ISTANBUL TECHNICAL UNIVERSITY ★ GRADUATE SCHOOL OF SCIENCE ENGINEERING AND TECHNOLOGY

KEY DRIVERS OF STRATEGIC RESHORING FROM CHINA: AN EMPIRICAL INVESTIGATION

M.Sc. THESIS

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Department of Management Engineering

Management Engineering Programme

JANUARY 2014

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İSTANBUL TEKNİK ÜNİVERSİTESİ ★ FEN BİLİMLERİ ENSTİTÜSÜ

ÇİN STRATEJİK RESHORİNG TEMEL SÜRÜCÜLERİ: AMPİRİK BİR ARAŞTIRMA

YÜKSEK LİSANS TEZİ

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OCAK 2014

Ridzhal Kamalov, a **M.Sc.** student of ITU **Graduate School of Science Engineering And Technolgy** student ID 507101031, successfully defended the **thesis** entitled "**KEY DRIVERS OF STRATEGIC RESHORING FROM CHINA: AN EMPIRICAL INVESTIGATION**", which he prepared after fulfilling the requirements specified in the associated legislations, before the jury whose signatures are below.

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To my family,

FOREWORD

“Supply chain management is all about human
chain management.”

Mr. Norio Yamanouchi
Direct Force

First of all, I am grateful to my German Thesis advisor Dr. Martin Stoesslein from Technische Universität München, who personally guided me through my research, shared his vast experience and encouraged me all way long and to my home university Thesis advisor Assoc. Prof. Dr. Hür Bersam BOLAT for her helpfull comments, suggestions and support to research on international basis.

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TABLE OF CONTENTS

Page

ABBREVIATIONS

BCG **:** Boston Consulting Group
EMS **:** Electronics Manufacturing Services
HBS **:** Harvard Business School
MNC **:** Multinational Corporation
TCE **:** Transaction Cost Economics
TCO **:** Total Cost of Ownership

LIST OF TABLES

Page

LIST OF FIGURES

KEY DRIVERS OF STRATEGIC RESHORING FROM CHINA: AN EMPIRICAL INVESTIGATION

SUMMARY

Reshoring manufacturing operations as a key strategic relocation decision option, popularly defined as bringing offshored manufacturing back home, has recently gained momentum by various companies. In December 2013, Apple changed course, deciding to assemble a line of Mac computers in California, U.S. Thus, Apple has also joined a wave of companies that found manufacturing in China not as advantageous as before. Companies that say they have brought back jobs include General Electric, Michigan Ladder, Zentech, Lenovo and many others. While the number of companies that has announced about their strategic decision on reshoring continuously increases, reasons stated for reshoring are manifold, they change from industry to industry and extend of their effect mostly remains unclear.

Following the rising daily press interest on reshoring phenomenon we aim to systematically explore the key drivers behind the top management decisions on reshoring with focus on China thus to observe further, define and complement the attention to this trend from our academic perspective.

First the available academic literature and related press was explored to obtain knowledge and comprehensive insights about the topic. To identify all manner of potential reasons behind reshoring decisions rich collection of data was collected from media and was further used in quantitative representations.

Second, basing on the knowledge from literature review, focused (semi-structured) qualitative interviews were held with company experts from different economic settings, such as from Russia, Germany and Japan to get rich primary data.

Finally, as limitation and future research direction, a survey instrument is suggested with companies operating in China to have a quantitative analysis of reasons on reshoring idea and to validate the results of prior two steps.

This survey design results in a very fine-grained database that enables an analysis of reshoring dynamics across various administrative, technical functions and industries located in a wide range of countries and regions of the world.

ÇİN STRATEJİK RESHORİNG TEMEL ETKENLERİ:
AMPİRİK BİR ARAŞTIRMA

ÖZET

Üretimin uzakdoğu ülkelerine kayması yaklaşık 20 yıl önce başlamıştır. Gıda, tekstil, elektronik sanayileri başta olmak üzere farklı sektörlerde yer alan bir çok şirket özellikle Çinde bulunan faaliyetlerini hızla genişletmiştir. Offshore adını kazanan bu fenomen, genellikle üretim maliyetini düşürerek ürünlerini piyasaya daha düşük fiyatla sunma avantajını elde etmeyi amaçlayan şirketler tarafından kullanılmıştır.

O zamanda nerdeyse tüm sektörlerin en büyük kurumları bu trende uyum sağlıyordu, ve offshore üretimi başarılarının en büyük nedeniydi. Tek kelime ile pazar konumunu korumak ve güçlendirmek için offshore şarttı. Ama dünya pazarının bugünkü durumuna bakarsak bu akışın ters yönde giden örnekleri fark edelebilir. Daha anlaşılır olması için, daha önce üretimlerini Çin'de bulunduran ve arttıran şirketlerin büyük bir kısmı artık üretimlerini kendi ev ülkelerinde yapmaya başlamıştır. Bu fenomene reshoring adı verilmiştir.

Offshorelardaki imalatın eve geri getirilmesi olarak tanımlanan reshoring, stratejik bir yerleşim seçeneği olarak, son dönemlerde çeşitli firmalar tarafından hız kazanarak uygulanmaktadır. Aralık 2013 tarihinde Apple Mac, bilgisayarların montaj hattı için California kararını vererek rotasını değiştirmiştir. Böylece Apple da imalat için artık Çini pek avantajlı bulmayan şirketler arasına katılmıstır. Üretimlerini geri gitiren şirketler arasında General Electric, Michigan Ladder, Zentech, Lenovo ve benzeri şirketler sayılabilir.

Reshoring kararını açıklayan şirket sayısı sürekli artarken, reshoring için belirtilen temel sebepler ise çok çeşitli olup, sanayiden sanayiye değişkenlik gösteriyor ve etkilerinin uzantıları da çoğunlukla belirsizdir.

Walmart 2023 yılına kadar kendi tedarikinin ABD pazarında olan kısmına 50 milyar dolarlık artış yapacağını duyurmuştur. 2012'de Massachusetts Teknik Enstitüsünde yapılan bir araştırmaya göre zamanında offshore üretimine başlayan şirketlerin %14'ü üretimlerini ülkelerine geri getirmeyi hedeflemektedir. Çin ve diğer uzak doğu ülkelerindeki çalışan maaşlarının hızla artmasıyla birlikte eskiden ucuz sayılan üretim maliyeti batı ülkelerindeki üretim maliyet seviyelerine giderek yaklaşmaktadır. Diğer taraftan işçilerin çalışma koşullarının iyileşmesine yönelik istekleri ve bu nedenle fabrikalarda sıklaşan grev olayları üretimcileri ciddi bir şekilde düşündürmektedir. Bununla birlikte reshoring fenomeninin arkasında olan gerçek ve ıspatlanmış nedenleri henüz bilinmemektedir.

Offshoring ve reshoring konusunda başka bir dikkate değer bilgi de internet kullanıcılarının %90'ının tercih ettiği Google arama motorundan gelmektedir. "Google Insights for Search" denilen uygulama kullanarak görülmektedir ki 2005'ten 2013 yılına kadar "offshore" kelimesinin aranma oranı 5 kat azalmıştır.

Aynı zamanda 2011'te aranmaya başlayan "reshore" kelimesi 2013'te en yüksek aranma seviyesine gelmiştir. Doğrusal bir bağlantının bulunmamasıyla birlikte offshore fenomenin tersi olan reshore fenomenin giderek önem kazanmasını internette açıkça görünmektedir.

Basının yükselen ilgisini dikkate alarak, bu çalışmada Çin odaklı üst yönetim reshoring kararının etkenlerini sistematik olarak araştırmayı amaçlamaktayız.

Şirketlerinin üretimlerinin genişletilmesi veya ev ülkelerine taşınması ile ilgili olan nedenlerin bulunması ve analiz edilmesi, genel olarak üretim yerleştirme kararına nasıl bir etki yaptıklarını anlamak için esastır. Bununla birlikte reshoring fenomenini daha ileri seviyede incelemek, açıklamak ve üzerinde olan dikkati artırmayı hedeflemekteyiz.

Bu araştırmanın cevap verilecek olan soruları şunlardır: Şirketler neden reshore yapmayı düşünmektedir? Reshoring kararının ekonomik etkisi nedir? Çindeki şirketler ile olan iş birliğinin temel karakteristikleri nedir? Hangi direk iş faktörleri reshore kararına yönlendirmiştir? Hangi doğrusal olmayan faktörler reshore kararını etkilemiştir? Ayrıca bu çalışmanın, reshoring fenomenin daha detaylı incelenmesine ve şirketlerin üretiminin yerleşim kararına katkı sağlayanacağına inanıyoruz.

Bu çalışma araştırma niteliği taşımakta ve derin literatür çalışması ile uzman mülakatlarından edilen kalitatif bilgileri içermektedir. Bu amaçla, ilk olarak konu ile ilgili geniş bir bilgi edinmek için derin bir literatür araştırması yapılmıştır. Böylece reshoring kelimesinin geniş tanımlaması ve kavramsal çerçevesinin analizi yapılmıştır. Reshore kararının nedenlerini daha iyi anlamak için öncelikle offshore trendini yakından incelendi. Offshore kararının en önemli etkenleri olarak verimlilik ve maliyet düşürülmesi görülüyor. Bu iki fenomen bir birinin tersi olduğunu farz ederek reshore kararının arkasında da ekonomik avantajın olduğu düşünülebilir.

Bütün potansiyel reshoring nedenlerini belirlemek için büyük bir bilgi koleksiyonu toplanmıştır. İleri aşamalarda ise grafiksel göstergeler kullanılmıştır.

İncelenen 79 haber ve dergi sonucunda 60 tane potansiyel reshore nedenleri belirlenmiştir. Ardından reshore gerçekleştiren 46 şirketinin bu stratejik hareket duyurularını araştırıp birincil verilere ulaşılmıştır, ardından sayısal analiz yapılarak reshore için 20 tane ana nedeni belirlenmiştir.

Offshoring ve reshoring esas olarak birer üretim yerleştirme kararları oldukları için ilk olarak konu ile ilgili olan işlem maliyeti ekonomisi (TCE), uluslararası üretiminin derleme teorisi ve daha yeni üretim yerleştirme kararıyla ilgili teorik kavramlar incelendi. Bu çalışmada, literatüre katkı olarak üretim yerleşim bilgileri ve pazarlık gücü analizleri kullanılarak reshoring teorisi geliştirildi.

Ardından bu bilgiler doğrultusunda Rusya, Almanya ve Japonya gibi farklı ekonomik düzeydeki ülkeleleri temsil eden uzmanlar ile odak (derinlemesine) mülakatlar yapıldı. Uzman seçiminde önemli kriterler; uluslararası iş tecrübesinin olması, Çin'de olan üretim şartlarının bilmesi ve reshore kararının stratejik bir karar olduğundan dolayı orta ve üst düzey yönetici olması seçildi.

Araştırma yöntemi olarak mülakatların seçilmesinin ana nedeni reshoring trendinin henüz iyi incelenmemiş olması ve kalitatif yönteminin bu konuda yardımcı olacağı düşüncesidir. Mülakatlarda açık uçlu sorular ve bilgi analizinde niteliksel yöntemler kullanılmıştır. Genel olarak araştırmada "neden" ve "nasıl" soruları yer almaktadır. Bir araştırma çalışması için bu tarz sorular yeni trend ve fenomenler hakkında bilgi toplamakta en yararlı sorulardır. Bunların sonucunda konu ile ilgili zengin birincil veri edinilmiştir.

Son olarak, önceki iki adımı onaylamak ve kantitatif analiz yapabilmek için Çin'deki faaliyet gösteren şirketlerle bir anket çalışması önerilmiştir. Anket çalışmasının amacı, Çin'de faaliyet gösteren şirket yetkililerinden elde ettiğimiz nedenlerin hangi derecede reshore kararını etkilediğini öğrenmek. Böylece bir önceki iki adımın onaylanmasıdır.

Araştırma yapısı çok nitelikli bilgi tabanı ile sonuçlandırılmıştır. Reshore fenomenin ana etkenleri ve alt etkenleri belirlenmiş olup Ishıkawa (sebep-sonuç) diagram halinde özetlenmiştir. Bu bilgi farklı ülke ve dünya bölgelerindeki idari, teknik fonksiyon ve endüstri alanlarında reshoring hareketler analizlerine imkan sağlamaktadır.

Reshore kararı stratejik ve zor bir karardır. Şirketlere için hayati önem taşımaktadır. Kendi içinde bir çok çelişki bulunduran bu karar, ciddi analizleri gerektirmektedir. Umuyoruz ki bu çalışma hem reshoring fenomini inceleyen bilimsel araştırmacılara hem üretim yerleştirme kararları veren şirket yetkililerine yardımcı olacaktır.

1. PROBLEM SETTING AND MOTIVATION

The shift of manufacturing to low cost countries to gain cost advantage began nearly 20 years ago. Moving overseas, companies were offered a wide range of benefits like special economic zones, new operational infrastructure, favorable taxation, conducive currency exchange rates and most importantly, cheap labor force. In addition to cost efficiency, offshoring served as a useful tool of near sourcing and strategy of being close to emerging markets. Since then, China became a particularly practical choice for companies willing to offshore. However, apparently, something has changed and companies that had offshored manufacturing to China recently started thinking about bringing their manufacturing back home and many of them already did. This phenomenon became known as reshoring.

Reshoring manufacturing operations as a key strategic decision option has gained momentum by various companies. In December 2013, Apple changed course, deciding to assemble a line of Mac computers in California, U.S. Thus, Apple has also joined a wave of companies that found manufacturing in China not as advantageous as before. Companies that say they have brought back jobs include General Electric, Michigan Ladder, Zentech, Lenovo and many others. Walmart (2013) is also encouraging by announcing that by 2023, it will increase market sourcing within the U.S. by $50 billion. An MIT study in 2012 found that 14 percent of companies intend to move some manufacturing back home. Reasons may be manifold and may change from industry to industry. According to a study by the Boston Consulting Group (2011), wages are increasing by 15% to 20% a year in China and India, bringing the labor cost level ever closer to the level in the Western countries. On the other side, controlling worker conditions and production is challenging due to the high number of subcontractors involved, causing unexpected quality, availability and operational problems (Planetmgpie, 2012).

While investigating reasons for reshoring phenomena we have derived interesting information from Google Insights. Google Insights for Search is a popular customer interests investigation service by Google very similar to Google Trends, providing insights into the search terms people have been entering into the Google search engine. This information is available to all users of Internet and can be easily obtained. Unlike similar service of Google Trends, Google Insights for Search also provides a visual representation of regional interest on a country's map. This is particularly useful for country-based comparison. It displays top searches and rising searches that may help with keyword research. Results can be further narrowed down using categories that are displayed for each search keywords. The Google Insights constructs the graph using 100-point scale where the number 100 represents the peak search interest. However, it does not say any thing about real number of searches. On the other hand, this tool shows insights to only keywords that have gained significant popularity which statistics can be provided. This provides additional interest to the tool. The terms that we became particularly interested in was “reshoring”.

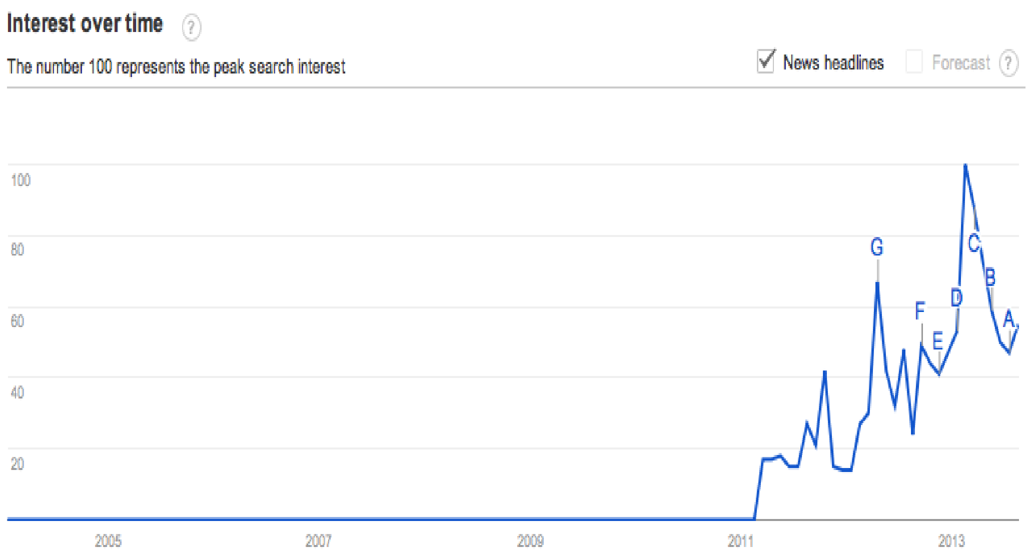

Figure 1.1 : Number of searches for “reshoring” in Google insights.

