained from interviews with employees from both the German and Chinese sides and third-party legal and financial advisors.

Therefore, the qualitative research strategy and multiple research model were applied in this research.

### 5.1.2 Hypothesis

Three hypotheses were developed before the case studies, and the in-depth case studies

will determine whether or not the hypotheses can be supported.

# Hypothesis 1: High-speed integration will bring advantages in post-deal integration.

Hypothesis 2: Synergy comes from operational integration.

Hypothesis 3: Culture distance impacts the integration negatively.

As the three hypotheses correspond to the three research questions, the question of the validity of the hypothesis is answered through the in-depth case analyses.

### 5.1.3 Sampling frame

The following criteria were used to select suitable cases from a compiled a list of Chinese cross-border acquisitions in Germany.

a) Cases should be selected from different time frames and give enough time to observe the integration results. This should allow for the possibility of determining if the acquirer and target learned from past experience and used this knowledge to perform better than before;

If the completion of integration is defined as seamless cooperation between the acquirer and the target company, none of the selected cases in this research paper could be selected. It would likely be supposed that there is no ascertainable time frame for the integration period, as every case is different. On the one hand, differentiating the integration period would help observe the issues that need to be addressed in different periods of the process. On the other hand, using a wider time span will allow for better comparison and more generalizable research results.

b) Cases should be selected from both Chinese SOEs and POEs. This should give a fuller picture of the culture and management styles of the two different types of Chinese companies;

The Chinese SOEs are the main force of CBMA since they have more support from the Chinese government and are more powerful than Chinese POEs. I selected cases from both SOE and POE acquisitions to observe and analyse the different natures of the enterprises to give a more complete understanding of Chinese CBMA in Germany. The corporate culture of these two types of enterprise is also very different, which leads to greater insight.

# c) The selected cases should reflect differences in share proportion. This should allow for any differences to be observed;

Being a majority shareholder or minority shareholder gives the acquirer different levels of control and management in the target company. It makes sense to include both

scenarios in the research.

# d) Cases selected should reflect acquisition by a single acquirer and multiple acquirers. This should allow for the evaluation of the integration results of different operational platforms.

With a single acquirer, the situation might not be particularly complicated. However, with multiple acquirers, there are more challenges. With more than one acquirer, aligning the multiple corporate cultures becomes complicated. This allows for a more in-depth analysis of the issues.

The sampling frame of this research could be defined as single or multiple Chinese acquirers who act as majority shareholders or minority shareholders in the acquisition of German enterprises.

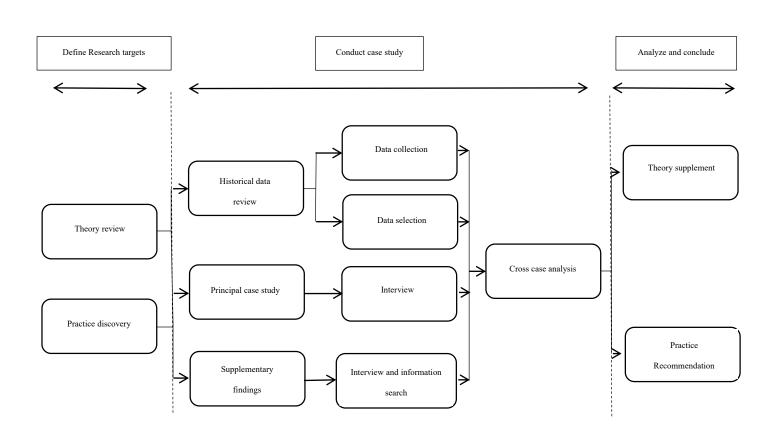
# 5.1.4 Research approach design

The idea of conducting this research comes from the real problems encountered in practice, and the existing theories are not sufficient to support the solutions in real practice. I decided to apply qualitative analysis and adopt historical data analysis as a supplement, the research approach was designed accordingly.

To approach the research target, I have reviewed the historical data from China and Germany to understand the trend of FDI between the two countries. I have further explored the reasons that Chinese CBMA in Germany increased and the relevant arguments for this phenomenon.

Based on certain selection criteria, I choose three cases for in-depth analysis. To augment the case study results, third-party financial advisors and lawyers were invited to comment on their relevant experience.

The research target of this paper is to develop a theory and, more importantly, a guide for the post-deal integration required after a Chinese company acquires a German company.



### 5.2 Case study design

The case study design is related to the methodology applied in this study. Five components of case study design were summarized by Robert K. Yin in his book, *Case Study Research Design and Methods*.

- 1) A case study's questions;
- 2) its propositions, if any;
- 3) its unit(s) of analysis;
- 4) the logical linking between the data and the propositions; and
- 5) the criteria for interpreting and findings.

This dissertation applies multiple case studies supplemented by the analysis of historical and statistical data.

Single and multiple-case designs are variants within the same methodological framework. No broad distinction is made between the so-called classic (that is, single) case study and multiple case studies (Robert K. Yin, 2014).

Compared to a single case study, multiple case studies can require extensive resources and time. Each case must be carefully selected so that it either (a) predicts similar results (a literal replication) or (b) predicts contrasting results but for anticipatable reasons (a

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theoretical replication) (Robert K. Yin, 2014).

The effectiveness of post-deal integration may not be explained by single case analysis, therefore, it is important to apply multiple case analyses in this research. The statistical analysis could be used to support the results generalized from the cross-case studies.

### 5.2.1 Case selection strategy

Case selection criteria were developed according to the research objectives. As stated in the last section, I selected the cases from the manufacturing industry in which advanced technology was the main reason for the acquisition. The selection criteria for the cases were as follows.

1. Selecting acquirers from Chinese SOEs and POEs can give a fuller picture of the culture and management styles of the two different types of Chinese companies;

2. Selecting acquisitions from a single acquirer and multiple acquirers helps to evaluate the integration results from different kinds of operational platforms;

3. Selecting cases from 3 to 8 years ago gives a big enough timeframe to observe the integration results and allows for the possibility of checking if the recent acquirer and acquiring firm learned from their experiences so as to perform better than before;

4. Selecting acquisition cases with different levels of share proportions is important to observe if a broader focus is needed.

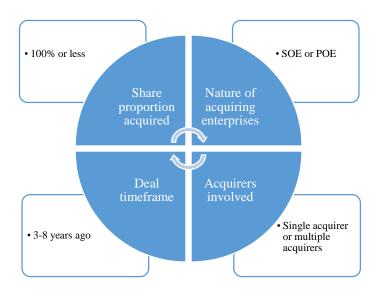


Figure 17 Case selection criteria

After going through the major Chinese CBMA in Germany since 2012, a potential selected case database was prepared. The process of reviewing the acquisition to final acceptance as a case study is as follows.

#### Table 8 The strategy for collecting case materials

	Actions
Step 1	Historical case review
Step 2	Potential case analysis database set up according to the case selection criteria
Step 3	Interview invitation sent to acquirers and target companies for selected cases
Step 4	Selection of cases based on the acceptance of the interview invitation + case selection criteria
	Case samples determination

In order to obtain the data on historical Chinese acquisition in Germany, a computerized English and Chinese academic and business database and resource search was carried out. The databases accessed included IMAA Institute, Bloomberg, Thomson, United Nations Conference on Trade and Development (UNCTAD), Elsevier, China Statistic database, Big Four accounting firm internal research database, BCG research, articles from Booz&co, Roland Berger, Bain&Company and Merrill Datasite, Capgemini, and the online library of Vienna University.

The final three cases were selected according to the above-mentioned criteria.

# 5.2.2 Relevant information collecting methods

Interview invitations were sent out to the acquirers and targets of the potential selected cases. The information was collected through in-person interviews and secondary sources including business reports, academic research reports, top-tier consulting firm reports, the websites of the acquirers and target companies, and other public websites.

### 1. Primary and secondary sources

In-person interviews were the most important means of getting primary research material. The interviewees included the management and staff of acquirers and targets, and the lawyer and auditor who had experience with Chinese acquirers. Semi-open interview question lists were prepared for the different groups of interviewees. The question list designed for each interview had different focuses and specialties. In general, the lists included both open and closed questions in order to get a clear response but not limit the interviewees' thinking.

As a supplement to the primary material, secondary material was obtained from the websites of the acquirers and target companies, public websites, and published academic or business articles.

# 2. Management and staff interviews

This study used multiples types of interviews including in-person interviews, telephone

interviews, group discussions, and informal staff 'tea and talk' meetings. The semi-open question list was provided to the interviewees beforehand. The group discussions and 'tea and talk' meetings with the staff were done mostly in an open manner.

# 3. Third-party interviews

In the interviews with the acquirers and target companies, the respondents will be limited by the company they serve, so the introduction of a third-party professional interview can make up for some missing information in the case interviews. It can also allow for more objective opinions on their experience that are not limited by a certain company.

In this research, I have involved a lawyer and auditor who have served either the Chinese acquirer or the German target company.

# 4. Interview design and considerations

Interview questions were designed in a semi-open manner and the content was different for the acquirer and target company.

The focus and structure of the interview questions for the management and staff of the acquirers are as follows.

- 1) Closed question:
- Q1: What is the purpose of this acquisition?
- Overseas market extension
- Cost reduction
- Improve production efficiency
- Get IP
- Seek synergy
- Other strategy
- Q2: What is the reason the Chinese acquirer chooses Germany?
- Highly developed industry
- Stable political environment
- Relationship with China
- Q3: Did the acquirer have experience in CBMA before?
- Q4: What due diligence has been done before the acquisition?
- Finance
- Legal
- Operation
- Technology
- Culture
- HR

2) Open question:

Q1: How do you measure the cooperation between the two management groups?

Q2: Was there any management change in the post-deal stage?

Q3: How do you measure the integration process?

Q4: How do you evaluate the country culture differences reflected in daily management?

Q5: Do you think that any issues in the post-deal stage could have been prevented from more comprehensive due diligence?

Q6: Do you think the pre-set targets have been realised in this acquisition?

The focus and structure of interview questions for the management and staff of the target companies are as follows.

1) Closed questions:

Q1: Did you have any experience with Chinese companies before the acquisition?

Q2: Why do you think the Chinese company pursued this acquisition (please choose one or more in below selections)?

- Overseas market extension
- Cost reduction
- Improve production efficiency
- Get IP
- Seek synergy
- Other strategy

# 2) Open questions:

Q1: How do you evaluate the cooperation between the management of both parties?

Q2: What do you think the key factors for a successful M&A in the post-deal stage are? Q3: Does culture difference matter the most? And what part of the culture difference

makes the most impact? Why?

Q4: From your point of view, what are the synergies that could be realised from this M&A?

Q5: What could the Chinese and German management do to improve and achieve a better integration result?

# 5.2.3 Cross-case comparison

For the convenience of generating comparable results for each case study, the same structure was designed for the three selected cases.

		Acquirer	
		Target	
	Case background introduction	Acquisition trigger	
Case study		The acquisition	
		Integration process	
	Financial and operational performance after a	cquisition	
	Integration evaluation and enlightenme	ent	

Source: Compiled by the author

The case background investigation included five components: the introduction of the acquirer and target, the trigger of this acquisition for the two parties, the acquisition itself, and the integration process applied.

Five to ten years of financial and operational performance review followed the background investigation to show the integration result during the observation period. The cross-case comparison showed an overview of the three case studies, including their commonalities and differences.

The integration process was summarized for the short term, middle term, and long term. According to the available financial data for the acquirers and targets, the cross-case comparison of revenue, cost, and gross margins were presented following the general analysis.

An integration checklist was developed to evaluate the general performance of the three cases in terms of strategy, general management, HR, finance, R&D, and sales and marketing.

At the end of the cross-case analysis, I summarise the key takeaways and discuss the validity of the three hypotheses.

This section will present the three in-depth case studies of Chinese CBMA in Germany. Through case analysis from a financial and operational perspective, the integration results will be evaluated and reveal key takeaways for practice.

As discussed in previous chapters, this study will focus on the acquisition purpose of seeking advanced technology. The cases selected are all in high-tech fields or involve an acquired enterprise that has mastered advanced technology that is attractive to the acquirer.

Moreover, this study intends to explore the integration results from both a financial and operational perspective, which can give a complete picture of the acquiring and acquired companies' performance after acquisition. The observations and analysis could also be cross-checked to verify the correctness of the conclusions.

## 6.1 Case 1 – Chinese POE SANY acquired Putzmeister

Case 1 was selected based on the criteria stated in chapter 5. The relevant information collecting method adopted is shown in the table below.

	Share proportion acquired	100%
Case selection criteria	Type of acquiring enterprise	POE
Case selection chiena	How long since deal occurred	8 Years
	Single acquirer or multiple acquirers	Single
	Management and staff interviews	Yes
Relevant information collecting method	Public network information	Yes

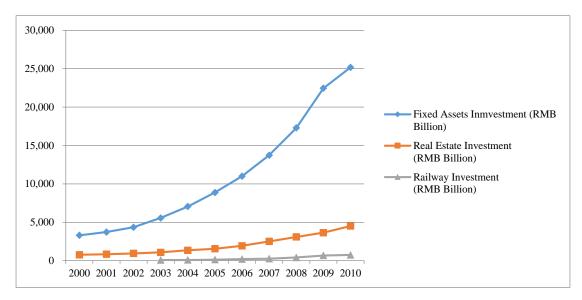
#### Table 10 Research overview of case 1 - SANY acquired Putzmeister

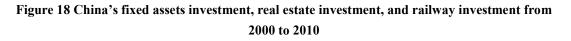
## 6.1.1 Case background

# 1. The first acquirer 1: SANY Group and its subsidiary SANY Heavy Industry Co., Ltd.

SANY Group is a Chinese POE that started operation in 1989 in Changsha, in the Hunan province. The majority shareholder is Mr. Wengen Liang. In China, SANY Group has five major industrial bases in Shanghai, Beijing, Shenyang, Kunshan, and Changsha. In addition, globally, it has more than 30 overseas subsidiaries. Its business covers 150 countries, including exports to 110 countries and regions.

Since the 1990s, benefitting from the huge infrastructure construction and rapid urbanization process, China has gradually become the world's largest market for engineering machinery and equipment. Taking advantage of the scale effect and low cost, a number of Chinese mechanical engineering enterprises, represented by SANY, grew rapidly and gradually dominated the local market.





The Chinese government increased its investment in fixed assets including real estate and railway. This stimulated the industry sales that could be tracked in SANY Heavy Industry's audit reports over a similar time span.

The figure below more intuitively describes the same trend of the performance of SANY Heavy Industry and the investment trend of the Chinese government in fixed assets.

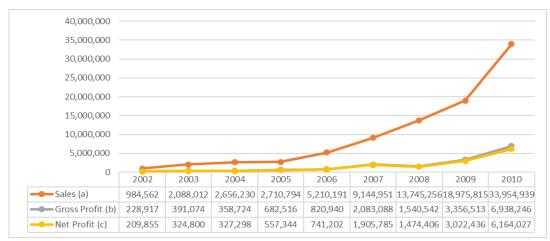


Figure 19 Sales and profit of SANY Heavy Industry, 2002–2010

Source: China National Bureau of Statistics, 2011

Sources: Published Audit reports of SANY Heavy Industry, 2002-2010

It is also mentioned in the 2007 audit report: 'From 2005 to 2010, China will construct nine special passenger railway lines with their length reaching 3139 km. To complete the railway lines, China will build bridges and tunnels, 1119 km and 667 km respectively, and will lay ballastless track and normal track, 1919 km and 6500 km respectively, which will cost more than 300 billion RMB in investments. The railway passenger dedicated line construction has a large demand for large displacement concrete machinery, large tonnage compaction machinery, excavation machinery, paving machinery, rotary drilling rigs, and other equipment'.

In 2008, to offset the possible negative impact from the financial crisis, the Chinese government implemented an economic stimulus policy of RMB 4 trillion for infrastructure investment, and the construction machinery industry to which SANY belongs experienced almost explosive growth in that period. After two decades of rapid expansion, SANY became China's largest and the world's sixth-largest construction machinery manufacturer in 2011.

Rank	Company	Country
1	Caterpillar	US
2	Komatsu	JP
3	Volvo Construction Equipment	SE
4	Hitachi Construction Machinery	JP
5	Liebherr	DE
6	Sany	CN
7	Zoomlion	CN
8	Terex	US
9	Doosan Infracore	KR
10	John Deere	US

#### Table 11 Top 10 global construction machinery manufacturers in 2011

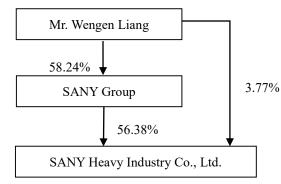
Source: Yellow Table 2011, Ranked by KHL\*

More importantly, SANY had successfully occupied the Chinese concrete machinery (part of the construction industry) market, which had been dominated by German brands for quite a long time. In 2010, the demand for concrete machinery in China had exceeded 50% of the global market. In that year, SANY accounted for 60% of the Chinese concrete machinery market with \$2.72 billion revenue and replaced Putzmeister as the largest manufacturer of concrete machinery in the world.

SANY Heavy Industry Co., Ltd. (600031), the wholly owned subsidiary of SANY Group, is listed on the Shanghai Stock Exchange Market.

<sup>\*</sup>Note: Established in 1989, KHL Group is the leading supplier of international construction information in the world. KHL Group is a diversified media company that delivers information in whatever format the market demands. Using its strong market-leading magazine brands, KHL has expanded into digital magazines, newsletters, apps, directories, new media technologies, exhibitions, conferences, awards, and contract publishing. <a href="https://www.khl.com/about-us">https://www.khl.com/about-us</a>

Figure 20 The shareholding structure of SANY Heavy Industry Co., Ltd.



Source: 2017 SANY Heavy Industry Co., Ltd audit report

Even though the European debt crisis and China's domestic macro-regulation readjustment and control brought great challenges to the company, SANY Heavy Industry still showed strong business growth from 2010 to 2011. Due to the enhancement of the main product's market competitiveness and the enlarged market scale, the published yearly audit report shows that both revenue and the total profit had dramatic increases of 49.54% and 55.55% respectively compared to the previous year. The basic earnings per share also had a 54.02% increase.

In the 2011 yearly audit report, the company's achievements in its branding strategy were also stated, which are summarised below in table 12.

SN#	Times	Achievements
1	Mar 19, 2011	The 62m brachial pump truck donated by SANY Heavy Industry played an important role in the Fukushima earthquake rescue which made the company a bright point of global manufacturing.
2	July 1, 2011	SANY Heavy Industry, with the market value of \$21.6 billion, entered into the top 500 world companies for the first time, selected by the British <i>Financial Times</i> , and ranked 431st. In addition, it became the first Chinese machinery company to enter into the top 500 world's companies
3	May 18, 2011	The crawler crane (SCC86000TM (3600 ton)), known as the 'world's first crane', succeeded in laying down the line which indicated that Chinese crawler cranes stand on top of the world
4	Dec. 11, 2011	The company's 86-meter arm rack pump was officially approved by the Guinness world record as the longest in the world, marking the company's steady standing at the forefront of the world's pump car

#### Table 12 Brand strategy achievement in 2011

design and manufacturing.

Source: SANY Heavy Industry's audit report, 2011

Technology is always a strong support for a company in fierce market competition. SANY Group devoted many efforts to improving the technical performance of its products, which allowed it to stand in the leading position among Chinese competitors. In addition to the world records of the 86-metre pump car and 3600-tonne crawler crane, the fifth generation E series pump, C3 series and C9 series excavators, SAC3500 crane, and SR460 rotary drill also realised mass production and sales, allowing SANY to maintain its leading position in the industry. The invention patent for 'Method and device for restraining the vibration of concrete pump truck boom' was awarded the 13th China Patent Gold Award in 2011.

With the continuous development of its market, technology, and capital, SANY entered the construction machinery manufacturing industry and built a complete product chain rapidly. The research and development progress of its core components was remarkable, which further enhanced the core competitiveness of the company's industry chain. The available data for R&D expenditures from 2009 to 2011 showed increased investments of 428,378, 700,426, and 1,363,934 in thousand RMB.

## 2. The second acquirer: CITIC Private Equity Funds Management Co., Ltd.

CITIC Private Equity Funds Management Co., Ltd. (CITICPE) is a professional company engaged in the investment business for China CITIC Group and CITIC Securities Company Limited. It was approved by the National Development and Reform Commission in June 2008. CITICPE is a market-oriented professional investment institution focusing on tapping into China's national economic growth related to domestic and foreign investment opportunities.

As one of China's leading private equity firms, CITICPE concentrates on companies that are growing, expanding, or maturing in relation to China's national economic growth. It focuses on five key sectors:

- Technology and internet
- Industry and energy
- Finance and business services
- Consumer and leisure
- Healthcare
- Real estate

The role of CITICPE is to provide SANY with experience in due diligence, M&A regulations, and post-deal management. As an industrial fund, CITICPE is familiar with M&A transactions and has experience in large-scale enterprise management. The entry of CITICPE can

effectively make up for the shortcomings of SANY. The smooth cooperation between the two acquirers is an important factor in determining the success of the transaction.

# 3. The target company: Putzmeister Holding GmbH

Since 1958, Putzmeister has been one of the leading global providers of concrete pumps, tunnel machines, industrial pumps, mortar machines, and professional high-pressure cleaners. Beyond manufacturing, Putzmeister can also provide complete solutions for transporting and storing sludge and high-density materials.

As mentioned in the book, *Hidden Champions: Lessons from the World's Best Unknown Companies*, by management guru Hermann Simon, small- and medium-sized machinery manufacturing enterprises are regarded as pillars of the German economy. Putzmeister has the spirit to seek quality and technology diligently and strives to maintain a leading global position in each industry sector in which its business is involved.

After three decades, Putzmeister's core product, the 'elephant' pump, became the undisputed first brand in the global concrete machinery industry which was widely used in the most famous architectural engineering projects in the world, including the 1986 Soviet Chernobyl nuclear accident emergency rescue, the 2007 construction of the Dubai Tower, and the Shanghai 'Oriental Pearl' TV tower project.

Benefitting from the globalization of the manufacturing industry, Putzmeister experienced a rapid expansion and high-speed development period from 2007 on. Its revenue reached EUR 1.09 billion in 2007, which is 270% of its 2000 revenue. 90% of the revenue in 2007 was realised in over 100 countries (except Germany) and its core product, concrete pumps, occupied 60% of the global market (except China) with sales in 154 countries around the world.

Most of Putzmeister's sales came from the North American and European markets, and Putzmeister had no significant sales volume in the Far East and Africa. The improved quality of 'made in China' with good post-sales service made the Chinese producer more competitive in the market. Putzmeister and Schwing, which had occupied more than 80% of the market shares in China in the 1990s, were seriously attacked by Chinese producers such as SANY and Zoomlion, which shrank Putzmeister's market share to less than 5% in 2009.

Moreover, the subprime crisis caused by the US real estate bubble suddenly swept through the major European and American countries in 2008. According to the IMF report, the real GDP of developed countries decreased to -3.5% in 2009. Later on, the national debt crisis started in Greece and spread over Europe starting in 2010, which dealt a serious blow to European countries.

Due to this series of crises, in North America and Europe, the tight capital market and the downward adjustment of the real estate market led the relevant industries into a cyclical industry recession period.

In 2008, the sales of Putzmeister dropped down to EUR 450 million and it went into a loss situation for the first time in 50 years. In 2009, SANY took Putzmeister's top position in the concrete pump market. From then on, Putzmeister faced many financial and operational predicaments. The founder of Putzmeister officially withdrew from daily management and a professional manager assigned by the bank creditors took over the CEO position.

The newly appointed CEO tried to restore Putzmeister's market position by every means possible and, finally, slowly turned the business around to positive results in 2010 and 2011. However, the profits after taxes during these two years were only 10% what Putzmeister made in good years due to the spreading of pessimistic sentiments related to the unknowable future of EU and US economies.

Mr. Karl Schlecht, the founder of Putzmeister, thought a lot about the company's future and he changed his view on life after decades of hardship, frustration, success, and glory while running the business. Finally, he answered the question of whether to 'stay or switch' in 2011.

# 4. Acquisition Trigger

The vibrant Chinese machinery manufacturing industry bought up a large number of local enterprises with international competitive power, but the competition in the imperfect market environment also brought problems. The major enterprises appeared to be monopolizing and competing with each other in several major market segments. The key market players during that time included SANY, Zoomlion, and XGMG.

These three major Chinese construction machinery companies had significant similarities in products, technology, and even profit structure. Because of the frequent negotiation mechanism among the industry peers, intellectual property rights were not well protected. The shared products and technologies would inevitably lead to fierce competition in terms of price and marketing.

In 2008, Zoomlion, one of SANY's competitors, outplayed SANY and acquired the third largest concrete manufacturer in the world, an Italian company named CIFA. Through this, Zoomlion passed SANY by a 5% market share. Compared with CIFA, Putzmeister was in a much superior position in terms of technology and brand recognition, and its sales were more than two times those of CIFA. If Zoomlion succeeded in acquiring Putzmeister, this would have serious implications for SANY's international explorations. In acquiring Putzmeister, SANY hoped to change the market pattern.

As one of the world's most famous construction machinery manufacturers, Putzmeister's product is known as the best brand of global concrete machinery and the company focuses on high-end products. Sales of its concrete pump brand 'elephant' cover more than 100 countries in the world. Over the past 50 years, Putzmeister has built up its global production and sales system in 154 countries, including America, Brazil, Indian, France, Spain, and Portugal. Its

'elephant' brand ranked first in the three emerging markets outside China (Turkey, Saudi Arabia, and India). The well-known product brand, the mature global production and sales system, and the highly complementary market of Putzmeister were all very attractive to SANY.

Technology is always an important business focus for SANY. Mr. Wengen Liang and his management team deeply align on this point, which led to the decision to acquire Putzmeister. The acquisition allowed SANY to enjoy advanced technology from Putzmeister and obtain more than 200 IPs.

Table 13 shows general information on both companies. Together with the next table showing the summary of the advantages and disadvantages for SANY and Putzmeister, a clearer view of the parties in this acquisition can be gained.

Category	SANY	Putzmeister				
Date established	1994	1958				
Location	Headquarters in Changsha; 169 sales offices and more than 2,000 service centres globally	Headquarters in Germany, set up subsidiaries in more than 10 countries				
Staff numbers	51,827	3,000				
Business Scope	Construction machinery, including concrete machinery, pavement machinery, crawler crane, crane trucks, mining machinery, pile machinery. and spare parts	All kinds of concrete pumps installed on trailers or trucks, mixing machines, special pumps used for tunnel construction and the coal industry, and newly developed manipulator devices				
Product and market position	Focus on middle- and low-end markets	Focus on high-end market				
Revenue	RMB 507.76 million/EUR 62.21 million*	EUR 570 million/RMB 69.83 million				
Net Profit	RMB 86.49 million/EUR 10.60 million	EUR 10.03 million/RMB 1.23 million				

#### Table 13 General company information of SANY and Putzmeister in FY 2011

Source: Published financial reports of SANY and Putzmeister

The table below compares the advantages and disadvantages of the acquirer and the target company. Through these, the meaning of the acquisition can be better understood.

\*Exchange rate adopted was the converted exchange rate from the Bank of China on December 31, 2011. (EUR: RMB = 8.1625:1)

	SANY	Putzmeister
	China's largest and the world's sixth-largest construction machinery manufacturer	One of the world's most famous construction machinery manufacturers, and has the world's top brand of concrete machinery
Advantage	Gross Profit around 30% (2011)	Gross Profit about 10% (2011)
Comparison	Focus on middle- and low- end products and domestic	Focus on high-end products and international market
	Implements TOYOTA management model	Advanced German management model
	Pursues mass manufacturing and speedy development, runs business in full	Pursues advanced technology and good quality, concentrates on fine business
	Lack of experience in running international business and operation	Weak China marketing ability
1	Low revenue from overseas market, the degree of internationalization is not	Low revenue from Chinese market and has serious cash flow problem
Disadvantage Comparison	Good sales performance in the domestic market, but does not have international technical competence	World-class technology, but sales performance is not ideal
	In the competitive Chinese market, market share is gradually eroded by industry competitors	Along with the growth of Chinese industry competitors its market share is decreasing in China and globally

#### Table 14 Advantage and disadvantage comparison between SANY and Putzmeister

## 5. The Acquisition

The growth of China's construction machinery manufacturing business and the global crisis Putzmeister encountered triggered this acquisition. The process of acquisition also went through twists and turns before reaching completion. Through examining the acquisition process, we will discover its profound impact on the post-integration phase.

In the beginning, there were eight potential investors on the list of Morgan Stanley, the financial advisor of Putzmeister. In December 2011, Norbert Scheuch, assigned CEO of Putzmeister started site visits in China and his first stop was SANY. The clean and orderly factory and production line and the passionate and professional company owner who explained to him the company history and expansion plan left a deep impression on Norbert Scheuch. The perfect quality and high creativity in the technology changed his original image of a 'cheap factory' in China.

The meeting between Norbert Scheuch and Mr. Wengen Liang went smoothly, but SANY was not the only potential investor Norbert Scheuch planned to visit in China. The next day, he went to Hongkong for a meeting with the CEO of Zoomlion. Zoomlion is an enterprise with a national capital background, so it has the unique advantage of government relations. Because Zoomlion had acquired CIFA, the management of Zoomlion had more practical knowledge on the topic of CBMA.

On December 22, 2011, one day before Putzmeister sent the formal bidding invitation letter to all potential investors, Zoomlion submitted a formal document to Hunan Development and Reform Commission for acquiring Putzmeister. About one week later, Zoomlion received the approval from Hunan National Development and Reform Commission for acquiring Putzmeister. This was the equivalent of the authorization from the NDRC stating that Zoomlion could go ahead and acquire Putzmeister\*. Zoomlion did this even though Morgan Stanley clearly stated that Chinese companies participating in this bid would not apply for the approval from NDRC before the final agreement was signed and that the violator would be regarded as an automatic waiver.

However, an unexpected event made dramatic changes in the outcome of this deal. Theoretically, if Zoomlion obtained the approval from the NDRC, the game was over. As a matter of fact, in the acquisition of CIFA, it was the NDRC's proposal that pulled SANY out of the competition. This time, Mr. Liang decided not to let history repeat itself.

He wrote a letter to Schlecht, the founder of Putzmeister, to express his strong desire to cooperate with Putzmeister, and then he communicated with Morgan Stanley that Zoomlion's 'false start' behaviour should be considered a conscious breach of contract. Next, on January 11, 2012, he started his secret journey to Frankfurt for a face-to-face meeting with Schlecht.

It was a smooth and pleasant meeting during which Schlecht was touched by Mr. Liang, who

\*As the supervisor of China's economic planning and development, in order to avoid unfavourable competition in the transaction, the NDRC requires all CBMA cases to obtain their approval in advance.

promised that Putzmeister would stay independent in operation and brand, and the German management team would be retained. He also addressed the fact that this cooperation would combine the competencies of SANY and Putzmeister in technology and on the market, along with the guarantee of solid capital support against the turbulence of the global market, creating a new global leader in the concrete machinery industry.

Nobody mentioned the acquisition price in the meeting and the due diligence process was waived. SANY, together with CITICPE, acquired 100% of Putzmeister's shares for EUR 360\*million on January 20, 2012.

The timeline of the acquisition according to SANY's records is as the table below shows.

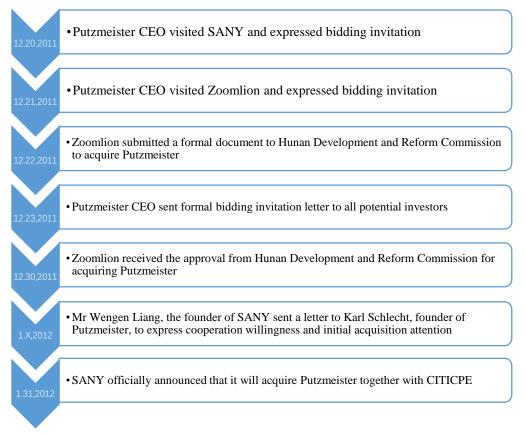
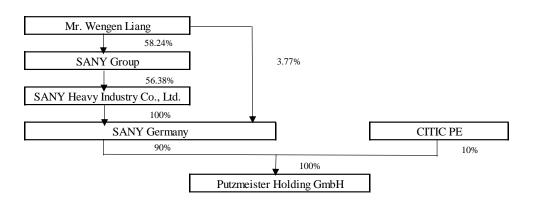


Table 15 Timeline of SANY's quick acquisition of Putzmeister

Source: Online news and announcements

The Chinese media called this acquisition a 'Dragon dance with Elephant'. The dance began with the companies trying to get a feel for each other's pace, followed by a speedy combining of forces.

Figure 21 Company structure after the acquisition



Source: SANY Heavy Industry Co., Ltd audit report, 2012

## 6. Integration process

Mr. Liang had a very clear understanding that, in the acquisition of Putzmeister, the focus was not the price, but obtaining the sales channel, brand, and technology. Changing the global market pattern through this transaction was the other important purpose. How to run the two businesses after the acquisition and how to integrate (partially or fully, fast or slow) were the key determinants for success in the post-deal integration.

The quick management decision and rapid acquisition gave SANY the opportunity to acquire Putzmeister. SANY's management believed that they knew the target very well as Putzmeister was one of SANY's role models. Because SANY knew the target well and the company was under pressure to quickly acquire Putzmeister, SANY did not perform the financial, tax, legal, human resources, or operation due diligence process that the CBMA deal usually needs to pass through before the purchase agreement signed. This lack of due diligence led to some of the obstacles and difficulties the two companies encountered in the integration phase.