The interest to phrase “reshoring” (See Fig.1) and related search terms including this keyword is seen to have started in 2011. This information perfectly matches with the start of reshoring news on popular social tool Twitter. Using Google insights we see that most of the search terms related to reshoring were entered from United States. The popularity of this keyword gradually increased since 2011 but from time to time-showed steep dips. The peak of popularity of reshoring phrase was seen in 2013. However, after this peak another drop occurred and is currently observed. The interest to reshoring has in general a rising trend but with high variation.

Another interesting information provides the results of search term “offshoring”.

This vise versa process was chosen to compare the trends popularity against reshoring. The resulting graph in Google Insights of phrase “offshoring” shows that it has been steadily loosing in popularity, search terms people entered decreased since 2006 reaching recently its lowest level. (See Fig. 2)

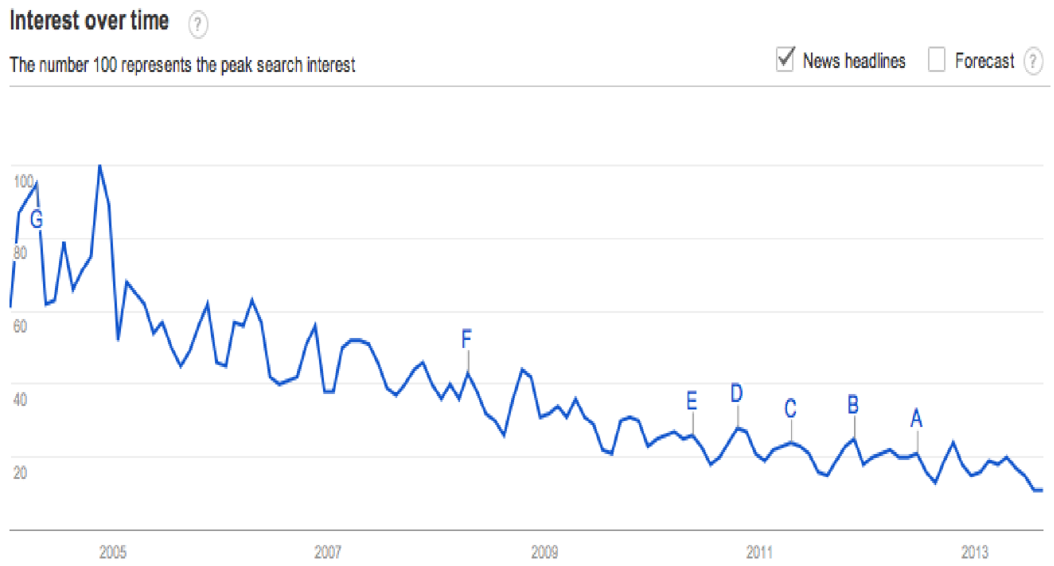

Figure 1.2 : Number of searches for “offshoring” in Google insights.

Of course, it is too early to conduct any conclusions deriving from this data. More precise work should be conducted to find the correlation between the number of searches in search engines and real popularity of trends within business groups. However, it can easily be said that Google Insights definitely provide useful information on people’s interests, intentions, and maybe future actions. Needless to say that such insights can be very useful to researchers. Google Insights for Search enable to use this database of intentions coming from search engine users to predict the current trends.

Following the rising daily press interest on reshoring phenomenon we aim to further observe, define and complement the attention to this trend from our academic perspective. As the reasons behind reshoring idea and the extend of their effect mostly remains unclear, the purpose of this Thesis is to systematically explore key drivers behind the top management decisions on reshoring with focus on China.

2. RESEARCH QUESTIONS AND METHODS

2.1 Questions

This study aims to explore companies' decisions on reshoring their operations back from China. The reasons why companies may be choosing to expand or relocate manufacturing to home countries are essential in a manufacturing location decision. The purpose of this Thesis is to define key factors for reshoring and try to evaluate their magnitude. The research questions are formulated as: Why do companies consider reshoring? What is the economic impact of reshoring decision? What is management practice with Chinese characteristics? Which (direct) business factors led to the reshoring decision? To what extent do (indirect) factors, such as foreign government policies or trust affected the decision? These are some questions that Thesis aims to answer. We believe that this research will contribute to further studies of reshoring phenomenon and help companies with manufacturing location decisions.

2.2 Research Activities

This research is an exploratory work that uses the qualitative data from a deep literature review, several expert interviews. Internet based survey is further suggested to gain a better understanding of the drivers of the reshoring.

First the available academic literature and related press was explored to obtain knowledge and comprehensive insights about the topic. To identify all manner of potential reasons behind reshoring decisions rich collection of data was collected from media and was further used in quantitative representations.

Second, basing on the knowledge from literature review, focused (semi-structured) qualitative interviews were held with company experts from different economic settings, such as from Russia, Turkey, Germany and Japan to get rich primary data.

In-depth case studies were necessary to facilitate an understanding of the context and real drivers of both the previous offshoring and more recent reshoring decisions (John V. Gray et al., 2013). The questions used in interviews were open-ended and experts were given assurance on confidentiality of responses. To analyze the data we used the qualitative content analysis technique (Flick, 2002; Cooper & Schindler, 2003). The case study part of this Thesis is based on the methodology by Yin (2003) and Eisenhart (1989). For the qualitative interviews the main reference is Kvale (1996). The qualitative part of survey asks "why" and "how" questions on the reshoring topic. According to Yin (2003) the case study approach is preferred when these "how" and "why" questions are posed, when the researcher has little control over the events and when the focus is on a contemporary phenomenon in a real life context. This type of study is also called explanatory case study. This Thesis is a multiple case study where more than one reshoring case is in the focus, which provides an opportunity for comparative study. The interviewee's views and experiences on reshoring were examined separately and a comparison between them was made afterwards. These interviews were conducted personally with interviewees from Japan, Turkey, Germany and Russia, which lasted from 40 to 60 minutes. The data were collected through semi-structured interviews of executives who have had experience with offshore operations. These interviews were recorded using voice recorder. Subsequently the recordings were analyzed and used as the research data.

Finally, as limitation and future rresearch direction, a survey instrument is suggested with companies operating in China to have a quantitative analysis of reasons on reshoring idea and to validate the results of prior two steps. The respondents should be asked about the factors that influenced their decision on reshoring and the relative importance of these factors. This survey design results in a very fine-grained database that enables an analysis of reshoring dynamics across various administrative and technical functions located in a wide range of countries or regions of the world, across industries. In addition, the collected database also includes information both on companies that have already reshored as well as companies that consider reshoring but have not yet initiated the reshoring of operations. Based on the existing knowledge and the information gained in the interviews and survey, key drivers of reshoring from China were identified.

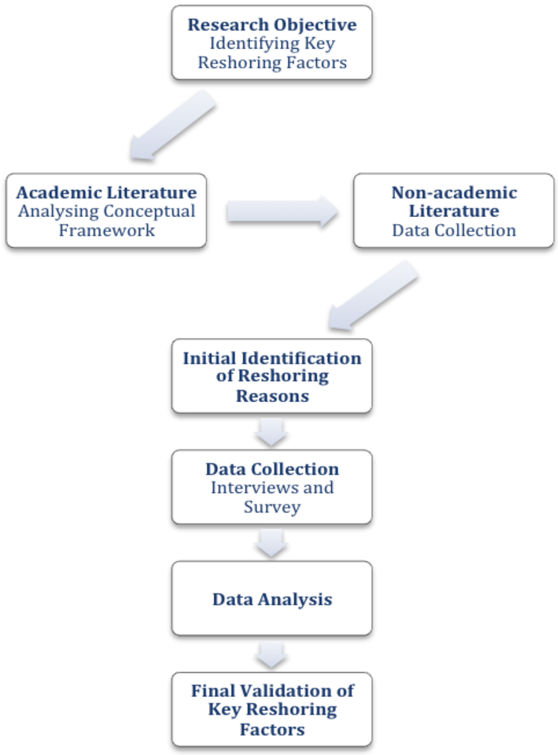

Figure 2.1 : Research design.

Figure 3 illustrates the research design applied in this study. First, the study explores existing academic and non-academic literature concerning reshoring. Then, based on the available knowledge and collected research data, the common reasons for reshoring are identified and reviewed. The graphical representation of overlapping reasons and their frequency encountered is prepared to understand visually the gradual importance. Additionally, a catalog of firms with information regarding reasons and time of reshoring is composed.

The literature review is followed by semi structured qualitative interviews and Internet based survey. The purpose of the interviews is to open the topic from the company perspective and to get rich data that is necessary to facilitate an understanding of the context. The interviews explore the reasoning for reshoring decision; looking into details and trying to find some hidden factors like governmental issues, perceived risks, labor problems etc. Finally, the survey is proposed to validate the results of prior two steps and evaluate the degree of importance of each reason for reshoring. Using the data collected through 3 steps, the final analysis is conducted and the purpose of study, defining key drivers of strategic reshoring from China, is finally achieved.

3. LITERATURE

3.1 Key Definitions of "Reshoring"

Frequently termed "reshoring" (sometimes "back shoring"), can be generally defined as moving manufacturing back to the country of its parent company (Gray et al, 2013). Reshoring can be also defined as offshoring activities that have been brought back onshore. The term "offshoring" is itself imprecise and generally describes the relocation by a company of its business processes from one country to another typically an operational process, like manufacturing, or supporting processes, like accounting. Company undertaking offshoring decision in common sense by doing so is expecting to gain cost savings. However it is clearly seen that not all offshored operations bring expected benefits. The Boston Consulting Group and Gartner predicted in 2005 that 50% of offshoring contracts made between 2001 and 2004 would be failing to meet the expected results (Aron et al. 2005: 136).

To overcome this challenges related to offshoring, reshoring, economic idea of the moment, with or without insourcing might be considered as an option. The reasons behind reshoring and idea itself seem to be simple. The costs saved by manufacturing goods in China are eroding as Chinese wages rise, leading manufacturing jobs return back home. The idea known as reshoring can be generally characterized as repatriation of manufacturing operations back to the home country. Moser et al. (2012) define the term reshoring (sometimes back shoring/on shoring) as bringing back the manufacturing of products to the place where they will be sold or assembled. In this definition they put the emphasis on the country where the final products will be sold. On the other hand, the popular press (Hagerty, 2012) defines reshoring as "bringing manufacturing back home" from a current location that is, in fact not home. Other press sources, also define reshoring as the repatriation of manufacturing operations, but imply relocation from low-cost countries back to the home country. In Washington, the idea is even more simplified and reshoring stands as the repatriation of manufacturing operations from China, back to the U.S. The reshoring initiative is highly popular topic in political arena and government openly supports the idea itself. Finally, more holistic definition that reflect the reality of reshoring, is the transfer of "all or some manufacturing production from a low-cost country back to the home country or to another country, low-cost or not." (Mantey D., 2013)

3.2 Conceptual Background Review

Since reshoring is fundamentally a location decision (John V. Gray et al, 2013), we examined theoretical concepts related to it. Transaction cost economics (TCE) focuses on the make-or-buy decision and tries to balance the costs of market friction (transactions) and specific asset investments with the potential risk of buying the item rather than making it (Williamson, 2008). TCE states that firms will prefer to relocate from higher cost to lower cost regions, all other conditions being alike.

On the other hand, areas with higher cultural differences or limited intellectual property protection are identified as more likely for opportunism and will also be less attractive (McIvor, 2013). An eclectic theory of international production shows location advantage as one of three determinants of international production by multinational companies (Dunning, 1988; Rugman, 2010). In his revised work Dunning (1998) identifies resource seeking advantage, marketing seeking advantage, efficiency seeking advantage and strategic asset seeking advantage as primary location advantages.

More recent research on the manufacturing location decision suggests a move away from resource seeking, primarily cost advantage toward strategic asset seeking, or more complementarity of assets and activities (Cantwell, 2009). This includes greater interest in knowledge creation and value creation and capture (Gereffi & Lee, 2012). Casson (2013) uses internalization theory to explain both the rise of offshoring and its reversal, reshoring. He provides some background on the relevance of economics and internalization theory to understanding better the supply chain. Ellram et al.'s (2013) work applies internalization theory to the location decision.

This paper uses the location aspect of internalization theory to understand the factors that affect organizational decision on various regions for locations of owned manufacturing facilities. McIvor's (2013) implies that the resource-based theory and transaction cost economics (TSE) theory can both be employed to the outsourced manufacturing location decision for organizations to reduce the risk of opportunism. In their work, Gray et al. (2013) provide a basis for pushing the research on manufacturing sites decisions forward. They provide definition to reshoring as a term and review relations between reshoring and the location decision, between offshoring and reshoring, including the trend towards reshoring.

Angus C. Chu et al., (2013), in their recent work develop a simple framework to predict pattern of offshoring and reshoring over the course of economic development. They conclude that economic development in offshored countries initially causes an increase in offshoring activities but eventually leads to a return of offshoring tasks to developed countries. These theoretical implications are consistent with the empirical trends in China.

3.3 Selection Reasons for Reshoring

3.3.1 Academic literature

To fully understand and complement to these reasons, the initial objectives for offshoring the operations should be studied precisely. Kennedy et al. (2009) define offshoring as "moving a function and its associated jobs to another part of the world". (Kennedy et al. 2009: 3). Offshoring or Offshore outsourcing has been defined as the migration of jobs to poor countries from rich countries, leaving the people who perform them behind. (Blinder, 2006). Recently the term began to describe the practice of companies from developed countries of contracting with businesses beyond their country borders for services that would have been done by in-house employees (Levine, 2012). Offshoring has implications for the strategic management field because it may require new resources and the development of new or unfamiliar capabilities. Thus, offshoring can be considered an internal process as well as a business strategy for effective management of resources and firm-level capabilities (Doh, 2005).

It is common that the primary reason for offshoring was cost efficiency and general cost savings. Assuming that reshoring is a vise versa process of offshoring, the ultimate result of this strategic location decision should be cost reduction as well. When the offshoring or reshoring decision is done, special attention needs to be paid to the cost components of manufacturing. Often these cost components are the reasons for relocation. Therefore, completeness and accuracy of these reasons bear a crucial role for successive managerial decision-making process on relocation.

Within the broad category of location advantage priorly supporting offshoring dechision, Dunning (1980) identifies several types of advantage, including:

- Resource-based advantage
- Import-substituting manufacturing advantage: includes (a) material cost, (b) labor cost, and (c) market and government trade policies.
- Export Platform Manufacturing advantage
- Trade and distribution advantage: involves improved market access through closer proximity to customers.

Based on existing literature it can be conducted that reasons for reshoring are manifold. Although rising Chinese wages are most frequently cited and showed as primary reason for reshoring, it should be stated that many other important objectives exist. For instance indirect labor costs, rising shipping rates, quality problems, intellectual property issues, currency rate and the intangible costs of being far from headquarters all add up to this strategic decision. A recent study by the Boston Consulting Group states that wages have risen by 15-20% a year in China and India (Moser and Beyer 2011: 3).

Gray at al., (2013) in their work, provides examples of factors outlined from literature stream from economics and international business seeking to explain location choices while simultaneously considering whether to "internalize" the offshore activity or not.

Table 3.1: Factors that can be used to examine location decisions (Gray et al., 2013)

Category	Factors
Input factor costs	Tax rates (De Mooij & Ederveen 2003) Tariffs (Culem, 1988) Currency changes (Froot & Stein 1991; Blonigen, 1997)
Risks	Currency risk (Campa, 1993) Expropriation risk (Henisz & Delios 2001; Henisz, 2003) Quality risk (Gray, Roth, & Leiblein 2011)
Network effects	Clusters/agglomeration (Porter, 1998; Almeida & Kogut 1999; Bell, 2005)
Differences between locations	Psychic distance (Johanson & Wiedersheim-Paul 1975) Cultural distance (Kogut & Singh 1988; Kirkman, Lowe, & Gibson 2006) Institutional distance (Kostova, Roth, & Dacin 2008)

Many studies have examined specific factors with intuitive effects on location choices, such as tax rates, tariffs, wage rates, energy costs and currency changes. However, many factors are not as easily quantifiable. Some of these factors relate to changes in the levels of different types of risk (e.g., quality risk, disruption risk, currency risk, intellectual property risk), and some relate to network externalities. Finally, some factors are related to the difficulties of operating in a location due to differences between locations, such as cultural and/or language differences.

In the preliminary to their work, Ellram et al. (2013) provide a list of factors suggested as drivers of the global manufacturing location decision today. Some of them include:

- rising cost of labor in low-cost countries (Anon, 2012).
- rising prices of oil and associated transportation costs (Fishman, 2012).
- slowing of the global supply chain due to the shipping industry adoption of slow steaming (Hull, 2005).
- improving ratio of U.S. labor output/productivity per labor dollar (Anon, 2012; Fishman, 2012).
- real and anticipated volatility in currency valuation (Culp, 2012).
- growing concern toward environmental problems (Mueller et al., 2011).
- increasing theft of intellectual property when dealing in global regions (Clarke, 2012; Riley & Vance, 2012).
- fast response time and leaner supply chain associated with locating manufacturing closer to the end customer/consumer (Williamson, 2012).
- perception of quicker recovery in the case of supply chain disruption (Fishman, 2012; Williamson, 2012).

Ellram et al., (2013) try to develop a better understanding of reshoring manufacturing to the United States, using an electronic survey. The respondents were asked about the factors that influenced their choice of regions for offshore manufacturing in the past 3 years and in the coming 3 years, as well as the overall level of risk associated with each of their offshore manufacturing regions. (See Table 3.2). Multiple ordinary least squares regression was used to regress each independent variable onto two dependent variables. Data were gathered for each independent variable's importance in the location decision in the past 3 years as well as its effect in the coming 3 years.

Table 3.2: Drivers of Manufacturing Location Choice: Exploratory Factor Analysis (Ellram et al., 2013, Volume 49, Number 2).

Factor		Factor Loadings	
		Past 3 Years	Next 3 Years
Input/product	Currency	.750	.505
	Weight	.745	.491
	Raw materials location	.600	.566
Cost	Switching cost	.627	.733
	Labor cost	.751	.579
	Stability of labor cost	.680	.667
Labor	Availability of local management	.559	.807
	Availability of labor	.321	.778
Logistics	Availability of knowledgeable intermediaries	.719	.774
	Availability of transportation	.788	.794
	Stability of transportation cost	.552	.607
	Transportation reliability	.755	.576
Supply chain interruption risk	Distance to customer	.453	.514
	Terrorism	.786	.771
	Disaster	.759	.772
	Reputational risk	.625	.325
Strategic access	Market potential	.692	.610
	Customer presence	.463	.616
	Access to supplier or buyer knowledge	.610	.653
	Competitive pressure	.466	.533
Country risk	Global/political uncertainty	.619	.654
	Environmental issues	.672	.687
	Social/ethical	.575	.576
	Natural disaster	.510	.602
	Political instability	.610	.684
	Regulation risk	.617	.613
Government trade policies	Tax advantages	.756	.729
	Subsidies	.781	.830
	Countertrade requirements	.488	.376

The cost advantage itself has suffered from severe erosion while at the same time other significant problems have arisen. Initial situation with bad worker conditions lead to logistical, availability and poor quality problems due to large number of intermediary subcontractors involved in operations overseas. (Planetmgpie 2012: 9)

Quality related challenges have been present ever since offshoring started, and that is sometimes severely deteriorating the benefits expected from offshoring. The lack of sufficient control regarding subcontractors and unapproved changes in materials or processes are inclined to increase the amount of low quality or even faulty products. Moreover, in many industries counterfeit products are difficult to control due to poor local legal recourse in these countries. (Moser and Beyer 2011: 3)

3.3.2 Non-academic literature

In his meeting with top managers from Silicon Valley in February 2011, during the dinner President Obama asked Apple's CEO Steve Jobs about possibility of manufacturing Apple products in the United States. Apple's founder is said to have replied directly: “Those jobs aren’t coming back.” Since then something has changed and apparently, we see that Apple reversed its course announcing the new assembly line of Mac computers in California, U.S. (Regalado, 2013)

The rising labor cost is the most popular reason stated in popular press. According to Hackett Group the manufacturing in China in 2005 was nearly 31 percent cheaper than in developed countries. By 2013, this difference will lower to 16 percent and in some cases become small enough for U.S. production to make sense again. China’s cost advantage is gradually eroding making manufacturing at home more viable.

Hal Sirkin, an author of Boston Consulting Group 2011 report, makes an emphasis on improved U.S. manufacturing competitiveness. According to his estimates over the next eight years, 2 million to 3 million jobs can return to home. He is optimistic about the results of a survey. (Lynch, 2012)

Last year BCG also announced that more than a third of large American manufacturers (with more than $1 billion in sales) are considering reshoring production from China. (Manufacturing.net, 2012). Companies that failed to achieve the estimated profits in the host country decide to relocate their operations back home. According to a study by Harvard Business School (HBS) in 2011, many firms are however doubtful about relocating activities back to U.S. or moving to other low cost countries. In a conducted survey with HBS alumni who had a manufacturing in China, professors Michael Porter and Jan Rivkin found that many of them were deciding to come back because they previously thought that wages abroad were much lower than at home. Steadily rising wages are underlined as primary reason of their considerations.

International Labor Organization, claim that real wages in Asia between 2000 and 2008 rose by 7.1-7.8% a year. (The Economist, 2013) According to an HSBC study, real wages in China's coastal areas have risen 3,5 times in the last 11 years. The rise of wages in China is broadly addressed by many studies. Pay and benefits for the average Chinese factory worker rose by 10% a year between 2000 and 2005 and speeded up to 19% a year between 2005 and 2010, according to BCG. In addition the Chinese government has set a target for annual increases in the minimum wage of 13% until 2015. (Hutchinson, 2013)

Demographics are only supporting the trend toward higher wages. In 2012, China's working age population fell for the first time, by 3.5 million to 937.5 million. The supply of labor force from rural areas in China's has decreased stimulating China's wages rise even further. (Hutchinson, 2013)

On the other hand, labor unrest and strikes in Chinese factories became more frequent and when they occur, the government officials often tell the plant managers to meet workers' demands immediately. Following labor unrest, wages at some factories have gone up steeply. Honda was forced to give its Chinese workers a 47% pay rise after strikes in manufacturing plants in 2010. Foxconn Technology Group, a Taiwanese firm that does a manufacturing for Apple and other high technology companies, had to double the wages at its factory in Shenzhen after a series of suicides. And nowadays its labor troubles are still continuing. (The Economist, 2013)

Consumer preference is another indicator of strong support for U.S. manufacturing. Boston Consulting Group has released in 2012 another two survey reports pointing to a strong and growing consumer preference for "Made in the USA" labeled products, and to a marketing advantage for brands with the place of origin label. More than 80 percent of U.S. consumers stated that they are willing to pay more for products labeled “Made in USA” than for those labeled “Made in China”. The key drivers were stated as concerns about quality of products manufactured in China and a desire to keep jobs in the U.S. (Harry Moser et al., 2013)

Recently, manufacturing analysts have begun to echo Moser's claims about total cost of ownership (TCO) estimates. In 2011 Accenture study of 287 manufacturing executives across a variety of industries, the researchers found a significant underestimation of overseas manufacturing costs. The study shows that many manufacturers who had offshored their operations likely did so without a complete estimation of the indirect costs, and thus, the total cost of offshoring was considerably higher than initially thought. As defined by authors, part of the issue is that not all costs of offshoring are counted directly under manufacturing costs but they impact many other areas of the enterprise as well. (Markowitz, 2012)

The inappropriate attitude of local government towards foreign companies is another concern for TNCs. Forbes magazine columnist Gordon Chang shows a case of Google's entrance to Chinese market and forced abandonment as a hostile set of government. According to Chang, support to local player, search engine Baidu, shows how Chinese government wants the local companies to be the national champions. The case of paper shredder company “Fellowes” that was forced out of its own production plant by subcontractor companies is another well-known example illustrating that MNCs face problems with local government. Considering this case the publisher of Manufacturing & Technology News journal Richard McCormack warns readers about moving production to a communist country. (Navaro, 2013)

Some journals also do show political reasons as possible initiators for companies’ willingness to reshore from China. According to them, if the global economic recovery continues to be weak, the increase in political pressure on MNCs to slow the pace of offshoring is inevitable. It will be felt the most in the United States, which has offshored more service and manufacturing functions than any other developed country. Consequently, a phenomenon called reshoring might become more popular. (NASSCOM, 2011)

A difficulty in communicating with business partners due to different time zones and geographic locations is an additional reason for reshoring stated in daily press. Decision on a value of time due to large distances have an extreme importance when companies do not have a permanent representative in China that makes communicating with manufacturers difficult. Distant locations create problems with product delivery and timing. In this case factor in shipping are difficult to endure. (Lynch D. J., 2012)

Product origin concerns increasingly take attention of customers. We can see clearly, now that there is a growing sense in U.S. companies wanting to produce in the United States. It is very important to them to have “Made in the U.S.A.” on their label again, because customers are ready to pay for it. (Rocks et al., 2012).

During many years of outsourcing innovation suffered from the distance between manufacturing and design, and quality became a problem too. (The Economist, 2013)

Most frequently cited and therefore obvious reason for reshoring is the rise of wages in China and other Asian countries. The crucial change that has taken place over the past decade made that wages in low-cost countries grow several times. According to the data from International Labor Organization, real wages in Asia between 2000 and 2008 rose by 7.1-7.8% a year. In addition, not only did wages of factory workers rise but it is claimed that salary of senior management in several emerging markets, such as China, Turkey and Brazil, now either matches or exceeds pay in U.S. and Europe, according to a recent study by the Hay Group.

On the other hand, the survey by the McKinsey Global Institute shows that pay in developed economies rose by just 0.5% to 0.9% a year between 2000 and 2008. In manufacturing, the financial crisis actually reduced pay: real wages in American manufacturing have declined by 2.2% since 2005. By contrast, pay and benefits for the average Chinese factory worker rose by 10% a year between 2000 and 2005 and speeded up to 19% a year between 2005 and 2010, according to BCG. Moreover, the Chinese government has set a target for annual increases in the minimum wage of 13% until 2015. (The Economist, 2013)

Firm's reputation as another factor strongly supporting company's decisions on reshoring. Lenovo says that its decision to bring back computer manufacturing to North Carolina was a way of looking after the firm's reputation as well as bringing direct business benefits.

A new labor law introduced in 2008 brought in more protection and rights for workers, including the right to sign a permanent contract after a year of employment in a company. Nowadays factory workers in China are more aware of their rights, their career aspirations are rising steeply and they are less willing to work long hours in boring factory jobs. Weakening of U.S. Dollar and strong Chinese Yuan is another important actor in reshoring. (The Economist, 2013)

In the longer term, reshoring is expected to be boosted by the use of advanced manufacturing techniques and further automation that promise to transform the economics of production, making it a less labor-intensive process. One of new direction for future production is 3-D printing. The process, in which individual machines process layers of materials making a three-dimensional solid object of virtually any shape from a digital model, is already being used in research departments and factories. Cheaper, user-friendlier and more capable robots are currently installed into factories around the world. They cost just the same in U.S. as they do in China. Relative to the cost of labor, average robot prices since 1990 have fallen by 40-50% in many advanced economies, according to McKinsey. New generation robots are safe in operations and simple in programming so that it can be configured by an unskilled worker and can operate right next to real people. (The Economist, 2013)

Table 3.3 shows the distribution of reasons and their frequency of Internet news and academic literature on reshoring. In an Internet research and academic literature review, we have also tried to find results in Russian and Turkish sources about reshoring phenomenon. However, this phenomenon is still not widely covered in these countries and current news are generally constructed on findings from western journals.

Table 3.3: Reasons for reshoring choice and frequency cited

	Particular Reasons	Source	Frequency Cited
Currency	Weakening of American Dollar	(2) (5) (7)	3
	Appreciation of Chinese Yuan	(14) (20) (25) (30)	4
	Weakness of sterling in the UK	(13)	1
Logistics and Supply Chain	Growing cost of product transit	(5) (35)	2
	Too many steps in the supply chain	(6)	1
	Large stock due to long shipping time	(24)	1
	Deteriorating turnaround time	(23)	1
	Local sourcing: 'just in time' philosophy	(23) (24) (69)	3
	High order quantities	(20)	1
	Customization, fast response	(24) (50) (56) (69) (79)	5
	Uncertainty related to worldwide shipping	(11) (47)	2
	Long waiting time (lead time)	(6) (11) (20) (24) (33) (10) (41) (50) (64) (78)	10
	Problems with borders and customs	(10)	1
Geographic Location and Cultural Differences	Difficulty of traveling overseas	(6) (47) (51)	3
	Different time zones	(20) (47)	2
	Frequent trips to check operations	(5) (20) (24)	3
	Differences in language	(20) (77)	2
	Hard to manage and control	(22) (34) (51)	3
	Cultural differences	(20)	1
	Graft or payment under the table	(20)	1
	Innovation sufferings	(2) (70) (71)	3
	To be close to the market	(3) (48) (50) (55) (56) (58) (63)	7
Product Origin Concerns	Firms reputation	(2) (46) (58) (60) (67)	5
	Strong consumer preference	(19) (20) (27) (28) (11) (14) (46) (61)	8
	Marketing advantage for home made products	(19) (67)	2
	Prefer doing business with American suppliers	(6) (42)	2
	Innovation suffered from the distance	(2) (33) (44)	3
	American innovation and efficiency rise	(6) (29) (45)	3
Technological Development	Development of advanced man. techniques	(2) (6) (7) (18) (22) (23) (26) (29) (53) (62)	10
	American technology has improved	(7) (29) (54)	3
	Rising labor productivity in U.S.A	(10) (25) (45)	3

Governmental issues	Agreement with local worker unions in U.S.A.	(2) (10) (10) (29) (49)	5
	Tax rising in China	(5)	1
	Protectionist rules of China	(4)	1
	Outright piracy in China	(4)	1
	Home country support on reshoring initiative	(24)	1
	Much tougher environmental legislation	(24)	1
	Concerns about communist country	(4)	1
	The government support to Chinese companies	(20)	1
	The lack of a Chinese national court system	(15) (24) (77)	3
Intellectual Property	Leakage of intellectual property	(4) (57) (64)	3
	Forced transfer of technologies	(4)	1
Quality	Problems with product quality	(5) (23) (24) (10) (6) (6) (17) (28) (2) (20) (34) (36) (40) (44) (45) (52) (53) (54) (73) (74) (76) (78)	22
Financial Aspects	The US has traditionally the lowest cost of capital	(8)	1
	Taxes stability in U.S.A.	(5) (2)	2
	Capital tied up in big shipments of goods	(2) (33)	2
	Rising local taxes and tariffs	(5) (75)	2
	Prepayment in purchases from abroad	(20)	1
Cost Concerns	TCO in America is falling	(2) (25) (29) (43)	4
	Transportation costs rise	(2) (5) (7) (20) (18) (13) (11) (21) (22) (23) (24) (25) (29) (35) (42) (66) (71) (75)	18
	Rise of wages in China	(2) (3) (4) (6) (8) (11) (12) (18) (13) (10) (14) (20) (21) (22) (23) (25) (27) (29) (30) (33) (37) (51) (63) (65) (69) (75)	26
	Rise of manufacturing costs in China	(25) (38) (41) (52) (68) (74)	6
	Energy cost advantage in U.S.A. (Natural gas)	(8) (12) (5) (14) (22)	5
	Total cost of ownership (TCO)	(7) (19) (20) (21) (24) (29) (39) (42) (57) (62) (72)	11
	China is no longer a low-cost country.	(2) (5) (23)	3
Country Risk	China social stability concerns	(4)	1
	Economic risks in China	(4)	1
	Geopolitical risks	(4)	1
	Equity overtake possibility	(4)	1
	Labor unrest and strikes	(2) (3) (4) (15) (22) (23) (31)	7

3.4 Business Situation in China

Since 1978, the Chinese economy has grown at an average annual rate of some 10%. Today China is the world’s largest exporter and the second-largest economy in the world. However, 2012 became a year of slowest economic growth for China since 1999. While China’s GDP has slowed to around 7% this year, some economic volatility may result as China’s economy shifts to consumption-driven from export-driven.

The main worry for China's leaders is if the economic slowdown leads to high unemployment that could spark social unrest. So far government officials say employment is stable. (Ranasinghe, 2013) While China’s GDP growth is currently slowing, it still remains among the world’s top performers and is expected to reach 7.5 percent in 2012, with analysts forecasting similar growth in 2014 and 2015.