This dissertation will now turn to both parties' steps towards integration after the deal was completed.

## a) People

SANY keeps its promises from the meeting with Schlecht as follows.

- SANY did not dismiss any employee of Putzmeister;
- The German management team remained unchanged;
- Norbert Scheuch was invited to join SANY Heavy Industry as executive director;
- Putzmeister remained independent in daily operation and Aichtal became the new overseas headquarters of SANY.

The only management role SANY assigned to Putzmeister was Mr. Xiangyang Jiang as Chief

Liaison Officer. This was mainly to bridge Chinese and German management in daily communication. Mr. Jiang is the vice president of SANY Heavy Industry, a 'China National Thousand Plan Expert' who received his doctoral degree in New York and was a visiting scholar of Cambridge University. He can speak fluent German.

'I was only the translator but was not involved in the daily business of Putzmeister. Putzmeister kept its original management team and operators and ran the operation and managed the company in accordance with the German model. So, there was not any significant change in Putzmeister after acquisition', Mr. Xiangyang Jiang said.

According to Mr. Jiang, the acquisition of Putzmeister was an important step in realising SANY's internationalisation strategy. It is important for Chinese enterprises who acquire companies overseas to keep the original management team and management model instead of pursuing absolute control or reforming it by the Chinese model.

In the interview with Mr. Jiang, he shared the process of and reasons behind management change in the past five years after the acquisition.

Author: 'Did SANY change the C-level management in the integration phase and why?'

**Mr. Jiang**: 'About one year after the acquisition, the former CEO was replaced by the CTO as he could cooperate with the board and he was not good at prioritizing different things and optimizing the process. The new CEO was much more supportive and the sales numbers increased slightly under his leadership even though this still cannot satisfy SANY's management. So, we have made an adjustment again in August 2017 that a new CEO from outside the company was invited to join us. And we changed the CFO according to the new CEO's suggestion. Now we are building a five-person management team in Putzmeister, besides acting as Chief Liaison Officer, I am the board member and management representative of SANY, also in charge of new business development and involved in company strategy and general management.'

Author: 'Why not assign a Chinese CEO to manage Putzmeister?'

**Mr. Jiang**: 'It is quite clear that SANY will not assign a Chinese CEO to Putzmeister. On the one hand, it is not that easy to find a suitable Chinese senior manager who can lead a German team with more than 3,000 staff. On the other hand, if we can find a capable candidate, he or she will definitely have cultural distance with the Germans. So, I, personally, more prefer to keep German top management who can understand and is willing to align with the value and mission of SANY.'

## b) Technology and production

One of the most important considerations for SANY in this acquisition was gaining technology from Putzmeister. Although SANY's concrete machinery business had exceeded Putzmeister

in sales from 2009 to 2012, Putzmeister was still unquestionably the world's top brand of concrete machinery, famous for the technical specifications of the product (pump height, pressure, arm). Putzmeister also held top-level technology in terms of reliability, stability, quality control standards, and processes. The acquisition of Putzmeister was conducive to improving the quality of the products and enriching a series of high-end products for SANY. This acquisition also helped SANY to improve the level of lean manufacturing and quality control.

China's machinery and equipment companies are able to produce good equipment, but the reliability and technical content of the products have not yet reached a world-class level. Acquiring Putzmeister would effectively promote the development of SANY's products from low- and medium-end brands to a high-end brand, hastening the birth of a new global giant in concrete machinery manufacturing.

Furthermore, Putzmeister could also improve SANY's other businesses such as pavement machinery, mining machinery parts, and assembly process, but it may not be a good choice to turn over its R&D team to SANY, as it could put Putzmeister at risk for lower future development.

Author: Acquiring Putzmeister filled the high-end market gap, does SANY have any idea to introduce the technology to China?'

**Mr. Jiang:** 'In the 90s, Putzmeister occupied 70-80% of the market share, until 2012, even though the brand reputation of Putzmeister was still much higher than SANY, but the product quality of SANY was also good, and taking our good service into consideration, our market share was increasing, while Putzmeister's business took the opposite turn during that time.'

**Mr. Jiang:** 'We took some technical reference from Putzmeister and definitely introduced some advanced technology to China, but since there is a big difference in the working mechanism of the two companies, we had some technical communications but SANY did not copy the manufacturing model of Putzmeister.'

**Author:** 'Did SANY have a plan to move the manufacturing base from Germany to China for the possibility of cost reduction?'

**Mr. Jiang:** 'The product and technology between Putzmeister and SANY are different but there is no big gap. Move the factory from Germany to China and export the products back to Germany does not make much sense for reducing costs. On the other hand, changing from "Made in Germany" to "Made in China" could be destructive to the brand. It could be an issue China should overcome in the long run.'

'For sure, we are seeking the cost reduction road map in Germany but we are more relying on improving the production efficiency, precision manufacturing, and supplier management, rather than moving the factory.'

Mr. Jiang also mentioned that, after the acquisition, SANY integrated itself into Putzmeister's supply chain system as a qualified supplier which greatly reduced the production costs and further improved the profitability of SANY. Through improving and perfecting Putzmeister's product line, and replacing Putzmeister's original steel and auto parts suppliers, SANY has decreased the procurement costs.

## c) Brand and market

Putzmeister had built a comprehensive sales system over the past 52 years. 90% of its sales contributions were from overseas markets and its brand 'elephant' was internationally recognized. SANY was in a different market situation in which 90% of its revenue came from the Chinese domestic market. The market and sales channel complementation between Putzmeister and SANY will help the two companies realise the highest international market share after the acquisition, which is in line with its clear strategic and industrial goals of creating a global concrete pump industry leader.

After the acquisition, SANY did not transfer the production line from Germany to China but segmented the market geographically. SANY would sell its own brand of pumps in China and sell Putzmeister's pumps outside China, positioning the German subsidiary as the global distribution centre of the group. In other words, SANY still focused on developing the low-and middle-end market and kept Putzmeister in the leading position in the high-end international market.

Most of the competitors understood the limits of the Chinese market and the mature market in the developed countries, so the emerging market with great potential has become the most coveted 'cake' in the machinery industry. In addition to retaining the market advantages of the two companies, through the integration of the brand, sales channels, and capital strength, SANY started to exploit the market in emerging countries. For example, taking advantage of Putzmeister's 1958 production setup, SANY now holds 70% of the market share in India, of which 60% is from Putzmeister.

The branding and marketing strategy was quite clear in the integration phase.

# d) Leadership and culture

This section focuses on the culture difference at the corporate level.

SANY has a quite complex and strict human resources management system. Its policies emphasize control and handle daily management by giving bonuses and fines to encourage and punish certain behaviours. The management style of SANY is militarized management and uses a top-down decision-making process. The sense of hierarchy is clear in the organization. All the employees execute the orders from the management without questioning the orders. The work intensity of the low level staff is relatively high, and the working hours are longer

than normal.

Compared with the management style of SANY, Putzmeister runs the company in a typically Western style, which applies a flat organizational structure. The human resources department is positioned as a supporting function but not a control function on behalf of top management.

Here, the differences in management and company culture between SANY and Putzmeister are summarised.

Management a	nd Culture	SANY	Putzmeister	
	Organization Structure	Multi-layer management	Flat management structure	
Management Method	Management Function Setting	Separation of positions and grades	The function setting is relatively flexible	
	Duty Assignment	y Assignment Centralization and top-down decision-making process		
	Business Philosophy	All for the customer; everything comes from innovation	Talent and technology is the base of business	
	Core Value	Work for a good personality before work for a good career; quality changes the world	Service spirit, keep improving, and create value	
	Enterprise Spirit	Self-discipline and social commitment; industry serves the country	High quality, creativity, enthusiasm	
	Enterprise Style	Fast response and pursue excellence	Be stable and focus	
Core Culture	Enterprise Mission	Reform the traditional machinery and equipment industry with advanced technology; upgrade the product to the world class level; satisfy client's demands and realise the lofty ideal of 'creating first-class enterprises, cultivating first- class talents, making first class contributions' and 'serving the country by developing the industry'	The company is willing to use its high-quality products, services and management system to support clients in solving the problems and achieving goals.	
Code of Conduct	Working Hours	Office Staff: standard working hours, 2 days off every 2 weeks; Operator: piece work system, 2 days off every 2 weeks	Office Staff: flexible working hours, 2 days off every week; Operator: hourly rate for pay, 2 days off every week	

Table 16 Management style and company culture in SANY and Putzmeister

Supervisor-subordinate Relationship	Rigid hierarchy and clear difference between superiors and inferiors	Staffholddifferentresponsibilitiesbut has equalityand mutual respect in person		
Communication Mode	Depends on the staff level, very often use email	Freedom, honest, and free to speak		
Working Atmosphere	A unified command, rigor, and tension	Free and comfortable		
Working Efficiency	Fast response	Slow rhythm		

Source: Company websites and internet

In the interview with Mr. Jiang, we talked about the reason that SANY finally got recognition from Mr. Schlecht and won the deal. He said: 'One of the important reasons is that SANY's core value - making contributions to society and changing the world by high quality is accepted by Mr. Schlecht. He agreed that the enterprise should take social responsibility and how SANY addressed this point was the same as his idea.'

Mr. Jiang also mentioned: 'On one hand, we wanted to respect the brand of Putzmeister and on the other hand, we were not very skilful in pushing the integration process forward. Additionally, "Keep the acquired company stable" is always SANY's biggest consideration, so we did not change that much of the German management team until now. But moving forward, we still need to make some necessary changes which will not change our trust for the German team, but, frankly speaking, the German company has advanced technology but their management system is not perfect, especially their risk control and operation processes.'

The interview also touched on the question of the culture difference. Mr. Jiang had his own opinion: 'Every company has its own culture which we should consider more than the country culture. Country culture may not be changed easily, but individually, we have daily interactions and that will give us the chance to understand and learn from each other.'

# 6.1.2 Financial and operational performance after acquisition

Through the published *SANY Heavy Industry Yearly Financial Report from 2010 to 2017*, an overview of the business trends of the company before and after the acquisition of Putzmeister is seen. The financial trends and data comparison will be analysed from a number of angles during the observed period.

## 1. From the revenue perspective

#### Table 17 Revenue, revenue from construction machinery, and revenue from concrete machinery

Unit: Thousand RMB

Category	2010	2011	2012	2013	2014	2015	2016	2017
Revenue(a)	33,954,939	50,776,301	46,830,535	37,327,890	30,364,721	23,470,343	23,280,072	38,335,087
Revenue - construction	32,963,478	49,066,431	45,016,756	36,340,488	29,704,933	22,678,730	22,773,451	37,656,599
machinery(b)	32,903,478	49,000,431	45,010,750	50,540,400	27,104,955	22,070,730	22,775,451	57,050,599

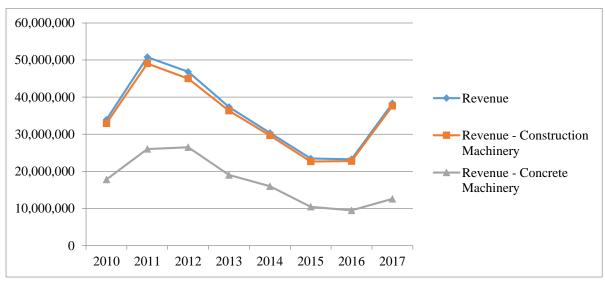
(b)/(a)	97%	97%	96%	97%	98%	97%	98%	98%
Revenue - concrete machinery (c)	17,827,002	26,045,921	26,509,211	19,029,606	16,021,974	10,473,920	9,502,807	12,599,589
(c)/(b)	54%	53%	59%	52%	54%	46%	42%	33%

Sources: Published audit reports of SANY Heavy Industry, 2010 - 2017

The purchase price agreement was signed on February 20, 2012, which was disclosed by the 2011 audit report of SANY Heavy Industry. SANY's German branch signed PPA on behalf of SANY together with CITICPE and acquired 90% of Putzmeister's shares.

SANY Heavy Industry separates its business into six categories including construction machinery. Within construction machinery, there is a subsection called concrete machinery to which Putzmeister belongs. Table 17 shows that the revenue from construction machinery accounts for 96% to 98% of the total revenue of SANY Heavy Industry, and concrete machinery accounts for roughly 33% to 59% during the period observed.

Figure 22 Trend of revenue, revenue from construction machinery, and revenue from concrete machinery of SANY



Sources: Published audit reports of SANY Heavy Industry, 2010–2017

As figure 22 indicated, during the observation period, the revenue from concrete machinery had the same trend as total revenue, but it is worth mentioning that even though the total revenue decreased in 2012, the revenue from concrete machinery still increased slightly, which was mostly due to consolidating Putzmeister into the group report.

It is also clear that, in 2012, the concrete machinery revenue portion accounted for 59% of total revenue, which was the highest in the observation period.

The revenue of Putzmeister increased from FY 2012 to FY 2016, which is the period during which it was acquired by SANY. If we consider the revenue portion that Putzmeister occupied

in the total revenue from SANY concrete machinery, we can see the same trend. In FY 2016, the revenue from Putzmeister accounted for 62.7% of the concrete machinery revenue of SANY Heavy Industry.

From Putzmeister's historical revenue numbers, we can see that the revenue did not increase continuously in the observation period, but it accounted for an increasing portion of SANY's revenue, as shown below in figure 23.

The figure below gives a clearer view of the revenue comparison between Putzmeister and SANY. This indicates the significant contribution of Putzmeister after the acquisition.

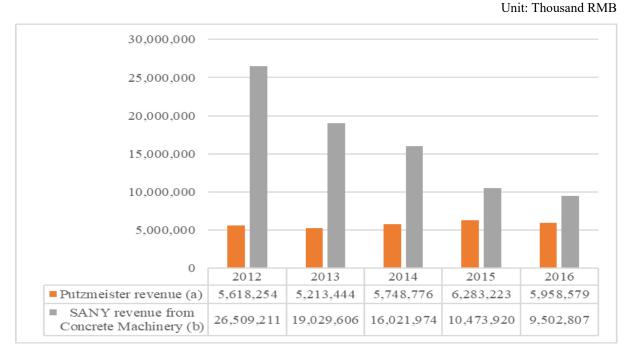


Figure 23 Revenue comparison of Putzmeister and SANY, 2012 to 2016\*

Sources: Published audit reports of Putzmeister, 2012-2016

The positive impact from the acquisition on SANY's revenue could also be tracked by the sales increase from its overseas business, especially when comparing this with the downturn of the domestic machinery industry.

From tracking the sales of SANY Heavy Industry in both the domestic and overseas markets, we see the dramatic increase in the overseas market from 2011 to 2012. With the exception of 2014 and 2015, the overseas market sales increased faster than the domestic market sales from 2011 to 2017. The audit report of 2015 explained 'Under the influence of slowing fixed assets investments, especially real estate investments, the company's operating income and net profit declined as compared to the same period of last year, but the market position of the company is stable and the level of internationalization is steadily improved'. It also stated that 'In 2015, sales of concrete machinery reached RMB 10.5 billion, ranking the first in the world'.

<sup>\*</sup>The converted exchange rate between EUR and RMB is 8.3176:1 from BOC, Dec 31, 2012.

Category	2012	2013	2014	2015	2016	
Thtzmeister Sales (a)	5,618,254	5,213,444	5,748,776	6,283,223	5,958,579	
SANY Overseas Sales (b)	8,740,041	10,874,438	19,882,685	12,646,640	13,487,355	
(a)/(b)	64.28%	47.94%	28.91%	49.68%	44.18%	

Table 18 SANY Heavy Industry overseas sales vs. Putzmeister sales\*

Sources: Published audit reports of Putzmeister and SANY Heavy Industry, 2012–2016

The overseas market sales dramatically increased in 2012 when the acquisition happened. As a result of the impact from the industry downturn, both overseas and domestic sales dropped after 2013. When the business turned around in 2017, overseas sales were higher than the domestic sales as the figure below indicates.

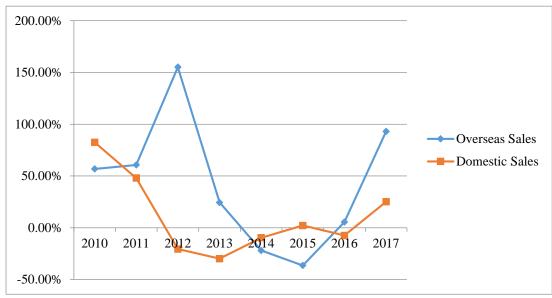


Figure 24 Increased speed of overseas and domestic sales of SANY Heavy Industry

Sources: Published audit reports of SANY Heavy Industry, 2010-2017

## 2. From a cost and gross profit margin perspective

Cost and gross profit is another way we can check the impact of the acquisition for SANY and Putzmeister.

Unit: Thousand RMB\*

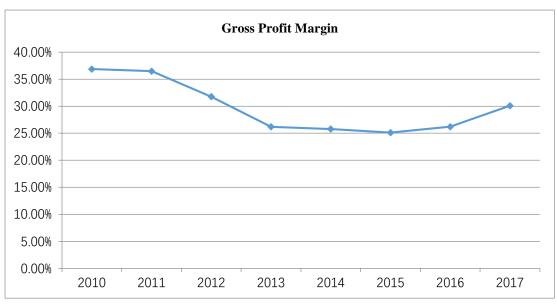
Category	2010	2011	2012	2013	2014	2015	2016	2017
Revenue(a)	33,954,939	50,776,301	46,830,535	37,327,890	30,364,721	23,470,343	23,280,072	38,335,087
Cost of Sales (b)	21,441,838	32,252,231	31,963,252	27,552,694	22,538,670	17,576,770	17,179,402	26,805,853
Gross Profit (c)	12,513,102	18,524,070	14,867,283	9,775,196	7,826,051	5,893,573	6,100,670	11,529,234
(c)/(a)	36.85%	36.48%	31.75%	26.19%	25.77%	25.11%	26.21%	30.07%
(b)/(a)	63.15%	63.52%	68.25%	73.81%	74.23%	74.89%	73.79%	69.93%

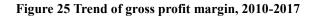
 Table 19 Revenue, cost and gross profit of SANY Heavy Industry

Sources: Published audit reports of SANY Heavy Industry, 2010 - 2017

The 2012 audit report mentioned that even though the macro-economic environment was very difficult for the machinery industry, SANY still performed better than its industry competitors and its economic indicators were generally healthy. Because the sales of concrete machinery exceeded RMB 30 billion, SANY remained in first place on the global market. On the Putzmeister side, the sales, profits, and other business indicators improved significantly in 2012 as well.

As table 19 shows, there was a downturn in revenue during the observation period and the gross profit margin also decreased. Figure 25 shows the trend more clearly.





Sources: Published audit reports of SANY Heavy Industry, 2010–2017

Mr. Jiang shared his view on the cost-down solution SANY used to improve its gross profit margin. 'The concrete machinery industry has its market size limit where we have already ranked the first in the world, so it is not that easy to explore the market even further. ... As "Made in Germany" was highly acknowledged by the market and it was taken as the proof of high quality, we will not change most German suppliers to Chinese suppliers, but the cost reduction route will be our consideration in the near future. And we plan to reduce costs by

Unit: Thousand RMB

improving the efficiency of the production line, applying precision manufacturing, and implementing an advanced supplier management method.'

From the financial data and the information disclosed by the yearly audit reports, we cannot see the positive impact of the acquisition from the cost and gross profit margin perspective.

# 6.1.3 Integration evaluation and enlightenments

# 1. Company culture, communication, and leadership

SANY acquired its role model in the industry, so it seems that this cross-border acquisition was triggered at least partially by some psychological factors. SANY's management was very confident in its knowledge of Putzmeister's business and SANY was racing against the clock to avoid its role model being acquired by some other competitor. This rush pushed them to waive the detailed deal diligence process. This oversight brought some surprises later in the integration phase.

Keeping the acquired company in a stable situation is always the most important target for the Chinese acquirer especially when the target is a company from a developed country. 'Keep stable' is the critical target which should be reached by 'Day 100', or 100 days after acquisition. SANY's management cared more about this critical factor than acquiring companies normally do.

'SANY's management always took the stability of Putzmeister as its first consideration, so we did not get involved in Putzmeister's daily management until several years after the acquisition. Recently, we just started to change some things gradually', Mr. Jiang said.

The process of changes to Putzmeister's management is described below as per Mr. Jiang's shared in the interview.

Time	Action taken in German Management	Involvement of Chinese Management
January 2012, deal completed	Keep the German management untouched	No
One year after acquisition	<ol> <li>Promote CTO to be CEO because the old CEO</li> <li>Could not cooperate with the board in the right way;</li> <li>Did not run the business well;</li> <li>Did not acknowledge the priority of multiple tasks.</li> </ol>	No
2017	Introduce a new CEO from outside the company and change the CFO according to the suggestion from the new CEO because the business performance had not satisfied the Chinese management	No

## Table 20 Milestones of changes to Putzmeister's management

	New executive management team built including	
	1) CEO	
Aug. 2017	2) CFO	Yes
Aug. 2017	3) Operation Director	res
	4) Sales Director	
	5) SANY representative (Mr. Jiang)	

Source: SANY management interview on September 21, 2017, in Changsha, Hunan province

The Chinese management was more inclined to trust the German management team and not actively intervene at the beginning of the integration phase. In the beginning, the governance model was relatively loose, and there was no direct report from the finance department to the headquarters as was common in the Chinese group company management model. Putzmeister kept its profits after the acquisition, and the profit earned was reinvested in the company to further develop the business. This was different from the common governance model in China which emphasizes direct and strict management of finances.

As explained by Mr. Jiang, SANY chose this loose governance model for the first few years. This was also a passive choice since it is very difficult to find a suitable Chinese manager who can be a strong leader in Germany with the necessary cultural background.

There were some favourable comments from Putzmeister staff members regarding the Chinese management, including staff members who have struggled against the acquisition before the deal was completed. They were satisfied with the smooth transition after the acquisition and SANY's management kept their promise that no changes would be made to the staff benefits and no layoffs would happen. 'I think it is better that acquired by the Chinese than America', said Joerg Loeffler, leader of the worker's council (Qi Miu, 2016).

From the interviews and website information, we could understand further how the management of both parties evaluated each other and their cooperation.

Author: 'What is your impression on German staff and management? Did you feel the culture difference in the integration phase?'

Mr. Jiang: 'Most of the German staff is well organized by themselves, the company in the developed countries are used to having a clear division of jobs, so the German staff can fulfil their individual tasks very well, but seldom care about whether the complete goal is achieved.

The working status of the employee is related to the development stage of his country. For example, since China is still in the developing stage, it is quite normal for the Chinese to work overtime to catch up with the developed countries. But in the developed countries, the employees are more willing to balance their work and life, overtime payment and salary increase does not work to stimulate them to give up their free time to work. This is the difference.

SANY has received many interview invitations from university scholars and others, and we have denied many of them. One of the reasons is that we found most of them have no practical experience which makes them emphasize the country culture difference too much. But, actually, this is not the case. We shouldn't forget that each company composed of individuals, and each individual has his own cultural background. The different individuals build "individual companies which have different histories, management styles, development targets, market positions, etc., so we should focus even more on the corporate culture difference where we will find a way to adjust.'

Mr. Jiang shared one more example of the culture difference between SANY and Putzmeister. 'There is a Science and Technology Festival held by SANY every year on August 8th during which SANY will commend good projects and individuals. While Putzmeister refused to attend this competition as they thought product research and development are accomplished by the whole team, not just by an individual. So, they don't understand why we want to pick a hero from the team, and this will also impact the personal relationship between this picked "hero" and the rest of the team members.'

In addition to discussing the leadership and culture differences in both companies, we also had some general discussion on how well the Germans understand the Chinese. During his time in Germany, Mr. Jiang has attended a variety of meetings and activities where he learned that quite a lot of German high-level leaders in business have a good understanding of what China is currently like. However, he also learned that quite a lot of Germans do not know China very well. Some of them thought that China is a very rich country and others had the opposite opinion.

An important channel for solving the culture difference is effective communication. Here, I have agreed with Mr. Jiang that remaining transparent with the employees and being willing to listen and communicate will definitely help both parties understand each other much better. SANY put some efforts into this but there is still room for further improvement. Mr. Jiang stated 'Through open communication, we can deliver the message to German staff that we need their efforts to put the company ahead on the market, otherwise our market position will soon be replaced by our competitor. We hope we can evoke their sense of mission and improve their morale'.

Some websites disclosed concerns from former German Putzmeister staff. Norbert Scheuch, the former CEO of Putzmeister, was involved in the acquisition but resigned one year later. He told a journalist that he was frequently troubled by the hierarchical management system of the Chinese company which made the decision-making process longer than it should be. Norbert Scheuch also told the journalist that the joint projects of both companies were complicated by China's unique 'rank higher than ability' management culture. In Germany, managers are often open to listening to a more experienced and knowledgeable subordinate. One more concern from Norbert Scheuch was about the language barrier he experienced in meetings with Chinese management. He said he was excluded from the decision-making process since he cannot speak Chinese.

# 2. Operational performance

SANY and Putzmeister implemented the integration of sales and marketing, branding, R&D activities, and production. After implementing a number of strategies, the integrated group has been quite successful, as the table below shows.

Field	Strategy	Achievements	
	1) Integrate the three emerging markets including	1) Rank no.1 in the three emerging markets;	
Sales and Marketing	Turkey, Saudi Arabia, and India;	2) Rank no.1 in the Chinese and global concrete	
Sales and Marketing	2) Complement sales network with Putzmeister.	machinery market;	
		3) Increase the gross profit.	
	1) Keep 'elephant' independent from SANY's brands	1) Position 'elephant' in the high-end market and	
	as they are focused on a different level of the market;	SANY's brands in low- and middle-end and make the	
Branding	2) Integrate Putzmeister's globally famous brands into	internal brand segmentation clear;	
Branding	SANY.	2) Enhance the overall efficiency, brand, international	
		influence, and financing platform and speed up the	
		internationalisation process.	
	1) Learn new technology from Putzmeister;	1) Break through the R&D and technology activities in	
	2) Obtain about 200 IP globally from Putzmeister.	SANY;	
R&D		2) The implementation of new IP brings manufacturing	
KæD		cost reduction;	
		3) Enhance the stability and reliability of	
		manufacturing.	
	1) Integrate Putzmeister's production line;	1) Complete industry chain;	
Production	2) Extend SANY's industrial chain;	2) Cost reduction;	
FIGUEIIOII	3) Improve the production line efficiency and perfect	3) Enhance the overall manufacturing performance.	
	supplier management.		

Table 21 Operational strategy and	achievements after the acquisition
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Sources: Internet and SANY management interview on Sept. 21, 2017

After more than five years of integration, there were many positive impacts from the operational perspective (see table 21). SANY ranked first place in both the domestic and global concrete machinery market through the market complementary effect. SANY benefitted from Putzmeister's market share in the emerging market as well. After the acquisition, SANY kept the brand 'elephant' independent and placed the brand in the high-end market. It worked well to use market segmentation for the brands of SANY and Putzmeister as it led to no internal market competition and a clear branding strategy.

SANY always devoted significant attention to R&D investment. Gaining advanced technology was one of the important considerations for acquiring Putzmeister. The advanced technology gains from Putzmeister not only helped SANY improve quality control, production processes, and manufacturing technology, but it also provided a cost reduction solution.

Additionally, with the financial support from SANY, Putzmeister made it through its economic difficulties and the business turned around in the same year as the acquisition.

In the concrete machinery industry, the superposition effect of the largest global manufacturer and the world's first brand manufacturer completely changed the global competition pattern of the industry and established the leading position of SANY.

Eight years later, SANY and Putzmeister are still on the way to moving the integration process ahead and there are be more challenges waiting for the Chinese and German management teams. 'We still have a long way to go', Mr. Jiang said at the end of the interview.

# 6.2 Case 2 – Chinese POE H Group acquired Company M GmbH

Case 2 was selected according to the criteria stated in chapter 5 and the relevant information collecting method adopted is as the table below shows.

	Share proportion acquired	100%
Case estaction within	Type of acquiring enterprise	POE
Case selection criteria	How long since deal occurred	7 Years
	Single acquirer or multiple acquirers	Single
Data and from the star and a t	Management and staff interviews	Yes
Relevant information collecting method	Public network information	Yes

## Table 22 Overview of Case 2 - Company H acquired Company M

# 6.2.1 Case background

According to the research if the World Energy Commission and International Institute for Applied Systems Analysis, although the global fossil fuel recoverable reserves could be used at least 100 more years, the recoverable reserves with relatively lower mining costs will be exhausted in the late 21st century. After 2030, the fossil fuel energy supply will become a serious problem. From a global perspective, the energy replacement cycle takes about 100 years. In this sense, the research and development of new energy sources should be put high on the global agenda. The energy situation in China is more serious than in the rest of the world. Although fossil fuels can be imported from other countries, this will lead to more energy security issues. This means that it is more urgent to develop new energy sources in China.

The energy structure refers to the composition and proportion of all primary and secondary energy sources in the total energy production or consumption. Coal takes first place in China's energy structure and accounted for 70% of total energy consumption.

The  $CO_2$  emission of coal is the most serious among the fossil fuels. At present, China emits the highest level of  $SO_2$  in the world and just barely emits less  $CO_2$  than the United States.

China's emissions are increasing continuously, so China faces more and more pressure from the rest of the world.

At the end of 2014, **'The Energy Development Strategy and Action Plan: 2014–2020'** issued by the General Office of the China State Council pointed out the best way to optimize the energy structure in China: reduce the proportion of coal consumption, increase the proportion of natural gas consumption, strive to develop renewable energy sources such as wind power, solar energy, and geothermal energy, and develop nuclear power safely. It also expected that, by 2020, non-fossil fuel energy will account for 15% of the primary energy consumption, the proportion of natural gas will reach just over 10%, the proportion of coal consumption will be controlled to within 62%, and the proportion of oil will account for the remaining 13%.

Although the development and utilisation of new energy sources have been carried out for many years in China, there is still a gap between China and the other developed countries.

In the meantime, the antidumping act released by the US and the relevant investigation by the EU in 2012 brought serious challenges to the marketing of China's photovoltaic products overseas. The Chinese photovoltaic producers have to consider how to overcome the negative impact of the punishment and secure the overseas business. As a result of this situation, China's industry professionals have expressed that overcoming the technical problems and mastering the core technology could be realised by cooperating with the countries that already hold the advanced technology in this industry.

Along with the encouragement of 'go abroad' from the Chinese government, more and more Chinese SOEs and POEs go abroad to seek suitable targets for acquisition. Europe (Germany in particular) is the engine of the global photovoltaic (PV) power market and quickly became the most favourable acquisition location for China's PV manufacturers.

## 1. The Acquirer: H Group

H Group is a Chinese private-owned company. It is a global, clean energy, multinational company committed to 'changing the world with thin-film solar energy'.

Founded in 1994, H Group has its headquarters in Beijing with more than 10,000 employees. H Group also has branches across the Americas, Europe, the Middle East, Asia Pacific, Africa, and other regions. The company's core business spans hydropower, wind power, and thin-film solar power.

In 2011, the first unit of H Group's Jin'anqiao Hydropower Station was officially put into gridconnected operation. It was the world's largest hydropower station invested in by private enterprises at that time, and H Group has since been part of the construction of million-kilowatt hydropower station enterprises. This Jin'anqiao Hydropower Station became one of the most important sources of capital to support H Group's exploration of photovoltaic manufacturing. One year before the cross-border acquisition of Company M in 2012, H Group had two thinfilm solar cell factories that went into production in China.

The table below summarises some of the important milestones of H Group's photovoltaic business since 2011 and is based on information from the company website.