Table 3.4: Overview of the World Economic Outlook Projection (IMF, 2013)

	Year over Year			
			Projections	
	2011	2012	2013	2014
Emerging Market and Developing Economies[3]	**6.4**	**5.1**	**5.3**	**5.7**
Central and Eastern Europe	5.2	1.6	2.2	2.8
Commonwealth of Independent States	4.8	3.4	3.4	4.0
Russia	4.3	3.4	3.4	3.8
Excluding Russia	6.1	3.3	3.5	4.6
Developing Asia	8.1	6.6	7.1	7.3
China	9.3	7.8	8.0	8.2
India	7.7	4.0	5.7	6.2
ASEAN-5[4]	4.5	6.1	5.9	5.5
Latin America and the Caribbean	4.6	3.0	3.4	3.9
Brazil	2.7	0.9	3.0	4.0
Mexico	3.9	3.9	3.4	3.4
Middle East, North Africa, Afghanistan, and Pakistan	3.9	4.7	3.1	3.7
Sub-Saharan Africa[5]	5.3	4.8	5.6	6.1
South Africa	3.5	2.5	2.8	3.3

On the other side China's trade surplus fell 14.0 percent in June 2013 as imports and exports both dropped unexpectedly suggesting a further slowdown in the Asian economic giant. (The China Post, 2013)

By 2020, China’s middle class is expected to account for around 45 percent of the population, or approximately 700 million people. Despite these remarkable shifts, China is still a developing country with significant economic difference between urban and rural areas. As of 2011, the per-capita disposable income of urban residents was US$3,454 and the per-capita disposable income of rural residents stood at US$1,105. (The U.S. Commercial Service, 2013)

Today companies in China are adapting to the new business environment, while recognizing existing challenges. In many regards, Chinese and foreign firms perceive the same difficulties: finding and retaining talent, overcoming political pressure, addressing raising labor costs, growing competition within industries and the slowdown of the Chinese economy. In addition some industries are heavily regulated by government and government regulations pose severe constraints to business activities in China. The relationship with the Chinese authorities are considered essential, regardless of whether they work for a Chinese or foreign firm. Main concerns regarding the Chinese government and the legal environment include unclear and changing regulations, policy adjustment and corruption. (Fernandez et al, 2013)

In survey by Fernandez et al, (2013), around 78% of surveyed executives claim that "finding and hiring suitable talent" is the top HR concern for foreign and Chinese owned firms. The issue appeared particularly acute for Engineers and Technicians as well as at Management. Rising labor costs follow closely as the second major HR related concern. It is also the number one external challenge for doing business in China. Generating commitment and loyalty comes third (43%) in the HR related concerns cited by surveyed executives. (Fernandez et al, 2013)

China has a growing market supported by rapid industrial development and economic growth. Business people and organizations have to understand the differences in the economic, political, and cultural environment of the country as these can be difficult to manage and may hinder business development. Especially important is to learn about cultural and political differences and their impact on business practices and business conduct. (Lawrence, 2010)

Finally, it can be conducted from business journals that the state of the art in doing business in has China changed but not critically. Chinese business environment still has barriers to certain industries; remain unfair in legislation and present deep cultural preferences that are sometimes difficult to understand. However all of these obstacles are identifiable and well known. What has changed is that now China is enforcing its own regulations, and companies having the inherent weaknesses in such business cases are becoming exposed. The real issue is not one of China's business environments becoming tougher; it is about getting into compliance and running a business in accordance with the law. (China Briefing, 2013)

4. CURRENT RESHORING EXAMPLES

In December 2013, Apple reversed its course announcing the new assembly line of Mac computers in California, U.S. With that, Apple joined a wave of companies that consider reshoring. Companies that say they have brought back jobs include General Electric, Michigan Ladder, Zentech, Lenovo and many others. Wal-Mart (2013) plans to increase its sourcing within the U.S. by $50 billion by 2023. GE is moving water-heater production back to a Louisville plant where it has vacant capacity for additional production.

In 2011 GE announced a $1 billion investment to "reshore" the manufacturing of appliances from plants in China back to plants in the United States (Crooks, 2012). GE is not a maverick in its reshoring decision; an MIT study in 2012 found that 14 percent of companies intend to move some manufacturing back home. Even Ford has brought back production from China and Mexico to Ohio and Michigan, thanks to a new agreement with the UAW. (The Economist, 2013)

In addition to large firms like GE and Apple, smaller companies are also reshoring; one prominent report lists companies as diverse as NCR, Coleman, Sleek Audio, Peerless and Outdoor Greatroom Company (Sirkin, Zinser, & Hohner 2011).

Yamaha transferred production of new all-terrain vehicle models from overseas facilities to its factory in Newnan, GA in 2011. Yamaha explains this decision by commitment to this facility and willingness to be near the U.S. motorsports market, thus Yamaha is able to respond faster to its customers and maintain its loyal workforce in Newnan. (Van Holmes, 2013)

In similar way Embraer, Brazilian airplane maker, opened its first U.S. aircraft final assembly plant in Melbourne. Electrolux built a new cooking products factory in Memphis in 2012. An investment of $190 million facility employs 1200 people. Florida-based Sleek Audio, which produces high-end earphones, moved its manufacturing back to the United States from China, because of poor quality and difficulties of traveling overseas. (Sage, 2008)

NCR Corp. moved ATM manufacturing from China, India and Hungary to a newly opened manufacturing facility in Columbus, GA in 2009. NCR claim that ATM technology becomes more innovative and strategic to financial institutions, and thus the ability to control manufacturing in key markets becomes a core and competitive advantage to growth strategy. Google has attracted a great deal of attention for deciding to make its Nexus Q, a new media streamer, in San Jose, California. Google stressed the advantage of having design and engineering facilities in such close proximity to one another. (Laura, 2012)

Caterpillar, for example, is opening a new factory in Texas where it plans to manufacture excavators, but has also just announced that it will expand its research and development activities in China. ET Water Systems pointed at transportation and logistic costs claiming that they play a big role in their decision on reshoring. Rising oil costs and thus shipping costs are most damaging for companies that produce goods with relatively low "value-density". (McKinsey, 2012)

Emerson, an electrical-equipment maker, has relocated its manufacturing from Asia to Mexico and North America to be closer to its customers. In addition to OEMs (original equipment manufacturers), contract manufacturers also do reshore. For example, Zentech, an EMS company, reshored some of its manufacturing in 2012 with plans to reshore the rest in 2013. As company officials claim that Zentech is experiencing growth in all industry sectors and continues to see opportunities in the area of reshoring. Companies CEOs and CFOs are emphasizing the importance of the TCO regarding their decision.

Although the reshoring trend is still in its early stages, it seems to be increasingly adopted as more and more Western companies decide to reshore at least part of their production from China back home. The number of firms known to have reshored manufacturing is still well under 100. Doubtless, many more are considering or already doing so quietly. The news in popular press provide us with some data on companies that plan to reshore or companies that have already reshored. Despite high amount of such news, most of them consider examples of same companies that have officially announced their reshoring decisions. At the same time there can be many companies that prefer staying unknown.

We have conducted a deep review of these cases and collected a database on companies that have declared their reshoring of operations. The database also provides us with information on industry type, time of announcement, destination places and official reasons for reshoring for each individual case. (See Table. 4.1)

Table 4.1: Companies that have announced about their reshoring

Company	Industry and Occupation	Reason	Destination Country	Date of Announcement
NCR Corp.	ATM producer	Ability to control manufacturing	Columbus, U.S.A.	29.10.2009
Electrolux	Electric appliances	Cutting costs	U.S.A.	15.12.2010
Peerless Industries	Audio-systems	Quality problems	U.S.A.	01.02.2011
Intertech Plastics	Mol. plastic products	Labor cost rise in China	Illinois, U.S.A.	21.02.2011
Coleman	Outdoor gear manuf.	Rising costs in China	Kentucky, U.S.A.	19.05.2011
Chesapeake Bay Candle	Candle manuf.	TCO	Maryland, U.S.A.	15.06.2011
Sleek Audio	High-end earphones	Quality concerns	U.S.A.	29.06.2011
NCR	ATM production	Cost of production and delivery time	Columbus, U.S.A.	11.07.2011
Neutex	Lighting	Delivery costs raised Wage gap eroded	Texas, U.S.A.	14.09.2011
Otis Elevator Company	Elevator Manuf.	Protect remaining jobs at its US factory	Minnesota, U.S.A.	15.09.2011
ET Water Systems	Irrigation control sys.	Innovation suffer Quality concerns	California, U.S.A.	18.10.2011
Farouk Systems	Hair dryers	Quality concerns Labor efficiency	Texas, U.S.A.	24.10.2011
Simple Wave LLC	Bowl Manuf.	Origin of product concerns	St. Charles, U.S.A.	26.10.2011
Lightsaver technologies	Safety lights	Problems with shipping and distance difficulties	California, U.S.A.	12.01.2012
Caterpillar	Machinery and engines	Being close to market	Texas, U.S.A.	15.02.2012
Ford	Automaker	Agreement with the local worker unions	Michigan, U.S.A.	22.02.2012
General Electric	Electric appliances	An agile supply chain Being close to market	Louisville, U.S.A.	07.03.2012

Suarez Corp	Electronical appliances	Labor cost rise in China Geographic distances	California, U.S.A.	19.03.2012
The Bison Gear Corp.	Gear motors	Quality concerns Cost gap eroded	Illinois, U.S.A.	27.03.2012
Zentech	Electronics Manuf.	Sophisticated manuf. techniques, quality	Baltimore, U.S.A.	12.04.2012
Cleveland CycleWerks	Motorcycles	Stabilize quality Improve technical expertise	Cleveland, U.S.A.	15.05.2012
Whirlpool	Appliances	Being near to strong market	Ohio, U.S.A.	29.05.2012
Yamaha Motors	Motorcycles and ATV	Being close to market Quick response	Newnan, Ga., U.S.A.	08.06.2012
Google	Phones (Nexus)	Economic reasons Intellectual property	San Jose, U.S.A.	27.06.2012
Seesmart	Lighting	Total cost of ownership Product origin concern	California, U.S.A.	23.08.2012
Emerson	Electric appliances	To be closer to customers.	U.S.A.	20.09.2012
Lenovo	PCs	Firm’s reputation	California, U.S.A.	15.10.2012
Buck Knives	Knives production	Customers preferences	Idaho, U.S.A.	24.10.2012
Foxconn	LCD TVs	China cost gap erodes Rise of automation	California, U.S.A.	12.11.2012
Airbus	Avia industry	Close to markets Cost rise in China	Alabama, U.S.A.	19.11.2012.
Apple	Computers	Supply chain issues Intellectual property concerns	U.S.A.	06.12.2012
Caldeira	Cushion-making	Labor cost rise in China	U.K.	15.12.2012
IKEA	Furniture producer	Cut delivery costs	U.S.A.	17.01.2013
Wallmart	Retailer	Pursuing new "Buy American" strategy	U.S.A.	18.01.2013
Jenlo Apparel	Apparel Manuf.	Cost advantage erodes Problems with labor	Canada	19.01.2013.
Digital Innovations	Electronic Devices	Innovation suffer	U.S.A.	15.03.2013
Motorola Mobility	Mobile phones	To stay close to R&D Reduce logistics costs	Carolina, U.S.A.	12.04.2013
Symingtons	Food manuf.	Cost gap eroded	Yorkshire, U.K.	13.04.2013
Wittmann Battenfeld	Automotive equipment	Quality concerns	Ontario, Canada	01.05.2013

Conair of Cranberry	Auxiliaries supplier	Cost rise Quality concerns	U.S.A.	06.05.2013
Conery Man. Inc,	Moldmaker	Rise in freight costs, taxes and labor.	Ohio, U.S.A.	13.05.2013
Unique Tool Gauge	Automotive suppliers	Quality concerns	Ohio, U.S.A.	15.05.2013
NV3	Cell phone kiosks	Problems in communication	Baltimore, U.S.A.	05.06.2013
Karen Kane	Clothing industry	Long lead times Quality concerns	California, U.S.A.	14.07.2013
Outdoor GreatRoom	Outdoor appliances	To gain high degree of customization	U.S.A.	06.08.2013

The gathered information shows that companies that have reshored generally do not have any relations to each other. They do not present same corporations or conglomerates and have announced about their decisions independently from each other. These companies include large MNCs as well as small startups. The industries they present also show great variability. (See Fig. 4)

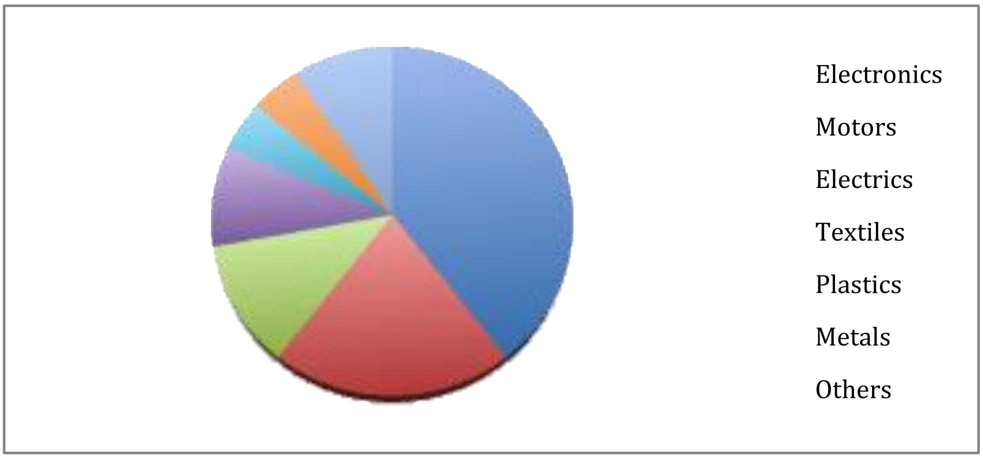

Figure 4.1 : Industry analysis of reshored companies

Among examined companies, electronic industry is the most popular industry that have reshored regarding the number of companies within this industry that announced this intention. Motor, Electric, Textile, Plastic, Metal are other industries follow it in turn.

The bases that company officials stated as reasons for reshoring are various. In general small companies point at specific problems like problems with quality or rise of labor cost whereas big companies like Apple, GE, Lenovo tend to show broad grounds for reshoring regarding supply chain issues or TCO. In addition companies with higher brand recognition are more likely to use reshoring announcement as an effective marketing tool.

Around 35% of companies showed rising costs in China as main concern for their However 11% of them pointed exactly at rising labor cost as specific cost concern in manufacturing in China.

Quality concern was second most popular reason among companies. Around 25% of representatives claimed that problems with quality they faced in their overseas production forced them to reshore. Another 11% were willing to be closer to market and final consumers and 10% claimed that had severe problems with delivery and timing.

For some companies like Lenovo and Simple Wave LLC, one of main aspects in their decision to reshore was company's' reputation. They see a huge potential in marketing products made in home country and in some cases claim that customers are willing to pay more for "home-made" label. Around 11% of responders are confident that automation and more sophisticated manufacturing capacities reduce the cost advantage of low cost countries, as price for such equipment is equal in every part of the world. This is case is true for Foxxcon and Zentech, high tech subcontractor manufacturers.

Some other companies defined problems with supply of labor force in China and the growth in efficiency of home country workers. High tech companies see intellectual property concerns and innovation sufferings from distant production as determinants of their choice. There were around 11% of companies that reshored due to these reasons. Lack of direct control on manufacturing, constantly changing customs and rising taxes, agreements with home country workers unions on cheaper labor supply and problems with labor force in China like unrest and strikes, are among other reasons supporting company's decision on reshoring.

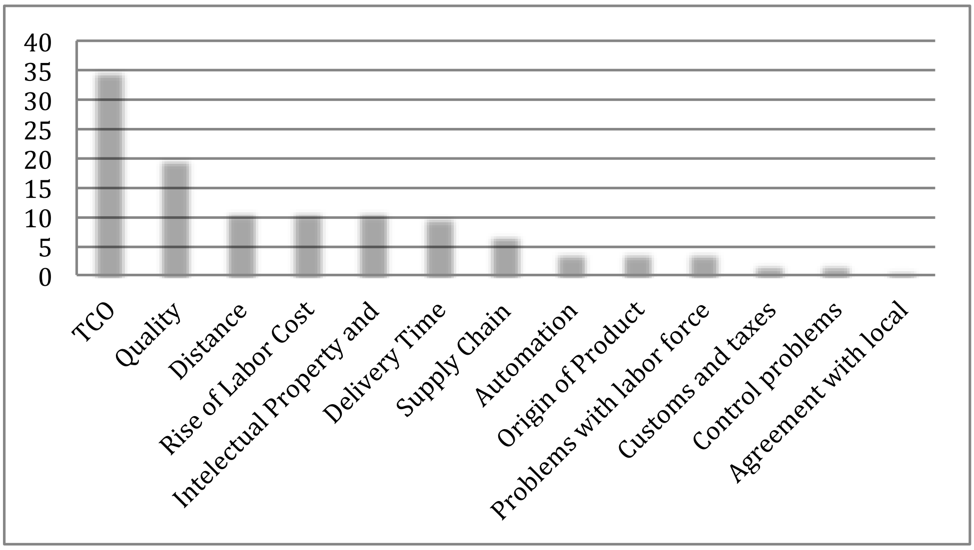

Figure 4.2 : Reasons most frequently stated by companies for reshoring.