Year		Achievements
2011	•	Thin-film PV research and manufacturing bases in Heyuan and Shuangliu went into
		production.
2012	•	Officially announced that the annual output of thin-film solar modules will reach 3GW,
		which made it the world's largest thin-film solar enterprise and integrated solar power
		integrator;
	•	Formally acquired Company M, a wholly-owned subsidiary of Q Cells;
	•	The Thin-film Power Station in L'Aquila, Italy, developed by H Group and the Italian
		AzzeroCO2 company and Exalto company, officially put into grid-connected operation;
	•	Established strategic cooperation with IKEA;
	•	Thin-film solar cell manufacturing in Wujin, Hainan and Yucheng was officially put
		into operation.
2013	•	The efficiency of Company M's modules and batteries reached 15.5% and 19.6%
		respectively;
	•	Acquired Global Solar's entire CIGS film patents and know-how (US);
	•	The efficiency (effective area) of Company M's CIGS thin-film power generation
		technology reached 18.7% according to the confirmation from an independent
		<u>German research institute;</u>
	•	Acquired all intellectual property rights of CIGS thin-film power generation
		technologies from MiaSolé (US) at the price RMB 350 million;
	•	Released the Fab 2.0 scheme, which is an upgrade for silicon germanium production
		lines that can significantly reduce the total production cost by about 9% per watt;
	•	Entered into an agreement with a third-party vendor to acquire Phase III Project of 1,050
		kilowatts of Solar Power Plant in the US which is H Group's first major investment
		project in the US solar market.
2014	•	Became the sole solar partner of Beijing station in the 2014 FIA Electric Equation World
		Championship;
	•	Acquired MiaSole production line for R&D of CIGS thin-film technology at \$15.2
		million;
	•	Signed a cooperative agreement with the Aston and Martin team;
	•	Acquired Global Solar's entire CIGS film patents and know-how;
	•	Entered into a 10MW photovoltaic energy management contract with FAW-
		Volkswagen;
	•	The efficiency of Company M's CIGS thin-film battery was further increased to
		21%;
		21/0,

#### Table 23 H Group's key achievements in the PV business

• Designed and manufactured an electric car super photovoltaic charging station for the American electric vehicle manufacturer Tesla;

	•	The efficiency of Company M's CIGS thin-film battery was increased further to			
		<u>20.5%.</u>			
2015	•	Engaged in Holland AFAS stadium rooftop PV project;			
	•	Won the Best Business Model Innovation Award at the 2015 Summer Summit of			
		Chinese Enterprise Competitiveness and the Beyond Imagination Innovation			
		Competitiveness Award Ceremony, with the innovative business model of 'High-tech			
		and Energy'.			
2016	•	Become the only PV supplier of G20 Hangzhou Summit;			
	•	Company M's production line technology was upgraded, and CIGS co-			
		evaporation equipment production capacity increased by 50%, thereby increasing			
		the average mass production efficiency by 0.8%;			
	•	Has been selected for the Tenth China Brand Value Top 500 list and ranked 44th with a			
		brand value of RMB 60,315 billion. H Group ranked first in the brand value of the 2016			
		new energy industry in China;			
	•	The conversion rate of gallium arsenide thin-film battery in H Group has again broken			
		the world record, with its double-junction cell efficiency reaching 31.6%.			
2017	•	Has been successfully awarded the Top Ten Influential Brands of 2017 for Chinese			
		household photovoltaics;			
	•	The glass-based CIGS champion module of Company M2 has broken the world			
		record with 16.97% of the total area photoelectric conversion efficiency.			
2018	•	Company M's glass-based copper indium gallium selenide mass production			
		technology has reached the world's highest efficiency of 18.72% on large-area glass			
		(0.94m <sup>2</sup> ) modules and has continued to maintain its global leading position in glass-			
		based copper indium gallium selenide technology.			

Source: H Group company website

H Group Solar Limited, an HK listed company, was a 50.65% subsidiary of H Group since 2012.

After about 20 years of development in the thin-film PV industry, H Group integrated the advanced technology globally by acquiring leading technology companies overseas and continuously put great effort into independent innovation. The world records of efficiency were continuously broken by H Group and its overseas subsidiaries, which established the company's leading technology position in the industry.

## 2. The target company: Company M GmbH

Company M GmbH is one of the world's leading manufacturers of CIGS thin-film modules. It is located in Thalheim, Germany and has a production capacity of 145MW. It also has an R&D subsidiary in Uppsala, Sweden. The innovation journey of Company M's thin-film solar cells can be traced back to 1982 when the Swedish government decided to finance an energy-related research project led by Dr. Stolt at the institute of Microwave Technology in Stockholm. After 10 years of R&D, the project succeeded in obtaining multiple sources of funding support. In 1993, the project leader convinced the Swedish government that it was possible to shift the

CIGS thin-film technology to business. The CIGS thin-film technology was commercialized in 2014. Some researchers have divided these 22 years (1993–2014) into three development periods based on the capital source dimension and the governing structure, as the table below shows (Andrea Perna, Enrico Baraldi and AlexandraWaluszewski, 2015).

Time Intervals	Period Characteristics
Devie 1 1, 1002, 2005	Establishing a development and production site for thin-film solar cells in
Period 1: 1993–2005	Sweden
Period 2: 2006–2009	Establishing a production site in Germany
Period 3: 2009–2014	Establishing a production site in China

Table 24 Three development periods of Compan	y M from 1993 to 2014
--	-----------------------

Since 2006, when Company M established its business in Germany, much about the company has changed. Company M's ownership, buy-sell history, shareholders, share structure, and governance model have changed significantly in four distinct stages. These four stages are shown in the next four figures.

Figure 26 Shareholder and company ownership transformation of Company M GmbH 2006–2008

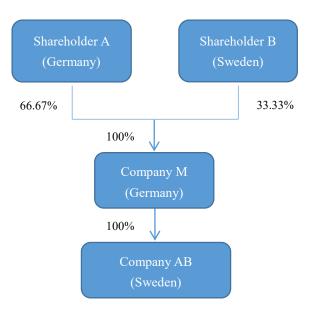


Figure 27 Shareholder and company ownership transformation of Company M GmbH 2009–2012

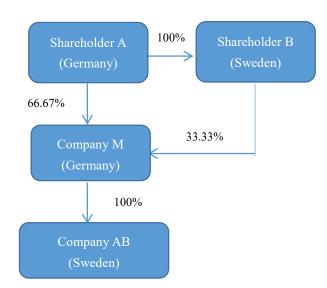


Figure 28 Shareholder and company ownership transformation of Company M 2012–2013

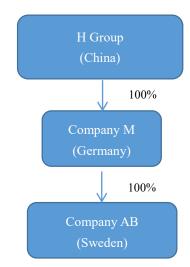
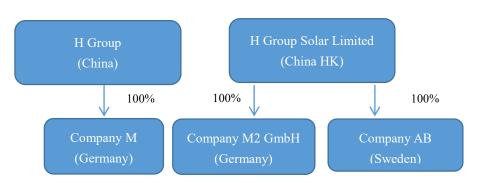


Figure 29 Shareholder and company ownership transformation of Company M 2013–Present



Source: Andrea Perna, Enrico Baraldi, AlexandraWaluszewski, 2015

In the second period, when Company M started its business in Germany, a large German silicon cell producer by the name of Q-Cells decided to invest in Company M and set up a joint venture with Swedish Company AB. The factory was located in 'Solar Valley', where the German government offered incentives to support the development of the PV industry.

Time	Achievements and Milestones		
2006	• Joint Venture between Q-Cells and Company AB (SWE) set up		
2007	Groundbreaking for first factory (25-30MW)		
	• First module produced;		
2008	• First shipment to customer;		
	Groundbreaking for second fabrication (90 MW)		
2009	Production start of SL2 fabrication		
2013	Residential kit for IKEA, Successful start in the UK		
2014	• Start of Company M Hi-Tech GmbH;		
2014	Residential kit for IKEA in the Netherlands and Switzerland		
	• Module generation with groundbreaking efficiencies of up to 16%;		
2016	• TÜV Rheinland verifies Company M's CIGS World-Record-Module with 17% module		
	efficiency		
2018	• New world record for Company M's CIGS thin-film panels for the verified efficiency of		
2010	17.52%		

Source: Company M's company website

## 3. Acquisition Trigger

H Group started to move from hydropower to solar power in 2009, and finally decided to choose thin-film as the technology route due to the below considerations.

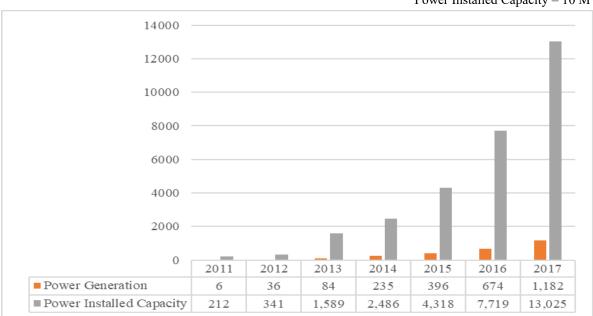
## a) Government support of the solar power industry

Solar energy is a highly subsidized industry worldwide. The Chinese government provided subsidies to PV businesses by implementing a number of projects (especially in the Tibet province) starting in 2002. From 2009 on, the government support was a project investment subsidy and price subsidy on electricity in several projects, including the famous 'Golden Sun' project and the 'Demonstration of photoelectric building application' project. These projects stimulated the market positively until 2013 when the projects were impacted by some incomplete financing policies.

Besides offering direct subsidies, the Chinese government also gave generous subsidies to the solar power product producers by providing land at a low price. The companies did not need too much cash available before building up a production base and could get the cash equivalent of 1/3 to 2/3 of the total investment from the government in advance. On top of the subsidies from the Chinese national government, the provincial governments usually provided extra

support, including partial tax refunds and installation expense refunds.

With the strong support from different levels of China's government, the power installed capacity and power generation sustained significant growth from 2011 to 2017.

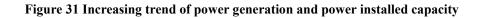


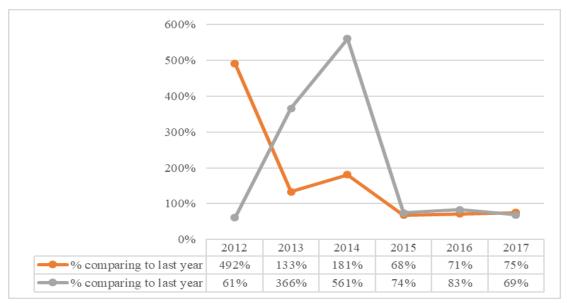
#### Figure 30 Power generation and power installed capacity

Unit: Power Generation – 0.1TWh

Power Installed Capacity - 10 MW

Source: Website of China Electricity Council, 2018





Source: China Electricity Council, 2018

As the figures above show, the increased speed of power generation and power installed

capacity both declined and flattened in 2015 due to the decrease in government subsidies.

China's National Energy Administration announced the solar power development and utilization targets in the 'Solar Energy Development "13th Five-Year" Plan' issued in December 2016. The targets for 2020 and the relevant real data from 2015 are summarized in the table below.

Target Category	Target Name	2015 Actual	2020 Target	
Denne Installe I Comercites	Photovoltaic Power Generation	4318	10500	
Power Installed Capacity	Photothermal power generation	1.39	500	
(Unit: 10 MW)	Total	4319	11000	
Power Generation (Unit:	Tetal Denor Committee	20(	1500	
0.1TWh)	Total Power Generation	396	1500	
Thermal Utilization (Unit: 0.1		4.42	0	
billion m <sup>2</sup> )	Solar Collector Area	4.42	8	

Table 26 Main targets of solar energy utilisation in the '13th Five-Year Plan'

Source: 'Solar Energy Development "13th Five-Year" Plan' issued by China's National Energy Administration in December 2016

Besides the above power development and utilization targets, China's National Energy Administration also addressed the targets of the continuous reduction of PV power generation costs and the constant improvement of the technology level.

To realise these set targets, the Chinese government will continue to introduce new policies to support PV development.

# b) Industry competition pattern

In 2012, most of the Chinese film solar cell enterprises were in the field of silicon-based film, and limited enterprises began to enter the field of CIGS thin-film solar cells through independent innovation, import of equipment, or cooperation with foreign equipment enterprises. Most of the mature industry pioneers were in Japan, America, and Germany. These were countries that had already mastered the advanced technology and had extensive experience with mass production.

Q-Cells, the parent company of Company M, was not the only major industry player. In 2012, Wurth Solar in Germany, Global Solar Energy, Nanosolar, and Miasole in America, and Showa Shell Sekiyu and Honda Soltec in Japan were also key players. These businesses are described briefly below.

Nation	Company Name	Business Brief	Current Status	
	Showa Shell Sekiyu	<ul> <li>Set up subsidiary Solar Frontier;</li> <li>Started mass production of CIS thinfilm solar module in 2011;</li> <li>Lab module efficiency 17.2%;</li> <li>Production module efficiency 11.6%;</li> <li>Capacity reached 600MW/Year.</li> </ul>	In operating	
Japan	Honda Soltec	<ul> <li>Set up at the end of 2006 as subsidiary of Honda Motor;</li> <li>Started mass production of thin-film solar module in 2007;</li> <li>Production module efficiency 11%;</li> <li>Capacity reached 27.5MW/Year in 2008.</li> </ul>	In operating	
Germany	Wurth Solar	<ul> <li>Founded in 1999 and ran trail production in 2000 to produce CIS glass solar module;</li> <li>Production module efficiency 12% in 2008;</li> <li>Capacity reached 300MW/Year.</li> </ul>	<ul> <li>Withdrew from PV business;</li> <li>Its subsidiaries were partially or wholly acquired by Chinese companies.</li> </ul>	
	Global Solar Energy	<ul> <li>Founded in 1996;</li> <li>Started small commercial production in 2004.</li> <li>Production module efficiency 10% in 2008;</li> <li>Capacity reached 75MW/Year.</li> </ul>	Acquired by H Group in 2013	
America	Nanosolar	<ul> <li>Founded in 2002;</li> <li>Started mass production in 2008;</li> <li>Used printing technology to produce CIGS module;</li> <li>Implement roll-to-roll production process;</li> <li>Production efficiency 16.4% in 2008;</li> <li>Capacity reached 120MW/Year in 2010.</li> </ul>	In operating	
	Miasole	<ul> <li>Founded in 2004;</li> <li>A producer of lightweight, flexible and powerful solar cells;</li> <li>Production efficiency 13% in 2011.</li> </ul>	Acquired by H Group in 2013	

Source: Compiled by the author from company websites and public websites

Rather than cooperating with these industry pioneers, some Chinese companies were more likely to acquire these companies at an appropriate time. The American and German

governments stopped providing subsidies to the industry in 2012, which made 2012 the appropriate time to consider acquisition. Through the acquisition, the acquirers could not only gain the needed advanced technology in a relatively short period but could also get rid of a strong industry competitor.

Around the same time, China created research foundations at its universities. The research foundations were intended to support the CIGS industrialization process. The first research foundation for CIGS technology was at Nankai University, where a number of research projects were implemented. The foundation achieved a key breakthrough in CIS thin-film battery efficiency increase by applying the co-evaporation method. The pilot test line showed an efficiency of 12.1% in 2002. Following Nankai University's lead, some other Chinese universities, including Tsinghua University and Peking University, also started to conduct research on CIS and CIGS thin-film solar technology. There still was, however, a huge gap in technology development between China and other developed countries at that time.

The following table shows critical information about the main completed and ongoing CIGS projects in China through the end of 2012.

SN#	Project Location	Party Engaged	Production Capacity	Investment
1	Guangzhou	<ol> <li>Guangzhou government;</li> <li>Yaofei International Co., Ltd.;</li> <li>Guangdong Xinyu Investment Co., Ltd.</li> </ol>	4 * 25MW	USD 500 million
2	Shandong	Sunvim Group Co., Ltd.	2 * 60MW	EUR 111.75 million
3	Suzhou	Suzhou Gaosai Solar Technology Co., Ltd.	25MW	-
4	Jinzhou	<ol> <li>Jinzhou Government;</li> <li>Arion Group;</li> <li>Taiwan Golden Energy Co., Ltd.</li> </ol>	200MW	RMB 3 billion
5	Weihai	<ol> <li>Weihai China Glass Solar Co., Ltd.;</li> <li>Nano Win Thin Film Tech Co., Ltd.;</li> <li>Taiwan Arch Energy Technology Inc.</li> </ol>	25MW	USD 600 million
6	Fujian	Chuanghui Photoelectric Technology Co., Ltd.	-	USD 60 million
7	Guangxi	Guangxi Guilin ShangKe PV Technology Co., Ltd.	70MW	-
8	Shanxi	Shanxi Hongsheng PV New Energy Co., Ltd.	180MW	RMB 808 million
9	Henan	Henan Yanyuan PV energy Co., Ltd.	60MW	RMB 780 million
10	Panzhihua	<ol> <li>China Huitong Guarantee Co., Ltd.;</li> <li>Nano Win Thin Film Tech Co., Ltd.</li> </ol>	2 * 50MW	USD 150 million
11	Benxi	<ol> <li>Benxi Government;</li> <li>Nano Win Thin Film Tech Co., Ltd.</li> </ol>		RMB 780 million
12	Tianjin	-	200MW	USD 20 million
13	Yangzhou	Yangzhou Lilai Optoelectronic Co., Ltd.	30MW	USD 98 million

#### Table 28 Completed and ongoing CIGS projects in China through 2012

Source: Compiled by the author from public websites

Since the 6<sup>th</sup> Five Year Plan launched, China's government took the research and development of solar technology as an important source of renewable energy and made it into a national program for tackling key problems. This greatly supported business exploration in this industry. In 2002, the solar cell production volume was less than 5MW, but the capacity increased to about 2000MW by 2008, which exceeded Germany and ranked first in the world. However, compared with developed countries, China's research and application in this field was still lagging behind.

The competition pattern of solar energy does not rely on how much of the resource the H Group holds but on how advanced the core technology of the company is. In other words, the company that has mastered the core technology will be on top. Based on such this, Mr. Li, the Chairman of H Group started to integrate the company globally and acquired three of the industry's leading companies in Germany and the US. These acquisitions allowed H Group to occupy an important position in China's thin-film solar industry and to become a world leader in the industry.

#### c) CIGS thin film technology advantages

The prevalent view from the academic and industry circles is that the development of solar technology has entered its third generation. The representative product of this generation is the thin-film solar cell based on CIGS and other compounds, as well as the thin-film Si solar cell. The representative product of the first generation was the monocrystalline silicon solar cell, and the second generation was represented by the polycrystalline silicon and amorphous silicon solar cells.

Thin-film solar cells are made of photoreceptors with a thickness of only a few microns on the glass, stainless steel, or polymer substrates. Compared with monocrystalline silicon and polysilicon solar cells, the thin-film solar cells are low cost, good in weak light, and portable. This means they can be used widely and can be applied in the integration of photovoltaic building (BIPV) and the construction of a large-scale low-cost power station.

There are three main kinds of thin-film solar cells which have been industrialised including amorphous silicon (a-Si), copper indium gallium selenium (CIGS), and cadmium telluride (CdTe). Among them, the technology of the a-Si thin-film solar cell is relatively mature and the technical threshold is relatively low, which allowed more manufacturers to enter this field. However, how to continuously improve the photoelectric conversion efficiency is always a question with this technology. Subject to cadmium toxicity, CdTe thin-film solar cell production must be collocated with a large recovery, which makes it difficult to be applied in mass production. CIGS was forecasted to be the most promising and mainstream of photovoltaic cells in the future because, due to technological advances and its continuous cost reduction, its conversion efficiency is close to the crystal silicon battery and it has a significant

competitive advantage.

CIGS has a wide range of applications, which are reflected in the following aspects.

# - Solar power plant (independent power station and distributed PV power station):

Along with the improvement of photoelectric conversion efficiency and the reduction of production costs, it is especially suitable for building solar power plants in areas with adequate sunlight. Taking advantage of the shorter transmission lines between the power station and the power using area, a solar power plant is especially suitable for the areas where the power grid is undeveloped.

# - Building a solar cell curtain wall and ecological roof

In fact, solar energy is particularly useful for solving the shortage of civil electricity. Some household energy consumption can likely be partially powered by solar power. This includes things like air conditioning, water heaters, and office power supplies. If solar cell curtain walls and ecological roofs are widely used, the electricity shortages in summer will be greatly alleviated. Solar cell curtains also conform to the requirements of architectural aesthetics.

#### - Urban solar street lamp

The urban street lamp not only consumes electricity but also requires high investment and maintenance costs to keep it lit. Power generation by thin-film solar technology does not require long-distance transmission lines or large power plants. For example, the more remote areas often lack basic transmission facilities and need more street lights. Thin-film solar batteries could easily solve the high cost and overhead of single lights.

#### - Greening irrigation power in desert areas of Northwest China

There are large desert areas in Northwest China, and the trend of grassland is decertified. To fundamentally improve the ecological structure and environment of northwest China, we can use solar power to replace the power created outside the desert with a pumped motor. This would not only reduce the huge investment required but would also change the desert to an oasis by pumping water from the superficial layer of the desert.

# - Other applications, such as PV solutions; vehicle, aeronautical, and spacecraft power; signal devices in railway roads and rivers; household electrical appliances; and solar energy teaching supplies

To gain the advanced technology and catch up with the top-tier competitors rapidly, the most efficient solution is looking for suitable acquisition targets in countries that already hold developed technology. Germany is one of the ideal places for such acquisitions.

Chairman Li explained his PV and acquisition strategy 'We have put about 30 billion RMB into the CIGS thin-film industry during the industrial downturn; somebody may take this as a joke. But actually, our strategy is very easy to understand and is similar to the buy low sell high in the stock market. After two or three years, when we release our full productivity, we will completely occupy the market'.

# 4. The acquisition

Before its series of acquisitions of advanced PV producers globally, H Group worked together with the industry experts to screen more than 700 solar enterprises in Europe, America, and Japan. Describing the process, Chairman Li stated 'We ranked these companies, understood the advantages of their specific technical route, and figured out if we could succeed in acquiring them. The study process took about one and a half years'.

In April 2012, affected by the global financial crisis, Q-Cells, the original parent company of Company M, failed to reach a restructuring agreement with its creditors and went into insolvency. Subsequently, the bankruptcy administrator took over the company's management and became the decision-maker for the company's fate.

Two months later, Hanwha Group revealed that they were considering acquiring Q-Cells and called Citigroup as the case sponsor. Earlier than that, according to the news from *Financial Times* on June 3, 2012, it was announced that H Group planned to acquire Company M, subsidiary of Q-Cells.

On August 29, it was announced that Hanwha won the bidding to acquire Q-Cells and got the approval from European Commission on October 10.

The official hand-over of Company M was on September 26 when Company M became a complete subsidiary of H Group.

About one month later, on October 24, the management of Hanwha Group announced that Hanwha Q-Cells was formally established and the celebration was held in Bitterfeld-Wolfen, Germany.

The intersecting acquisitions above described can be easily understood with the following figure. This also shows the acquisition strategy H Group used to acquire Company M.

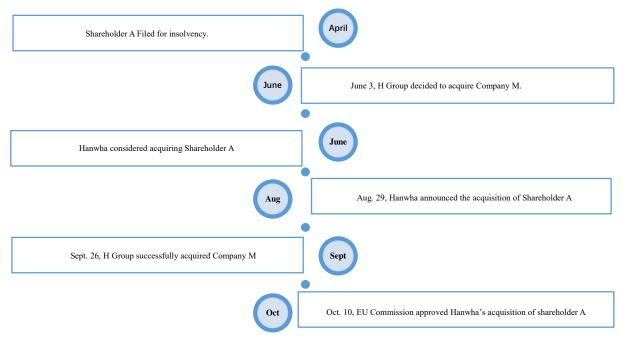


Figure 32 Timeline for the acquisitions of Q-Cells and Company M

Source: Company website and public website

A quick decision and decisive action by H Group allowed the company to acquire a valuable subsidiary of Q-Cells before it was fully acquired by Hanwha.

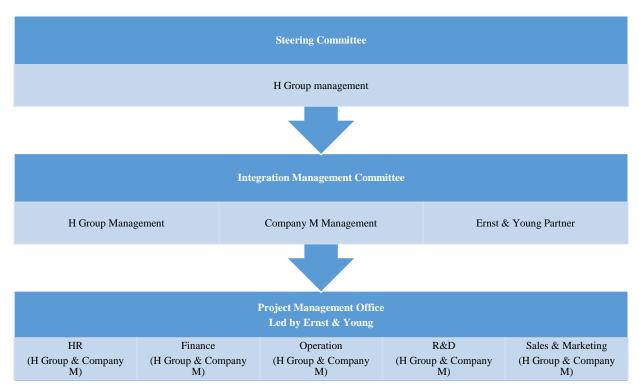
#### 5. Integration Process

In the acquisition of Company M, including its R&D Center in Uppsala, H Group took over about 450 staff in Germany and Sweden. Mr. Henning Schorisch, as the bankruptcy administrator of Q-Cells, said 'H Group acquiring Company M is an important step to keep Solar Valley Thalheim in operation. And in fact, the acquirers are interested in keeping all of the local employees which shows that overseas investors think the local enterprise's technical advantages, production resources, and innovation ability are very attractive.'

H Group deployed the integration process carefully. Even before it started, Ernst & Young, the deal advisor, conduct the due diligence process, which covered finance, HR, Operation, R&D, and culture. Completing the full due diligence process before the deal decision made a good foundation for both the deal negotiation and the post-deal integration preparations.

Ernst & Young and H Group management created a joint integration team, made a clear integration project management structure, developed an effective working mechanism, and defined the main responsibilities for each position on the team. The integration project management team was structured as described below.

#### Figure 33 Integration project team structure



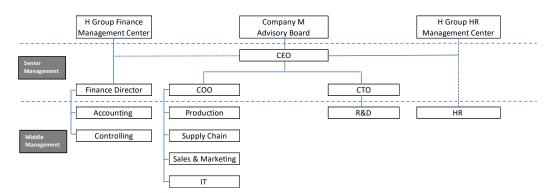
Source: Interview

The project management office was responsible for the execution of the integration. It was led by Ernst & Young and covered all functions to ensure the interaction of people from both companies. Besides the team and working mechanism, the integration project leaders also specified the targets by function and further addressed the '100-day' targets, which were the targets that needed to be achieved within 100 days from the deal completion date.

#### a) People

As mentioned, H Group management announced that there was no lay off plan for after the acquisition and that it would keep both locations (Bitterfield-Wolfen and Uppsala) operating independently. The H Group HR department initiated a key staff recognition program and established a retention plan to keep key management and technology staff. H Group planned to improve staff salaries and welfare after the integration. In the company governance model, the only solid line is in the finance function. This meant that H Group would assign a Chinese manager to Company M as the finance director of the company. Besides that, all the other functions were only shown as a dotted line in the company.

Figure 34 Company M company governance model



Source: Interview

From the governance model, it was clear that H Group wanted to keep strong control over the financial aspects. The assigned Chinese finance director was the representative of the Chinese parent company. This finance director not only took the finance lead of Company M but also acted as a bridge between the Chinese headquarters and Company M. The ex-CFO of Company M was promoted to CEO since his positive attitude in facilitating the deal made a good impression on the Chinese management. The other critical business interface happened in sales and marketing as the Chinese headquarters took over the sales power from Germany and only permitted the German team to work as the sales back office. On top of the CEO position, a senior Chinese manager was appointed chairman of the advisory board.

The dependent situation of the sales and finance team of the acquired company generated two effects. First, Company M got financial support from the Chinese headquarters for all the R&D and business activities. This released the company from the liquidity pressure. Second, losing sales and finance control made Company M more reliant on the parent company than it should be and this also caused the sales and finance team to lose their right to speak in some critical aspects. Because of all this, finding the resources to support the daily operations and the R&D activities became the company's focus and the pressure fell mostly on the assigned finance director.

At the beginning of 2014, as a part of H Group's strategy, Company M was separated into two companies. One still kept the name and the focus on production. The other company was created to mostly focus on R&D and technology transfer to China. The long internal discussion process between Company M management and the worker's council was beyond the Chinese management's expectations.

After the separation, the new Company M2 became the subsidiary of the HK-listed company, H Group Solar Limited. Along with the company separation, some of the staff were moved to the new company based on their functions within the company.

Besides splitting the company and staff, there were some changes to the top management as well. The Chinese finance director was promoted to be managing director together with the German CEO in the new company and Prokurist (Managing Director without legal responsibility) of Company M. This change in top management further strengthened the management and control of the Chinese parent company.

In June 2015, one month after the HK-listed company encountered a stock exchange crash, the German CEO resigned. H Group assigned a new Chinese CEO and COO to Germany to build a new management team together with the Chinese CFO and the Swedish CTO.

During the process, some director-level staff left the company due to worries about the company's future and because they did not feel their personal value was recognized.

At the end of 2015, the assigned Chinese finance director quit. H Group soon restructured the top management team by promoting the German director of production and R&D to VP, promoting the senior finance manager to finance director, and hiring a new Chinese Managing Director and CEO from the external market.

The governance model and management structure continued to change in both H Group and Company M since then.

Time	Change of the company	Change of the management
Sept. 2012	The acquisition was formally announced on Sept. 25	1) Company M CFO was promoted to CEO;
		2) The rest of the German management team was left
		untouched
July 2013	-	A Chinese Finance Director assigned to Company M as a
		member of the senior management team
Feb. 2014	1) Company M GmbH was split into two;	1) Appointed Chinese Finance Director to be one of the
	2) Set up Company M High-Tech GmbH and	Managing Directors in Company M High-Tech GmbH;
	transferred the company to the HK listed company	2) Appointed Chinese Finance Director as Prokurist in
		Company M GmbH
May 2015	H Group Solar Group, the parent company of	-
	Company M High-Tech GmbH suspended in the HK	
	stock market	
June 2015	-	1) German CEO resigned;
		2) New CEO and COO assigned from China
Dec. 2015	-	1) Chinese Finance Director resigned;
		2) New Chinese CEO assigned to replace the former one;
		3) Senior Finance Manager promoted to Finance Director;
		4) Head of Production and R&D promoted to VP of
		Company M

#### Table 29 Milestones of company structure and governance model changes

Source: Interview and internet

The management change after the acquisition happened gradually. The non-changed critical

control of finance is a common management style which Chinese companies tend to apply. The company change was mostly due to the high-level strategy from H Group, and the management changes were mostly personal choices, not the company's behaviour. As promised, H Group kept all the local team members to lead the company in daily operation. There were frequent visits from different levels of staff from both sides to improve the communication and strengthen the cooperation between the Chinese and the Germans.

#### b) Technology and production

The main acquisition trigger in this case was the advanced technology the target held. In further detail, the triggers for acquiring Company M could be summarised as below.

- The leading technology position globally;
- The patents the target held;
- Design and manufacture capability of the core equipment;
- Critical technologies which covered the industry's development route.

There were two main targets in the technology and production integration: production line localisation and technology improvement with other acquired companies in the US.

Production line localisation was one of the ultimate targets for H Group. This did not mean moving the production from Germany to China, but working on transferring the technology to China and implementing mass production in a relatively low-cost area. H Group had created a CIGS management centre in China focused on the cooperation with Company M and assigned Chinese technicians to Germany for short-term and long-term training that would be the backbone of building the production line in China. Besides providing training to their Chinese colleagues, Company M would also assign German technicians to China to support the new production line setup.

Through the production line localisation and technology industrialisation, H Group integrated the upstream core technology R&D and the high-end equipment manufacturing, the midstream of the thin-film solar cell manufacturing, and the downstream of the thin-film power generation. This integration solution created a business model of running a complete industry chain which, on the one hand, evaded the upstream and downstream controlled by the crystalline silicon photovoltaic enterprise, and, on the other hand, promoted the transformation and upgrade of the entire industrial chain.

Besides the technology transfer, the assigned Chinese COO considered switching some of the German raw material suppliers to Chinese suppliers for cost reduction. But taking the quality and tax burden into consideration, the supplier transfer plan has not been adopted.

After acquiring Company M, H Group acquired three other industry pioneers in the US: Miasole, Global Solar Energy, and Alta Devices. Including Company M, the integration of these four industry leaders helped H Group gain technological advantages globally through

technology sharing and R&D cooperation. The efficiency rates of several technical lines of thin film have been rising steadily, and the four acquired foreign companies have constantly beaten their own world records. To date, H Group holds more than 2,000 patents in the thin-film solar energy technology field mostly via its overseas subsidiaries.

#### c) Brand and market

When H Group acquired Company M, all the public logos of Company M had a suffix attached: 'A H Group's Company'. The solar cell market is segmented by the quality of the product which is mostly based on the efficiency rate. Even though roughly 90% of Company M's product was consumed by the Chinese market, this new logo with H Group's name still had a positive impact on the high-end market recognition.

As mentioned before, after acquiring Company M, the global sales team in H Group took over the sales power from Company M and established the guidance prices for internal sales with the consideration of the transfer price risk. Later on, especially after H Group Solar Limited was suspended in the HK stock market, market exploration and sufficient cash were two restrictions on sales activities. Under the liquidity pressure, H Group released the right of sales to Company M, but the selling price needed to be approved by the H Group Pricing Committee. Building up a new sales team to explore markets is costly. This was not very realistic for Company M especially when its parent company was in a tough situation, and it will definitely take time to build new sales channels. Thus, in certain periods, Company M's sales performance was not good as there was not enough cash to support running full production.

In the restructuring process of H Group, the sub-group to which Company M belonged changed several times until one of them successfully drove the sales performance upward by exploring Solar Home. The high-quality product from Company M was recognized by the market but the shortage of cash limited the production which brought further negative impact on the sales performance.

The lack of a product integration strategy might be the other limit on improving sales performance. From the interview with Martin, the product management director of Company M, it is clear that this strategy was lacking: 'We have the Company M panel, three acquired American panels, and the H Group panel. All these panels contain different types of technologies, but H Group never got an overall product strategy' (Interview, 2018).

#### d) Leadership and culture

The HR department of H Group was involved in the Company M integration from the very beginning stages. The professional Chinese HR managers worked with Ernst & Young to identify the key people and establish a retention plan for the critical management staff and technicians. The timely action on identifying and keeping the critical staff was very important to keep the company stable and show acknowledgement to the acquired staff.

H Group invited the German management and top-performing employees to China for the Chinese Spring Festival and other formal and informal meetings and activities. The HR department also organized some workshops and seminars on the topic of German and Chinese culture differences and similarities to help both parties better understood each other. Internally, the Chinese chairman organized some forums with German staff to exchange ideas and concerns from time to time. The company mission and values of both H Group and Company M were compared in the forum in order to find commonalities.

<b>Company M</b>	H Group
Company Values:	Company Core Values:
• The argument counts.	Mission identification
• We respect each other and recognize each	Sincerity
individual.	• Taking customer's satisfaction as the core
• We act fast and get to the point.	consideration
• Our strong and fast-growing company is based on	Continuous change and innovation
lean structures and processes.	Self-reflection
• It is the output and result that counts.	Company Discipline:
• We continuously improved by ideas and	• Changing the world with thin-film solar energy is
innovations.	our common mission and belief.
• Ecological awareness and social responsibility	• Righteous, generous, wise and magnanimous are
control our actions.	our temperament.
• We have fun.	• Vision and pragmatism are our style.
	• Be loyal, responsible, and ambitious are our basic
	requirements.
	• The mysteries of survival: Taking customer's
	satisfaction as the core consideration, providing the best
	products to the customers, as well as the best service and
	the best experience.
	• The mysteries of development: grow together with
	employees.
	• The secret of success: Always rely on people.
	• The mystery of ever-lasting: continuous change
	and innovation.
	• The problem of moral character is a zero factor and
	zero multiplying million is zero.
	• Honest is behaviour's foundation.
	• Diligent and passionate work has been half done
	the successful result.
	• Result is the most important thing; dignity comes
	from the performance.
	• No excuse for execution.
	Learn every day.

#### Table 30 Company mission and values comparison between H Group and Company M

•	Reflect every day.
•	Feel grateful every day.
•	Nothing is impossible in H Group.
•	H Group is strong because of a strong motherland.

Source: interview

H Group and Company M are identical in some company core values such as respect and recognition of the individual. Output and results are the most important things, and continuous improvement by innovation is also important. The activities initiated by H Group Management and the HR department used searching for commonality as the basis for a deep mutual understanding of each other's company culture. This makes great sense for company integration. Talking to Company M's staff, the Chinese chairman stated 'There are 18 H Group company values and disciplines, a lot of them are identical to Company M's. So, there is a lot of commonality in what we believe!'

Besides company culture differences, there are also some interesting findings from staff interviews regarding the impressions of the other party's management style and leadership.

Martin was the head of controlling before H Group acquired Company M. Later on, he was transferred and promoted to director of product management. He has worked for Company M for 5 years, beginning in 2010. He was well prepared for the interview and spontaneously separated the integration processes he was involved in by periods according to his changing feelings. The interview is transcribed below.

'First, in most of the Western countries, or at least in Germany, if the company was acquired by the Chinese, there is still the view that the Chinese will move the factory to China and close the factory in Germany as people think the production in China is cheaper than in Germany. So, fear existed at the beginning. But at the start with H Group, I think at the very beginning, we got a lot of welcome things such as being invited to China and we had some visitors from China as well. The whole German company may have been surprised about how many questions the Chinese asked, but still, personally, I felt I was very optimistic at the beginning. Since we have been in Beijing, we have done all these nice trips, we saw the location, I also have the feeling that our knowledge, our opinion is required and it is a place we can bring the topic up.'

'After that, it is the period I called the frustration period when you don't see the argument, you bring up changing anything. Therefore, from my perspective, it may take some time before you see the changes since the company is very big, or it is Chinese culture that they are very polite to talk to you but make the decision on their own at the end. The feeling of frustration grew very quickly not only in my department but in others as well. When we assigned a German engineer from the product management department to China who put a lot of effort into explaining things, I didn't see any change for some reason. It was a kind of communication issue where the Chinese didn't understand what we have explained, or everybody is listening politely but nobody is interested in a kind of open discussion.'

"Then we have the period when we got more Chinese management power in. From the integration point of view, I think it is good we had someone with a Chinese background join us. The assigned finance director from H Group was a very good link to headquarters and, for the finance area, she performed very well. It was more than a challenge for her in person to find a good level in a Western company and set up a network. The other key contact from China was the Chairman who was assigned by headquarters as well, but his involvement in business was not enough and the time he stayed was too short.'

'Therefore, I would say in terms of integration, if we have one or two more managers assigned from the Chinese side, I think it would generally improve the integration result. I mean the best person should be somebody originally from China but who has worked overseas before. This would be the best mixture you can find. Communication with Chairman and finance director, I would say from a cultural point of view, it is much easier than when we communicate directly with the Chinese in China, in terms of communication and in terms of having different views to share arguments with each other.'

'Besides the operational things, especially in the period when H Group had a problem in the HK stock exchange market, the communication flow was not transparent. I always got information from News and TV but not from headquarters. The different media always got information earlier than me, as a manager of the company, I felt not good because of that.'

'In general, nobody from headquarters explained the decision to us, and there was no open discussion on the things we addressed and I don't know what is the real reason behind this. I think the culture difference is a mixture of country level, corporate level, and personal level, but there is quite a huge difference on the country level.'

Martin left Company M in 2015, but there is still some question in his mind regarding the Chinese culture, management style, and leadership. He has addressed that having more knowledge regarding the culture and a deeper understanding of what is behind their behaviour would be very helpful when conducting daily business with the Chinese.

The second interview was scheduled with Mr. Lin, COO of Company M, a Chinese employee assigned by H Group in 2015. Mr. Lin holds American citizenship and studied and worked in the US for many years before he joined H Group. He is very experienced in factory supply chain management. After going through the run-in period in Germany, Mr. Lin had a good impression of the German middle- and high-level management in general: 'We have promoted some German leaders, managers, and directors according to their performance and contributions, and we found that when we were transparent and told them the difficulties we were facing, most of the German management would understand and were willing to work together in overcoming the tough situations. In the meantime, we shared the success in promoting each percentage in the technology process, which brought confidence to all the staff and encouraged everyone to continuously work together to achieve the next target.'

Just like the German management, the Chinese management in H Group also questioned the culture difference with Germany. Mr. Lin shared an example: 'H Group management has set up a KPI for all subsidiaries including Company M that R&D activities should be carried out 24 hours per day and 7 days per week since it is very common to work overtime in China, but they don't understand it is illegal in Germany, and it is not very easy to explain that.'

'In a more detailed aspect, we need to develop good working habits such as taking meeting minutes and distributing these to all the attendees afterwards. For example, at the end of 2014, we set up a production target in Germany for the next year at the meeting in Beijing which aligned with German CEO, but at the end of the next year, when management evaluated the yearly performance of the CEO, he derecognized the agreed target and asked for a 100% performance bonus instead.'

We have also discussed some closed questions and some of the interesting answers are summarised below.

The author: 'Do you think that the German CEO leaving the company brought any negative impact in 2015?'

CL: 'No, I don't think so. On the contrary, the quote provided and the goods delivery speed was very slow when the German CEO managed the company and turned out to be much smoother after we took over the company since we know the key contacts at the headquarters, which made more efficient communication.'

The author: 'It has been six years since H Group acquired Company M in 2012. How do you appraise the integration until now?'

CL: 'Before 2016, our production volume was not high and the Chinese top management did not pay enough attention to the R&D investment. Afterward, we started to put efforts in cost reduction and increased production volume, and we have reached new world records in the module efficiency. But it is a pity that we did not build up an R&D team in China until now, since we have to wait two more years to realise the technology transfer.'

The author: 'How does Chinese management dispel the concern from Germany when transferring the technology to China? There are worries about the company's future when the parent company seeks production localisation.'

CL: 'It should not be a problem if the German R&D team could keep the world record every year, and we put efforts in product development and continuous technology improvement.'

#### 6.2.2 Financial and operational performance after acquisition

We obtained the financial overview and the operational performance evaluations from the published financial reports of Company M, Company M2, and H Group Solar Limited. Since

the unlisted H Group has no obligation to publish its financial report in China, it is impossible to get its financial data from public places. Additionally, since solar business is just a very small part of the H Group, we may not find any significant impact of solar business on the general performance of H Group.

That said, the next paragraphs will deliver the information of the above-mentioned three companies, upon which we will analyse the integration effects on both sides.

We selected eight years of financial data from Company M's published financial reports and will analyse the trend of sales, inventory, material procurement, net profit/loss, and ratios in the observation period that begins in 2009.

#### 1. From a revenue, inventory, material cost, and labour cost perspective

HGB (Handelsgesetzbuch, German commercial code) applies the total cost accounting method, which means the operating cost on the income statement include all cost happened in the period but not correspond to period sales. We suppose the current period material procurement volume should be defined according to the period safety inventory level and the production plan of the next period.

It is clear from the figure below that the sales volume shrank seriously from 2011 to 2012. The dramatic sales decline further deteriorated in 2013, the year after H Group acquired Company M. Since then, the situation trended upward year by year. 2016 marked the best sales performance of the previous four years and the inventory decreased the most in this year as well, which is a signal of better sales performance. The business warmed up after the integration period, which is reflected not only by the increase in sales and decrease in inventory but also by the increase in material procurement. This means if H Group can collect receivable on timely manner, the procurement of material is affordable. We can track this from the data column 'procurement of raw material'.

As discussed in the previous section, H Group took over the sales right after the acquisition, but since the company experienced a stock exchange crash, H Group has released some of the sales rights to Company M to stimulate sales. Through various attempts from both sides, the sales situation improved. From an operational point of view, the question of how to bridge the sales power and capability of both parties and find the best mode of cooperation to stimulate sales activity is a worthy topic after an acquisition.

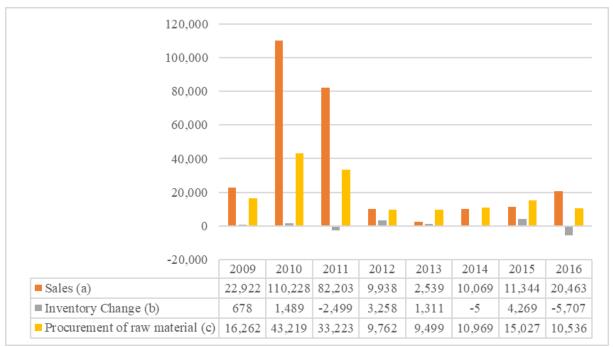
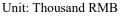
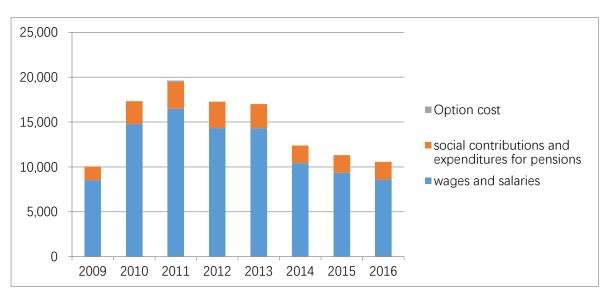


Figure 35 Comparison of sales, inventory change, and raw material procurement



Source: Source: Company M published financial reports, 2009-2016

Besides the manufacturing and R&D related material costs, the labour costs, which included wages and salaries, social contributions and expenditures for pensions, and option costs, were rather stable during the observation period. This showed that the acquirer kept its promise to improve staff welfare. The general decrease beginning in 2014 was due to the company split. We assumed the staff number was relatively stable as well.



#### Figure 36 Labour cost and composition

Source: Company M GmbH published financial reports

#### 2. From a net profit perspective

From the general overview of the yearly profit during the observation period, we could see the steep loss in 2011. The net profit trended upward after the acquisition, and it has remained roughly the same as the sales performance trend except for in 2014 when the net profit decreased due to reduced operating income and more material procurement at that time. The positive result of 2013 was mostly impacted by the extremely high value of other operating income. We cannot detect the reason for this high value.

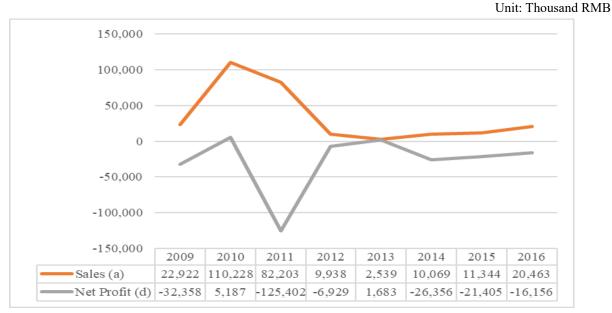


Figure 37 Comparison of sales and net profit

The full-year financial report of Company M2 is available for 2015 and 2016. As a start-up high-tech company, we assume that much R&D was needed before it could generate any revenue for the company. The net loss of 2015 was EUR 7,207K and in the next year, it was lessened slightly to a net loss of EUR 6,619K. The profit and loss statements of both Company M and Company M2 could not be consolidated due to the lack of the intercompany transaction details.

H Group Solar Limited changed its name to H Group Thin Film Power Limited in 2014 when Company M was established and transferred as its wholly-owned subsidiary. In the same year, the Swedish research subsidiary Company AB was sold from H Group to the HK-listed company as well.

As mentioned above, H Group Thin Film Power Group was suspended on the HK exchange stock market in 2015 when Ernst & Young issued its yearly audit report with a qualified opinion. The report exposed that the biggest concern was that the auditor was unable to determine whether any adjustments to the intercompany transactions were necessary. As the company structure of H Group Thin Film Power Limited is too complicate, we cannot translate the

Source: Source: Company M published financial reports, 2009-2016

financial data into the performance impact of Company M2 and Company AB on the group level.

#### 6.2.3 Integration evaluation and key takeaways

The integration process began in September 2012 and lasted for seven years. Both parties have travelled a tortuous road until Company M and M1 reported to insolvency at the end of 2019.

#### 1. Company culture, communication, and leadership

This was H Group's first cross-border acquisition. Because of this lack of experience, H Group tried to be well prepared before the deal moved to completion by involving in Ernst & Young in the integration process design. Tasks were prioritized in the '100-day plan' which covered finances, HR, and operational functions. The integration plan was further refined into 30- and 60-day targets. In the brief critical period after the integration, Ernst & Young served as the bridge between both companies. Ernst & Young listened and delivered information, which was important for speeding up the ice-breaking period. In addition to its short-term integration plan, H Group also developed more general targets for the two to five years after the integration and called this the 'Long-term integration plan'.

Everything went smoothly in the short term, even though there were worries and doubts about the company's future on the part of the Germans. Fast and effective communication brought confidence to the integration process. Both the Chinese and the Germans acknowledged the big country culture difference. Some workshops regarding the cultural differences were held by H Group. However, as the ex-director of product management pointed at, a couple of workshops were not enough, The Germans definitely needed more guidance when dealing with the Chinese acquirers, as did the Chinese need more guidance in dealing with the Germans. Cultural understanding should be bi-directional, but H Group was more focused on one direction.

The integration of culture did not stop at the country level but extended to the corporate level. Searching for commonalities within both company's core values helped to establish mutual recognition.

In addition, the flexible ways of the Chinese conflicted with the German style of management that planned things well in advance. Some of the German staff complained about too many changes to the group structure which led to confusion especially when needing to identify the right contact person to push things ahead.

There were more concerns regarding transparency after the HK-listed company was suddenly suspended on the stock exchange market. To minimize the impact, H Group management did not disclose all the information to the overseas companies. The staff instead received updates from public channels, which made them more upset, especially when there were some distorted reports. The timely communication of external crisis to the public is very important, but the

internal communication should not be neglected.

The leadership style was heavily impacted by the country and corporate culture. If H Group could have assigned more Chinese managers to Company M who had international living and working experience and could easily adapt to German culture, the cross-border management in the post-deal integration phase would have been easier.

In general, the short-term integration was successful, but improvements to different aspects would have been helpful.

# 2. Operational performance

It is clear that H Group acquired Company M for the advanced technology Company M held. It is difficult to enter this specialized high-tech driven industry as a new entrant. H Group sought nationalisation by applying the advanced technology it gained from the acquisition. We can summarise the functional integration performance with the table below.

Function	Planning	Execution
Sales and Marketing	Provide training on the sales process to ensure business goes smoothly.	<ol> <li>H Group took over the sales power after the acquisition;</li> <li>Company M set up sales back office to provide technical support on sales activity.</li> </ol>
Production	<ol> <li>Set up monthly production plan after acquisition report to and approved by H Group;</li> <li>Set up team focus on production line transfer;</li> <li>Set up production line transfer plan.</li> </ol>	<ol> <li>Set up production plan according to sales and safety inventory;</li> <li>Initiate production line in China Zibo and Nanjing;</li> <li>Company M arranged training for H Group engineers;</li> <li>Company M technician will do onsite support for China production line localisation.</li> </ol>
R&D	Interview Company AB, prepare for future R&D integration.	<ol> <li>Motivate R&amp;D staff to achieve new world record continuously;</li> <li>Separate R&amp;D team to a new start Company M2 and transferred to the HK-listed company in 2014;</li> <li>Support production line localisation in China and provide relevant training.</li> </ol>

#### Table 31 Operational integration by functions

Source: Interview and internet

During the seven-year integration period, H Group initiated one production line in China using the technology from Company M. Even though the construction is still in process, the production integration is on the right track.

More outstanding achievements were realised in the R&D field. Company M continuously beat the world records on module efficiency and kept the leading technology position in the industry. It is worth mentioning that neither Company M nor H Group was suspended from the stock exchange. Neither did the tough cash situation at the Chinese headquarters stop the R&D progress.

Market exploration was critical but difficult in the solar industry when H Group acquired Company M. H Group management forecasted that the cells made by Company M would be welcomed by the market, which led to their decision to take over the sales power. Centralising the sales activities would benefit H Group through the integration of multiple products from H Group and its other acquired overseas companies. Unfortunately, there was no strategic plan for this, which led to problems later on.

H Group has not yet achieved all of its acquisition goals, but the achievements are significant from an operational perspective. As summarised by the Chinese COO: 'It makes no sense to acquire Company M if we can't transfer the technology to China and realise localisation'.

# 6.3 Case 3 – Chinese SOE A Group and B Group work together to acquire Company F from Company D

Case 3 was selected based on the criteria stated in chapter 5. The relevant information collecting methods adopted are shown in the table below.

	Share proportion acquired	85%
	Type of acquiring enterprises	SOE
Case selection criteria	How long since deal occurred	3 Years
	Single acquirer or multiple acquirers	Multiple
Delevent information collecting method	Management and staff interview	Yes
Relevant information collecting method	Public network information	Yes

Table 32 Overview of Case 3 - A Group and B Group acquire Company F from Company D

#### 6.3.1 Case background

The acquirers and target in this case were in the same industry as Case 2, so we will not describe the general industry background again but only state the two major background differences.

First, more Chinese players were involved in the industry when this acquisition happened in 2015. This means that the industry pattern had changed since 2012. With the encouragement of the 'go abroad' policy of the Chinese government, more and more Chinese POEs and SOEs went abroad for various forms of external cooperation. While Hanergy acquired Solibro in 2012, some other acquisitions happened in that period within the solar industry. China Triumph International Engineering Co., Ltd acquired CTF Solar in 2011, China National Building

Material Group Co., Ltd. acquired Avancis in 2014, and Shanghai Electricity Group acquired 29.9% of the shares of Manz AG in early 2016.

The Chinese domestic PV market became more mature since the market players gained experience after a couple of years of rapid growth.

Second, the two major acquirers, A Group and B Group, are state-owned enterprises, and as traditional energy enterprises, they are mainly responsible for China's energy transformation. A Group announced its clean energy strategy (called the '1245' strategy) in 2015. This strategy included the following key points:

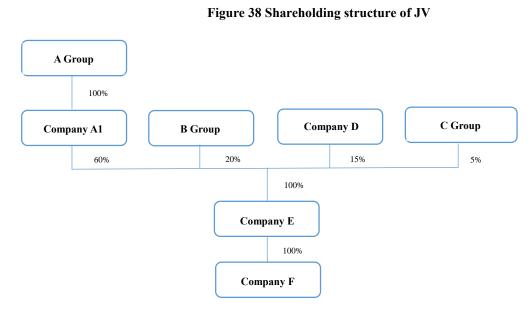
- '1' means aiming at 'one goal'. This goal is to be a world-class clean energy supplier and clean energy technology solution provider;
- '2' means mastering 'two transformations'. The two transformations are changing the concept of development and the way of development;
- '4' means promoting 'four developments'. They are safety, transformation, innovation. and harmony;
- '5' means 'five improvements'. These include improving the effectiveness and quality development of the enterprises, the management level of the enterprises, the international capability of the enterprises, the soft capability of the enterprises, and, finally, the capability to fulfil social responsibility.

To follow through with the '1245' strategy and form the 'one main body, two wings' industrial layout with clean production of coal as the main 'body' and clean power generation of coal and clean coal transformation as the two 'wings', with other industries such as solar, wind, and nuclear power as supplements, A Group actively searched for the opportunity to invest in solar business. They continued this search until they got in contact with B Group, which had just acquired 29.9% of the German Company D.

Before the acquisition decision, A Group engaged Deloitte, Latham & Watkins LLP, and China Electronics Engineering Design Institute to conduct financial, HR, legal, and technological due diligence and conduct feasibility research on the target with the goal of setting up a solar joint venture in Beijing.

Besides conducting the necessary due diligence and research with the help of the third parties, A Group also deeply researched monocrystalline silicon, polysilicon, CIGS, and CdTe thinfilm solar technology, and finally decided to invest in CIGS technology.

In May 2017, the JV platform was created by four shareholders in Beijing and Company D was wholly acquired. Three of the four shareholders directly invested in the JV and A Group invested via its subsidiary, Company A1. The shareholding structure is shown in the figure below.



Source: Company website and internet

#### 1. Acquirer 1: China central SOE A Group

A Group Co., Ltd. is a wholly state-owned, central enterprise established in October 1995 and approved by the State Council in accordance with the China Corporate Law. A Group is a comprehensive large-scale energy enterprise. Its main business areas include coal production and sales, electricity and heat production and supply, coal-based oil and coal-based chemicals, and other related railway and port logistics services. It is the largest and the most modern coal enterprise in China and the largest coal distributor in the world, ranking 165<sup>th</sup> in the 2014 Fortune Global 500.

The company became a role model for China's coal industry business because of its large-scale, efficient, and safe production. In 2011, the output of commercial coal reached 281.9 million tonnes, a 14.8% increase compared to the previous year, and the sales of coal reached 387.3 million tonnes, a 23.7% increase. On December 31, 2011, the reserve of coal was 25.4 billion tonnes and the recoverable reserve of coal was 15.25 billion tonnes according to the Chinese standards. Under the Joint Ore Reserves Committee (JORC) standards, the group's sellable coal reserve was 9.35 billion tonnes.

Besides traditional coal business, A Group also owned a considerable large-scale, highly effective, and rapidly increasing clean power generation business. This offered complementary advantages and followed a common development with the coal business.

As a central SOE, A Group has its own specific value concepts.

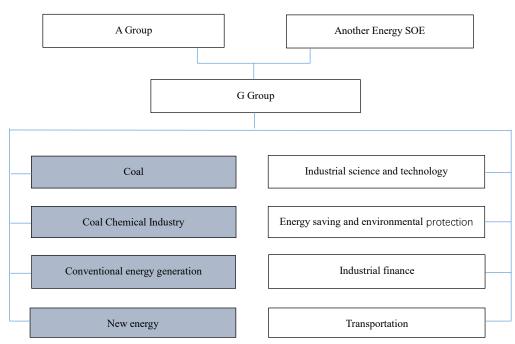
Table 33	Value	concepts	of A	Group
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Category	Value concepts
Mission	Provide green energy for social development
	• Adhere to the integrated development of mining, roads, ports, electricity, and
Vision	chemicals;
	• Create a world-class large-scale energy enterprise.
Core value	• Be scientific, harmonious, kind, and enterprising.
Sturate and	• Scientific development, reshaping of A Group, and doubled economic volume
Strategy	every five years.
Sminit	• Work hard and perseveringly, be pioneering and pragmatic, and pursue
Spirit	excellence
Concert of sofety	Mining without death;
Concept of safety	• Never overrun gas during production, otherwise it is an accident.
Management concept	• Be precise, rigorous, safe, and efficient.
Business philosophy	• Honesty and trustworthiness, pursuit of mutual benefit and win-win situations.
Concept of honesty	• Rather than seek fame and wealth, be prudent and fulfil duty.
Concept of talent	Attract talent and raise A Group's staff
Confidence, strate	egy, change, responsibility
• Raise a banner wi	th the same goal and work for achieving the goal together

Source: A Group's website

A Group has a brother company listed on both the HK and Shanghai stock exchanges in June 2005 and October 2007 respectively.

On August 28, 2017, approved by the State Council, A Group and the other China energy SOE merged and were restructured as a new SOE, G Group, which holds more than RMB 1.8 trillion in assets and has eight business sectors.



Source: G Group's website

The restructured Group ranks the first globally in four business sectors:

- The world's largest coal producer;
- The world's largest thermal power producer;
- The world's largest renewable energy producer;
- The world's largest coal liquefaction and coal chemical company.

In 2018, G Group ranked 101<sup>st</sup> in the Fortune Global 500.

#### 2. Acquirer 2: China SOE B Group

B Group is a state-owned large-scale comprehensive equipment manufacturing group. It focuses on energy equipment, industrial equipment, and integrated services. It dedicates itself to providing customers with green solutions, environmental protection, and intelligent, interconnected technology integration and system solutions. Its product range includes thermal power units (coal, gas), nuclear power units, wind power generation equipment, transmission and distribution equipment, environmental protection equipment, automation equipment, elevators, rail transit, and machine tools. Efficient equipment for clean energy and renewably-sourced energy accounted for about 70% of total sales revenue for B Group.

The history of B Group can be traced back to 1954. Through decades of development, B Group became a mechanical manufacturing group whose sales ranked first in the Chinese machinery industry. It was listed on the HK exchange market on April 28, 2005.

On December 30, 2008, B Group won the 'China's Most Competitive Brand' award from the

world's leading brand value research institute, the World Brand Laboratory.

On the company webpage, we find an explanation of company culture.

#### a) Brand Concept

Creation is the fundamental mission of manufacturing, and creativity is the core competitiveness of manufacturing. B Group is a large-scale equipment manufacturing group with the mission of creating basic equipment for the national economy and the people's livelihood. Creation is the soul of its continuous development. Every step of B Group's progress is made by our thousands of creators. They are the creators of different fields in B Group and the creators of good life. B Group provides a platform for the creation of staff in different fields of the Group with professional equipment. It also provides a strong platform for more creators to reach the future with its deep sense of social responsibility and influence.

#### b) Development Strategy

The company will further emphasize 'focusing on national strategy, promoting high-tech industrialization, and vigorously developing low-carbon economy', increasing investment in the new energy industry, and focusing on the development of high-efficiency clean energy, new energy, industrial equipment, and modern service industries. It will improve the competitiveness of the Group as a whole through technological advancement and international operational capabilities.

It adheres to the 'shareholder value-oriented, based on equipment manufacturing industry', further strengthening and expanding it, and is willing to provide more efficient, greener, and more economical energy and life for China and the world.

#### c) Corporate Vision

Guided by customer value, with innovation and development as the theme, it will provide more efficient, greener, and more economical energy, industrial equipment, and complete solutions for China and the world. It will make B Group a multinational group that has a global layout, transnational operation, international competitiveness, and brand influence.

In order to cope with the transformation of new and old kinetic energy and seek new strategic opportunities, B Group will incrementally develop new energy industries and will increase capital operation and investment in mergers and acquisitions.

On May 24, 2016, B Group officially announced that it had subscribed to Company D's additional issued shares of 1,523,500 through its wholly-owned subsidiary B Group German Investment Co., Ltd. at a price of 34.74 euros per share. The total subscription amount is EUR 52.93 million (about RMB 387.7 million). Upon completion, B Group German Investment Co., Ltd. held 19.67% of the total share capital after Company D's capital increase.

On December 27, 2016, the decision to acquire Company E was approved by the board meeting.

#### 3. Minority shareholders – Company D and C Group

Company D was the original German sole shareholder of Company E and kept a 15% share of the R&D joint venture as part of the strategy of working with A Group and B Group. The other minority shareholder, C Group, was the owner of the park in which the joint venture was located and it was also a Chinese SOE.

#### 4. The Target Company: Company F

Company F was Company D's CIGS research company. Company D is a German multinational company located in Reutlingen. It has expertise in five technology sectors: automation, metrology, laser processing, wet chemistry, and roll-to-roll processes. Company D offers its customers industry efficient system solutions which contribute to lowering the production costs of the end products and make them available to large buyer groups worldwide.

According to Company D's website, the milestones of the company since it was founded are summarised in the table below.

Years	Milestones
1987	Company founded.
1990	Developed the first automation system for processing crystalline solar cells in a pilot manufacturing project.
1994	Delivered the first automation solution for the FPD industry to Asia.
2000	Delivered the first automation system for fully automated crystalline solar cell manufacturing lines;
	• Developed the first fully automated quality testing and sorting system for crystalline solar cells.
2005	Entered into the thin-film market with equipment for the mechanical scribing of solar modules.
2006	IPO on the Entry Standard market of the Frankfurt Stock Exchange.
2007	Acquisition of Christian Majer (Germany) effective January 1, 2008, for the purpose of expanding manufacturing capacity.
2008	Gained additional technological expertise and manufacturing capacity through the acquisition of Manz Slovakia und
	Intech (Taiwan);
	• Accepted into the regulated market (Prime Standard).
2009	R&D partnership for the manufacture of lithium-ion batteries
2010	Acquisition of the exclusive rights of use of Würth Solar's CIGS production technology.
2011	Presents world record thin-film production size module with an efficiency of 14%.
2012	• Acquires CIGS modules innovation line from Würth Solar. Foundation of Company F;
	• Inauguration of new facilities in Suzhou (China) with 20,000 sqm production capacity.
2013	Becomes global leading equipment supplier for the touch panel production
	First order from AMOLED display industry.
2014	Acquisition of mechanical engineering division of Kemet Electronics Italy (formerly Arcotronics) for enlargement of
	technology portfolio in Battery division.

#### Table 34 Company milestones of Company D

2015	Acquisition of KLEO, a company of the ZEISS Group; expansion of portfolio by laser direct imaging technology.
2017	Start of strategic collaboration with B Group and A Group in CIGS thin-film solar technology.

Source: Company D's company website

Based on information in the interim report for the first half-year 2018 of Company D, B Group is the second-largest shareholder after the natural person shareholder.

As stated by Mr. Lin, CEO of Company D in China, 'From B Group's point of view, investing in Company D is not just a business investment, but also an investment in Company D's capability in the aspects of automation, energy storage, and industry 4.0. B Group itself also has a layout in these areas and intends to increase its market share and improve technology by cooperating with Company D' (Yanjun Shi, Siyu Fuhuang, 2016).

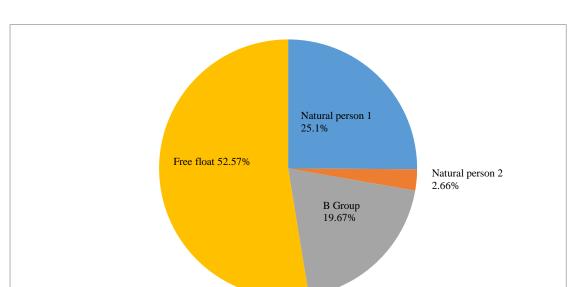


Figure 40 Company D Shareholding Structure, June 2018

Source: Company D's 2018 half-year financial report

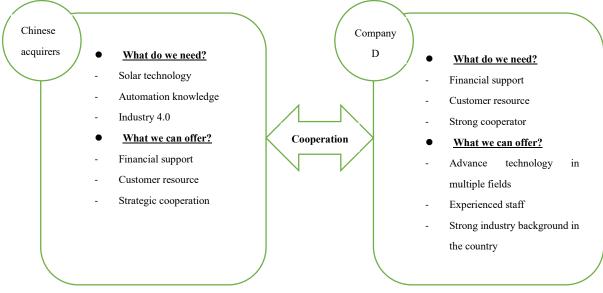
The cooperation among Company D, A Group and B Group contained various parts in the solar industry chain. That is to say, besides setting up an R&D joint venture which acquired its research subsidiary and becoming a minority shareholder of this JV, Company D also established several other joint ventures with these two groups. The above Company D' shareholding structure shows that B Group is the second largest shareholder of Company D. The complete introduction of the cooperation among Company D, B Group, and A Group will be described more thoroughly in the following section 6 'The acquisition'.

#### 5. Acquisition Trigger

Because this is not a simple case in which one company acquired the other, it is necessary to put this acquisition into the context of strategic cooperation among the relevant parties and observe the acquisition triggers for each party.

Since the participating parties in this case are in the same industry as those in Case 2, the acquisition triggers analysed in Case 2 can also be applied here. These include government support of the solar power industry, industry competition patterns, and the advantages of CIGS thin-film technology.

Looking at the acquiring Chinese SOEs and the targeted German Company D, we can gain a good idea of the reasons for the acquisition.



#### Figure 41 Resource and request review of the three major participants

Source: Compiled by the author

Through the above comparison of the two Chinese parties and the German party, it becomes clear that they have complementary competencies and needs, which likely triggered this acquisition. Both parties fully understood that there were already some major industry players and that the best way to win in the mature market and beat the fierce competition was to consolidate more resources and build cooperation among strategic partners.

#### 6. The Acquisition

Before the acquisition of Company F, one of the acquirer B Group acquired minority shares of Company D on February 28, 2016. It was officially announced on the website that B Group signed an investment agreement with Company D, according to which Company D would issue new shares to its existing shareholders at a rate of approximately 0.43 shares per share in cash. The share price of the new shares would not exceed 40 euros per share so that the highest investment amount of B Group's subsidiaries in this capital increasing subscription was expected to be 92,928,960 euros, corresponding to 29.9% of the share capital of Company D after its capital increase.

The participation of the Chinese acquirers was definitely welcomed by Company D, which had already started to search for an acquirer and business partner in 2012.