From the time line, we can conclude that reshoring cases started in 2009 and 2010 with individual examples and the number increased in the following years. The number of companies that reshored in 2013 can be interpreted ambiguously and at some point can misguide as 2013 is just in the middle and companies news on reshoring are generally announced by mass media behind the actual time of relocation.

5. THEORY OF RESHORING

In this chapter, we are interested in applying bargaining power analysis to reshoring concept, to understand the role of bargaining forces of host government, particularly the state of the art in China, motivating companies to reshore. For multinational corporations (MNC) operating abroad the interaction with the host government is an important issue. In general, it can be said that a host government's intervention policy imposes severe constraints on an MNC's strategies and operations within the host country.

Since its introduction in 1979, Porter's Five Forces became a practical framework for most industry analysis. The framework measures the competitiveness of the market concluding its attractiveness. The conclusion is used to determine current and potential risk of an industry. The Porter's five forces include (1) Threat of New Entrants, (2) Threat of Substitute Products or Services, (3) Bargaining Power of Buyers (Consumers), (4) Bargaining Power of Suppliers, (5) Competitive Rivalry among Existing Firms.

Moon et al, (2010), developed a theoretical perspective explaining how firms differ in their approaches to coping with the political forces from host governments. This perspective is built on the concept of bargaining power, referring to the notion that MNCs experience varying degrees of host government intervention, reflecting differences in their ability to influence host governments. (Moon et al, 2010)

Many studies have used the bargaining power framework in analyzing the relationship between MNCs and host governments (e.g., Doz & Prahalad, 1980; Fagre & Wells, 1982; Kim, 1988; Lecraw, 1984; Moran, 1974; Poynter, 1982, 1985; Vernon, 1971). The overall logic of this framework has been that the outcomes of MNC-host government interactions reflect the relative bargaining power of the MNC over the host government. Thus, MNCs with greater bargaining power are likely to obtain more favorable terms in negotiations with host governments, and are less likely to face the cases of host government interventions. (Moon et al, 2000)

This framework has much in common with Porters “bargaining power of consumers” force, stating that the more powerful a buyer (consumer) is relative to the seller, the more influence the buyer has. This influence can be used to reduce prices, increased favor in customer service or influence supplier preferences. These MNCs bargaining power comes from different sources that are extensively identified in the literature.

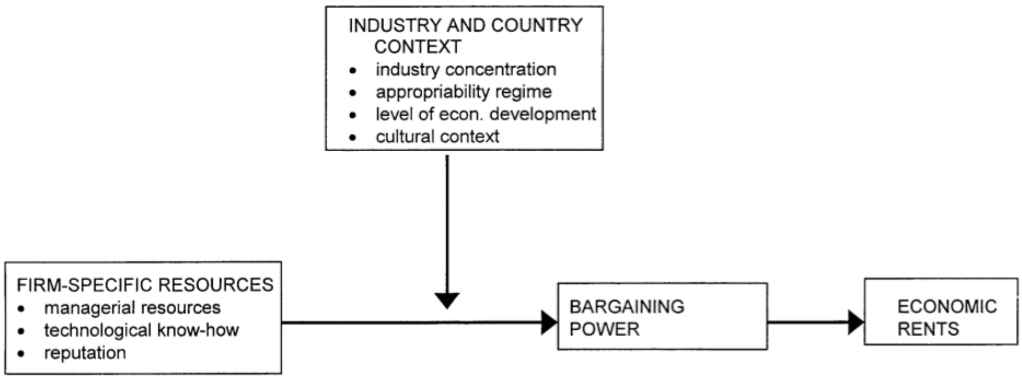

Figure 5.1 : Resource-Based Determinants of MNC-Host Government Bargaining Power Relationship (Moon et al., 2000, Vol. 26, 85–117).

Size of subsidiary (Poynter 1982, 1985) plays a direct and influencing role in bargaining position of a company in a host country. The size of subsidiary can be derived from number of employees, total sales number and total assets of subsidiary.

Another important indicator is a parent company size. Smaller companies have smaller capital and managerial resources and thus have less influential bargaining position (Lecraw, 1984).

Technology intensity (Poynter, 1985) in terms of operational and managerial complexity is also considered as a source of bargaining power of corporation. It is significantly more difficult for host country government to interfere to complex processes because of lack of expertise. Firms with high and low level technology face less expropriation than firms with medium level technology (Bradley, 1977).

There is also a consistent positive relationship between advertising intensity and ownership level (Fagre and Wells, 1982). Companies having strong worldwide brand and product recognition are in better bargaining position because of strong local demand for their unique value preposition of their products supported by intensive marketing activities.

Export intensity has a positive effect of increasing the ownership level of MNCs (Poynter, 1982, 1985). In this case the ratio of export to total sales of company plays crucial role. Export was positively correlated with actual ownership, bargaining success and effective control of a company.

A strong positive relationship exists between product diversity and ownership level. The host governments are in relatively weak bargaining positions when they face multi-product subsidiaries because of high managerial skills involved in the operations thus requiring complex substitutions (Fagre and Wells, 1982).

Staffing policy, as percentage of foreign nationals in management positions, is another concern in bargaining power. However, the direction of the influence has been controversial in both theory and empirical findings (Poynter (1982, 1985).

Political behavior is also frequently cited as defining source for bargaining power. However in the Poynter (1982) study, intervention level was only slightly associated with the measures of subsidiary political behavior. Only the firm's policy toward initiating contact with government had a significant negative relationship with intervention level. On the other side, partially owned subsidiaries (joint ventures with government) face significantly lower intervention than wholly owned subsidiaries (Bradley, 1977).

In general, high competition in industry is correlated with low level of ownership (Fagre and Wells, 1982). Finally MNCs operating in industries, which are of strategic importance to a host country, were expected to be in relatively weak bargaining positions. Poynter (1982: 18) argued that host government interference with MNCs in such industries seem to be motivated mainly by the expectation of political benefits to the host government rather than economic benefits.

Poynter's theory of bargaining power is an extensive model for determining the negotiating position of a multinational enterprise toward its host government, thus can be very well used for our case. Utilizing various factors, Poynter constructs a flexible basis for corporate and national strengths and weaknesses that is applicable to virtually any case of government - MNC relations.

Using this theory we can try to apply bargaining power analysis to reshoring concept. In general we assume that companies that offshored their production to China at that moment had an advantageous bargaining positions against host government. However this advantage eroded by the time and the companies that do not have sufficient bargaining resources any more decide to reshore their operations. Poynter extends his factor model to specific corporate and national determinants of bargaining power. Using graduate change in situation within these factors we can conclude the consistency of the derived theory.

The principal corporate influences include:

(1) Operational and managerial complexity is considered as a source of bargaining power of corporation. It is clear that for host government it is more difficult to interfere to complex processes because of lack of expertise. However with the time and gained experience with foreign partners an underdeveloped nation lacking in the expertise and capital resources to sustain a large and risky enterprise, gains this ability and does not need foreign partner any more. Thus gains a very strong bargaining position towards MNCs.

(2) The number of foreign nationals in senior subsidiary positions is anticipated to influence the bargaining power of the MNC. One perspective is that a large proportion of host nationals would reduce host government harassment and provide various benefits because it represents “good corporate citizenship.” Vise versa, it has also been viewed that a larger proportion of foreigners in an MNC subsidiary would imply to host government a greater need for foreign skills in order to operate the subsidiary successfully, hence the subsidiary is a more difficult target to digest and intervene (Poynter, 1982, 1985). The latter claim could make more sense in the past because of lack of local highly skilled professional at some point of development of host county. However, characteristically the highest management positions occupied by foreign personnel might not affect ownership of a MNC in positive way any more. Thus leading to decrease in level of ownership of MNCs.

(3) Vertical integration/sourcing (Intra-MNC sourcing) The degree of a focal subsidiary’s involvement in intra-MNC sourcing (i.e., input sourcing from or output sales to other subsidiaries or parent) was hypothesized in general to increase the

bargaining power of the MNC. It is assumed that host government has a lower bargaining power in the situation when MNCs is partially a customer of its own products, vertically integrated with other subsidiaries from other parts of the world, thus sourcing the production in host country from abroad. However, in the situation when more and more suppliers are also located in this host country, the previous complexity of vertical integration of MNCs becomes less important as it can be replaced by local supply. This will eventually lead to decrease in bargaining power of MCNs. However a careful empirical effort in this area seems necessary to investigate the nature of the discrepancy.

(4) Exports, according to Poynter, have a beneficial effect on a corporation' s bargaining power; and companies operating in host country are no exception to this rule. This issue is particularly important for countries because of macroeconomic indicators of trade balance. As internal market of host country as well as the solvency of population grows, the MNCs gradually orient towards internal market. Consequently the ratio of export to total sales decreases, making MNCs lose in terms of bargaining power towards host government.

In the same manner other bargaining power sources of MNCs against host governments may gradually become obsolete. The present situation pushes MNCs accept new circumstances or leave everything and reshore.

6. EXPERT INTERVIEWS

This section represents the key findings based on the interviews with case company authorities identified as experts. In the interviews, experts were asked about challenges faced during offshored production and reasons why companies consider reshoring from China. General state of the affairs in China and expert perceptions about the risks were also among the learning interests.

6.1 Interview Guidelines

Semi-structured interviews were chosen as research method since trend of reshoring is yet not very good studied and qualitative approach is expected to provide deeper insights. In-depth case studies are necessary to facilitate an understanding of the context and real drivers of both the previous offshoring and more recent reshoring decisions (John V. Gray et al., 2013).

The interviews were made following methodological stages by Kvale (2003), starting from the original research idea and continuing towards the final conclusion: 1) conceptualizing the topic and research question 2) designing the study to address the research question, 3) conducting the interviews, 4) transcribing the interviews, 5) analyzing the interviews, 6) verification, 7) reporting the results.

The questions used in interviews were open-ended ones and experts were given assurance on confidentiality of responses. To analyze the data we used the qualitative content analysis technique (Flick, 2002; Cooper & Schindler, 2003). The case study part in this Thesis is based on the methodology by Yin (2003) and Eisenhart (1989). For the qualitative interviews the main reference is Kvale (1996). The qualitative part of survey asks "why" and "how" questions on the reshoring topic. According to Yin (2003) the case study approach is preferred when these "how" and "why" questions are posed, when the researcher has little control over the events and when the focus is on a contemporary phenomenon in a real life context. This type of study is also called explanatory case study. This Thesis is a multiple case study where more than one expert interview on reshoring case is in the focus, which provides an opportunity for comparative study. The interviewee’s views and experiences on reshoring were examined separately and a comparison between them was made afterwards. These interviews were conducted personally with interviewees from Japan, Germany and Russia that lasted from 40 to 60 minutes. The data was collected through semi-structured interviews of company executives who have had an experience with offshore operations. These interviews were recorded using voice recorder. Subsequently the recordings were analyzed and used as the research data. The questions of interviews were designed depending on findings from previously held in-depth literature review and focused on the possible drivers for reshoring and the reasoning behind this decision. (See Appendix 1)

6.2 Sample

Based on the knowledge from deep literature review, focused (semi-structured) qualitative interviews were held with company experts from different industrial, economic areas such as electrics, electronics, logistics, telecommunications, machinery and from geographic settings like Japan, Turkey, Germany and Russia to get rich primary data. These interviews were the additional method to collect data for this study. Four interviews with four different company representatives were conducted in order to form a proper understanding about the initial offshoring objectives and current reasons for reshoring phenomenon.

The interviewees can be divided in categories according to industries interviewees present and according to countries of their origin. We preferred to study each case independently thus to have a better comparison.

Mr. Koji Hirai is an ex-executive of Hitachi High Technologies who shared his views and experiences on offshoring. He represented strategic level of a company and has more than 30 years of working experience.

Mr. Toshio Yokouchi represented Toshiba Corporation. He has recently retired and continues his carrier as lecturer of Japanese Direct Force Association. He was responsible for manufacturing sourcing and was a member of management board.

Mr. Josef Hutstein is a head of global service operations Nokia Siemens Networks, sub-region Russia. Has a vast experience of more than 17 years at Siemens

Communications and has an experience of offshored production in China as technical project manager.

Mr. Igor Boyarchuk is a purchase manager of heat saving systems manufacturer Astera, located in Russia. Has more than 7 years experience in industry with experience of manufacturing outsourcing in several countries as well as in China.

Table 6.1: Interviewee information.

Interviewee	Company	Industry	Position	Country
Mr. Koji Hirai	Hitachi High Technologies	Electronics	Ex-executive	Japan
Mr. Toshio Yokouchi	Toshiba Corporation	Electrics	Executive	Japan
Mr. Josef Hutstein	Nokia Siemens Networks	Communications	Sales Manager	Germany
Mr. Igor Boyarchuk	Astera Heat Saving Systems	Machinery	Purchase Manager	Russia

The interviewees presented their views on what the challenges in the offshore production have been and they then went on present their proposals about what can be done to ensure success in sourcing decisions related to offshoring or reshoring.

6.3 Result and Discussion

In this section we share the key findings based on the interviews with experts. The aim of the expert interviews was to find out the reasons behind the reshoring decisions of companies and to recognize the challenges that have been faced during the offshore production. Additionally the current state of affairs in China and expert opinions about the reshoring trend was discussed. The challenges that companies face in offshored production in China were examined as they extensively affect the subsequent decision on reshoring. We gained a comprehensive understanding of business decisions on relocation of manufacturing. Interviews were conducted with the top management of MNCs about the offshoring experiences, current business challenges in China and further reshoring plans.

Experts represented two Japanese multinational corporations (Hitachi and Toshiba), European heat saving systems manufacturer (Astera) and German multinational company Siemens AG having large outsourcing experience and strategic knowledge. These gave interviewees a chance to get a broad picture how the offshoring is seen in the company and what are the reasons why reshoring is now considered as a realistic option.

All interviewees agree that currently producing in China is still cheaper than production in their home countries. However, at the same time state that this cost gap is gradually eroding and the previous advantage is diminishing:

“If taking into consideration only financial aspect and forgetting about all other important components of products and services the statement that manufacturing in China currently is still cheaper than in Russia. However, the difference in costs is diminishing and currently is 5-10% in Heat Exchangers sector and cheap labor cost is a primary reason behind this cost gap.” (Mr. Igor Boyarchuk)

The interviewees were asked about reshoring phenomena in general and if they believe that the current trend will continue. The interviewees emphasized the erosion of cost advantage in China. Mr. Igor Boyarchuk thinks that reshoring will happen one day and this day came. According to him, the general unemployment situations in European countries force employees accept lower salaries only to have a work. At the same time, lower cost of production helps companies to sell their products cheaper. Moreover, governments help their national companies by giving grants and lowering taxes, raising the import tariffs on the other side. On the contrary, cost of manufacturing is China is rising year by year; the population’s level of life is becoming higher demanding higher salaries.

“So, we may observe move of two ways moving one to another, that are supposed to meet one day, like in market equilibrium point in economy. What happens next? We will see all together.” (Mr. Igor Boyarchuk)

Mr. Toshio Yokouchi also supports general trend of reshoring and claims that the situation is changing very fast that will lead companies to reshore:

“Reshoring will be continued because the life cost in China will increase, that means the salary will increase because people will require higher salary in all of the lands.” (Mr. Toshio Yokouchi)

Discussing reshoring decision Mr. Koji Hirai suggested that not only the cost of production in China but also the importance of the need to be close to the customer and the local major market plays role. Mr. Koji Hirai emphasized that being close to market niche helps companies to see the trend better. Staying far from the market slower business processes and it takes long time to understand what kind of products market needs. When factory is near to the market than you can directly feel needs of market. This helps the whole business in providing the customers correct products and services. However it also depends on the type of product you are manufacturing and the degree of customization you want to achieve. Mr. Koji Hirai mentioned:

“Our air conditioning team has production and factory in China. I think that to have a factory in that area is important not only because of cost but also marketing, especially being near market. I think it is important. We had a factory in Georgia/USA because we are marketing equipment in US. That’s why we had a factory there. Transportation costs and also to know the market niche, see the trend. If factory is far from the market it takes long time to understand what kind of products market needs. When factory is near market than you can feel needs of market. But for instance another products like semiconductor is almost a global product, so no need to have a plant in the market.” (Mr. Koji Hirai)

All of the interviewees found the question on reshoring very complex and difficult to answer directly. From one perspective, if China keeps recent structure and dynamics in future than for such a big market many companies have a reason to keep factories there. However it is difficult to forecast the direction that the Chinese government will take. On the other side rising production costs push companies to reshore. In opinion of Mr. Toshio Yokouchi the trend of reshoring will continue. The future dependence on foreign currency may bring some internal conflicts to China and this is seen as a source of risk. The relocation of production capacities will occur, but both oft he interviewees are not definite about coming back home to Japan, referring to high cost of production.

“China is now exporter of agricultural products such as grain etc. They are export country. But according to some data in 2015 China may become import country. That means that they will need foreign currency. So, and that means to get foreign country they must export, expand export business more and more. So at that time some conflict may occur. The Chinese cost becoming higher but they need foreign currency. At this moment labor force is cheaper and they export products and get foreign currency. But in the future they will import food, so they need foreign currency. On the other hand the labor cost becoming higher, the Chinese products becoming expansive. That means they cannot earn the foreign currency. Then maybe some conflict will occur in China. And that is another I think risk of doing business in China.” (Mr. Toshio Yokouchi)

In case of big neighbor country MNCs like Toshiba, there exists a very long time history of cooperation with Chinese companies and some local Chinese government that supports some Toshibas factories and introduces Toshiba very good area, for the factory. For this suitable conditions for instance, Toshiba may stay in that area. On he other hand, it is the fact that relation between Japan and China is not so good and still have some border issues occur but basically locating in the same area, these countries must have good cooperation. And for big neighbor companies like Toshiba and Hitachi keeping good relation with China is from one perspective a political mission. Taking this into account complete reshoring seems for such a big companies difficult issue. However for companies of smaller scale and different from Japanese origin the decision on reshoring is easier from political point of view ant they do not have such a mission and can reshore easier.

“Hitachi and Toshiba, such a big companies I think have some mission, not from government. But they must think about Japan, Japanese government. Actually no guideline from Japanese government but we have always to consider about Japan. I think Toshiba, or other such a big company should keep good relation with China. And based on that thinking there is some risk doing business doing business in China, big frictions but they may try to keep the good relation with the China, make an effort. So is the case of Japan. Yes, there are many issues in China, but in mind we will stay in China and keep good relation. Revolution, maybe not revolution, but improvement of Chinese governmental behavior is what we hope for. I don’t know about another countries but in case of Japan I suppose we must stay in China with reasonable scale. If it is too much of course Japanese company will reshore to other country. And small Japanese companies they do not have such an internal mission, so they reshore easily. But I think that scale is not so big.” (Mr. Toshio Yokouchi)

Interviewees didn't support the idea that mass production can easily be reshored home to developed high cost countries. Instead they see a potential in relocating production to other relatively low cost countries, at the same time representing big growing markets. In case of Hitachi, to current manufacturing plants in Japan, China, USA and India. They are going to add a plant in Brazil, seeing a good economical potential of this country. By doing so Hitachi will move some of production capacity from China to Brazil, as N.T. claimed, to be near the market. At the same time they do not close fabrics in China, but shrink the capacity.

"There are many other low cost near by countries that can be used for sourcing as well. Japanese businessmen are thinking about this currently, moving to another cost affective places, and are actively searching for them." (Mr. Toshio Yokouchi)

According to Mr. Toshio Yokouchi, currently many Japanese companies think about risk of political instability in China and establish new factories in Vietnam, Indonesia and Myanmar. However this relocation will have a restrained character and most of companies consider as a scale shrink, the volume of production will be reduced and moved to other countries. Complete reshoring is seen as difficult for Japanese companies. Still because of rising costs in China, there some examples of Japanese firms coming back to produce in Japan that before had a manufacturing in China. But primarily companies shrink manufacturing in China and go more now to Vietnam or Indonesia and manufacture there. Mr. Josef Hutstein stated that Siemens company has already relocated some of their manufacturing to India and this trend will be continued. In opinion of Mr. Koji Hirai also India is one of the most competitive locations for manufacturing.

"They have a very intelligent people, many intelligent people. Hitachi has also a soft ware factory in India now, and they develop soft ware for computers. Compared with China Indian people are very soft and calm. And of course the population of India is very big and growing. So India is going to develop a good economy. I think so. We have a subsidiary a soft ware company. We have of course a good relations with Tata, big Indian business as in the past we exported locomotives, had a telecommunication exchange and power plants. So Hitachi has an old many relations with India. And now, this February (2013) Hitachi has a managing directory meeting held in India. Directors meeting." (Mr. Koji Hirai)

Now with the change of business environment in China more companies are seriously considering reshoring production. Interesting to know the main factors from business perspective to get better insights. There are several emerging challenges related to production in China explained by the interviewees. The offshoring challenges were discussed from the managing practice, political situation, transportation, currency fluctuations and total cost of production points of view. They are explained in more detail in the following sections.

Japanese interviewees see the general managing practice in China as an important obstacle. Hitachi has its own subsidiary in China to managing local operations and Hitachi prefers it to having a local partner. Communication with local business partners presents some difficulties because of language barrier, as both Japanese and Chinese top management of upper age speak little English.

"My age problem is very big. But now Hitachi is changing to hire foreign people, foreign university graduates. This year %10-20 of new employee's university graduates are foreigners. Japanese educational situation is changing. Now they say in primary school have to have to learn English. But now they have difficulties, they do not have proper teachers, especially in pronunciation. It's a based on writing and grammar so speaking is somehow neglected. Compared to Japan Chinese people can speak English very well." (Mr. Koji Hirai)

Quality is one of the most important reasons that force companies to reshore. Mr. Josef Hutstein had previously experienced serious problems with offshored operations in China and sees cultural background of Chinese people and their not willingness to report problems as a leading factor towards these issues with quality.

"It is common for many suppliers in China that they never report quality problems and/or failures. You see these failures directly before shipping or even worse, after shipping when customers call you because of poor quality or failures. The problem is that in China they agree to "everything" and then fail." (Mr. Josef Hutstein)

Another reason for having troubles in communication is cultural differences in mentality. According to Japanese people Chinese have more western style of doing business: prefer clear and quick decision-making. Japanese people on the contrary are more ambiguous in their replies and often need more time for thinking.

“Our businesses partners sometimes miss understand our opinion. Because we do not say clearly. It is the same situation. The interesting thing is that after meetings we have parties with Chinese people for top business people, with very strong Sake, so and we get drunk. And at that time Chinese businessman say that this issue conclusion is finished. They say it at the party, when Japanese businessmen are drunk, and we say “ok, ok, ok”, then in the morning they say, You said this last night that you accept this price or something like that. So we become surprised. So such things sometimes happen.” (Mr. Toshio Yokouchi)

On the other side, popularly stated reason for reshoring like geographic distance and problems in communication deriving from the different time zones was not seen as big problem and most of the time did not make problems in communicating:

“Difference in time zone becomes an obstacle in high season and rush projects. Even one day delay may cause problems for us. But in 90% of cases we do not experience any problems in communication and do not see time zone difference as a problem.” (Mr. Igor Boyarchuk)

Another issue in managing business in China that come from difference in cultures is how Japanese attach significance to details like being polite in communication and being on time. Punctuality in working times, meetings and keeping to the agreed schedules can vary significantly from the expectations. While operating in China they give trainings on this concerns to local staff but with low success.

“There is some difference between cultures of Chinese people and Japanese people. Japanese people always ”origato gosaimas… ” Welcome… And also time is very important for Japanese people, we are very serious about keeping on time. When we must go somewhere 7 o’clock, almost all Japanese people go there before that time. But in case with china 10 to 30 minutes is very usual for delay. So in such a thing they must give the educational program, actually on very fundamental thing. Actually the person, very excellent people exist among Chinese local people. When Japanese firms want to give responsibilities to them, and now it is expanding: localization. And Japanese company gives some suitable education to them. Examples of success are still few.” (Mr. Toshio Yokouchi)

Mr. Hutstein provides another insight to managing business in China that comes from difference in cultures.

“I have several Chinese friends and was welcomed always in a very warm way. That’s very positive. Unfortunately the mentality of not reporting any problems and failures, never say no and agreeing to all requirements is very, very problematic in high tech industry.” (Mr. Josef Hutstein)

In addition the reliability of Chinese staff or colleagues is also another concern. When companies hire Chinese employees they expect them to gain companies mentality and working habits. Sometimes this does not work.

“Also Japanese companies hire Chinese people and they come to Japan together with Japanese businessman. So he becomes close to Japanese mentality, knows Japanese very well. He can be a leader in local factory in china. So he comes back to China, and sometimes when Japanese people do not understand formal documents in Chinese. So when he was in Japan Chinese lawyer always checked him, but when he comes to China we believe him. He can decide everything. And sometimes he does some bad things. So we must think about such risk as well. And Japanese people always stay in one organization but Chinese people always move. So such things we have to consider and think about.” (Mr. Toshio Yokouchi)

Another challenge for companies operating abroad is risk perception, especially by Japanese business people. Risk concerns are based on political situation in China and this issue is strongly emphasized by both Interviewees. For sustainable business development political situation in a host country is important and that country has to be safe. Japanese many companies are thinking that China has a risk, because their political situation is not good. The interviewees saw the security as a major problem and potential reasons for reshoring. The concerns about communist party and possibility of revolution in near future. Both interviewees are sure that people in China are thinking about the freedom from current political regime. Some companies already relocate their factories because of this reason. However, as Mr. Toshio Yokouchi underlined again, because of the neighbor relations with China, Japanese companies will keep their presence but may gradually shrink the production to reduce overall risk by transferring production to other near buy low cost countries.

“So that’s why it is very difficult decision, despite risk we will stay in China. And to reduce the risk we will shrink the business or factory in China and establish new one to Indonesia, Myanmar or Vietnam. This is the realistic way of Japanese companies." (Mr. Toshio Yokouchi)

Highly popular topic of advanced manufacturing technics is seen over exaggerated by interviewees. Automation brings efficiency however still labor force is needed to operate these machines, well trained and well educated. Robots are not all or everything. On the other side intellectual property problems that companies face in china are among big concerns. According to Mr. Koji Hirai, for highly technological and innovative companies like Apple, the primary reason for reshoring is probably a willingness to keep know how. That's why some of them gave up production in China. The intellectual property condition in China is misery. Recent Japanese papers claim that in day of introduction of new product outside of Japan, %80 of its imitation products are coming from China. In addition to imitation of products well-known brand labels are also used illegally. The Chinese government allows registering brand marks and labels very similar to existing ones that brings problems to MNCs. Even if only small percentage of customers are confused by this trick, in case of China this means millions of people, because oft he large population.

"That's a problem, yes. And such a things must be followed by international law. International common sense must pass for such thing. But there are many people in china, 1400 million people, and so very small number of them doing this. It is not a problem of overall Chinese people. But some very …people doing such a imitation, manufacturing imitation products. They are doing such a register, changing brand names, doing such things they can, just for making money. But I think it is a very limited people, because of big amount of population in China, %1 is still a big number. Big scale. As a probability such thing may happen, but government must control such a things." (Mr. Toshio Yokouchi)

According to Mr. Toshio Yokouchi technologies are very hard to keep as a secret. Even in case of patents exists a possibility that detailed information provided there can be used by another companies. So, patent is not a block to keep a technology, its actually one effective way to keep the light of the company. For example Sharp Corporation gave up registering the patents because they want to keep their technologies inside the company.

“For example before in Korea Samsung, many Samsung people came to Japan and they... For example in Toshiba they make friends and went back to Korea. And then invited Japanese engineer to Samsung. That means companies know how was …they could catch up Japanese know how from Japanese companies. And that already happened between Japan and Korea. In case of China the same thing may happen. It may, so Japanese companies must, we must run in front of them, always. All the technology or know now transferred to China or Korea, even to Thailand or Myanmar will be taken, they will get it. So, I think it is impossible to protect it, can not keep. That means Japanese companies always run in front of this countries in technology matter, I think. So now the global world is, the information simultaneously expands to the world. The know how also does, it takes more time than information but, know how also spreads to the world. And if people want to know that they will know that, that know how. They will get it, there is no a good protector for that. Therefore must think, we will always develop the new idea, technology, product. That is the way of that. It is a very hard job. Japanese way of life.” (Mr. Toshio Yokouchi)

The origin of production does not play a critical role in modern world. Of course best reputation comes from „made in Japan“ label but „made in China“, manufactured by Japanese company is also acceptable. Interviewees see transportation and logistics in China also acceptable. Inside of China some logistic problems may occur, therefore it is difficult to find Japanese company factory in that area. Almost all factories are located in the east cost area, from east to south. For this region transportation is not a problem.

“I think many Japanese logistic providers are now going to China to make a business there. For instance, we have a subsidiary, Hitachi Logistics. This company now has a branch in China, making business there. China now has o good high ways, and of course trains are very good. So if have a good warehouse there, you can make a good business there.” (Mr. Koji Hirai)

According to interviewees the issues with government are bearing more local character; it is more local government that makes business in China difficult rather than central one. This issue may be seen in example of unusual taxes they sometimes require. So company operating in some prefectures is two times obligated by taxes.

When companies refuse to pay, some troubles may happen.

“But according to the law, I am not sure about that law but, but they already have paid, but this local government require it. They hire some lawyer and fight against the local government then they could have good results fighting against them.” (Mr. Toshio Yokouchi)

Another important challenge is an artificially held cheap Yuan. Responders believe that some day Chinese government will not be able to control such a powerful economy at stable level. China grows not only from inside but also from outside, depending on exports.

“So in 40 years ago Japanese currency kept very low compared to dollar (360 Yen/US Dollar). I just have started in Hitachi. But at the end, even Japanese government wanted to keep that level, they couldn’t do that. No way. Because Japanese economy depends on exports. For example South Korea, they still keep their currency low, but that’s because Korean economy is not so big now. But compared to Korea China is 5 or 6 times larger so now they cannot keep currency level as they want.” (Mr. Koji Hirai)

The total cost of ownership in China is still lower than in other countries. Interviewees think that it is still cheaper to produce in China but adding that it also depends on a product type. This cost advantage comes primarily form cheap labor force. In comparison to Japan, Chinese salaries are still 3-4 times lower and that makes China preferable place for production compared to Japan. The productivity of Chinese labor force is considered as good however the isolation of Chinese people makes cooperation difficult and productivity depends on people cooperation. Currently there exist risks about strike of Chinese labor. Main expectation is rise of the salary. It is known that some leaders of the labor unions hesitate workers pushing them to strikes. Normally Chinese workers are considered as hard working and general labor quality in China is not bad. Considering strikes Mr. Toshio Yokouchi see some political premises:

“Because of political matter Chinese labor sometimes makes strikes. Chinese ask for increase of salary. But I am not sure but some people say that government is instructing them doing that in Japanese companies. As I said I am not sure but I think maybe occurred to some Japanese companies. Chinese government is behind of some labor organization. It is not actually the requirement of increasing salary, more like political issue. Organized by some political organizations." (Mr. Toshio Yokouchi)

The most important condition for staying in China claimed by interviewees is a stability of the society. The demonstrations in a China, occur time to time bring serious concerns to Japanese business groups. In addition companies are also interested in Chinese legislation, which currently changes very easily depending on a situation. MNCs look for global standards in legal system and see this issue as primary governmental responsibility.

The interviewee from Russia emphasizes additional reasons for reshoring depending more on external from situation in China rather on the situation in home country. He claims that not only rising cost concerns in China force companies to reshore, but also the improving production abilities at home make this idea possible.

"As I said, not only the trend of increasing cost of logistics and labor is the thing that led to start or reshoring phenomenon. The condition of life, the economic situation, the circumstances of crisis or pre-crisis forced European countries and Russia with them to invest in own real sector of economy, and the worsening financial situation of population led to decrease in labor cost. So, reshoring was not forced only by rise of manufacturing costs in China. This is global and complex process, but it could not be evaded." (Mr. Igor Boyarchuk)

In this qualitative part of survey we mainly asked "why" and "how" questions to experts on the reshoring topic, as our focus is on a contemporary phenomenon occurring in a real life context. Based on the findings of the interviews it is clear that there are a lot of uncertainties and challenges related to current business situation in China. The interviewee's views and experiences on reshoring were examined separately and these valuable findings were added to conclusion part.