The alignment between two Chinese SOEs (B Group and A Group) in this acquisition can easily be understood according to the above analysis of the general strategy and acquisition trigger.

The cooperation among multiple parties to establish a JV is part of the full industrial chain strategic cooperation plan called the R&D platform. In addition to this, an equipment platform, module platform, and project platform were also established among the same participants with different shareholding ratios. The brief of functions of each platform and the overall industry chain map are described as follows.

#### a) The R&D platform

The joint venture of the R&D platform was created by A Group via its wholly-owned subsidiary Company A1 (60%), B Group (20%), Company D (15%), and C Group (5%). This was the technology driver of the whole industry chain that providing IP and know-how to the equipment platform in the building production line and earned revenue on the production line sold by the equipment platform.

The main business that the R&D platform performed included:

- Processed R&D and sales of CIGS thin-film solar cell technology;
- Processed R&D and sales of the new generation of CIGS thin-film products;
- Provided technology training and service

#### b) The equipment platform

The joint venture of the equipment platform was established by Company D (56%) and A Group via its wholly-owned subsidiary Company A2 and B Group (10%), the equipment manufacturer applying the technology from the R&D platform.

The main business of the equipment platform is manufacturing and selling CIGS thin-film production equipment to external and internal clients. This is related to the installation of the equipment. The commissioning will be done by the R&D platform. The third platform that focuses on module production will be one of the clients of the equipment platform.

#### c) The module platform

The joint venture of the module platform was established by A Group via its wholly-owned subsidiary Company A2 (54%), B Group (20%), a Shenzhen high-tech company (10%), and A Group via its wholly-owned subsidiary Company A1 (10%). Company A1 is the standard module and BIPV (building-integrated photovoltaic) producer that manufactures on the equipment and production line provided by the equipment platform. The nominal production capacity is 306MW with plans to start operation in 2019.

#### d) The project platform

The project platform will be set up by A Group and B Group and will focus on undertaking and developing a CIGS project in building a power station and gaining revenue from electricity generation once the power station is up and running.

Each platform mentioned above has its own competency in the industry chain and can serve both external and internal clients. Below, the business relationship and profit generation map can be seen.

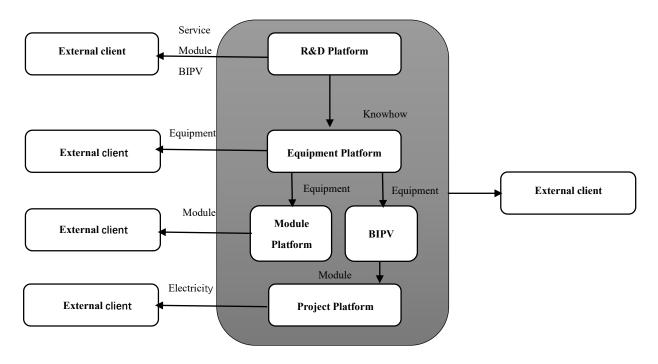


Figure 42 CIGS industry chain and profit generation map

Source: Published announcement from B Group

This case is more complicated than the other two case studies. This is due to its acquisition form, as it involved setting up cooperation with cross-border business partners rather than acquisition. The parties involved were Chinese SOEs and a traditional German company. The huge difference in culture, management style, governance model, and modes of communication was expected and made the integration more complex than usual.

#### 7. Integration Process

The R&D JV was established by three Chinese SOEs and the original shareholder of the target company in May 2017. A small integration team assigned three Chinese staff chosen by the majority shareholder of the JV to the target company for a couple of months to complete the 'integration' process, which mainly covered financial and technical functions. During the initial

phase of integration, there were various visits between Chinese and German management.

The target company changed its name according to the suggestion of the Chinese management. The new name was taken from the abbreviation of the majority shareholder of the R&D JV, which predicted the creation of an entirely new business detached from the old parent company.

#### a) Staff

Representatives from the four shareholders formed the board of the R&D JV, and, soon after that, the core management team was finally named for the R&D JV and the German subsidiary. This included co-CEOs from China and Germany, a CTO from Germany, and a VP and CFO from China. Both CEOs had different job functions in the JV. The brief governance structure is as follows.

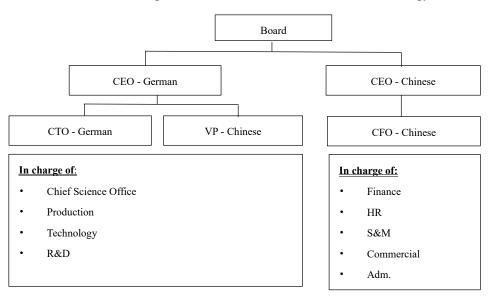


Figure 43 Governance Model of Nice Solar Energy China

There was no systematic research on the target company before or after the acquisition. The key technology and management staff and the proxy's identification was very rough and lacked accuracy, and there was also no retention plan for the key staff.

No layoffs were made in the acquiring company, but Company F did lose some staff after the acquisition. The headcount was strictly controlled by the A Group who was in the process of laying off the staff in the rest of the group due to the business downturn. The target company had to run the company and strive for the targets assigned by the board with a shortage of staff.

Since Company F was functionally in the R&D division of Company D, it relied on the support from the parent company in some of its administrative functions. After the acquisition, Company F restructured some functional departments and hired new staff to make the company more complete functionally. For example, hiring a new finance director who would report to

Source: Staff open talk

the JV CFO was a critical step in the staff integration stage.

As a start-up company, slowing down the recruitment rhythm brought no big impact on the daily operation for the R&D JV, especially as its new factory was still under construction in Beijing.

Generally speaking, the complicate cross-company and cross-function governance model reduced the working efficiency somewhat.

For example, the production staff in Beijing directly reported to the VP in China who further reported to the CEO in Germany. The difference in location and time between China and Germany made the report and approval flow longer than normal and sometimes it was not well managed. The Chinese R&D department staff had a similar situation since their top manager was the CTO located in Germany.

The HR department of the R&D JV used the consulting company Mercer to comb the professional position and rank of the German subsidiary to make it comparable with its parent company one year after the acquisition. This should have been done earlier as it was well over a year before the new staff rank was completed and the new ranking was done by a third party without openly communicating with the staff.

#### b) Technology and production

Technology transfer was achieved by building a new pilot production line in Beijing and the production line was in the module platform. The CTO from Germany was the leader of R&D and was responsible for building the teams in China and Germany.

Chinese staff were scheduled to receive a half-year of technical training from the German technicians. This would help the Chinese staff in the engineering and commissioning of the new production lines in China. The German experimental production line was to be used for R&D activities with the new capital investment from China to upgrade the equipment.

The capacity of the proposed production line in Beijing was 44MW, which would support the R&D activities in Beijing and the small-scale production of standard modules and customized products in the future. It was expected that Germany would provide more and more technical guidance to China as the business ramped up.

#### c) Brand and market

Since the mass production line of 306MW from the module platform is still under construction and expected to ramp up in 2020, and it is the same with the pilot production line of 44MW in Beijing, there is no clear branding strategy proposed.

As analysed in previous sections, the R&D JV will focus on continuously improving the

technology, which mostly relies on selling patents and know-how in order to earn revenue from internal and external clients. Branding and marketing was not a key consideration in this case. But if we take the whole industry chain with multiple participants into consideration, the question of how to price the by-products from the R&D activities should be considered. Especially important is how to avoid competing with the module JV and the BIPV manufacturing company, as this question remains open.

Each platform in the industry chain has an inseparable interest in the others.

# d) Leadership and culture

The previous two cases involved German companies acquired by Chinese POEs. In this case, the majority shareholders are Chinese SOEs, which makes the gap of leadership and culture at the corporate level even bigger.

Before we explore the integration process, it is first important to understand the major differences between Chinese POEs and SOEs in a number of aspects.

# - Different objects of responsibilities

The SOE is accountable to the owners of state-owned capital, that is to say, the country and the people. Formally, they are accountable to the state-owned capital management departments of local governments. The government and the state-owned capital management departments are responsible for supervising the operation and value-added of state-owned assets on behalf of the state and people.

The POEs are accountable to the shareholders, which means the investors are the beneficiaries, supervisors, and risk-takers.

In accordance with the modern enterprise system, both SOEs and POEs have corresponding boards of directors, supervisory boards, and operating management teams.

# - Different responsibility mentality

The different responsibility mentality mostly refers to the difference in the spirit of ownership from the enterprises' leaders and supervisors. Generally speaking, the spirit of the ownership from POE leaders and supervisors is stronger due to a stronger relationship between the enterprise operation results and the benefits for the leaders and supervisors.

Usually, the strong feeling of ownership will bring about the following effects in the enterprises:

- a) A lower degree of corruption;
- b) A higher degree of discretion in decision-making, which makes for lower potential risks;
- c) A greater desire for profit, which promotes a stronger desire for innovation; and
- d) A more serious leadership which will reduce the laziness of employees.

#### - Different vision of development

SOEs usually face greater resistance in opening up international markets since very few countries welcome foreign government-controlled enterprises.

The SOE cannot increase the people's sense of wealth, but it can increase the government's management content, the administrative burden, and the resources grasped, which can further increase the autocracy of the government. Private enterprises can increase the wealth of the shareholders, which is conducive to the healthy development of society.

The SOEs are politically driven, but not market or profit driven. Management staff in SOEs care more about keeping their position and developing their own career in their current organization. *Guanxi* (personal relationship) is the most important key in daily business. Personal relationships are built by offering help and giving *Mianzi* (face) to each other. People are more devoted to building up solid *Guanxi* in the organization and *Zhandui* (line up) is an unspoken request by leaders. Especially in a start-up company, management observes the rules of man but not the rules of clear regulation. In other words, even though the company has clear policies, people could always find a solution either to work around the policy or the power class will introduce a new policy to replace the old one in order to achieve the goal.

For example, according to PRC Accounting GAAP, one company should not reimburse any personal expenses to non-company staff. But with the special approval from the CEO, this rule could be broken, for instance when reimbursing the expenses of visitors to the headquarters who have good *Guanxi* with the CEO.

One of the German team leaders shared her feelings on the difference in leadership styles between the Chinese and the Germans. She said that the Chinese management used to give orders top-down and request that the subordinates obey the order with no excuses, while the German staff can negotiate and discuss everything with their manager.

During several open talks with different levels of German staff, the following three hot topics were often discussed.

#### - 'We need more transparency from Chinese management.'

A CTO from Germany has questioned the position of the 'Chief Scientist' from China who does not report to him, but to the CEO directly. As the head of technology, he thought he should be the only leader in this function.

#### - 'Everybody mentioned integration, but what do you want to integrate?'

During the open talk, one of the manager-level technicians mentioned that it seems there are different understandings of integration among the staff, but nobody from the Chinese

management could address this point clearly. The middle-term target of the German company was also not clear to German staff.

### - 'What do you think the biggest failure of this M&A is?'

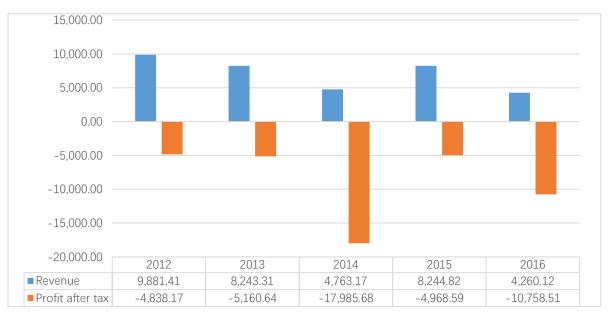
I got this question in an open talk from a German engineer, and later on, she shared her opinion with me. She said that there is a kind of special team spirit in the company that brought people together even through tough times. And from her point of view, destroying this team spirit was the biggest failure of this M&A.

One open talk was organized with the Chinese engineers who had accepted training in Germany during that period. When we talked about the difference between the Chinese and the Germans, some of the engineers thought that the Germans had a more straightforward way of communicating than the Chinese, but more of the Chinese engineers thought there was no significant difference between the Chinese and the Germans on a personal level.

# 6.3.2 Financial and operational performance after acquisition

As the acquirer is a joint venture set up by four shareholders and is a non-listed start-up company, the financial information is not available publicly. Since the target Company F has its main business focus on R&D and technology, we can treat it as a cost centre mostly financed by the shareholders with some sales of by-products from R&D activities. Negative P&L results were expected, which could be alleviated through functional synergy such as procurement and R&D after the acquisition. The yearly financial reports of Company F after 2016 have not yet been published. We could not analyse the impact of the acquisition in the integration phase from a financial perspective, but we will have some operational integration summaries in the next section.

From the Company F's after-tax profit margin trends since 2012 (figure 44), we can see the yearly incremental loss. This explained why Company D was looking for an acquirer from the open market to take over.



Unit: Thousand EUR

Sources: Published audit reports of Company F from FY2012 to FY2016

In this section, we will give an overview of the financial impact of the acquisition on Company D. As the previous owner and current minority shareholder of Company F, Company D realised operational turnaround after selling Company F to the joint venture and became the biggest winner in the deal.

						Unit: Thousand EUR
	2012	2013	2014	2015	2016	2017
Revenues	184,107	266,248	305,925	222,019	231,010	324,967
Changes in inventory	-10,118	4,224	-6,461	-6,700	128	661
Internally produced and capitalized assets	14,888	7,890	9,305	14,500	7,733	9,478
Total operating revenues	188,877	278,362	308,769	229,819	238,871	335,106
Other operating income	15,495	13,917	12,517	10,927	7,369	38,643
Material expenditures	-100,870	-160,490	-180,168	-147,783	-138,432	-222,620
Gross profit/loss	103,502	131,789	141,118	92,963	107,808	151,129
Personnel expenses	-71,591	-65,216	-72,358	-84,007	-79,142	-74,517
Other operating expenses	-42,712	-39,563	-54,847	-50,817	-50,443	-65,161
EBITDA	-10,801	27,010	13,913	-41,861	-21,777	11,451
Depreciation, Amortization and Write-downs	-19,907	-23,909	-46,700	-16,344	-14,154	-9,895
Earning before interests and taxes (EBIT)	-30,708	3,101	-32,787	-58,205	-35,931	1,556
Financial income	211	370	413	89	48	96
Financial expenses	-1,919	-3,337	-2,193	-3,581	-3,716	-1,754
Earnings before taxes (EBT)	-32,416	134	-34,567	-61,697	-39,599	-102
Taxes on income	-1,064	-2,857	-3,611	-2,514	-2,956	-2,696
Comprehensive income	-33,480	-2,723	-38,178	-64,211	-42,555	-2,798

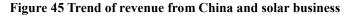
Table 35 Company D Consolidated P&L 2012–2017

Source: Company D yearly audit reports, 2012–2017

#### 1. Comprehensive loss decreased significantly and realised positive EBIT in 2017

The yearly audit reports from 2013 to 2017 and the 2018 half-year interim report reflected the increase of solar business compared with revenue generated from electronics, energy storage, contract manufacturing, and services. The strongest performance of solar business happened just after Company D established the collaboration with three Chinese state-owned companies in 2017 with the purchase agreement to sell Company F bundled with two production line procurements from China. In the first half of 2018, 39.9% of the revenue of Company D came from solar business. This collaboration also stimulated the business in the Chinese market after a downturn from 2013 to 2016.





Sources: Company D's Audit Report, 2013-2017 and 2018 half-year interim report

As mentioned above, the decrease of Company D's comprehensive loss came from the good performance of the solar business in China, which also reflected the positive impact of the collaboration with the Chinese acquirers.

It is particularly obvious from the 2017 financial performance that the EBIT achieved a positive result after years of loss. The significant decrease of financial results in 2017 also reflected the bettered operational performance that relieved the group's external financial liabilities.



Figure 46 Yearly result, EBIT, and financial performance

It is also stated in the 2017 yearly audit report that 'Group revenue as well as our consolidated net profit before interest and taxes (EBIT) reflects this success in the Solar, Contract Manufacturing, and Services segments. Revenue increased by 40.7% to a record level of 325 million euros while EBIT improved by 37.5 million euros from - 35.9 million to 1.6 million euros, primarily thanks to the one-off effect in the solar segment from the sale of Company F'.

# 2. China continuously contributed the most revenue for Company D and solar business contributed positive EBIT in the first half of 2018

China contributed 52.5% of the total revenue to the group, which is 34.9% more than the revenue contributed by the US (see figure 46).

Sources: Company D's Audit Reports, 2012-2017

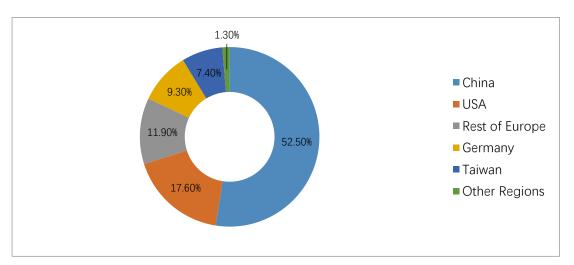
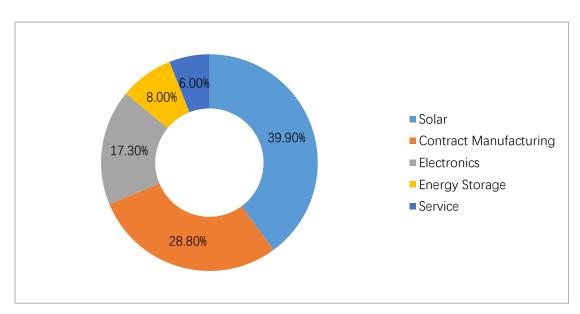
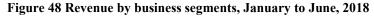


Figure 47 Revenue by regions, January to June, 2018

Source: Company D's 2018 first half-year interim report

The performance of solar business in the first half of 2018 reflected the continuous strong profit earning ability compared with the other four business segments. The half-year revenue from solar business ranked first among the four business segments. The absolute value of the EBIT ranked second, but if compared with revenue, the EBIT from solar business was 26%, which showed the best profitability.





Source: Company D's 2018 first half-year interim report

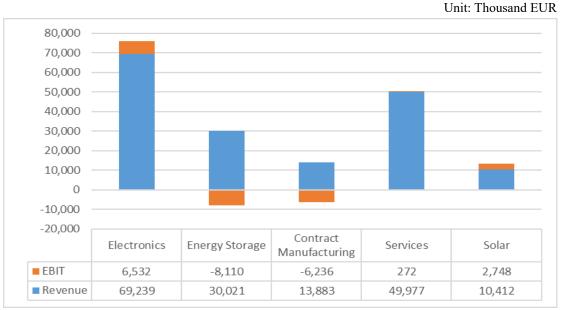


Figure 49 Revenue and EBIT of the first half of 2018 by business segments

Source: Company D's 2018 first half-year interim report

# The increase of sales, raw material procurement, and inventory reflected the business turnaround after collaboration with the Chinese business partners.

From the above analysis, the collaboration with the Chinese SOEs improved the solar business and also stimulated its Chinese market for Company D. The positive financial impact came from selling Company F to the Company E and also from obtaining the new sales channel in China. Along with the increase in revenue, the increase in material procurement and inventory since 2017 reflected the vigorous business.



Figure 50 Trend of revenue, inventory change, and material procurement of Company D

Source: Company D's Audit Reports, 2012-2017

Since the four platforms of solar business are all in the start-up phase, more time is needed to observe the functional performance of the platforms.

As the seller, Company D has benefited from this deal, which was reflected in their published financial report. The production line sales contract combined with the PPA of Company F helped Company D turn around their business in the solar industry and in China.

# 6.3.3 Integration evaluation and enlightenments

This case is more complicated than the other two since it did not occur between the one buyer and one seller but by setting up an industry business chain among four shareholders.

If we look at the four parties' collaboration strategy, we would say that it is meaningful to both the Chinese and the Germans since both parties can complement each other. In the designed industry collaboration strategy, each of the four platforms has its own external clients and can generate revenue. Additionally, the platforms have internal business cooperation in which they provide services or products to each other. Relying on the demand for clean energy from China, the Chinese SOE as the majority shareholder of all the platforms is a strong guarantee for the market shares for the R&D joint venture. The ongoing production line construction in China will be the recipient of German technology in China. More time will be needed to determine if the business model works well.

People are always the most important 'assets' to be considered in the integration phase, especially for a high-tech company, since all the technology and know-how are from and kept by the key staff members. Through observing a short-term integration period, we could identify some problem areas by summarising the things that should be done compared to the things that have been done.

Integration	Actions	Status
Function		
Strategy	• Clear the targets for both sides	Ongoing
	Clear the integration process and targets	Ν
	Set up company business model and profit model     N	
General	• Name the management team for both sides	Y
Management	Set up clear and effective governance model     Ongoing	
	• Establish company mission, vision, and core values to unify N	
	both sides	
HR	• Identify the key people from management and technology	Ν

#### Table 36 Tracking the integration of people

	• Design and implement retention plan for identified key people	Ν	
	• Sort out and unify the ranks and grades of employees in both Ongoing		
	companies		
	Cross-culture training	Y	
Finance	Accounting GAAP conversion	Y	
	• Set up finance team and cross-team working mechanism	Y	
	Accounting system integration and report consolidation	Y	
	• Unify internal control and sign limit authorization	Y	
R&D	• Set up clear targets for both R&D teams	Y	
	• Set up cross-team working mechanism	Ongoing	
	• Set up technology transfer plan	Ongoing	
Sales and	• Position the company clearly in the internal solar industry	Ongoing	
Marketing	chain		
	Set up S&M strategy	Ongoing	
	• Set up S&M team	Ongoing	

Source: Staff interview

For the table above:

- 'Y' means the action has been completed.
- 'N' means the action has not been completed.
- 'Ongoing' means that the management has the intention to complete it and the process is ongoing but not yet complete.

Each of the listed actions is meant to be done in the integration period and some of them are time-sensitive. In other words, if the action is not completed within a certain period after the integration, its (positive) effect will be greatly reduced. In this case, the failure to identify key staff and lack of a retention plan made the company lose talented individuals. A lack of timely and transparent communication regarding the integration process and target will do harm and not help keep the company stable after integration. A lack of timely sorting out and unifying staff rank and grade may make the staff psychologically unbalanced.

#### 6.4 Cross-case analysis and discussion

#### 6.4.1. Overview

In this dissertation, I selected three Chinese cross-border acquisition cases in Germany for in-depth analysis based on a set of defined criteria. To generalize the case findings, I have summarized the general information about these three cases as the start of analysis and discussion.

Content	Case 1: SANY - Putzmeister	Case 2: H Group – Company M	Case 3: A Group/B Group – Company F
Acquisition time	January 31, 2012	September 30, 2012	January 21, 2017
Purchase price	EUR 360,000,000	EUR 25,000,000	EUR 50,000,000
Industry	Construction machinery	Photovoltaic	Photovoltaic
Nature of acquirer	POE	POE	Majority shareholder is SOE
Size of acquirer (staff number)	About 50,000	More than 10,000	The majority shareholder has more than 150,000 staff worldwide
Size of target (staff number)	About 3,000	About 450	About 130
Acquisition mode	Equity acquisition	Equity acquisition	Equity acquisition via newly established JV among four shareholders
Acquisition share	100%	100%	100%, China SOE 85%
Acquisition Trigger (from acquirer)	<ul> <li>Obtain advanced technology;</li> <li>Change the market pattern;</li> <li>Obtain complementary benefits from brand, production, and sales system.</li> </ul>	<ul> <li>Obtain advanced technology;</li> <li>Enjoy preferential government policies;</li> <li>Occupy a favourable position in the competition pattern.</li> </ul>	<ul> <li>Obtain advanced technology</li> </ul>

Table 37 General information about the three cases

Source: Compiled by the author

This dissertation focuses on post-deal integration in high-tech industry. In this industry, the most common acquisition trigger for the acquirers was obtaining advanced technology from the target companies.

From the above table, clear commonalities among the cases can be found:

- All cases were in the manufacturing industry;
- The size of acquirers measured by staff number was more than 10 times the staff of the targets in the first two cases, and in the third cases the Chinese shareholders of the acquirers are more than 10 times the size of the target company;
- Equity acquisition was used;
- The companies sought to obtain advanced technology.

Through the above comparisons, the differences between the three cases also became clear:

- The integrations took place over different spans of time;

- The companies were in different parts of the manufacturing industry;
- Deal size measured by purchase price varied considerably;
- Chinese acquirers held either 100% or 85% of the shares.
- Two were POEs and one was an SOE;
- There were different acquisition triggers.

# 6.4.2 Financial and operational integration

H Group in case 2 involved a third-party consulting firm in the integration process. In the other two cases, the acquirers worked on the integration by themselves. We will observe the integration period by the short term, middle term, and long term respectively.

We define the short term as 100 days after deal completion, middle term as 2 years after deal completion, and long term as 5 or more years after deal completion.

# 1. Integration process

The comparison of the integration process in the three cases will be analysed by corporate functions. From the analysis, we will see the general focus of the acquirers and the differences as well. If the relevant information is not available, it will be marked as 'NA'. If any action continued on to the next observation period, it will be marked as 'Cont'd'. If there is no relevant information provided, it will be marked as '-'.

In the last part of this chapter, when we further discuss the best practices in each observation term, we will have a better understanding of the integration results from each of the three cases.

Case	Content	Short term	Middle term	Long term
Case 1:	Process	> No third-party involved	> -	-
SANY - Putzmeister	Initiated			
	General	<ul> <li>Keep German management untouched</li> </ul>	Promote German CTO to CEO	> Introduce new German CEO from the
	Management			market;
				<ul> <li>Change German CFO;</li> </ul>
				> One Chinese manager placed in the core
				management team as representative
	HR	NA	NA	NA
	FIN	NA	NA	NA
	R&D	> Set up collaboration mechanism between	<ul> <li>Organize Chinese R&amp;D team study in Germany;</li> </ul>	Cont'd
		two R&D teams	> Obtain and implement about 200 IP from	
			Germany	
	Production	NA	> Integrate the production lines from both parties;	> Work together to enhance the overall
			> Work on cost reduction road map via integration;	manufacturing performance
	Brand &	NA	<ul> <li>Keep 'Elephant' independent from SANY's</li> </ul>	Cont'd
	Marketing		product;	
			> Integrate the emerging markets from Putzmeister;	
			<ul> <li>Complement sales network globally with</li> </ul>	
			Putzmeister	
	Supply Chain	NA	> Put SANY on the supplier list of Putzmeister	Cont'd
Case 2:	Process	> Involve third-party consulting firm and set	-	-
H Group – Company M	Initiated	up integration team composed of the acquirer,		
		the target, and the consulting firm		

#### **Table 38 Comparison of Integration Process**

	General	Keep the German management team	<ul> <li>Assigned a Chinese CFO to the core management</li> </ul>	<ul> <li>Assigned Chinese CEO and COO after</li> </ul>
	Management	untouched	team	German GEO resigned
	HR	<ul> <li>&gt; Organize staff communication</li> <li>&gt; Set up key staff retention plan</li> </ul>	<ul> <li>Implement key staff retention plan</li> </ul>	Cont'd
	FIN	<ul> <li>Set up finance governance model</li> </ul>	<ul> <li>Accounting firm working together with both parties on the GAAP conversion and reporting</li> </ul>	Cont'd
	R&D	<ul> <li>Set up communication and working</li> <li>mechanism</li> </ul>	<ul> <li>Organize Chinese training in Germany and further promote the communication</li> </ul>	Cont'd
	Production	<ul> <li>Design the production line localisation</li> <li>plan;</li> </ul>	<ul> <li>Implement the production line localisation plan;</li> </ul>	Cont'd
	Brand & Marketing	<ul> <li>Keep the German brand independent</li> <li>Make the brand logo contain the suffix "A H Company"</li> </ul>	Cont'd	Cont'd
	Supply Chain	<ul> <li>Set up communication and working mechanism;</li> <li>Assign Chinese procurement staff to Germany</li> </ul>	Both teams work together to find synergy from supply chain integration	Cont'd
Case 3: A Group – Company F	General Management	<ul> <li>Keep the German management untouched;</li> <li>Set up co-CEO governance model and nominate a Chinese CEO to work together with the German CEO</li> </ul>	<ul> <li>CFO on board;</li> <li>Set up core management team including 2</li> <li>Germans and 3 Chinese.</li> </ul>	-
	HR	<ul> <li>Arrange communication between Chinese</li> <li>top management and German staff</li> </ul>	<ul> <li>Third-party consulting company provides culture training for both Chinese and German staff;</li> </ul>	-
	FIN	<ul> <li>Set up cash control policy;</li> <li>Understand the target's financial</li> </ul>	<ul> <li>GAAP conversion and internal/external reports consolidation;</li> </ul>	-

	operations process	<ul> <li>Build financial teams on both sides;</li> </ul>	
	<ul> <li>Budget discussion</li> </ul>	> Set up working mechanism between two finance	
		teams	
R&D	> Set up working mechanism between two	<ul> <li>Arrange training for Chinese engineers in</li> </ul>	-
	teams	Germany	
Production	-	-	-
Brand &	-	> Change the company name of the target to follow	-
Marketing		the Chinese company;	
		<ul> <li>Sell modules produced by Germany to China to</li> </ul>	
		explore market	
		<ul> <li>Attend industry exhibitions together</li> </ul>	
Supply Chain	-	<ul> <li>Assign Chinese engineer to support German</li> </ul>	-
		procurement team and sort out the procurement process	
		Share suppliers to seek synergy	

Source: Compiled from cases study sections

### 2. Financial and operational performance

We can start the evaluation of integration by observing the financial performance of the acquirers and the targets. In China, the financial information of an unlisted company is not published, so we have no resources with which to track the changes before and after the acquisition for these companies.

For example, in case 3, the JV is not a listed company with publicly available financial information. Additionally, since the four collaborating companies acquired the target through their JV in 2017, not enough time has passed to observe the impact on financial performance. Because Company D had dual roles in this case study, we analysed the impact of the acquisition through its financial information.

The assessment of integration is mainly based on the financial and non-financial results from the integration practice. The measurable synergy reflected by the financial result is analysed by considering the following aspects.

- The trend of revenue
- The trend of revenue from the target company related segment
- The trend of revenue from the target company related region
- The change of revenue domestic vs. overseas
- The trend of gross margin/EBIT/net profit
- The trend of inventory change
- The comparison of revenue change and profit change
- Change of financial cost, raw material cost, and staff cost

In addition, some other non-financial integration results were analysed by considering the following aspects.

- Change in management practice
- Practice of functional integration
- Synergy obtained from integration practice

	• • • •	•	· · ·
Table 39 The fina	ancial informatio	n comnarison amo	ng the acquirers
	inclui mitoi matio	n comparison amo	ing the acquirers

Content	Case 1: SANY – Putzmeister	Case 2: H Group – Company M	Case 3: A Group – Company F
Tracking period	> 2010-2017	A -	A -
Revenue	<ul> <li>Revenue from concrete machinery slightly increased in the year after acquisition;</li> <li>Revenue from concrete machinery takes 59% of total revenue the year after acquisition;</li> <li>Overseas revenue dramatically increased in the year after acquisition</li> </ul>	▶ -	>
Cost	<ul> <li>Cost of sales increased after acquisition</li> </ul>	A -	► -
Gross margin	Decreased in the year after acquisition due to the macroeconomic impact	> -	> -
General analysis	<ul> <li>Acquisition stimulated the revenue of acquirer;</li> <li>Synergy from cost reduction is not yet realised.</li> </ul>	<ul> <li>Since the acquirer is an unlisted company in China whose financial report is not available from public sites, the relevant analysis cannot be conducted;</li> <li>Since solar business is just a small part of the group, the revenue may not have a significant impact on the group level result.</li> </ul>	<ul> <li>Since the acquirer is a JV set up by three Chinese SOEs and the original shareholder of the target in 2017 was an unlisted company, the financial situation cannot be tracked;</li> <li>As a start-up company, there is no complete yearly financial information for tracking until now.</li> </ul>

#### Table 40 The financial information comparison among the targets

Content	Case 1: SANY – Putzmeister	Case 2: H Group – Company M	Case 3: A Group- Company F
Content	Case 1. SAIVI – I utzineistei	Case 2. If Group – Company M	Company D
Tracking period	> 2009–2016	▶ 2009-2016	▶ 2012-2018
Revenue	In the observation period, the target company had an	Revenue increased two years after the deal was	<ul> <li>Revenue significantly increased in 2017;</li> </ul>
	upward trend of revenue through the years;	completed;	Revenue from China and solar business were
		Inventory significantly decreased in 2016, which was	significantly increased
		aligned with the sales blooming;	
Cost	➢ NA	No significant performance observed	➢ NA
Gross margin/Net	➢ NA	Did not reach break-even through the year;	EBIT turned positive in 2017 after three years of
profit		Even though the target operated at a loss, the loss	negative results;
-		situation was alleviated through the years.	The comprehensive result was negative in 2017 but was
			significantly alleviated;
General analysis	The acquisition helped the target get out of the business	Based on the target's financial report, it took about two	The collaboration with Chinese SOE helped Company
	difficulties, which was reflected in the revenue increase.	years for the target to benefit from the acquisition;	D turn around its business in China and in the solar industry;
		$\rightarrow$	$\blacktriangleright$
		In general, the loss situation was alleviated after	Sold out MCT, the cost centre for R&D to significantly
		acquisition, which could be considered as a successful	alleviate the loss situation of Company D.
		integration.	