7. ONLINE SURVEY

7.1 Model and Hypothesys

Survey instrument is suggested as limitation and future research direction with companies operating in China to have a quantitative analysis of reasons on reshoring idea and to validate the results of prior two steps. The idea is to ask respondents about the factors that influence their decision on reshoring and the relative importance of these factors. This survey design would results in a very fine-grained database that enables an analysis of reshoring dynamics across various administrative and technical functions located in a wide range of countries or regions of the world, across industries. In addition, the collected database would also include information both on companies that have already reshored as well as companies that only consider reshoring but have not yet initiated the reshoring of operations. In addition to existing knowledge from literature review and the information gained in the interviews, survey would have enhanced and validated the findings about key drivers of reshoring from China.

7.2 Sample

For future research research projects that aim to validate the key drivers for reshoring from China, members of German Chamber of Commerce in China (North China, East China, South & Southwest China and Hong Kong), European Union Chamber of Commerce in China, American Chamber of Commerce in China (Hong Kong, and Shanghai), Turkish Chamber of Commerce in China, Russian European Chamber of Commerce in Shanghai, British Chamber of Commerce in Shanghai were identified as experts and can potentially be selected as candidates for this survey.

For this reason we hereby provide prepared survey questionary and contact information of these chambers to enable researchers to reach the contact information of members of these chambers to conduct a survey.

Table 7.1: Online Survey.

1. Company type:				
Manufacturing	Retail	Consulting	Law	Logistics
	If other, please specify:			
2. Company size by employees:				
Less than 10	Between 10 to 50	Between 50 to 250	Between 250 to 1000	More than 1000
3. Your working experience:				
Less than 1 years	Between 1 to 5 years	Between 5 to 10 years	Between 10 to 20 years	More than 20 years
4. Your educational background:				
Primary school or equivalent	High school or equivalent	Bachelor or equivalent	Master or equivalent	Doctoral or equivalent
5. Your nationality:				
German	American	Chinese	Turkish	Russian
If other, please specify				
6. To what extend do you think business challenges in China cause reshoring?				
Strongly agree	Agree	Slightly agree	Disagree	Strongly disagree
7. Which country(s) do you see as potential destination points if considering reshoring from China?				
Myanmar	India	Thailand	Vietnam	No country
	If other, please specify:			

8. Which factors and to which extend do you find important while considering strategic reshoring from China?				
	Not important	Slightly important	Important	Very important
Currency and exchange rate	○	○	○	○
Rising labor cost	○	○	○	○
Labor unrest	○	○	○	○
Rising transportation cost	○	○	○	○
Problems with transportation	○	○	○	○
Distance to customer/market	○	○	○	○
Product origin concerns	○	○	○	○
Political uncertainty in China	○	○	○	○
Environmental issues/legislation	○	○	○	○
Tax advantages erode / Rise of taxes	○	○	○	○
Difficulties due to distant geographic locations	○	○	○	○
Difficulties due to cultural differences	○	○	○	○
Concerns about patents and intellectual property	○	○	○	○
Issues with Chinese government	○	○	○	○
Lack of legislator system/court system	○	○	○	○
Advanced manufacturing technics development	○	○	○	○
Product quality concerns	○	○	○	○
Cost of Capital/Prepayment	○	○	○	○
Total cost of ownership	○	○	○	○
China stability concerns	○	○	○	○
Operational problems in China	○	○	○	○

7.3 Result and Discussion

As future research direction we suggest to conduct listed chambers of commerce in China thus to conduct a quantitative analysis of reasons for reshoring idea and to validate the results of prior two steps.

Table7.2: Selected chambers of commerce in China.

Name of Chamber:	Email addresses:	Contact Person
German Chamber of Commerce in North China	kraft.julia@bj.china.ahk.de	Mrs. Julia Kraft
German Chamber of Commerce in East China	chamber@sh.china.ahk.de	No name
German Chamber of Commerce in South & Southwest China	chamber@gz.china.ahk.de	No name
German Chamber of Commerce in Hong Kong	info@hongkong.ahk.de	No name
European Union Chamber of Commerce in China	euccc@europeanchamber.com.cn	No name
American Chamber of Commerce in Hong Kong	amcham@amcham.org.hk	No name
American Chamber of Commerce in Shanghai	amcham@amcham-shanghai.org	No name
Turkish Chamber of Commerce in China	info@turkishchamber.com.cn	No name
Russian European Chamber of Commerce in Shanghai	china@rosstandard-europe.com	Mr. Kelvin Gao
British Chamber of Commerce in Shanghai	summer.wang@britishchamber.cn	Mrs. Summer Wang

8. CONCLUSION

The research objective of this study was to explore key drivers behind companies decisions on reshoring with focus on China, thus to define reasons for reshoring and to complement the attention to this trend from our academic perspective.

With this aim we conducted an exploratory research study that uses the qualitative data from a deep literature review of reshored company examples, several expert interviews for collection company internal data. A quantitative data from suggested Internet based survey is thought to validate the results of prior two steps and evaluate the degree of importance of each defined reason for reshoring.

Since reshoring is fundamentally a location decision initially we examined theoretical concepts related like transaction cost economics (TCE), an eclectic theory of international production and more recent research studies on the manufacturing location decision. From our perspective we developed a simple theory of reshoring using knowledge from location decision concepts and bargaining power analysis.

In summary, the contribution of the study is:

- Definition of reshoring and analysis of its conceptual framework
- Data collection from 79 news on reshoring dating from 2009 to 2013
- Initial determination of 60 potential reasons for reshoring
- Determination of 20 main reasons for reshoring from 46 company announcements with dates of announcements and destinations
- Development of reshoring theory by application of Poynter's theory of bargaining power to reshoring concept.
- Data collection from 4 interviews held with representatives of 4 different companies from 3 countries
- Final analysis and determination of key drivers for reshoring from China

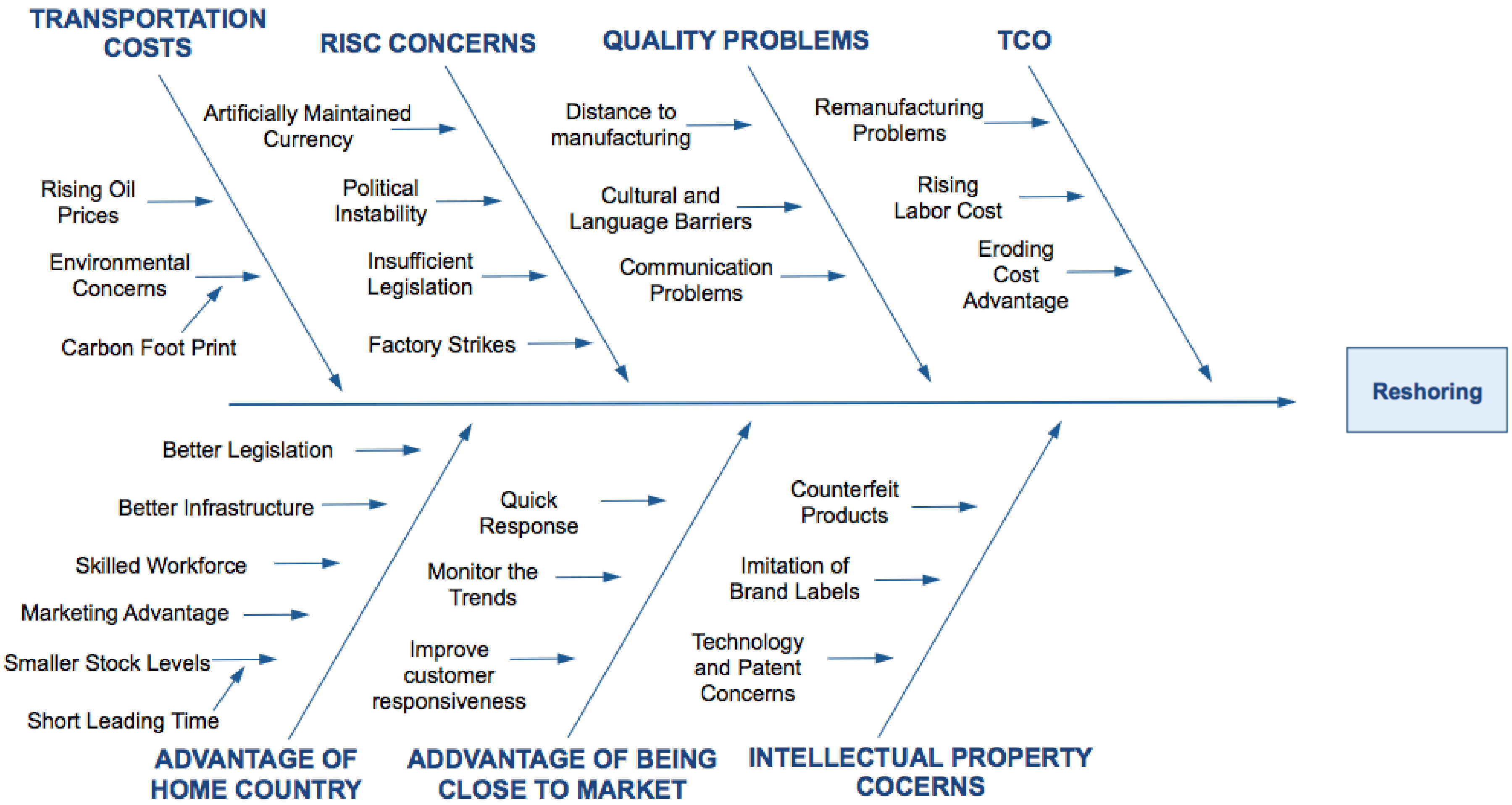

Figure 8.1 Ishikawa Diagram Representation of Reasons for Reshoring

The main findings related to drivers for reshoring identified by literature review, the interviewees based on their experiences were:

1) Higher than expected total cost of ownership, eroding gap of cost advantage with high emphasize on rising labor cost make foreign companies reshore. Cost conditions in China are changing rapidly and in particular concerning the labor costs. With the general rise of living standards in the area over the years naturally the wage expectations of employees also rise.

2) Quality of products coming from China is not sufficient. Companies that are offshoring their operations face a lot of quality problems, which create additional work because of the need to remanufacture. Sometimes, the error comes from a misunderstanding between the supplier offshore and the company because of communication problems, especially because of the language. In fact, it is always difficult to manage a team that is situated more than several thousand kilometers far away from the manager himself. That is why it is sometimes better to go directly there in order to decrease the risk of mistakes.

3) Risk concerns on political, economical and social stability in China. Concerns about Chinas' political instability and insufficient legislation are seen as important reasons why companies may consider reshoring. Several strike examples that already occurred in factories in China and probable local governmental support behind them frighten foreign company's management. Another factor that has to be taken into consideration is that Yuan is gaining value comparing to the Dollar. After years of artificially maintained low currency China may not be able to hold Yuan cheap any more.

4) Intellectual property concerns and low legislator system development. Intellectual property rights are not respected very well in China that result in tons of counterfeit products on the market. Technologies are very hard to keep as a secret but situation in China is deteriorating. In addition to imitation of products well-known brand labels are also used illegally. The Chinese government allows registering brand marks and labels very similar to existing ones that brings problems to MNCs.

5) Rise of transportation costs. This increase can be explained by rising oil prices. Current environmental concerns and new regulations, like carbon foot print

calculations for individual products, are expected even more to complicate the current situation.

6) Advantage of being close to market. The main advantage to be close to the market is to be able to answer rapidly to its needs. In addition when a company is situated close to its final market, it increases its ability to sense what will be the future market needs and the future trends. Thus, it can try to figure out some ideas that could meet these needs and when they will become true, the company will be able to answer quickly. In this way, it improves its customer responsiveness, which represents a powerful competitive advantage. By locating close to the market, the company enables itself to adapt its products to all the requirements of its clients in a very short term.

7) Advantage of home country. In general developed countries have a better infrastructure that enables companies operate with higher efficiency. Producing at home, the companies have a higher supply of skilled workforce, which enables a smooth running production and a minimum amount of stocks. In addition due to short leading time companies decrease stock levels even more. At the same time control of the quality of the products is ensured before the shipment. Intellectual property rights are well stated and preserved by local legislation. On the other side, problems with cultural and language barriers do not exist and managers have a chance of direct contact with their employees, which enables fast response to appearing difficulties. Likewise, production within the home country allows decreasing transportation costs and lead-time to customers. From risk perspective developed countries have a better economical and political situation than China, stable environment that leads to minimum wages inflation and strike possibilities. Additionally, the rising concern of consumers towards products produced in home country serves companies as strong marketing tool. “Made in U.S.A” for example already helps companies to promote a positive image of brand among the population.

Finally, based on the deep literature review and the findings from the interviews the drivers of reshoring from China were identified. The decision on reshoring is not a simple one. There are many trade-offs between conflicting interests that require a serious analysis. We believe that this research will contribute to further studies of reshoring phenomenon and help companies with manufacturing location decisions.

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APPENDICES

APPENDIX A: Interiews

Mr. Koji Hirai

Ex-executive

Hitachi High Technologies

Naka Area, Japan

Can you tell about your factories and operations outside of Japan?

Hitachi has factory in Thai, Indonesia and Philippines. Our products are changing now. Once Hitachi was producing television, videotape, video equipment etc. and we also had a semiconductor factory. But now do not anymore because of cost competition of cost from Samsung and Taiwan companies.

What about production in China and Japan?

I don’t have personal experience in producing in China, but our air conditioning team has production and factory in China. I think that to have a factory in that area is important not only because of cost but also marketing, especially being near market. I think it is important. We had a factory in Georgia because we are marketing …equipment in US. That’s why we had a factory there.

Was that because of transportation costs?

Transportation costs and also to know the market niche, see the trend. If factory is far from the market it takes long time to understand what kind of products market needs. When factory is near market than you can feel needs of market. But for instance semiconductor is almost a global products, so no need to have a plant in the market.

In addition, you produce them in Japan?

Japanese companies produce semiconductors in Japan and Hitachi also used to produce semiconductors in Japan but Samsung defeated us cost-wise and semiconductor is very difficult business because it needs big amount of investment to produce new technology. Several ten billion of dollars is needed to change to new technology. So Hitachi top management didn't have a good sense for that.

Is Hitachi now thinking about?

Hitachi now thinks about basic social for instance transportation systems or power plants, power transmission networks. Such a big system, social infrastructure equipment or system. Now Hitachi is at this point.

Now Hitachi has production plants in?

Now Hitachi has plants Japan, China, USA, India, in near future they will have Brazil. Brazil is now very good economically growing.

Does Hitachi think about moving its production from China to Brazil or other places?

Yes, I think so. I am not sure, as I retired 10 years ago. I don't know about precise movements but I think for instance they now have a plant in Brazil because of air conditioning products. They think to be near the market.

Have you heard about closing factories in China?

They didn't close factories in China; they are still there doing business in China, producing air conditioning in China.

What about managing practice in China?

I can't explain it very well, but I think Hitachi has a big subsidiary in China that manages. We have some semi head quarters In United States, Europe and China. That headquarters manage that area.

Are they your local partners?

Not partners but direct subsidiary of Hitachi.

What do you think about reshoring phenomenon?

I think many Japanese businessmen are thinking about this, moving to cost affective places, and searching for them. I think not only but also political situation is also very important. That country has to be safe.

To which degree is communication difficult with your foreign business partner ex. China?

My age problem is very big. But now Hitachi is changing to hire foreign people, foreign university graduates. This year %10-20 of new employee university graduates are foreigners. Japan educational situation is changing. Now they say in primary school have to have to learn English. But now they have difficulties, they do not have proper teachers, especially in pronunciation. It's a based on writing and grammar so speaking is somehow neglected.

Do Chinese people also have problems with English?

Compared to Japan Chinese people can speak English very well.

What else except cost can be a reason for reshoring?

Not only the cost, marketing, country risk. Japanese many companies are thinking that China has a risk, because their political situation is not good. The safety. The government enouncement how they are going is not true. Such things make it not good to have a factory there.

What's is your personal think about Reshoring?

It is very difficult question. If China keep recent structure in future than they have many population. It's a big market. I think many companies have a reason to have a factory there. But still if that changes what direction they will go, we don't know. Like Soviet Union brake down in many countries, it's not good. But no body can predict what happen.

Do you sometimes hear about companies that leave China for other production places? Or some recent examples of Japanese companies that go to produce in other countries rather than to china?

There are still many companies going to produce in China. To have a factory there, market there. Still this trend remain, to go to produce in China.

Which countries do you see as potential competitors of China?

India.

There is a recent reshoring movement in United States to bring production back from China.