Source: Compiled from case study sections

#### 3. Integration evaluation and comparison

According to the best practices of integration checklist with the specific term durations (short, middle, and long term), the three cases can be easily compared. The dimension 'terms' reflects how quickly the action should be completed. 'Y' and 'N' reflect whether or not the relevant action has been done within the named 'terms'. 'Ongoing' means not yet been done but has been initiated. 'NA' means we had no relevant information from a primary or secondary data source.

Function	Integration Actions	Terms	Case 1	Case 2	Case 3
	> Clear the targets for both sides	S	Y	Y	Ongoing
Strategy	<ul> <li>Clear the integration process and targets</li> </ul>	S	Y	Y	Ν
	> Set up company business model and profit model	S	Y	Y	Ν
	> Name the management team for both sides	S	Y	Y	Y
Constal Management	> Setup clear and effective governance model	S	Y	Y	Ongoing
General Management	Establish company mission, vision, and core value to unify both sides	s	Y	Y	N
	<ul> <li>Identify the key person from management and technology</li> </ul>	S	Y	Y	N
HR	<ul> <li>Design and implement retention plan for identified key person</li> </ul>	S, M, L	NA	Y	N
	<ul> <li>Sort out and unify the ranks and grades of employees</li> <li>in the two companies</li> </ul>	S	NA	Y	Ongoing
	<ul> <li>Cross-culture training</li> </ul>	S, M	Y	Y	Y
	<ul> <li>Accounting GAAP conversion</li> </ul>	S	Y	Y	Y
	<ul> <li>Finance team and cross-team working mechanism setup</li> </ul>	s	NA	Y	Y
Finance	> Accounting system integration and report consolidation	s	Y	Y	Y
	> Unify internal control and sign limit authorization	S, M	NA	Y	Y
	> Set up clear targets for both R&D teams	S	Y	Y	Y
R&D	<ul> <li>Set up cross-team working mechanism</li> </ul>	S, M	Y	Y	Ongoing
	> Set up technology transfer plan	S, M	Y	Y	Ongoing
	Position the company clearly in the internal solar industry chain	S, M, L	NA	NA	Ongoing
Sales & Marketing	> Clear the targets for both sides	S	Y	Y	Ongoing
	<ul> <li>Clear the integration process and targets</li> </ul>	S	Y	Y	Ongoing

#### Table 41 Integration checklist for the three cases

Source: Compiled from the case study sections

#### 6.4.3 Key takeaways from the cross-case analysis

Even though we can describe the integration goals as short term, middle term, or long

term, we cannot define the exact length of the overall integration period. As Mr. Jiang, the Chinese manager assigned by SANY, said, even the deal completion was more than five years ago, the integration is still ongoing. Whenever both parties run the business seamlessly as one company, we would say the integration period is complete.

Using the above integration checklist, we will next analyse the positive and negative impacts respectively.

# **1.** Keeping the target company stable after the acquisition has the most focus in the short run.

In the short run, all three acquirers kept the core German management team untouched to gain the target company's trust. SANY and H Group interfaced Chinese management into the acquired company after a certain period based upon the situation. Company F had no Chinese manager assigned to Germany but established a co-CEO structure at the JV level to integrate the management strength between the Germans and the Chinese.

From the interview with Chinese and German management of SANY and H Group, we get the impression that the Chinese company should integrate with the German management earlier and even more deeply.

# 2. Ascertaining reasonable development goals for the acquired company is the best motivation for the staff.

The consensus among the three cases was that there was the expectation that Chinese management would be difficult to satisfy. In case 1, the interviewee mentioned that one of the reasons the German management changed was due to the unsatisfactory performance measured by the Chinese management: 'The company was always earning money, but the development pace could not meet the expectations'.

In cases 2 and 3, we learned that there was a big gap between the targets set for the German company and the resources the Chinese parent company promised to provide. The German management replied to the aggressive targets from the Chinese management with two proposals: one to show what results could be achieved with the provided resources and one show what resources must be provided to achieve the requested results.

In case 3, the German CTO delivered a similar message in the open discussion: 'If the targets set are a little bit high but reachable with effort, it is a kind of motivation, but if it is too much higher than reality, no nobody will really go for it'.

Hypothesis 1 (High-speed integration will bring advantages in post-deal integration.) was not supported.

# **3.** Technology transfer as one of the ultimate goals for the acquirer needs great efforts from both parties

Since the most common acquisition trigger for the acquirer was to obtain advanced technology already mastered by the target companies, the way to transfer the advanced technology or implement it in China was critical for Chinese acquirers. Both the first-hand information from the interviews and the secondary material from the internet showed that how the German company can remain secure after the technology is transferred was a pressing question for the Germans.

From the three cases, we found that the acquirers have different ways of transferring technology. In case 1, the acquirer mostly occupied the IP and know-how from the targets. In cases 2 and 3, the most important technology transfer was through production line localisation. IP and know-how do not make that much sense on paper, which meant that the scientists and technicians were the key to transferring the technology to China successfully.

After going through all the cases, we could conclude that none of them has finished the technology transfer process. However, we can try to summarize the key points to support a successful transfer.

- Keep the key scientist and technical staff with an attractive retention plan;
- Define a clear company development target for the acquired company after transferring the current IP and know-how to China;
- Design a comprehensive technology transfer plan;
- Involve both parties in the project and keep an open communication atmosphere;
- Motivate staff in the right way to support them going through difficulties in the process.

# 4. Synergy comes from operational integration

It was often mentioned that one of the most important targets for CBMA was seeking synergy. The synergy comes through a series of activities to reach the best result of 1+1>2.

In case 1, the financial support from the acquirer helped the target go through the difficulties and realised a business turnaround. The business recovery of the target contributed greatly to the overseas and concrete machinery segment sales performance of the acquirer. The market win through integration stabilised the acquirer's position. R&D and production integration have no clear reflection from the financial perspective, but the integration of R&D and production will definitely do well for the technology transfer. The implementation of advanced technology from the target company will further improve the acquirer's competitiveness.

In case 2, even though it took a longer time to make the target benefit from the acquisition, the internal technology transfers through training and setting up a new production line in China were very important steps for the acquirer to achieve progress in the business.

Since the acquisition in the third case happened in 2017, not enough time has passed to observe the synergy from the integration process. One question that came up in the open conversation with the German staff was 'Everyone is talking about integration, what do you exactly want to integrate?' Setting up and delivering a clear integration target are preconditions to realising the defined synergy.

After analysing the aspects of culture and leadership differences, one more key point is that the synergy from management integration is also very critical.

# Hypothesis 2 (Synergy comes from operational integration.) was supported.

# 5. Encourage working diligently with a good understanding of local legal requirements and different social stage

In the interviews with both parties, there was a general concern about working overtime. Some of the Chinese management realised that since China is a developing country and trying to do its best to catch up with the developed countries., it is common for Chinese staff to work much longer than eight hours per day. Personal benefit increases and career promotions are very convincing in China. In Germany, however, since the society is in a very mature and developed stage, people would prefer more to balance their life, not just focusing on their jobs.

Time off should be secured and it was also part of labour law in Germany where it is clearly stipulated that the maximum weekly working hours is 48 and at the end of working day employees must have an uninterrupted rest period of at least 11 hours (Arbeitszeitgesetz, ArbZG).

# 6. Both parties must face the culture and leadership style differences and find a way to compromise

As mentioned before, culture is divided into two layers. The conflicts reflected in daily cooperation come from the mixing effects from two layers of culture difference. To alleviate the negative impact and to generate a positive impact from the culture and leadership differences, the following options are possible:

- Keep an open communication atmosphere and respect each other unconditionally;
- Organize cultural training for both parties to give a better understanding of country culture difference;
- Establish the common mission, vision, and core values for both companies using an

understanding of both companies' culture;

- Culture distance provides both parties with an opportunity to learn from each other.

Hypothesis 3 (Culture distance impacts the integration negatively.) was not supported.

### **Chapter 7 CBMA integration concept**

Chapter 3 gave an overview of current theories on post-deal integration. In chapter 6, the in-depth case studies addressed the process and issues encountered in real practice. Taking the theory gap and practical issues into consideration, to fulfil the research targets and answer the research questions, I have created a comprehensive guide for Chinese CBMA in Germany.

When a company locked an investment goal, before making a transaction decision, a checklist incorporates all necessary information a company must acquire for deal diligence and post-deal integration is as below.

# 7.1 The composition of the concept

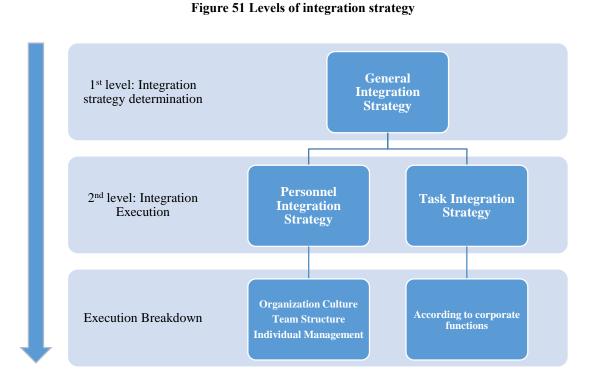
Traditionally, the integration process starts after the deal completion when the case is taken over by IMO (integration management office). The IMO is usually composed of the management team from the acquiring company and the acquired company and external functional experts. Some scholars have stated that the integration process should really begin before the deal completion. This means that sufficient preparation will impact the post-deal integration result. It is important to complete the comprehensive evaluation of the target's enterprise management system and technical capabilities, and identify key personnel and various risk exposures before the deal completion in order to avoid missing opportunities that might aid in achieving a successful CBMA in the post-deal stage.

The guide for post-deal integration will cover the following five aspects: the levels of integration, the key considerations for each level, the working mechanisms, the integration process and schedule, and the integration contents for each step according to the different corporate functions.

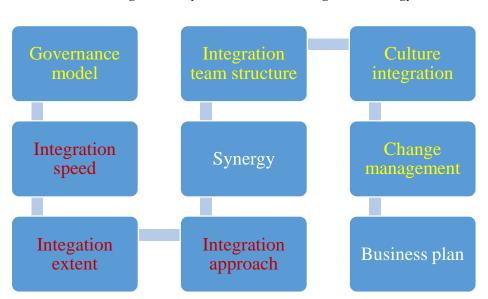
# 7.1.1 Developing strategies for the different levels of integration

The first level of integration is the determination of the integration strategy which includes the personnel integration strategy and the task integration strategy. The next level is the integration execution in which the personnel integration should be prioritized, followed by the task integration. In the execution breakdown, the personnel integration should be executed for organization culture, team structure, and individual management. The task integration breakdown should be executed according to the corporate functions in both the acquired company and the acquiring company.

I separated the integration strategy by personnel and task integration to give further insight into the critical steps in the process. Before getting into the determination of integration strategy, the comprehensive evaluation of the targets and the deal risk should be considered.



Corresponding to the three levels of integration strategy, the key considerations for each level are sorted out as shown in the table below. In the general integration strategy, integration speed, integration extent, and integration approach are considered. The post-deal governance model, integration team structure, culture integration, and change management are critical when considering the personnel integration strategy. In the task integration strategy, the acquirers are very much focused on the realisation of synergy and the business plan.



#### Figure 52 Key considerations of integration strategy

Applying the nine key considerations above to the two aspects of integration strategy allows us to break down the integration strategy into the following integration actions.

### 1. General integration strategy

### a) Integration speed

Integration speed is recognized as a key parameter in the integration process which depends on the nature of the corporate functions. For example, high-speed integration is often requested in the sales and procurement department because it can reduce the business uncertainties after the acquisition. Cultural integration takes more time as both parties require time to grasp the differences and accept each other despite these differences. If the acquisition trigger is obtaining advanced technology, high-speed integration should be applied in the R&D integration.

Chinese scholars Jing Liu and Xiaohuan Chen defined the determination factors of integration speed as 'internal relatedness (management style, strategic orientation, performance) and external relatedness (target market and market position)' (Jing Liu, Xiaohuan Chen, 2015).

As above, to decide a proper integration speed, we must consider from different angles including different corporate functions, integration contents, internal and external relatedness.

#### b) Integration extent

Besides the integration speed, the integration extent is another important decision that should be made as part of the integration strategy. Full integration extent means each function of the acquired company will adopt a certain degree of integration into the acquiring company. Partial integration extent means that only some of the functions of the acquired company will be in the integration scope. As discussed before, the scenario of no integration will not be considered in this dissertation.

#### c) Integration approach

After determining the integration speed and extent, the integration approach is almost fixed. The popular integration approaches described in chapter 3 will be adopted: preservation, symbiosis, adoption, and holding. In terms of Chinese CBMA in Germany, the symbiosis and holding approaches are more appropriate. The preservation approach grants the target high autonomy without integration. The link between the acquiring company and the acquired company is minimal and mainly occurs only when the acquired company needs support from the acquiring company. This approach is generally not accepted by the Chinese acquiring company. In contrast, the adoption approach entirely consolidates the target company into the acquiring company with

high-level and high-speed integration. This approach is typically not accepted by the acquired German company.

# 2. Personnel integration

It is well known that human potential is at the heart of strategic, organizational, economic, intellectual, societal, and business potential. Therefore, personnel integration takes the most important position in the post-deal integration process. The integration team structure, established governance model, cultural integration, and change management are the four main parts of the personnel integration process. The cultural integration will be deeply analysed as the Chinese fundamental culture will heavily impact the business behaviour until the effective integration steps are applied.

### a) Integration team structure

An effective and efficient team structure for integration should have three levels.

### - A steering committee

As the project management leader, the steering committee shall be composed of the top management from both the acquiring company and the acquired company. If the acquiring company lacks CBMA experience, it may be necessary to bring third-party professionals into the steering committee. The steering committee will be responsible for leading the whole project, ensuring the project quality, and making sure everything is on schedule. If any conflicts emerge, the steering committee will be the highest-level coordinator.

# - An integration management office for strategy decision and execution

The integration management office is the project leader at the execution level and should be composed of the high-level management team and professionals. The integration management office makes the rules and working mechanism for the project, coordinates resources, and tracks and supervises daily operating activities. The proposed general action plans of the integration management office are summarized as follows.

> Establish the integration management office team structure, including the integration management office governance model and the work stream objectives;

Establish daily working principles and the working mechanism;

> Establish the communication mechanism between the acquiring/acquired companies and other relevant parties (third-party consultant);

> Establish the reporting mechanism with a steering committee;

> Perform in-depth analysis of the 'as is' situation, identify integration challenges, and perform risk assessment;

> Evaluate the existing resources to identify how to allocate these resources to support all of the integration modules;

> Develop a specific working plan and complete timeline based on the overall integration plan, break down the assignment to each module integration team.

### - Corporate function team leaders

Corporate function team leaders are the executors of the integration strategy. They are the internal and external function professionals and are directly responsible for the quality of the integration work. They report to the integration management office.

### b) Establish a governance model

The governance model consists of the governing processes and roles that need to be in place to guide, control, and measure the integration between the acquirer and the target. A clear governance model can make each party involved understand their role in the organization, the working mechanism, and their relationship with other key stakeholders. In CBMA cases, the governance model combines both management teams and is linked to the integration extent and depth of integration as well.

### c) Cultural integration

As mentioned in chapter 3, culture distance will be considered on two levels when designing a cultural integration strategy. This strategy must include both country culture and corporate culture. Before studying the cultural integration steps, we need first to understand the historical changes of Chinese culture and the reflection of this culture on business behaviour. This process of action involves the progressive influence of individual behaviours through country culture and corporate culture.

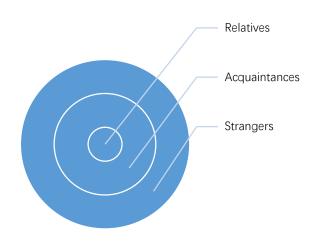
As one of the four ancient civilizations, China has 5,000 years of civilization. 'Family culture' and 'emperor thought' have a significant impact on Chinese entrepreneurs and leaders. Since ancient times, China has been farming as its main occupation and family is the centre of Chinese society. The patriarchal clan system, centred on the parents and based on the principle of inheritance by the eldest son, has lasted for thousands of years in China, thus forming a unique 'family culture' (Xinzhi Zhang, Liping Zhang and

Yehua Xiao, 2010). This 'family culture' impacted all aspects of social life and

expanded to communities, institutions, and enterprises. The influence of the combination of both 'family culture' and 'emperor thought' on business behaviour will produce differences in the following aspects that conflict with Western business behaviour.

# - The trust system in interpersonal relationships is different in the East and the West.

The Eastern interpersonal relationship circle structure is centred around relatives, the next circle is acquaintances, and the outermost circle is strangers (Jie Su, 2018). Trust is applied according to the interpersonal relationship circle structure, which means the more familiar someone is, the more trust is offered. The exclusiveness of the traditional family culture leads to relativism in the employment mechanism of enterprises. Chinese enterprises used to adopt the idea of 'rule by man' rather than 'rule by law', which makes people attach more importance to relationships and feelings than to justice and principles.



#### Figure 53 Eastern trust system in interpersonal relationships

Source: Jie Su, 2018

In contrast, the Western managers pay more attention to abiding by established rules and doing things according to the order of law, reason, and things. The establishment of the modern enterprise system is based on high trust of the professional managers. In the enterprise environment with clear property rights and regulation systems, the contractual trust between employers and employees is established based on the employee's individual performance, and a meritocracy is applied. This corresponds to the trust system of 'family culture'.

The worship of authority is the product of 'emperor thought'. This stands in opposition to the Western ideal of human rights. Command and execution are reflected in the communication between managers and subordinates in Chinese enterprises. Chinese managers tend to adopt a more powerful stance in their communication with subordinates, which is different from the concept of equality and concern for people in Western management.

In addition, *Mianzi* can be directly translated to 'face', which is a typical socialpsychological phenomenon in China. In Chinese society, *Mianzi* has an extraordinary influence. When a person does someone a favour or supports someone in a certain circumstance, it could be understood as offering someone *Mianzi*, and it is assumed that the favour will be returned in the future. If a person voices a different opinion publicly, especially with one's boss, it may cause the boss to feel like he is losing *Mianzi*.

In accordance with Hofstede's theory described in chapter 3, compared to German culture, Chinese culture pays more attention to collectivism than individualism. The Chinese are accustomed to paying attention to what others are like. Comparably, Germans tend to advocate personal heroism and maximize individual potential. In a Chinese enterprise, when a person independently undertakes a task, it will cause others to stand on the side-lines or even not cooperate. The distribution of interests in a team will also have a group thinking mode similar to egalitarianism. Prominent individuals will eventually be excluded from the organization.

The influence of Chinese traditional culture on business behaviour is as mentioned above. However, since China's 1978 opening and reform and with more and more frequent business contacts between the East and the West, foreign-funded enterprises have invested in China and have trained a number of Chinese managers with transnational management capabilities. The integration of Eastern and Western management cultures is gradually affecting and even changing the traditional management concepts of some Chinese managers. Cultural integration penetrates the whole process of CBMA post-deal integration in almost all functions so that the open and inclusive attitudes of both parties on the cultural differences are crucial to the success of integration. The cultural integration strategy should include the following aspects:

➢ Build a cultural integration plan and alignment of intercultural gaps between China and Germany by including culture training which should include both the country culture and corporate culture perspectives;

Establish an effective communication mechanism to fix the challenges from culture difference

Set up regular (e.g., weekly, monthly) communication mechanisms in daily work between cooperating departments;

Organize open discussions and feedback mechanisms between employees and top management to encourage them to speak out equally about culture;

➤ Hold team-building activities with Chinese and German teams to improve cooperation and mutual understanding;

➢ Both Chinese and German management should listen well because listening to the other team's employees can help to identify management problems caused by cultural difference in a timely manner;

> Apply an effective reverse integration from German to Chinese to improve the Chinese management level;

> Pay attention to the typical Chinese business behaviour during communication.

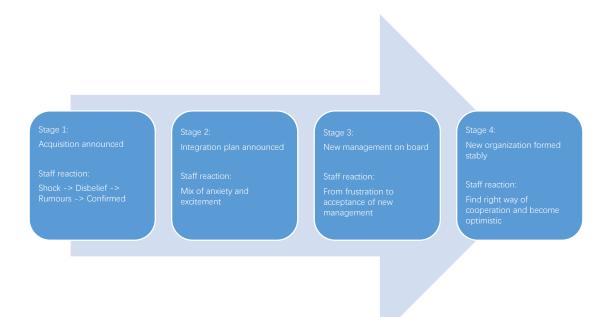
Emphasize commonalities in company visions, missions, and values

Design talent exchange plan to strengthen the daily communication between the two companies

#### d) Change management

Change management at the individual level is more about managing various employee's emotional states associated with the different stages of mergers and acquisitions. The response of change management according to different acquisition stages is summarised below.

#### Figure 54 Change management in the different stages along with staff reactions



Study change carefully to identify the pain points;

Unify the company vision and incentivise employees to continue doing their jobs in the transition period, including by encouraging them to address their apprehensions;
 Share the comprehensive change management plan and be open in the communication;

> Design an effective communication mechanism between the management of acquiring company and the acquired company;

➢ Be sensitive to employees' emotional states associated with the different stages of M&A and establish an adequate sense of urgency necessary in change management;

 $\succ$  Acknowledge and honour the past and celebrate the new beginning with the management transition.

# 3. Task integration: Business plan and synergy

Synergies generate most of the value in an acquisition. Synergy is defined as Synergy= $V_{AB}$ -( $V_A$ + $V_B$ )>0. Usually, synergy can be expected from multiple corporate functions in terms of cost savings and revenue enhancement. When working on the integration business plan, there needs to be a balance between the relevant impacting

factors, not just an attempt to achieve synergy. This is because achieving synergy can come with the trade-off of cost increases.

Define a high-level strategic plan on top of the pre-determined targets in the CBMA;
 Detailed assessment and development of synergy business cases, integration costs, and one-off costs and investments related to achieving synergies and the combined business plan;

> Detailed assessment and development of combined financial plan P&L, balance sheets, and cash flow projections with a focus on revenues and direct/indirect cost assumptions.

Besides the above nine key considerations of integration strategies, the acquirer should also be transparent in the communication of organizational structure and governance model developed for the target after the deal completion. This is essential at the starting stage of integration. As mentioned in the earlier chapters, the most important target in the integration stage after the deal completion is keeping the organization stable. Adequate and timely communication is critical to avoid rumours. Clear expectations and well-defined targets that are delivered clearly to the acquired company can motivate people to improve their performance.

The realisation of task integration relies on keeping the right people on board, which means that personnel integration should be prioritized. Only if both parties integrate the personnel and tasks well does the acquisition itself makes sense. Additionally, developing the overall integration strategy before the deal completion could improve the efficiency and preciseness of the integration process.

# 7.1.2 The working mechanism of the integration team

The integration team works in a matrix in which the longitudinal levels include the steering committee, the integration strategy, the execution management, and the functional executors. The transverse direction is composed of the multiple acquiring companies and the acquired company that will be integrated.

Correspondingly, the longitudinal integration tasks are delegated by the levels of the integration team. Both the steering committee and the integration management are the high-level strategy and functional breakdown designers, and the functional team performs the final execution of the integration.

Within the integration team, the data flow is bidirectional. The reporting mechanism is bottom-up and the management mechanism is top-down. Regular communication to address issues and to track the execution is requested to ensure that the project is executed on schedule. The troubleshooting and decision-making process should be clearly defined within the team. Milestones and timetables of the whole project should be determined and followed strictly. The general working mechanism of the integration team should be determined and communicated before the project launch.

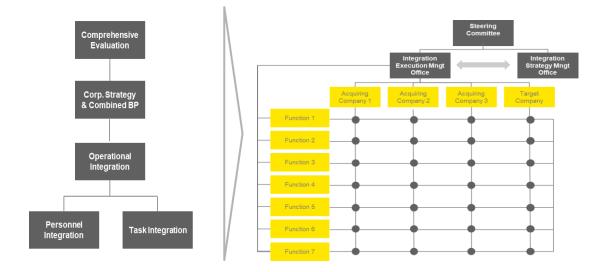


Figure 55 Integration tasks vs. integration team

In case the acquiring company is not experienced in CBMA, involving a third-party professional is a good choice to make up for the knowledge and skill gap. The participation of both parties from different levels is essential to ensure a successful project. The execution of the integration plan provides a good opportunity for both parties to understand each other, and even expose the conflicts that exist in cooperation which should be resolved by the efforts of parties.

# 7.1.3 The integration process and schedule

As was concluded in chapter 6, there is no absolute definition of integration period length. In this chapter, the separation of the integration process will be given according to experiences from practice. Usually, the short-term integration period refers to the first 100 days after the deal completion. The middle-term integration period refers to the period between day 100 to 5 years after the deal completion. Long-term integration will not be discussed in this dissertation because it will continue after the middle-term integration has been completed.

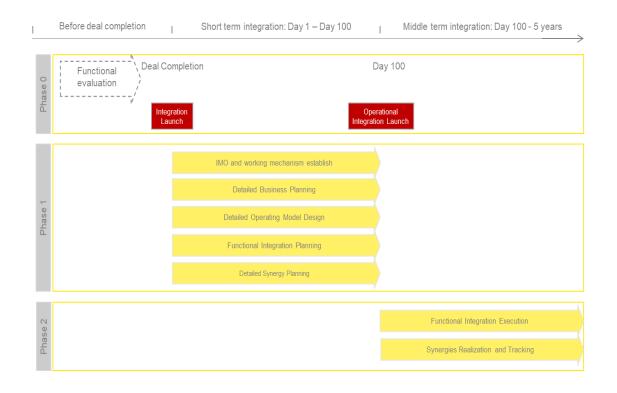
Some researchers have shown that staff from the target company would rather shorten the transition period after deal completion. This includes immediate action related to talent evaluation and personnel adjustment. A long transition period in the post-deal stage is more likely to have a psychological impact on personnel.

The pre-deal functional evaluation is defined as phase 0. Upon deal completion, the integration process launches officially. Phase 1 starts on day 1 and goes until day 100. Phase 1 tasks include:

- Integration management office and working mechanism establishment;
- Detailed business plan setup;
- Detailed operating model design;
- Functional integration plan setup; and
- Detailed synergy plan design.

When the phase 1 tasks are fulfilled, the integration process will enter the second phase, which starts after day 100 and continues until 5 years' post-deal. Phase 2, also known as the middle-term integration period, focuses on splitting the high-level strategy down to the functional detail integration steps. Synergy will be realised along with the execution of the integration plan. The operational integration launches since the start of middle term integration.

#### Figure 56 Integration process, task, and schedule



#### 7.1.4 Integration steps and key steps for determining corporate functions

In this section, I will define eight corporate functions as examples to summarize integration content and steps. Since each corporation may have a different organizational structure, I will try to include the functions that most enterprises have in their corporate structure.

#### 1. HR

As mentioned several times in previous chapters and sections, the integration of people

always takes the first priority in the whole integration process. The integration of people should be implemented immediately after the deal has been completed. The integration should cover all staff in the acquired company.

The design of the HR integration process should include the key points below.

> Develop an organizational structure and governance model for the acquired company that is aligned with the business requests;

> Detail the HR integration plans based on the current management practices and requirements;

> Establish an adequate sense of urgency necessary and prepare employee communication plans to fix the challenges;

➢ Build cultural integration plan and alignment of intercultural gaps within countries (China vs. Germany) and establish close cooperation and workshops with HR and communication departments at all company levels;

> Design talent exchange plan between the acquiring company and the target, including remuneration and benefit arrangements for expatriates;

> Design the HR process for the acquired company;

Key talent integration requires quick action.

# 2. Finance and administration

Chinese management often takes control of the financial management for their overseas subsidiaries. When the acquired company very much relies on financial support from the Chinese headquarters, cash management will be the most important control point. However, it takes time for the acquired company to trust the acquirer.

Synergy could also be achieved from financial integration. In some multinational companies, bringing the newly acquired company into the funding pool plan could reduce the cost of capital usage. The key integration points for finance and administration are summarised below.

> Analyse current financial reporting procedures, accounting for the GAAP difference between HGB and PRC GAAP (China accounting standards), be well prepared for GAAP conversion and reporting consolidation;

➢ Design new reporting processes and calendar for the acquired company aligned with the prevailing processes and calendar of the acquiring company;

> Design budgeting processes and calendar for the acquired company aligned with the prevailing processes and calendar of the acquiring company;

Review and design a common and standardized set of financial and operational KPIs to manage both businesses;

- Review and design a common internal control framework and processes;
- Review and design treasury and cash policies and procedures;

> Develop global tax structuring model, consistent with the target's operating model;

- Develop an understanding of the transfer pricing model for all the involved entities;
- Design dividend distribution policies;

> Integrate financial software to ensure accounting information flows smoothly between the acquiring company and the acquired company;

> Evaluate financial risks (e.g., Forex) policies and operating procedures

# 3. R&D

Obtaining advanced technology is one of the most common acquisition triggers when a Chinese company considers acquiring a German company. This means that the functional integration of R&D is one of the most important parts of operational integration. In addition, a good integration of the R&D function can also realise synergy.

Evaluate the technology gap between the two R&D teams and design a feasible integration plan based on the evaluation results;

> Define the work focus, cooperation mode, and mutual targets of both R&D teams;

 Establish a technology staff exchange program and design staff training plan for Chinese technicians;

Card the existing patents and licenses the acquired company has and plan to move ahead with further R&D development;

> Establish the technology implementation and transfer plan from Germany to China;

➤ Combine the two technology teams by leveraging the competency of and identifying team leaders for both.

R&D integration requires swift action to maintain key personnel.

# 4. Sales and marketing

Sales and marketing is the other corporate function that might generate synergy after acquisition. The acquired German company is the advanced technology holder and its product is usually positioned in the high-end market. In comparison, the Chinese acquirer used to position itself in the middle-end and low-end market where the customers are more sensitive to the price than the quality.

On the one hand, the good branding from the acquired company will increase the market awareness of the Chinese acquirer's product. In case 2, the acquirer added their company name in front of the acquired company's brand as a way to leverage the acquired company's brand advantage. On the other hand, the huge Chinese market opens new doors for the acquired company. The major integration points for sales and marketing are as below.

> Analyse the current customer base and distribution channels of the acquired company;

> Analyse the current pricing policies and commercial terms and conditions of the acquired company;

> Position the products from both companies according to the market segmentation strategy;

- Prepare customer retention plan and execute;
- > Design combined (at least, ad interim) 'go to market' model;
- ➢ Identify leading practices and design combined sales and marketing governance, organization, staffing and reporting lines (e.g., territories, geographies, sales staff)

> Review and operationalize new sales and marketing strategy with particular reference to:

- > Address multi-brand plan in a country aligned with common mission
- > Identify and propose to enter markets where only one company is present
- Identify operative risks and mitigation plans
- Identify long-term opportunities
- > Arrange customer visit plan (requires fast action).

# 5. Logistics and Distribution

Building a logistics and distribution centre used to be an integration target after acquisition which could improve efficiency and reduce transportation costs. The logistics channels of both parties are an important resource that can be shared and leveraged.

The key points for the integration process for logistics and distribution are as below.

> Organise operational data (e.g., costs, performance, capacities, volumes, headcounts, asset base, KPIs, technical capabilities, and related initiatives and studies);

Synthesise commercial data (e.g., product and country volume growth plans, innovation pipeline, product strategies, financial objectives, and requirements);

- > Consolidate, harmonise, and analyse the fact base for legacy businesses;
- > Develop basis of design for distribution network;
- > Define alternative network scenarios and sensitivities consistent with fact base;
- > Develop and validate network analytical framework;

➤ Identify and analyse network performance enablers – impact, ease and organizational, and systems impact/requirements;

➤ Analyse, including sensitivity analysis of key assumptions, and shortlist two network alternatives based on prioritisation and evaluation criteria (from Basis of Design);

> Evaluate the possibility to set up a distribution centre by leveraging the resources and understanding the client territory.

# 6. Procurement

Procurement is one of the key connections with sales and production and it is also an

important part of the supply chain. Achieving synergy from procurement used to be expected in manufacturing industry acquisitions. The integration process should include the key points below.

> Identify the 'as-is' raw material procurement model for both companies;

> Perform gap analysis on the procurement process between both companies, fill the gaps, and plan to work out the 'to-be' procurement process;

 $\succ$  Analyse the strengths of both procurement teams as the preparation for the procurement resources integration;

> Develop integration plans for procurement and specific improvement areas to be undertaken;

➤ Identify synergies in price, detail quality, delivery time, and payment terms for suppliers that align with the corporate strategy;

> Develop detailed supplier integration plan and work out the supplier management solution;

Understand the performance status of existing procurement contracts and develop integration plans for live contracts;

> Develop an integration plan for all unfinished contracts during the transition period;

> Develop a detailed list of relevant procurement personnel;

> Analyse the position of procurement in the SCM (supply chain management) to align with other processes;

Arrange a key supplier visit plan (needs to be addressed quickly).

# 7. Manufacturing

Since manufacturing takes place at both parties' locations, usually there is no deep integration applied here from an operational perspective. But the manufacturing process of the acquired company is well worth learning. In light of this, the manufacturing integration should focus on learning from the acquired company and applying this to the acquiring company. The key steps are summarised below.

> Deeply analyse and compare the manufacturing process of both companies, find the gaps, and learn and apply the best practices;

➤ Identify if both companies align with each other in the manufacturing plan and make changes if necessary;

> Exchange and share manufacturing management experience and improve team integration.

# 8. IT

Information technology integration is critical when corporate management relies more and more on ERP (Enterprise Resource Planning) and data transformation. Most of the acquired German companies use an SAP system which is a German full-function ERP system, but the Chinese use many different types of systems. The integration of the IT function should include the following points.

Set up stable network connection and convenient communication tools for both parties (needs to support video conferences, data exchange, and remote system access);

➤ Integrate systems as much as possible to reduce challenges such as system instability and security vulnerabilities for future integration;

> Deeply study the ERP systems that the two parties use;

> Set up a collaboration working platform to achieve information sharing and data transmission; centrally store the relevant information; set up proper information authority; ensure data confidentiality and integrity;

- Design security systems to prevent access to data by unauthorised users;
- ➢ Figure out the hardware and software needed for IT integration;
- Execute system configuration and data transformation.

#### 7.2 The proposed integration concept

The table below is the summary of the proposed integration guide which includes the four dimensions that have already been discussed. In each dimension, there are independent variables which decide the direction of the next step in the integration process. For example, the corporate function could be the independent variable of integration speed and the culture distance between China and Germany could be the independent variable of integration extent. The same rules could be applied to other dimensions as well.

Determination	General Integration Strategy		
	• Integration speed		
	• Integration extent		
	Integration approach		
	Personnel Integration		
	Integration team		
	Governance model		
	Culture integration		
	Change management		
	Task Integration		
	Business plan and synergy		
Working Mechanism	Integration Team		
	Integration Task		
Integration Process and Schedule			
Integration Key Functions	HR		
-	Finance and Administration		
	R&D		

#### Table 42 Post-deal integration guide

Sales and Marketing
Logistics and Distribution
Procurement
Manufacturing
IT

The four dimensions of the integration guide work together to draw a complete outline for Chinese CBMA in Germany. None of these steps can be neglected.

It is necessary to mention that the more comprehensive evaluation the acquiring company has done on the acquired company, the better the result of the integration after the deal completion. The practical research has shown this. Before making a deal decision, the acquiring company should engage third-party professional firms to conduct the transaction due diligence. A comprehensive transaction due diligence is an overall investigation or audit of the potential investment target which should include the following aspects:

- a) Financial due diligence
- b) Tax due diligence
- c) Legal due diligence
- d) HR due diligence
- e) Technical due diligence
- f) Operation due diligence
- g) Culture due diligence

The first four types of due diligence are commonly applied in CBMA. The checklist for conducting due diligence may differ from case to case, but the list below tries to incorporate most of the necessary information a company must acquire.

#### 1. Basic information

- 1) Company registration documents, shareholding structure, shareholder and key management introduction, etc.;
- 2) Product/service introduction;
- 3) Marketing analysis;
- 4) Competition analysis;
- 5) External investment status, if any;
- 6) General risk analysis, including resource risk, market uncertainty risk, project implementation risk, competition risk, policy risk, financial risk, bankruptcy risk, etc.;
- 7) Governance model and HR policies.

#### 2. Financial status

- 1) Accounting policy applied;
- 2) Financial reports and data analysis for the past three fiscal years;

- 3) Short-term and middle-term forecast;
- 4) Abnormity of comparable financial data;
- 5) Important contracts (buy/sell);
- 6) Major creditor and debtor information;

#### 3. Legal information

- 1) Legal documents proving the ownership of important assets;
- 2) Any documents that could be used to verify the obstacles related to the ownership of important assets;
- 3) Relevant documents required for compliance investigation such as company shareholding framework and business registration;
- 4) Important contracts and implementation status;
- 5) Government approval and third-party consent to identify potential transactions;
- 6) Liabilities or potential liabilities;
- 7) Health, safety, and environmental protection;
- 8) Labour and employee issues, whether there are labour disputes, whether there is a strong trade union organization, and whether there are laws and regulations that put forward requirements on the remaining employees after the acquisition.

The other three due diligence aspects are also essential but usually do not need to be applied in each deal. The technical due diligence is very critical in high-tech industry acquisition which sometimes could also be included under operational due diligence. The culture due diligence is one of the most overlooked aspects, but it has attracted more and more attention recently since the practitioners have started to realise how cultural collapse can negatively impact the CBMA result.

#### **Chapter 8 Conclusion**

#### 8.1 Overview

Since China opened its doors to the outside world and carried out reforms, the demand to accelerate the development of its real economy has caused Chinese SOEs and POEs to seek suitable acquisition targets abroad. Through CBMA, Chinese enterprises have achieved the rapid upgrading of their own technology, increased their penetration of the international market, and realised complementing advantages with the acquired enterprises.

As one of the strong emerging economies, China has become an increasingly active player in the international arena. Its CBMA activities, especially in developed countries, have increased the number and volume of Chinese companies with advanced technology. Not only is there a surge of CBMAs in China, but more and more attention is being given to the post-deal stage, especially when statistics show that two-thirds of M&A failures are due to integration issues.

The existing scholarship that was selected for this dissertation came from between 1994 and 2018. This gave a broad picture of CBMA-related research in culture, finance, leadership, and politics. The literature has revealed, discussed, and given solutions to some practical problems. This dissertation aims to create a comprehensive guide for the post-deal integration of Chinese CBMA in Germany.

As stated in chapter 5, this dissertation applied a mixed-method design that combined qualitative research with hypotheses and statistical data analysis. In the historical data review section, I analysed the inward and outward FDI of Chinese and German companies from the 1980s to the present. The historical review of both countries helps to understand the booming phenomenon of CBMA from China to Germany.

In addition to an overall understanding of the background of Chinese CBMA in Germany, this dissertation provided three in-depth case studies in chapter 6. This chapter used a comparative analysis structure to observe the financial and operational performance of both the acquired company and the acquiring company to judge the effectiveness of the acquisition during the 5-8 years' period before and after the acquisition. The semi-open interviews designed for the Chinese and German employees as well as the casual conversations and open discussions have provided an understanding of the feelings of different levels of employees about the integration stage. This has helped to better understand the effects of post-deal integration.

In this chapter, I will first present the theoretical and practical contributions of this dissertation, followed by the recommendations for the Chinese and German managers. recommendations for future research.

#### 8.2 Contributions

As mentioned in chapter 2, I had three research objectives in this dissertation. This dissertation makes both theoretical and practical contributions. In general, I detect and elaborate on practical issues and develop a comprehensive framework and guide to fill in the gap in current theory. I also recommend practical ways for practitioners to resolve issues.

#### 8.2.1 Contributions to theory

This dissertation contributes to the following aspects of theory.

#### 1. Specific research on the post-deal stage of Chinese CBMA in Germany

I found that CBMA is a very popular topic that has attracted more and more attention from scholars and practitioners. Furthermore, Chinese CBMA in Germany are booming, making integration issues caused by CBMA a highly relevant topic.

Prior research on CBMA activities has investigated certain aspects such as culture, integration, and synergy. Some corporate functions have been addressed, such as successfully managing the integration of mergers and acquisitions (E. Craig McGee, 1999), overcoming cultural and organizational divides in Chinese overseas M&A (Francesca Spigarelli, Attilio Mucelli and Ilan Alon, 2013), and understanding the problems and strategies of CBMA for Chinese enterprises (Z.M. Li, J.J. Jiang, 2014).

But if one is looking for a solution to the practical issues related to the post-deal stage of Chinese CBMA in Germany, little can be found.

a) The existing research results are fragmental and do not address the situation as a whole;

b) There is no systematic research on Chinese CBMA in Germany in the post-deal stage;

c) There is no link between practical issues and the relevant theory.

Since the management during this post-deal stage has not been sufficiently studied in existing research, I applied a holistic view of both the theoretical and practical perspectives to close these research gaps.

## 2. Create a four-dimension guide to post-deal integration in Chinese CBMA in Germany

Considering the complex nature of the post-deal stage of CBMA and the missing comprehensive theoretical guidance on practice, I have created a comprehensive guide

for this type of post-deal integration.

The comprehensive guide has four dimensions: determination, working mechanism, integration process and schedule, and integration key functions. This four-dimension guide serves as the foundation for post-deal integration activities, and each dimension further contains one or more key considerations for detailed execution.

The guide has a certain level of flexibility. When the subdivisions of the four dimensions' change, the direction guidance will change accordingly. With the changes in influencing factors and our understanding of the integration management in Chinese CBMA in Germany, the guide will continue to provide space for research in the future.

# **3.** Sort out historical data and information to give a comprehensive understanding of the background of Chinese CBMA in Germany

The analysis of the status quo is inseparable from the review of history. Chapter 2 looked at the inward and outward FDI of Germany after World War II. It also looked at the inward and outward FDI of China since 1984. The historical comparison revealed the changing trends of investment that matched the economic and social development stages. It also explained China's enthusiasm for investing in the German high-tech manufacturing industry.

#### 4. Research on the institutional environment for Chinese CBMA in Germany

Economic activities are largely influenced by the political environment, and the establishment of a political system is based on the country's stage of development and the need to balance relations with other countries in the international political environment. Therefore, research on the flourishing development of CBMA in China and the reasons why Germany has become a hot country in China should be observed in the political environment.

Chapter 4 of this dissertation describes the Chinese political environment and related policies of CBMA. It also presents the internal and external factors that have caused the CBMA transaction volumes to increase. In addition to the study of national policy and political environment, Chapter 4 and Chapter 6 have discussed Chinese SOEs and POEs and their commonalities and differences in management style. After discussing the political environment and the management characteristics of the different types of Chinese companies, the problems and lessons learned from the post-deal integration of Chinese companies in CBMA are listed at the end of chapter 4.

#### 5. Apply a comparative case study

As explained in chapter 5, this paper mainly applies the qualitative analysis method in exploratory research. In the three selected cases, this paper applies the same research

structure, including the first level of financial and operational aspects, and the second level of segmentation factors of financial and operational aspects respectively. The second level included factors such as the integration steps of each corporate function in the short term, medium term, and long term and the financial performance including income, cost, gross profit, and net profit for a certain period before and after the deal completion. Subsequently, given the different function integration schemes, a crosscase comparison checklist was created for the three cases.

The horizontal comparison among the three cases lays a solid foundation for creating a new guide in chapter 7. Applying the comparative structure in the case analyses not only makes the case analysis structure clear but also gives the conclusions a certain practicability and reliability.

# 6. Combine the existing findings from scholarly research and well-known consulting firm publications to provide multi-angle interpretations for practical application

As mentioned before, the motivation for working on this research is to solve the problems encountered in practice and lessening the gaps of existing theories and research methods. To reach the research objectives, I thoroughly explored current scholarship and I leveraged the methodology proposed by the well-known consulting firms who have been involved in the CBMA integration projects from different professional functions. The professional consulting firms have practical experience which is helpful for creating a feasible integration guide as the end-product.

#### 8.2.2 Contributions to practice

In addition to theoretical contributions, this dissertation also gives some contributions to practice.

## **1.** Create a new CBMA integration guide that includes each influencing factor for Chinese CBMA in Germany to increase the possibility of a successful CBMA

In order to improve the success rate of integration, it is necessary to deconstruct the influencing factors of post-deal integration and analyse the effect of each influencing factor on the result of integration. Furthermore, this dissertation shows how each of the influencing factors can be made to produce a positive force that ultimately leads to the success of CBMA.

Deconstructing the factors affecting post-deal integration rather than providing a superficial analysis of the post-deal integration results is more conducive to a clearer understanding of the problem and finding the corresponding solutions in practice.

# 2. Provide good practices for effective Chinese CBMA in Germany through a four-dimension guide

The CBMA four-dimensional integration guide created in chapter 7 includes the overall strategy of integration, the working mechanism of integration, the integration process and timetable, and the integration of each corporate function. In fact, the dimensional analysis method in the guide has universal applicability and a certain degree of guiding significance for post-deal integration in CBMA.

# **3.** Analyse the impact of pre-deal preparations for CBMA on post-deal integration work, and further improve the success rate of post-deal integration work

In most of the literature, there is little explanation about the impact of CBMA pre-deal preparations on post-deal integration. In fact, all links in the M&A transaction might interact with each other. When the pre-deal work is not sufficient and the acquirer does not have a complete understanding of the status and prospects of the industry in which the target enterprise operates, the current status of the target enterprise's operation, the competitive advantages and disadvantages of the target enterprise, and the reason the target enterprise is seeking an external investor, the difficulty of post-deal integration work will increase. It might even lead to a CBMA failure which cannot be saved by further post-deal integration work.

In chapter 7, the in-depth analysis of cases 2 and 3 reflect the negative impact of inadequate due diligence. In case 2, the due diligence did not perform completely, which made the Chinese acquirer underestimate the further investment after the acquisition. Due diligence was the most insufficient in case 3, which brought many surprises to the post-deal stage.

Therefore, the analysis method constructed in this dissertation which links the pre-deal work to the post-deal work contributed much to practice.

# 4. Analyse by each corporate function to give practitioners more feasible suggestions

Since each corporate function may have a different integration depth, integration breadth, and integration speed, we need to organise the management problems in the

post-deal stage by corporate functions that could be further analysed, judged, and identified.

Analysing the effectiveness of CBMA post-deal integration work by corporate function is more acceptable and more helpful for practitioners. Practitioners who are involved in integration can compare this information with their own situations, check if the existing integration work is on the right track, cover all the aspects, and make sure the actions are completed in a timely manner.

#### 8.3 Limitations and directions for future research

This dissertation aims to provide generalizable research findings from both theoretical and practical perspectives on the acquisition of a German company by a Chinese company with the purpose of obtaining advanced technology. Since this research is one of the first studies that uses a mixed-method approach and because there was not very much practical information that could be obtained from the existing literature, the limitations of this research should be recognized in the interpretation of the research findings.

First, as with other research, this research has also a certain limitation on generalisability because the three cases selected by certain criteria have a typical representativeness but cannot represent the whole. The case studies involved Chinese SOEs and POEs with full or majority control, but this dissertation did not address the situation of minority control by a Chinese company. Future research could consider more diversified industries to study.

In addition to the limited number of cases selected, the interview appointments with Chinese managers were turned down in some circumstances, especially when I planned to interview the managers from Chinese SOEs. It was extremely difficult to get their clear opinions since they were unwilling to disclose the integration situation due to worry about releasing inappropriate statements. Most of the ideas that I obtained were through daily work with them.

Second, the observation period in the selected three cases was not long enough to give a conclusion on the final integration result since all the three cases are still in the integration process. There is no doubt that more empirical case studies will be available in the future and some of them will be able to give more comprehensive conclusions.

Third, more research instruments could be applied in the research. In the case study, I used the formal interview and open discussion as the main data-gathering instrument. This meant that the number of people involved was limited. If I had also used a questionnaire to collect data from most of the employees in both the acquired and acquiring companies, I would likely have gained more extensive findings.

#### 8.4 Recommendations for Chinese and German managers

#### 8.4.1 General recommendations for both managements

#### 1. Integration is not a one-way process but a process of mutual study

It is important that both parties understand that integration is a two-way process that starts on opposite sides but meets at a certain point in the middle. It is true that usually the acquirer initiates the integration process, but it should not be wrongly understood as a simple process that the acquirer fully integrates the acquiring company. Maintaining the mutual study mentality for both parties will make the integration process smoother.

#### 2. To overcome the cultural differences and even make them positively impact the integration process, both parties should maintain mutual respect and accept the differences in an open and inclusive manner

As discussed in chapter 3, the three levels of culture should be addressed respectively for better understanding. The culture difference at the country level is mostly addressed in the culture training required by the acquiring company or the assigned external consulting firm. We should not ignore the culture difference at the country level. However, in actual practice, most of the conflicts come from the corporate level since the management styles and leadership in a German company and a Chinese SOE/POE are quite different.

Reducing the cultural differences on the corporate level takes a certain period of time but could be achieved through working together. It is a gradual process in which the two parties should maintain a tolerance for the differences and, to a certain extent, put aside the insistence of self-culture. Although it is difficult for one party to completely change the other, the interaction in the daily work might eventually achieve cultural integration.

Besides country culture and corporate culture, the formation of each individual's psychology and behaviours are influenced by other factors such as his/her background, life experience, and family. Therefore, from an individual perspective, the differences between Chinese and German employees should not be magnified, because it is too complicated to give a proper judgement.

3. The speed of integration in CBMA cannot be discussed separately from the different natures of each functional department of the enterprise, otherwise it is unscientific to say that rapid integration or gradual integration should be implemented.

As it was already answered in chapter 7, the integration speed should be defined according to the nature of each corporate function before the integration starts. If a fast culture integration is pursued without considering that time needed for both parties to understand and adapt to each other and adjust personal behaviour, the integration result is likely to fail.

# 4. Management integration is critical to foster synergy realisation. Synergy is expected in the R&D, supply chain management, and manufacturing process since we are focusing on the CBMA with the main purpose of technology acquisition in the manufacturing industry.

Besides the detailed action plan in each operational field that possibly generates synergy, management integration deserves significant attention. On the one hand, it is a critical part of integrating the people. On the other hand, if both management teams can cooperate seamlessly, synergy might be achieved at the end.

# 5. Setting up a PMO at the beginning of integration to involve both parties and a third-party professional consultant helps to achieve a smooth and successful integration

The difficulties in the integration of Chinese-German mergers and acquisitions are obvious. The frequent occurrence of Chinese CBMA Germany began about 10 to 15 years ago and the integration experience of the two parties is not sufficient. Therefore, involving third-party professionals in the integration process, establishing joint PMOs with both the acquirer and the acquired company at an early stage of integration, and clarifying its working mechanism and the responsibilities of each participant in the PMO will play a big role in a smooth integration process.

#### 8.4.2 Recommendations for Chinese management

## **1.** Before the deal decision is made, the Chinese management should perform comprehensive due diligence to fully understand the target

In Chapter 6, the in-depth case study reflects the lessons the Chinese acquirers have learnt from insufficient due diligence. Insufficient means either the Chinese acquirer did not make a comprehensive investigation of the target, or the quality of the due diligence report was not satisfied.

The investment decision made on top of the insufficient due diligence work may generate defects that cannot be made up in the post-deal stage.

#### 2. An overall integration strategy should be designed in advance surrounding

#### the purpose of the acquisition

In the interview or open discussion with the Chinese managers, they mostly complained that the German acquired companies do not want to cooperate in the technology transfer. However, the Chinese managers did not see if the company strategy was given to ensure that after the technology transfer the German company still can survive in the long run. A sense of security comes from being involved as part of the acquirer and the solid development plan the acquirer has created after the acquisition.

If the staff members of a targeted firm feel that the acquiring firm has a very clear picture of a common goal, they are likely to maintain a positive working attitude because they anticipate prosperity and success in the near future (Industrial Marketing Management, 2010).

The overall strategy shall serve the purpose of acquisition and make it clear by what means the acquirer could achieve the acquisition purpose.

# **3.** Chinese management should understand the legal and regulatory environment of the acquired company's location in advance to avoid legal risks in operation

Familiarity and compliance with the local legal and regulatory environment of the acquired company could avoid operating risks. Compared with Germany's sound legal and social system, China's laws and regulations are not perfect in some aspects, and, due to the lack of sufficient supervision, the existing law and regulation cannot be absolutely implemented.

As mentioned in previous chapters, since the legal representatives take different responsibilities under the corporate law in China and Germany, the Chinese managers cannot understand how serious certain issues (e.g., insolvency) are to a German leader.

Being well prepared from the legal and regulatory perspectives before starting a business in the target company is essential for the Chinese acquirer.

#### 4. Chinese management should pay attention to cultivating and absorbing crosscultural management talents

Chinese companies tend to pay more attention to the transaction process, but do not pay enough attention to the post-deal integration phase. All of the problems in the post-deal integration phase were, ultimately, due to the lack of experienced management talent in Chinese CBMA.

Along with the increase of Chinese CBMA transactions in Germany, Chinese managers have more opportunities to learn and practice, which is a great chance to cultivate

Chinese cross-cultural managers.

#### 8.4.3 Recommendations for German management

# 1. Accept the involvement of Chinese managers assigned with an open attitude and help them integrate as quickly as possible

Regardless of whether the Chinese acquirer wants financial control, strategic control, or operational control of the acquired company, usually one or more Chinese managers will be assigned onsite for at least a certain period. In most circumstances, the acquired company needs financial support from the new shareholder. From the Chinese managers' point of view, financial management first requires the funds to be managed properly, so the German company will usually have a Chinese finance manager in direct or indirect reporting line.

In the research cases, all three Chinese acquirers left significant management freedom to the German managers and trusted them. Correspondingly, the German managers should accept the assigned Chinese manager and help him/her be integrated into the company as soon as possible.

# 2. Understand the purpose of acquisition, accept the inevitability of technology transfer, and ensure the value of German company survives in the new environment

As the Chinese acquirer generally wants to obtain the advanced technology of the German target company, it is clear that the Chinese acquirer will schedule the existing technology transfer from Germany to China. The interviews with Chinese managers showed that the technology transfer process is not very smooth, mostly due to a lack of active cooperation from the German companies.

If the German managers accept the inevitability of technology transfer, their focus will turn to realising the value of the company itself, winning the long-term support of the Chinese acquirers, and finding a way for the German companies to survive in the new situation.

To conclude, this dissertation has drawn attention to resolving the practical issues in the post-deal stage since the statistics show that the most important factor in the 60–80% failure rate of Chinese CBMA in Germany is the effectiveness of the post-deal integration. By applying the mixed research methodology, this dissertation creates a comprehensive guide in four dimensions to lead the post-deal integration process in the right direction. It contributes on both theoretical and practical levels and is a stimulus to further research in this field.

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## LIST OF ACRONYMS

CBMA - Cross Border M&A M&A - Mergers and acquisitions FDI - Foreign direct investment EY - Enrst & Young PWC - Price water house copper R&D - Research and development NDRC - China National Development and Reform Commission P/E Ratio - Price earnings ratio PDI - Power distance IDV - Individualism/collectivism MAS - Masculinity/femininity UAI - Uncertainty avoidance LTO - Long-term orientation IP - Intellectual property SOE - State Owned Enterprise **POE - Private Owned Enterprise** PMO - Project Management Office IMO - Integration Management Office BCG - Boston Consulting Group SANY - SANY Group SANY Heavy Industry - SANY Heavy Industry Co., Ltd. CITICPE - CITIC Private Equity Funds Management Co., Ltd Putzmeister - Putzmeister Holding GmbH CIFA - Compagnia Italiana Forme Acciaio NDRC - National Development and Reform Commission FY - Financial Year PPA - Purchase Price Agreement CEIG - China Energy Investment Group Co., Ltd. EBIT - Earnings before interest and tax IMO - Integration Management Office **BP** - Business Plan ASEAN - Association of Southeast Asian Nations CIS - Commonwealth of Independent States GAAP - Generally Accepted Accounting Principles KPI - Key performance indicator SCM - Supply chain management Mianzi - Face, good reputation CIGS - Cu, In, Ga, Se

### APPENDICES

### **Case 1: Interview Question List**

#### 1. Closed questions:

- (1) The Purpose and Method of this CBMA
  - 1) Why not choose a target inside China?
  - 2) Why choose a target in Germany?

The main purpose chooses Putzmeister

- Overseas market extension
- Cost reduction
- Improve production efficiency
- Get IP
- Seek synergy
- Other strategy
- 3) Before acquisition, did SANY have any business with Putzmeister? (Please give some examples) How deep that both parties understand each other from business?
- 4) What was the acquisition method used? Did SANY 100% acquire Putzmeister's share? What is the shareholding structure after acquisition, what is the current parent company of Putzmeister?
- 5) What are the most important departments of Putzmeister? Are these key dept. managers willing to attend interview?
- (2) Did SANY conduct any other CBMA before this acquisition? (including targets in other countries)
  - 1) If SANY has done CBMA in other countries before, please state the difference with acquisition in Germany (besides legal and regulation, what are the culture difference and management style difference?)
  - 2) If SANY has done CBMA in Germany before this acquisition, did SANY get any experience/lesson in previous deal which could support SNAY complete this deal successfully?
  - 3) How difficult did you find interacting with German partners (cultural aspect; communication; reliability; ... Compared to other CBMA you did in the past)?
  - 4) Did you perceive differences between managing innovations in China and managing innovations in Germany?
- (3) What due diligence has SANY done before acquisition:
  - 1) Who are the 3<sup>rd</sup> party intermediaries providing service in this deal? Can I interview them?
  - 2) Did SANY conduct full function due diligence in finance, tax, operation, legal HR and culture?
- (4) Cooperation between management of both parties:
  - 1) What is the mutual trust at the beginning?

- 2) Did SANY find any divergence of opinion in the cooperation, how does it resolved?
- 3) What is the governance model and reporting mechanism now? (single line or double lines)
- (5) Post deal integration:

Which integration approach did SANY use? Absorption, independent coexistence?

- People integration (governance model, talent retention program, culture integration activity, new labor contract and business communication between depts.)
- Business integration (market segmentation, sales channels integration, production arrangement, supply chain integration, procurement, transportation...)
- Financial integration (cash management, and profit allocation)
- R&D relevant integration (did both R&D team work together?)
- Culture integration (does language be a barrier in the cooperation, any culture training provided, consciousness on culture difference and examples and how to resolve it or did it be resolved?)
- The short term, middle term and loan term business plan after integration
- (6) Management change in the integration period
  - Management appointment and governance control design?
  - In the early stage of merger and acquisition, any changes of employees' mentality and how did management stabilize the situation?
  - Any talent loss of key positions, reason and remedy?
  - In the period of integration, did the divergence of management concepts, thinking and methods impact on management and how did management deal with it?

#### 2. **Open Questions**:

- (1) How do you evaluate and comment on the integration process, how long did the integration process finished?
- (2) How do you evaluate the culture difference between Chinese and Germany in management?
- (3) Can you tell me specific experiences/small episodes in the negotiation phase or post-merger phase which you think are due to the specifics of Chinese and German management style?
  - Company control
  - S&M
  - Manufacturing
  - R&D
  - Finance
  - Company value
- (4) Did you find any issues in the post deal integration that may avoided if more sufficient due diligence done? Any experience or lessons?

- (5) How do you evaluate the meanings of this CBMA, do you think SANY has realized the CBMA targets? If yes, from which perspective the targets were realized?
  - Synergy (scales effect, sales channel, manufacturing synergy etc.)
  - Higher revenue
  - Higher profit
  - Obtain IP and R&D capability improvement
  - Improve the positive external influence
  - Others
- (6) Do you have anything else would like to share?

### Case 1: Interview – VP of SANY

Interviewer: Selina Yao Interviewee: Dr. Jiang Location: Changsha Mingcheng International Hotel Date: Sept. 21, 2017 9:00 – 12:00

Y: What is your position in Putzmeirster?

您目前在普茨迈斯特的职务是什么?

J: I am one of the board members, representative of SNAY, in charge of new business development, corporate strategy.

我的职位是董事,三一派驻代表,也负责新业务的开发和战略。

Y: SANY have only assigned one management to Putzmeister until now?

三一到现在也只派了一个中国人。

J: Yes.

是的。

Y: Can you please share some examples that the individual culture between German and Chinese staff?

能否请您分享中德员工个人文化上的差异?

J: German more emphasize on collective consciousness. If you praise someone and take him out from the team, he will feel strange. He will though "We are a team, why do you take me out alone?" So there is no way to set a good role model.

德国人更强调集体意识。如果你表扬某人并把他从队里带出来,他会感到奇怪。

他会说:"我们是一个团队,你为什么要单独带我出去?"所以没有办法树立一个

好的榜样。

There is a Science and Technology Festival hold in SANY on each Aug. 8 on which SANY will commend good project and individual. While Putzmeister refuse to attend this competition as they thought product research and development are accomplished by the whole team but not an individual. So they don't understand why we want to pick up a hero from the team, this will also impact on the personal relationship this picked "hero" with the rest of team members. 每年 8 月 8 日, 三一都会在三一举办科技节, 表彰优秀的项目和个人。而普茨迈 斯特拒绝参加这次比赛, 因为他们认为产品研发是由整个团队完成的, 而不是个 人完成的。所以他们不明白为什么我们要从团队中挑选一个英雄, 这也会影响这 个挑选的"英雄"与其他团队成员的个人关系。

Another example, overall you can see that German enterprises used to a structured way of working, holiday should be secured and avoid too many emergencies. If Chinese management asked for something urgent should be done over the weekend, German staff may not be able to do it at all. Bonus, overtime payment, promotion opportunity cannot be strong motivations to German employee who satisfied on their current situation and would rather to balance work and life. I have been thinking about the reasons behind that if German enterprises have lost their goal? What do they think more important is to make the company's performance become something I can be proud of, or that I just want to go to work in the morning and come back in the evening, make some hobbies in my spare time, and watch football.

再举一个例子,总体上你可以看到,德国企业习惯了结构化的工作方式,假期应 该有保障,避免过多的突发事件。如果中国管理层要求在周末做一些紧急的事情, 德国员工可能根本做不到。奖金、加班费、晋升机会对德国员工来说并不是很强 的动机,因为他们对自己的现状感到满意,而更愿意平衡工作和生活。我一直在 想,是否德国企业失去了目标,背后的原因是什么?他们认为更重要的是让公司 的业绩成为我可以骄傲的事情,或者我只想早上上班晚上回来,业余时间做一些 爱好,看足球?

Y: What do you think an effective way to make the culture difference gap?

您认为怎样才能有效地消除文化差异?

J: Through open communication we can deliver the message to German staff that we need their efforts to put the company ahead on the market otherwise our market position will be replaced by our competitor soon in the future. We hope we could evocate their sense of mission and arise their morale.

通过公开的沟通,我们可以向德国员工传达这样的信息:我们需要他们的努力, 使公司在市场上领先,否则我们的市场地位将很快被我们的竞争对手取代。我们 希望能唤起他们的使命感,鼓舞他们的士气。

Y: At that time, SANY didn't look for acquisition targets in China. Was it because SANY's strength in China couldn't find a suitable target that could improve its business? 当时三一没有在国内寻找收购标的, 是不是因为当时三一在国内的强大已经找不

到一个更好的可以提升企业水准的公司了?

J: I was not the decision maker but I can offer you my feeling and judgments on this matter. At that time SANY and Zoomlion are two market giants who took more than 90% market shares in China. SANY was not an excavating machine manufacture but producing concrete pump and Putzmeister is the industry benchmark. Therefore, SANY has a deeper understanding on Putzmeister's technology which is also the reason to miss the due diligence process before the deal happened. The other reason for making quick acquisition decision is to catch up the time since Zoomlion has already obtained the official permission from China government.

我的感觉和我根据前前后后的判断,但我不是决策者: 三一在这个时候已经跟中 联在中国市场是绝对的市场巨头,两家加在一起已经占据了 90%以上的市场份 额。三一最早不是挖机,最早是做混凝土泵的,当时是以普茨迈斯特最为标杆做 的,所以三一对普茨迈斯特技术认识比较深,比较了解,这也是没有做尽职调查 的原因,再一个是抢时间,因为中联已经从官方渠道得到了许可,三一再不快一 点就来不及了。

Y: I understood from the public information that even though Zoomlion offered a higher price, but the owner of Putzmeister finally chose SANY. What impress the owner most? 我看到网上信息说中联出家比三一高,最后老先生还是把公司卖给三一了,三一 是靠什么打动老先生达成交易的呢?

J: One of the important reasons is that SANY's core value - making contributions to society and changing the world by high quality is accepted by Mr. Schlecht. He agreed that the enterprise should take social responsibility and what SANY addressed on this point is the same as his idea.

其中一个重要原因是,三一重工的核心价值观—为社会做出贡献,以高质量改变世界,得到了施莱赫特先生的认可,他同意企业应该承担社会责任,三一重工在

这一点上所说的与他的想法是一致的。

Y: The bosses of the POE want the enterprise to achieve aggressive goals with limit resources, which often confuse the acquired German company. I wonder if SANY have the similar issue? And how does SANY management solve such management cultural differences?

民企老板希望企业用很少的资源达到很强势的目标,这往往另被投德企很为难。

不知道三一会不会也有类似的问题?以及怎样解决这样的管理文化差异?

J: SANY of course hopes that Putzmeister can do better with limited resources, but SANY management didn't say that you must achieve 100% of the goals I set, but the goals are directions you need to work on. You can say that I can't achieve it now, but I will work towards this direction, such as gross margin, earning before tax etc.

三一当然希望他能用有限的资源能做到更好,但是并不是说是我定的目标你就

100%一定做到, 而是这是你要努力的方向, 你可以说我现在达不到, 但是我会朝

这个方向努力、比如毛利、税前利润等等。

Every company has its own culture which we should consider more than the country culture. Country culture may not be changed easily, but individually we have daily interface and that will bring us the chance to understand and learn from each other.

每个公司都有自己的文化,我们应该考虑的不仅仅是国家文化。国家文化也许不

容易改变,但我们之间每天的交流,将给我们带来相互了解和学习的机会。

Y: Did SANY Group change the C-level management in the integration phase and why? 现在整体的普茨迈斯特的 C-level 管理层都换了吗,为什么?

J: About one year after acquisition, the former CEO was replaced by CTO as he cannot

cooperate with the board and he is not good at prioritize different things and optimize process. The new CEO is much supportive and the sales numbers increased slightly under his leadership even though it still cannot satisfy SANY Group's management. So we have made an adjustment again in Aug. 2017 that a new CEO from external was invited to join us. And we changed the CFO according to the new CEO's suggestion. Now we build up a five person's management team in Company P, besides acting as Chief Liaison Officer, I am the board member and management representative of S Group, also in charge of new business development and involve in company strategy and general management.

收购后大约一年,前首席执行官被首席技术官取代,因为他无法与董事会合作, 并且他不擅长以优先级处理事情和优化流程。新任首席执行官提供了很多支持, 尽管在他的领导下公司业绩仍然无法满足三一的管理层,但是销售数字还是略有 增长。因此,我们于2017年8月再次做出调整,邀请外部新任首席执行官加入 我们。我们根据新任首席执行官的建议更改了首席财务官。现在,我们在普茨迈 斯特公司中组建了五人的管理团队,除了担任首席联络官外,我还是三一集团的 董事会成员和管理代表,还负责新业务的发展,并参与公司战略和总体管理。

On one hand that we wanted to respect on the brand of Putzmeister and on the other hand we were not very skillful in putting the integration process ahead. Additionally, 'Keep the acquired company stable' is always SANY's most consideration, so we did not change that much of German management team until now. But moving forward, we still need take some actions for some necessary changes which will not change our trust to German team, but frankly speaking German has advanced technology but their management system is not perfect especially the risk control and operation process.

一方面,我们希望尊重普茨迈斯特的品牌,另一方面,我们在推进整合进程方面 也不是很熟练。此外,"保持被收购公司的稳定"一直是三一重工最为关注的问题, 因此直到现在,我们才改变了那么多德国管理团队但在前进的道路上,我们仍然 需要采取一些必要的措施来改变我们对德国队的信任,但坦率地说,德国队技术 先进,但他们的管理体系并不完善,尤其是风险控制和操作流程。

Y: What is your impression on German staff and management? What did you feel the culture difference in the integration phase?

您对德国员工和管理层的印象如何?您觉得整合阶段的文化差异是什么?

J: Most of the German staff is well organized by themselves, the company in the developed countries use to have clear division of job, so German staff can fulfill their individual task very well, but seldom staff care about if the complete goal is achieved.

大多数德国员工都有很好的的自律性,发达国家的公司通常分工明确,所以德国

员工能够很好地完成各自的任务,但很少有员工关心完成整体目标的情况。

The working status of employee is related to the social stage of his country, for example since China is still in the developing stage, it is quite normal for us to work overtime to catch up with the developed countries. But in the developed countries, the employees are more willing to balance their work and life, overtime payment and salary increase doesn't work on stimulating them to give up their free time to work. This is the difference.

员工的工作状态与所在国家的社会阶段有关,比如中国还处于发展阶段,我们加班加点赶上发达国家是很正常的但在发达国家,员工更愿意平衡工作和生活,加班费和加薪并不能刺激他们放弃自由工作时间。这就是区别。

SANY has received quite many interview invitations by university scholars and others, and we have denied quite many. One of the reasons is that we found most of them have no practical experience which makes them emphasize too much on the country culture difference. But actually it is not the case. We shouldn't forget that each company was composited by individual, and each individual has his own culture background. The different individuals build up "individual companies which have different history, management style, development target and market position etc., so we should even focus more on the corporate culture difference where we will find a way to adjust.

三一重工收到了不少大学学者等的面试邀请,我们也拒绝了不少。其中一个原因 是,我们发现他们大多没有实践经验,这使得他们过于强调国家文化差异。但事 实并非如此我们不应该忘记,每个公司都是由个人组成的,每个人都有自己的文 化背景。不同的个体造就了"具有不同历史、不同管理风格、不同发展目标、不 同市场地位的个体企业",因此,我们更应该关注企业文化差异,寻找调整的途 径。

Y: Why not assign a Chinese CEO to manage Putzmeister? 为什么不考虑换一个中国的 CEO?

J: It is quite clear that SANY will not assign a Chinese CEO to Putzmeister. From one hand it is not that easy to find a suitable Chinese senior manager who can lead a German team with more than 3000 staff, from the other hand that although we can find a capable candidate, he or she will definitely have culture distance with German. So I personally more prefer to keep German top management who can understand and willing to align

with the value and mission of SANY Group.

这一点, 三一的董事会一直都是比较明确, 派一个中国的 CEO, 想这么大一个企 业, 全球有 3000 多人, 不管是从沟通或者从其他方面也找不到合适的人; 第二 点, 即使这个人很能干, 可以干一把手, 也是会有一些文化上的障碍; 我个人认 为换中国人去不如找一个认同愿景和价值观的当地人。

Y: I understand that there are two reasons behind this acquisition. One is that SANY need a good starting point to open up the overseas market which Putzneister could offer its sound brand and multiple sales channels, the other reason is that the product from Putzmeister could make up the high-end market where SANY doesn't occupy global wise. Did SANY have any other reasons to acquire Putzmeister and if they are realized? 我理解三一收购普茨迈斯特的原因主要有两个,一个是三一要去打开海外市场需要一个好的支撑点,普迈以自己的品牌和销售渠道都会对三一有利,另一个是普茨迈斯特的品牌产品比起三一的产品在市场上是高端产品。我们还有没有其他的收购动机以及目前是否?

J: First of all, buying Putzmeister is due to a psychological reason since it's our industry

role model we used to learn for quite many years. From the perspective of business, Putzmeister is indeed a sound brand in high-end market, which occupied big share of global market. It is more efficient way to leverage existing market of Putzmeister than SANY develop by itself. And Putzmeister's products took a certain market share in China at that time. The other main consideration is that if Putzmeister was bought by any of SANY's competitors, the original market share of SANY will decline.

首先把普迈买下来也是个 Psychologic 的原因,他是我们原来学习的榜样,可以 终于收入囊中,有心理的原因。从商业方面看他确实是高端品牌,对于国际市场 占有率很好,比自己开发国际市场有效;产品在国内在当时也有市场,也有考虑 如果被竞争对手买走会是三一占有率下降。

Y: Acquiring Company Putzmeister filled the gap of high-end market. Does SANY Group have any idea to introduce the technology to China?

我们买了普迈,对于高端产品市场是填补了空白,我们有没有把他的技术,建产

线,引进技术,降低成本。三一有没有这样的想法?

J: In 90s, Putzmeister occupied 70-80% market share, until 2012, even though the brand reputation of Putzmeister still much higher than SANY Group, but the product quality of SANY Group is also good, and taking our good service into consideration, our market share is increasing, while Putzmeister's business is in the opposite turn during that time.

We took some technical reference from Putzmeister and definitely introduced some advanced technology to China, but since there is big difference on the working mechanism of the two companies, we have some technical communications but SANY Group did not copy the manufacturing mode of Putzmeister.

普迈在 90 年代的时候占了 70-80%, 后来慢慢往下掉, 三一的产品在 2012 年声 誉品牌不如普迈好, 但是我们生产出的产品的品质还是不错的, 再加上我们服务 的能力, 为什么普迈市场份额下降, 三一上升的原因。技术我们有一些得到借鉴, 有些技术通过某些方式也引进到中国, 但是两个产品内部工作机制有很大差别, 因此基本上是两条腿走路, 还是会有技术交流, 但是并没有直接拿过来按照普迈 方式生产

Y: Did SANY Group have a plan to move the manufacturing base from Germany to China for cost reduction possibility?

三一没有想过为降低成本把德国生产基地关了?

J: The product and technology between Putzmeister and SANY Group are different but no big gap. Move the factory from Germany to China and export the products back to Germany does not make much sense to reduce cost. On the other hand, change from "made in Germany" to "Made in China" can be destructive to the brand. While it could be an issue China should overcome in the long run.

For sure, we are seeking the cost reduction road map in Germany but we are more relying on improving the production efficiency, precision manufacturing and supplier management, rather than moving the factory off.

普茨迈斯特与三一集团的产品和技术虽有不同,但差距不大。把工厂从德国迁到 中国,再把产品出口回德国,对降低成本没有多大意义。另一方面,从"德国制 造"到"中国制造"的转变可能会对品牌造成破坏。虽然从长远来看,这可能是一 个中国应该克服的问题。当然,我们正在德国寻求降低成本的路线图,但我们更 多地依赖于提高生产效率、精密制造和供应商管理,而不是把工厂搬走。

Y: Before the SANY's acquisition, the economic benefits of Putzmeister have declined due to the impact of the economic crisis. After the SANY's acquisition, has there been any improvement and promotion on the margin of Putzmeister?

三一收购之前, 受经济危机冲击普迈的经济效益已经整体下滑, 后来三一收购以

后,对普迈本身的效益有没有什么提升和促进?

J: Through personnel exchanges and supplier integration to improve Putzmeister's economic benefit helps but the value has not been fully reflected. SANY is still cautious on the action taken on Putzmeister, and the management does not want to influence the brand value through some not fully considered actions, so it will take some time to see the positive impact.

我们也是通过人员的交流,甚至供应商的整合,有一定的帮助,但是价值还没有 充分体现出来。三一还是比较谨慎,不希望通过一些没有经过充分考虑的行动时

的对品牌产生影响,所以比较慢。

Y: Has Putzmeister been a profitable company for five years since this acquisition 普迈被收购后的五年一直都是盈利企业吗?

J: Yes, it is.

是的,一直都是盈利的。

Y: In terms of capital management, is Putzmeister a self-financing enterprise? And SANY will not ask Putzmeister transfer profits to headquarters?

现在在资金管理上, 普茨迈斯特是一个自负盈亏的企业吗? 也不需要将盈利转去

集团总部。

J: Yes and the profit will be kept in Putzmeister for its business development.

盈利就会留在普茨迈斯特用于自身发展。

Y: In Putzmeister's organization chart, does CFO need to solid report to SANY group CFO or he/she only one reporting line to Putzmeister CEO?

在普迈公司内部管理架构内 CFO 有没有对三一重工 CFO 的汇报, 还是只对普茨

#### 迈斯特 CEO 负责?

J: There is not solid reporting between Putzmeister CFO and SANY CFO, but they

would cooperate with each other and respect each other's professional requirements in daily work. SANY has assigned a board member base in China who we should report to and be responsible to supervise us.

CFO 没有对三一集团 CFO 直接汇报,对职业要求会互相配合要求,会尊重,但 是在 org.chart 上没有汇报关系。三一董事会会有一个成员来对普迈工作进行监 管,我们要对他进行汇报。

Y: It sounds like SANY's management didn't implement a strong management method on Putzmeister. Do you think this management way is right? And will there be any negative effects?

听上去三一对普迈的管理还是挺放手的。那您觉得这种放手的方式现在回过头来

看是对的吗? 会不会也有一些负面的影响?

J: There will certainly be some negative effects. In the early stage, we will give them more independence and help them gradually get used to SANY. But later on we will strengthen the management mostly to emphasize improvement on the enterprising spirit. 肯定会有一些负面的效应, 在初期的话, 给他们多一点的独立性, 逐步习惯三一,

以及普迈-三一,但太久了也是会有些问题。所以现在也逐步在这方面加强,收

紧,收紧是更多强调使他们更有进取心。

Y: What would be the next steps of changing management?

下一步准备从哪些方面调整可能会有益处呢?

J: The main thing is to let the management team really have entrepreneurship. We need

to face to our current business status and cultural difference, and find out specific measures gradually solve the problem. Again, it is much related to choosing CEOs and core teams.

主要还是让管理团队真正地有企业家精神,要看到我们目前的经营状态上的不足

和文化上的差异,并且找到具体举措逐步解决问题。再次强调,跟选择 CEO 和

核心的团队有很大的关系。

Y: I feel that German employees need communicate in daily work with management very much, especially when the situation is not clear since no enough communication will make their thinking pessimistic. But in the sense of traditional Chinese management, communication does not seem to be so prominent. The management method I used in Germany - to distinguish the career demands of everyone in the financial department, to understand his/her ability and characteristics, and adjust my expectations for their work based on my understanding of the communication with them. Many departments are lack of interaction; I think even if they don't assign people to Germany they should have more interactions to ensure mutual understanding.

我感觉德国员工非常需要沟通,特别是当局面不清晰的时候,没有充分的沟通会 使他们的思路偏向悲观,但在传统的中国管理中心沟通似乎并没有那么突出的重 要。另外,我在德国曾经用的管理方法 - 区分财务部门每个人的职业诉求,了解 他的能力和特点,根据我的了解去匹配我对他们在工作上的期待。很多部门缺少 互动即便不派人过来也应该多一些互动来保证双方的理解一致。

J: Sometimes it also has something to do with the ability of Chinese management,

including SANY. It's very difficult to send out people with real communication ability, because there are not many Chinese managers with overseas background, so it's very difficult to recruit people who are capable to understand different culture and good at people management for integration.

有时候这也和中国管理层的能力有关系,包括三一,派出去真正有沟通能力的人 很困难,因为没有多少人有海外背景的,派出去要能够做管理,又要能够对文化 融入的理解,对人的管理有能力是很难招到的。

Communication is definitely an important field in management while Chinese are not good at communication. A good communication in keeping transparency actually is western management method. First of all, I respect on you and I am willing to communicate with you to gain your understanding and support. Then, I want to work with you upon our mutual understanding. In this aspect, SANY still have space to improve especially when we explain Putzmeister why the margin we have reached is not satisfied, it is not only about the potential innovation but also the sustainable company development. We can't stop to wait our competitors catching up and we shall be well prepared in case there comes a new round of economic crisis. 沟通无疑是管理中的重要领域,而中国人不擅长沟通。保持透明度的良好沟通 实际上是西方的管理方法。首先,我尊重您,并愿意与您交流以获取您的理解 和支持。然后,我想与您共同理解。在这方面,三一重工仍有改进的空间,特 别是当我们向普茨迈斯特解释为什么我们所达到的利润率不能令人满意时,这不 仅关乎潜在的创新,而且关乎公司的可持续发展。我们迫不及待地等待我们的 竞争对手追赶,我们将做好充分的准备,以防出现新一轮的经济危机。

Y: I saw an article recently, which is not about post deal, but about the management of

different kind of talents. In general case, you need to use KPI to manage staff, but for the real talents, you need to use mission to manage them. You need to establish a common development goal with him in the future, so that he is willing to realize it together with you. In those words, I think Germans can still be motivated, but maybe not everyone can adopt this way to motivate people.

我最近看到另外一篇文章,不是讲投后整合,是讲对不同人才的管理的,将对一

般的人你要用 KPI 去管理他,对于高级人才你要用企业使命来管理,要与他建立。

未来共同的发展目标, 使得他愿意和你共同发展。就是说我觉得德国人还是可以

被 motivate, 只是可能不是所有人都可以采用这种方式。

J: Yes. In general how to keep the old company active and motive staff pursuit moral target is a big topic which is not for Putzmeister only. Sometimes I also want to encourage the company's positive culture by changing the company's culture and choosing the staff that is willing to develop and actively forge ahead. There are still some people who are still willing to pursue career success put more time and energy on work.

对,一个来说相对来说比较老旧的公司,已经没有当年道德上的追求,怎么样让 这样的公司保持活力,我觉得这是个很大的课题,我认为这个不只是普茨迈斯特 的问题。我有时候也想怎么样去鼓励公司积极向上的文化,一种是去改变公司的 文化,另一种是选择公司内部愿意去 develop,愿意去积极进取的,这样的人还 是有的,有些人愿意追求事业上的成功,愿意付出多一点。 S: I also want to ask how do we communicate with the worker's union? Do you find it difficult to communicate?

我还想问咱们跟工会的沟通怎么样?有没有觉得很困难遇到阻力。

J: Until now we can work with worker's union since we did not apply any aggressive management way such as shutting down factory or lay off staff. And we have come to some agreement with them which is good to cost reduction. It is also the reason that SANY insists on German CEO manage German company but the CEO shall understand shareholders' demand and deliver the demands to staff in a right way.

我们到目前为止还算好,因为到目前为止没有什么特别激进的招,一下子关掉工

厂或者踩到多少人,但是最近还是能够跟他们达成一些协议,通过这些协议能够

对成本的控制。所以我们还是坚持 CEO 用当地人,并且这个当地人理解股东的诉

求,把这个诉求以当地人可以理解和接受的方式传递过去。

It is the most difficult for Chinese entrepreneurs to build up a set of mindset and deliver it to German staff which can encourage them working towards that direction. We still have a lot of common standards, dedicate, work for better company performance and respect on others. The weakness of human nature is essentially the same between the Chinese and the Germans.

怎么样把中国企业家的对公司发展的想法、愿景通过一种德国的方式,使得能建 立起一套东西,朝那个方向做这是最困难的事。大家还是有很多共同的标准,要 敬业,公司要有好的表现,要有起码的尊重,人性的弱点中国人和德国人本质上 是一致的。

## **Case 2: Interview Question List – for staff**

- (1) Do you have any experience with Chinese in working before H Group acquired M GmbH? And how long you worked for M GmbH? What your roles during your stay?
- (2) What do you think the purpose of this M&A that H Group acquired M GmbH?
  - Overseas market extension
  - Cost reduction
  - Improve production efficiency
  - Get IP
  - Seek synergy
  - Other strategy
- (3) Cooperation between management of both parties
  - 1) What is the mutual trust at the beginning? (pls. give some example if possible)
  - Did you find any divergence of opinion in the cooperation, how does it resolved? (pls. give some example if possible)
  - 3) How difficult did you find interacting with Chinese partners (cultural aspect; communication; reliability; ... compared to biz partners besides China you have worked with in the past)? (pls. give some example if possible)
  - 4) In the early stage of post-acquisition, any changes of employees' mentality from your observing and how did the both managements work together to pass it through? (pls. give some example if possible)
- (4) What do you think the key factors to bring a success M&A in post deal stage? Does culture difference impact the most? And what do you think which level of the culture difference impact the most? Why?
  - Country culture difference
  - Company culture difference
  - Personal culture difference
- (5) What are the synergies H Group got from this M&A?
  - Market
  - R&D
  - Production
  - Management
  - Others
- (6) What do you think the aspects where the Chinese and German management could improve to get a better integration result?
- (7) Do you have anything else would like to share?

### **Interview Question List – for lawyer**

#### **Closed questions:**

- 1. Will you please share me your experience in CBMA when a Chinese company acquired a German company? (Appreciate could have some specific cases)
- 2. What do you think the obstacles or difficulties which may lead to M&A failure in post deal stage from legal perspective? (Appreciate could have some case examples) And do you have any suggestion to help both party avoid or get rid of these problems?
- 3. Do you have any idea on the M&A cases that SANY acquired Putzmeister Holding GmbH, and a Chinese Fund acquired CHOREN Industrietechnik GmbH?
- 4. Do you have any impression on the management style or behavior difference between German and Chinese? (Appreciate to have some examples)
- 5. Any other opinion or idea you would like to share?
- 6 . Comparing with acquired by other countries' company, what do you see the difference that Chinese company have.

### Case 2: Interview – COO of M GmbH

Interviewer: Selina Yao Interviewee: Charles Lin Method: Telephone Interview Date: April 28, 2018 Duration: 1:06 h

#### SY: Did you attend the acquisition process?

您参与收购流程了吗?

CL: No, but I know the business evaluation and technology evaluation process. The target of acquisition is to introduce the best PV technology in Europe. When H Group has interest on CIGS and want to talk with Q-cells (ex-mother Company of M GmbH) but Q-cells is very aggressive and were not willing to talk. But later on when Q-cells stepped in tough situation, they turned to be very active to contact H Group. Q-cells hold silicon, CDT and microcrystalline silicon technology.

没有,但是我清楚商业评估,技术评估。收购目的就是引进欧洲最好的技术。当

时 Qcells 很强势, 2011 年主席去沟通的时候, 不搭理我们, 后来形势不好, Q-

cells 主动跟 H Group 谈。瑞典研发技术也还不错。Q-cells 当时有晶硅, CDT, 微

晶硅技术。

## SY: What are the main aspects of management differences and communication difficulties with German management?

跟德国管理层合作当中,管理差异大,沟通困难,主要体现在哪些方面?

CL: For example, at the end of Y14 when all the management getting together in BJ for yearly production target. All attendees were agreed on 83MW production volume but there are no meeting minutes followed. Then next year, M GmbH did not reach the aligned production KPI but CEO denied there is one agreed by him. And CEO asked for 100% bonus in front of the Chinese management.

例如, 在 14 年结束时, 所有的管理人员聚集在北京讨论年度生产目标。所有与 会者都同意 83MW 发电量, 但没有随后的会议记录。然后转意念, M GmbH 没 有达到预计的生产目标, 但 CEO 否认他曾经同意。首席执行官在中国管理层面 前要求100%的奖金。

## SY: Is there any trust issue in the communication with German management? Did cultural differences have any impact?

与德国管理层沟通过程中有没有信任问题? 文化差异会带来影响吗?

CL: At the beginning, the German management was mostly care about if you can get money and resources from China headquarter. M GmbH needs further investment on R&D, and the output was very low at that time.

最初,德国管理层最关心的是能否从中国总部获得资金和资源。M GmbH 需要进

一步的研发投入,当时产量很低。

After the startup period, we had meetings with CEO and CTO to decide how to process the operation. And finally we decide to invest on new R&D activities which include dismantled one cavity from production SL1, next CTO started on new technology process. In the Y15 the product size from SL1 reached to 15cm. And then in Y16, we worked on production SL2 which increase 1% of technology process which encourage staff very much. In the Y15, the equipment for Nanjing new factory was delayed moving in due to financial difficulties, we kept transparent with German staff and encourage all staff working together to overcome the present difficulties.

在开始期不久后,我们与首席执行官和首席技术官举行了会议,决定如何进行运营。最后,我们决定投资于新的研发活动,包括从 SL1 生产中拆除一个腔体,接下来 CTO 开始新的技术流程。在 15 年中, SL1 的产品尺寸达到 15cm。然后在16 年,我们在 SL2 产线上,工艺增加了一个百分点,极大地鼓励了员工。在 15 年中,南京新工厂的设备由于经济困难而推迟了迁入,我们与德国员工保持信息

透明,并鼓励所有员工共同努力克服目前的困难。

SY: Understood that even though the company encountered some financial difficulties but after thoroughly communication with German staff, we can move together towards one direction and there exists no big issue. So the key is we should keep everyone on the same page.

尽管遇到了财务困难, 在跟德国管理层充分沟通后大家还是可以同心协力朝着一 个方向努力的。并没有存在特别大的问题。关键是大家要有一个共同的目标以 及在同一个层面上的理解。

CL: Yes, that's right. 是的。

SY: Did you think that Chinese management has learnt sth. more than the technology, for example from the management perspective, is there any improvement?

CL: I definitely have leant sth. more, but maybe not that much for the top management in China, they only knew that the social benefit is very well there. For example, the Chairman has requested R&D team should work 7\*24 hours per week.

SY: Besides finance integration H Group assigned a manager to M GmbH, what else integration in other corporate functions have been done?

除了财务整合, H Group 还为 M GmbH 指派了一名经理, 其他公司职能部门还

进行了哪些整合?

CL: H Group has sent some R&D and procurement engineers to M GmbH for short term training but did not sign training contract. And the staff trained didn't realize their value since the production line localization project suspended due to cash shortage.

H Group 已派遣一些研发和采购工程师到 M GmbH 接受短期培训,但没有签署

培训合同。由于资金短缺,生产线国产化项目暂停,培训人员没有意识到自己的

价值。

M GmbH has assigned one sales engineer to H Group for 6 months transfer.

M GmbH 已经指派一名销售工程师到 H Group 公司工作 6 个月。

#### SY: Does H Group have any plan of technology transfer?

H Group 有任何技术转让计划吗?

CL: The main target is production line transfer, not that much focus on technology transfer.

主要目标是生产线转移,而不是太注重技术转移。

# SY: Since 2012, M GmbH was acquired by H Group until now, 6 years passed, do you think H Group has realized the acquisition target?

自 2012 年以来, M GmbH 被 H Group 收购至今, 6 年过去了, 您认为 H Group

实现了收购目标吗?

CL: We made progress on increasing the production volume, cost reduction and improving the efficiency record. But it is a pity that H Group put insufficient attention and investment on technology transfer, China R&D team is not yet setup, it needs another 2 years to improve.

我们在增加产量、降低成本和改善效率记录方面取得了进展。但遗憾的是, H

Group 对技术转移的重视和投入不足,中国的研发队伍还没有建立起来,还需要

2年的时间来提高。

# SY: What do you think the main reason that M GmbH was able to make champion module in the financial difficulties?

你认为 M GmbH 能在财政困难中达到冠军组件效率的主要原因是什么?

CL: The assigned Chinese finance leader made a great contribution on leveraging and consolidating resources between China and Germany. Name the same Managing Director for both M GmbH and M2 GmbH ensure the smooth communication.

委派的中国财务领导人为中德两国资源的杠杆化和整合做出了巨大贡献。为 M

GmbH GmbH 和 M2 GmbH 任命同一董事总经理,确保了沟通顺畅。

### **Interview – Product Management Director of M GmbH**

Interviewer: Selina Yao Interviewee: Martin Method: Telephone Interview Date: June 20, 2018

MM: Let me start with the first step. First, if you work in a German company and you get some point information that Chinese company will take over your company, that there is still a fear what the Chinese are planning to do. You know? In most of the western, or at least in German has there is still the view that China will move the factory to China and close the factory.

So it is the general pic that here the people think that production in China is cheaper than in Germany. So it is the fear at the beginning of the time. So if I reflect the time when we started with H Group, I think at the very first beginning we got a lot of welcome things, we were invited, we got visitors from China, the whole management maybe kind of surprise how much time and questions they asked, personally I was very optimistic at the beginning. That we have been in Beijing, we have done all these nice trips then we saw the location, I also have the feeling that our knowledge, our opinion is required and it is a place we can bring the topic up.

And after this period there is a period, I call this period as frustration. That you don't see the argument you bring up changing things. Therefore, my perspective now there are two reasons that rather the company is quite big that it takes some time before you see the changes. The other thing could be inter-culture that the Chinese are very polite to talk to you but at the end they will make decision by their own. So I mean especially in the product management area, I mean we have these links to Miasole, so Miasole as remembered we sent 2 people to China, Andreas for 6 months, I don't remember the name of the American guy. I think we put a lot of efforts into explain things, but for some reason I didn't saw reason of changes. And that was kind of frustration period, the frustration getting up very fast and it is not only in my area but the other area. That were a kind of communication issue that Chinese don't understand we have explained, or it is more kind of there is a border. That everybody is listening polite but nobody is interested in a kind of open discussion.

Then we have the period when we get more Chinese management power in, I think when you started it was quite early in the project, right?

SY: Explain the process that H Group making decision to assign me to M GmbH.....

MM: And then you are coming to Germany more or less in 2013, right?

SY: I started my labor contract from July 1, 2013.

MM: From the integration point of view, I think there is something where I think there I see some benefit. If somebody from the culture background but also you have not been with H Group before, right? At lease, obviously you are speaking the same language which is definitely benefit, but I think you also have the culture basis that we are unfortunately we don't have. So I think for the integration process, this is what I think the keys. So I think for the finance area, I think that works pretty good, I think it is more than the Challenge for you in person to find a good level within the western company, so I think you are a very good link to the headquarter in China.

### Case 2: Interview – External lawyer of M GmbH

Interviewer: Selina Yao Interviewee: Thomas Schubert Method: Telephone Interview Date: Nov. 17, 2017

TS: I realized during my career that indeed advising Chinese companies...I mean it is difficult to generalize but maybe there are some mainlines that I identified overtime, that advising Chinese companies buying or acquiring into the European market is very different to our transaction. I mean...maybe to summarize and drop some points that what I think or what I think to be generality of these transactions.

There is very often and there are exclusively strategically that company acquiring, Chinese companies into European companies to buying companies. Very often situation that at least I see they take steps try to into internationalized and now they are more experienced which means it is very much advisory and counseling intense cause we need to explain everything you do and why you do, why you go .... I wouldn't say less experienced that would be the wrong terms but it invests they do not know the market and often the legal market they are going to enter, so you do a lot of things and put much efforts to educating your clients and making them knowledgeable about the framework and also about the market that I realized the clients often requires what are the standards and how do others do and what would be the name normally doing it. So I tend to see that there is willingness and interest aligning with the market, go with the different way.

A little bit that I see it takes a long time until Chinese company, the management of Chinese company really trust in their local European advisor. You know it takes longer than other client until you really setup the trust in relationship. And very often you got questioned and you do explain why you do things. And I also see there is much involvement, very often from the company, that the management runs their own due diligence parallel into details

I cannot tell you the name that last acquisition in Germany, the Chinese client read all the things 100% to make them knowledgably.

And the other points that the senior management of Chinese they are not able to speak English, so very often they are using younger executives like you were to help them to understand. But this also make thinks more difficult because very often the important things must to be translated into Chinese, but still like can handle English all but you have to make sure the information should be passed into Chinese because the decision makers should be more comfortable to know in Chinese.

Then another thing which I realized especially with state of enterprise, it that the decision making process is very unclear and very often the decision maker is not align with the title on the name card hierarchical that make their voice is more important than others in the company. What you got to understand that it is very different than the western European because in the Western Europe rather easy that from the name card you find the guy who is the decision maker. That makes the negotiation very difficult that Chinese will go back and forth not very clearly communicating what the aim is. And it is very hard to convince Chinese management even you tell them go this direction will lose money. Maybe consider twice and go another way that less burdensome financially will pay much easier. Probably nothing to generalize but very often it is the case. It something good turns out then very often that management just say this is fine but they are not reluctant to share they are happy with you. They are not the way to tell you they don't like something, but they just instruct you to do things all the other even though it all their disadvantages. I have an experience that you know I am always pushing the things out that you shouldn't do the things that will make you lose the money, but I just got the answer that "I am the management, I just tell you to do the things now." At the end the company loses a lot of money.

And the last but not the least, I feel challenging to get paid of the fees. I don't know. Even though it was pre agreed the Chinese companies try very hard to negotiate the fees, try to negotiating down. But even though you get successful transaction, it takes a while you get paid for it. It is different than what you see the European company.

Again I think that is very important disclaimer that it is limit view that I worked with, I joined working with Chinese now very intense. Probably many things I cannot generalize according to my experience. A lot of my colleagues have. You know that it is difficult to generalize or to find that it is the case. It is kind of disclaimer you should add once you ware writing your thesis.

Chinese management are more and more experience when they have huge investments overseas and also the younger executive team being educated in the US university and European university and just by that time all the skills are applied. Overtime, the Chinese companies or the decision maker in the Chinese companies being more westernized then they initially were. You know over time, you do more and certainly you got more standards, you play the standard.

The market is very competitive... Difficult to get paid of your bill.

#### **Case 3: Interview – Chinese engineers**

Interviewer: Selina Yao Interviewee: Chinese Engineers Location: F's office Date: Sept. 5, 2018

"Tea and Talk" Event with 20 Chinese technical trainees

Topic 1: What's your impression on German after 4 months training here? What do you think the difference between Chinese and German?

经过 4 个月的培训, 你对德国人的印象如何。你认为中国人和德国人有什么不

同?

Engineer A: I think they are more noble than us and they have a higher degree of social

development. When driving on the road, everybody obeys the traffic rules. The car will let the pedestrians go ahead.

我觉得他们比我们更高尚,社会发展程度更高。路上开车遵守交通规则,车会让

行人先行。

Engineer B: I think they are no different from us individually. I don't think they are very straightforward, but we are more mild and indirect than them. It is also possible that they have already received Chinese culture training, so they have paid attention in advance.

我觉得他们跟我们没有什么区别,并不觉得他们非常直接,而我们比他们婉转。

也有可能他们都接受了中国文化培训,所以已经提前注意了。

Engineer C: I can see that they are more direct than us, pointing out others' mistakes directly in the work, but they are also quite gentle in their communication outside the work, and we don't fell be offended abruptly.

我可得他们确实比我们直接,指出错误很直接在工作中,但是工作之外的交往,

觉得他们也还是挺婉转的,并不会觉得突兀被冒犯。

Engineer D: I like their rigorous way in the process of teaching, they teach everything step by step very clear never skip any steps in the process.

我喜欢他们严谨的方式,在工艺流程教授过程中,一步一步很清晰,绝不会越步

操作。

Engineer E: I think they are very nice. They know that we will feel bored on weekends, so they warmly ask how are we doing in the weekends. If they have any activities in their spare time, they will invite us to participate. They think about other people's feelings.

我觉得他们人很好,他们知道我们周末会感觉无聊,每周一见面都会热情地问周

末过得怎么样?如果他们业余时间有什么活动,也会邀请我们参加。他们会考虑

他人的感受。

#### Topic 2: Do you like the working style and life in Germany?

Engineer A: Too much relax to me, it is good to have intensive and relax take place by turn, but if always be that relax, it is also not comfortable to me.

对我来说太放松了,放松与紧张交替才是最好的状态,如果总是放松我会觉得不

舒服。

### **Case 3: Free talk – Engineer of F company**

Interviewer: Selina Yao Interviewee: Mrs. L, German Engineer Location: F's Office Date: Mar. 19, 2018

L: The worst situation is losing people and broken the "Spirit". I think our company has a special "sprit" that about 3-4 years ago, we have experienced "short time" work, while everybody worry about the situation and personnel will lose job, but I am surprised that nobody left the company but they choose trust and stay with the company.

Everybody talk about "integration", but what is the integration? It seems like people have different understanding on this.

I explain the 3 possibilities which including "not integrate", "totally integrate" and "partially integrate". I do also mention the integration speed when we decide to integrate.

She agrees.

She also talked about the management style difference: "Chinese way is always from top to the end that the management requests you to do this or that, but in Germany, we can discuss and negotiate everything."

We have aligned each other about the importance of communication.

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