I don’t think so. I don’t think it is possible.

What about automation and extensive use of manufacturing robots?

But robots only produce … Still you need human beings there, well trained and well brains. Robots are not all, everything.

What about your work experience in US?

I had a short stay there. I don’t have a direct management of foreign people.

Apple, GE moved their production plants to California, US. To which extend do you see it is important to have a label made in?

I don’t think that it s now important. Actually depending on production cost and logistics, why do they change production to US?

Maybe cost or country of origin?

I think as a producer of IPhone, in competing with China, intellectual property for Apple is a reason. That’s why they gave up production in China.

What do you think about intellectual property conditions in China?

It is not good. They are still developing companies. Recent Japanese papers say that in date of introducing of outside of Japan, %80 of imitation products coming from China coming now.

What about transportation and logistics?

I think many Japanese logistic providers are now going to China to make a business there. For instance, we have a subsidiary, Hitachi Logistics, This company now has a branch in china, making business there. China now has o good high ways, and of course trains are very good. So if have a good warehouse there, you can make a good business there. Because China is now second big market.

Do transportation costs rise recently or not really? For example a case to produce in china then to send to Brazil?

I think it depends on a what kind of product. For semiconductor its very easy to transport. But for a train, automobiles. Such a products have to have a factory near market.

If we now compare the number of Japanese companies going to and out of China

I have no idea.

Does Hitachi now consider other production places other than China?

Hitachi got a big production of trains in England. Hitachi now is making a factory there.

Except cost what do you see as factors of location?

Catching market trends, depending of course on products. I say, semiconductor is a global commodity. So transportation is not so tight. Political risk is very important I think.

What about governmental regulations in China?

Chinese government…many big companies in China are governed by Chinese government. So government has many companies. They can control many things, governmental issues. It is for foreign companies a risk.

What about currency? That they artificially hold cheap Yuan?

Currency is also big point. But some day they will not be able to control such a powerful big economy at stable level because Economy of China grows and they can’t …Because their economy is not only inside but also outside. They have to export products, and then they cannot keep low level currency. So in 40 years ago Japanese currency kept very low compared to dollar(360 Yen/US Dollar). I just have started in Hitachi. That time frame. But at the end, even Japanese government wanted to keep that level, they couldn't do that. No way. Because Japanese economy depends on exports. For example South Korea, they still keep their currency low, but that's because Korean economy is not so big now. But compared to Korea China is 5 or 6 times larger so now they can not keep currency level as they want.

What about productivity of workers in China?

Once I have a business with Chinese company. 30-35 years ago. Chinese people were very isolated. Cooperation was difficult. Productivity depends on people productivity. And that's important.

People aware of their rights?

I think so.

As a place for going from China to?

India. They have a very intelligent people, many intelligent people. Hitachi has also a soft ware factory in India now, and they develop soft ware for computers. Compared with China Indian people are very soft and calm. And of course the population of India is very big and growing. So India is going to develop a good economy. I think so.

What about managing business in India. Local partners in India?

We have a subsidiary a soft ware company. We have of course good relations with Tata, big Indian business. So, in the past we exported locomotives and telecommunication exchange, power plants. So Hitachi has an old many relations with India. And now , not sure but, this February Hitachi has a managing directory meeting held in India. Directors meeting.

Is it still cheaper to produce in China?

I am not sure but I think still cheaper, of course depending on products.

What about comparison of production in Japan and China?

I think still Japanese salary is 3 or 4 times a Chinese salary. So human costs are very high in Japan. So still China is preferable place to produce.

Mr. Josef Hutstein

Sales Manager

Siemens AG

Munich, Germany

According to your estimates is it still cheaper to manufacture in China rather than in your home country?

Yes, in my opinion production in China and other low cost countries is still cheaper than in Germany. However also transportation costs exist that should not be underestimated.

Is your company considering reshoring production? If so, what's driving that conversation, and when might you act?

Still not.

How do you perceive both the magnitude and the meaning of this phenomenon? Do you see it as trend? How wide spread reshoring is and how far it will go?

Yes, definitely a new trend. I know about several us-based companies which already re-shored back to US.

Recent surveys provide some data on increasing China labor and logistics costs. Do you see other important reasons driving reshoring decisions by companies?

Yes, I think rising wages and rising transportation costs are main drivers for companies to reshore. Additionally lower production quality is a problem that we suffer from, we find it insufficient.

To which degree to you find difficulties in communicating with business partners due to different time zones and geographic locations important?

Yes of course, sometimes different time zones and geographic locations make communication uncomfortable (sometimes you wait until next working day) , but not really so important for our business.

How do you perceive management practice in China? Have you encountered some operational (sourcing, production, distribution) challenges in China?

Yes, unfortunately I had. It is common for many suppliers in China that they never report quality problems and/or failures. You see these failures directly before shipping or even worse, after shipping when customers call you because of poor quality or failures. The problem is that in China hey agree to "everything" and then fail.

To what degree do rising costs in China make production in your home country more viable?

Unfortunately I do not have core any figures and numbers. But still in my opinion they are not significant enough to reshore. We preferably move to India actually.

What are the main reasons why particularly your company considering to reshore?

As I mentioned before we are not considering reshoring to Germany now. We are moving more from China to India! Reasons are cost structures only.

How do you deal with question of reshoring or moving to other low cost countries?

As mentioned before: we are moving lots of tasks to India already.

Do you support an idea to reshore some manufacturing capacity while moving additional capacity from China to other low-cost geographies?

Of course, just strengthening our production locations. Also loyalty of employees in low cost countries is a big concern!

Which personal experiences with Chinese business partners support your decision on reshoring and which encourage you to continue manufacturing in China?

I have several Chinese friends and was welcomed always in a very warm way. That's very positive. Unfortunately the mentality of not reporting any problems and failures, never say no and agreeing to all requirements is very, very problematic in high tech industry.

To what degree does your company's reputation play role in your decision on reshoring? Does country of origin matter? (e.g.: Made in U.S.A)

Does not matter.

Workers in China are now more aware of their rights. Their aspirations are rising and they are less willing to work long hours in boring factory jobs. What is your opinion on Chinese labor force?

We all did expect such steps. No surprise. And I do think it is natural and should happen.

Have you encountered labor unrest situations and what was the reaction from government?

No.

Which factors discourage you from reshoring initiative in your home country? (Strong currency, low labor productivity etc.)

High labor costs.

Mr. Toshio Yokouchi

Executive

Toshiba Corporation

Naka Area, Japan

What are the key drivers of reshoring from China? Is it still cheaper to manufacture in China than in Japan?

I think China is still cheaper than Japan, especially for worker cost. It is increasing in China, especially in east cost area. That is a very developed area. And in this area labor cost is becoming higher and higher. So, but still I think it is cheaper than Japan. But problem for Japanese companies – the cost merit is now becoming down when they build factories in China. Of course inside of China still labor cost is cheaper, but we must add logistic cost to total production cost. Therefore building up a factory inside of china does not have a good merit. Of course labor cost is cheaper but other costs occur. And also another problem is this that strike may happen, because compared with East cost salary inside of China salary may be lower than this area. So for same company the people in the inner part of China may request the almost the same salary to the company. So, in such a case this is a risk of security, sustainability of factory. So that may be one reason why Japanese companies must consider that. And now Myanmar, Vietnam and such countries are now growing up. And the social stability may be better than China at this moment. Of course Myanmar is now growing too quickly and there is a conflict inside the country. Mentality of Myanmar people is very understandable for Japanese people, because they are Buddhists, Buddhism country. Therefore they are understandable. They are friendly country. Myanmar is wonderful target country for Japanese countries now. Of course many foreign companies also going to Myanmar, but Japan is very keen on Myanmar.

Does Hitachi consider reshoring a production? What is driving that conversation and when it can happen?

So, it depends on a business, I think. In case of Toshiba, we have a very long time history of cooperation with Chinese companies. And also with some local Chinese government support some Toshibas factories. They introduce us very good land, area, for the factory. So they support hiring the labor to Toshiba. And in such a good area Toshiba can keep relationship with that local government. In such a case Toshiba may stay in that area. I think, not sure because I am retired person, about actual movements very well, but I think is still keeping staying at china at this moment. Newly they go to Myanmar or Vietnam. But I don't know about actual reshoring movement in case of Toshiba at this moment.

How do you perceive the magnitude and …Do you see it as trend?

I think actually at this moment relation between Japan and China is not so good. They still have some border issues. Basically we are in the same area, east area of Asia. Hitachi and Toshiba, such a big companies I think have some mission, not from government. But they must think about Japan, Japanese government. Actually no guideline from Japanese government but we have always to consider about Japan. I think Toshiba, or other such a big company should keep good relation with China. And based on that thinking there is some risk doing business doing business in China, big frictions but they may try to keep the good relation with the China, make an effort. So, in case of Japan. Yes, there are many issues in China, but in mind we will stay in China and keep good relation. Revolution, maybe not revolution but improvement of Chinese governmental behavior is what we hope for. I don't know about another countries but in case of Japan I suppose we must stay in China with reasonable scale. If it is too much of course Japanese company will reshore to other country. And small Japanese companies they do not have such a internal mission, so they reshore easily from China. But I think that scale is not so big.

About general trend of reshoring? Maybe in case of other western countries? Is it trend? Or case of some companies?

It will be continued because the life cost in China will increase, that means the salary will increase because people will require higher salary. In all of the lands. And also according to some data China is now exporter of agricultural products such as grain etc. They are export country. But in 2015 China may become import country. That means that they will need foreign currency. So, and that means to get foreign country they must export, expand export business more and more. So at that time some conflict may occur. The Chinese cost becoming higher but they need foreign currency. At this moment labor force is cheaper and they export products and get foreign currency. But in the future they will import food, so they need foreign currency. On the other hand the labor cost becoming higher, the Chinese products becoming expansive. That means they cannot earn the foreign currency. Then maybe some conflict will occur in China. And that is another I think risk of doing business in China. So currently many Japanese companies think about such risk. The new factories they establish in Vietnam, or Indonesia or Myanmar. But reshoring is a little bit difficult for Japan. They are thinking about such a risk but reshoring is must think must be considered as a scale shrink, the volume of production will be reduced and moved to other countries. And complete reshoring it is maybe difficult for Japanese companies. That's my opinion.

Other important reasons for reshoring?

Security. The revolution may happen China. Because now the communist party is the government. But the people of china are thinking about the freedom. So that is very, very big risk doing business in China. That can occur within 5 years. I am not sure but it is very realistic matter. Therefore they reshore fabrics outside of china. But as I have said before, japan will keep good relationship with china because basically we are very similar human race having like Mongols, Silk Road history we know, and we have a dream through the history. Actually sometimes we don’t like Chinese people but from the history we live in one region, area. So that’s why it is very difficult decision, despite risk we will stay in China. And to reduce the risk we will shrink the business or factory in china and establish new one to Indonesia, Myanmar or Vietnam. This is the realistic way of Japanese companies.

What about Logistics?

Inside of china we may have a logistic problems, therefore it is difficult to find Japanese company factory in that area. Almost all factories are located in the east cost area, from east to south. In this way logistic is no so problem I think.

Business collaborates in China?

Communication with Chinese people is a bit difficult I think for Japanese people. And this is probably common feeling of Japanese businessman. Japanese mentality…Chinese people are more like western people. They say clearly and do a quick decision-making. That is different in case of Japanese businessman, we are not so clear: our yes or no is not clear. Our business partners sometimes miss understand our opinion. Because we do not say clearly. It is the same situation. The interesting thing is that after meetings we have parties with Chinese people for top business people, with very strong Sake , so and we get drunk. And at that time Chinese businessman say that this issue conclusion is finished. They say it at the party, when Japanese businessmen are drunk, and we say “ok, ok, ok”, then in the morning they say, You said this last night that you accept this price or something like that. So we become surprised. So such things sometimes happen. Also Japanese companies hire Chinese people and they come to Japan together with Japanese businessman. So he becomes close to Japanese mentality, knows Japanese very well. He can be a leader in local factory in china. So he comes back to China, and sometimes when Japanese people can not understand formal documents in Chinese. So when he was in Japan Chinese lawyer always checked him, but when he comes to China we believe him. He can decide everything. And sometimes he does some bad things. When they are ,…So we must think about such risk as well. And Japanese people always stay in one organization but Chinese people always move. So such things we have to consider and think about.

How do you perceive management practice in China? Operational problems in China?

I have in case of Kronokoyamato (it is a logistics company, very big and important). So they go to China and they giving education, company education to Chinese people. There is some difference between cultures of Chinese people and Japanese people. Japanese people always ”origato gosaimas… ” Welcome… And also time is very important for Japanese people, we are very serious about keeping on time. When we must go somewhere 7 o’clock , almost all Japanese people go there before that time. But in case with china 10 to 30 minutes is very usual for delay. So in such a thing they must give the educational program, actually on very fundamental thing. Actually the person, very excellent people exist among Chinese local people. When Japanese firms want to give responsibilities to them, and now it is expanding: localization. And Japanese company gives some suitable education to them. But some not all. Examples of success are still few.

To what degree rising costs in China make Japan the place of production?

Yes, there some examples of Japanese firms coming back to produce in Japan that before had a manufacturing in china. But now the manufacturing in Japan becoming competitive. So some of them are starting to manufacture in Japan. But still rare case. Because of for example “Unikuro”, they manufacture big amount of costumes. So in that case Chinese area because of labor is cheaper, they do not come back to Japan. I know that they shrink manufacturing in china, but go more now to Vietnam or Indonesia and manufacture there. So they do not come back to Japan. So in some cases are there Japan is becoming competitive but still China is cheaper.

What are the main reasons why particularly Toshiba reshore?

I am not sure that Toshiba will reshore, still Toshiba has many factories in china. I don't know very well the future movements.

How you deal with question of coming back to Japan or going to other low cost countries?

Japanese firms consider more going to other low cost countries like India, Vietnam, Myanmar rather then coming back to manufacture in Japan.

Do you support the idea of shrinking some production in China and moving the other to low cost countries?

Yes, Myanmar, Thailand and Indonesia.

Which personal experiences support your decision reshoring?

What will be the condition of staying in China?

Stability of the society. Still there are demonstrations in a China, time to time. So I think stability is the most important condition.

So china must all…they must study global standard. So they change laws very easily depending on a situation. So that thing must be changed. That is governmental responsibility.

Have you ever encountered labor unrest and maybe governmental response to these situations?

In my personal case I don't have, because I don't have so big experience in china. But so especially governmental things are under table. And that's also a problem.

What about company's reputation, In case of Toshiba. The origin of product (made in China or…) To which extend does it matter?

Made in Japan is the best I think. But made in china, manufactured by Japanese company is acceptable.

Workers in China are more aware of their rights, have own aspirations. What is your opinion on Chinese labor force?

As I said one of the risks is the strike of Chinese labor. Mainly rise of the salary is expectation. Actually money. Everybody wants money), they want to get more salary, sometimes strike. Some leader of the labor actually hesitate the people, workers. So, normally many Chinese workers work hard, that's why Japanese companies go to China and establish the factories. Because labor quality is not so bad in China. But now facing one …Political matter, they Because of political matter Chinese labor sometimes makes strikes. Chinese ask for increase of salary. But I am not sure but some people say that government is instructing them doing that in Japanese companies. As I said I am not sure, but I think maybe occurred to some Japanese companies. Chinese government are behind of some labor organization. It is not actually the requirement of increasing salary, more like political issue. Organized by some political organizations.

And how does Chinese government react in such situations?

I think it is not a top government; it is more local government, I think. And for example because of this, they sometimes require unusual tax. So, we refuse to that. In such a cases some troubles may happen. So according to some Japanese food manufacturers in china I have such things, this is strange in china. And they manufacture in this area, they send to here (Japan), they pay tax in this prefecture, they sell their products in this area, they pay tax in this prefecture. But manufacturing is in different prefecture, they also require the tax. Additional tax. They must pay the tax to this prefecture. But according to the law, I am not sure about that law but, but they already have paid, but this local government require it. They hire some lawyer and fight against the local government then they could have good results fighting against them.

Which factors discourage you from reshoring in your home country? Strong currency, low labor productivity…etc.

I think the productivity is not so bad in China. About others, can you find them in my previous words?

What about intellectual property? Patents…etc.

That’s a problem, yes. Now, China is a leading country issuing patents, by the number they issue a year. Before Japan was number one, but now they are. But register mark, for example brand mark of Toshiba, in China they in case of such a brand mark they register very similar brand mark to the government. Like Toshima to Toshiba, yes. And MacDanalds or something like this. And it’s a very big issue. They are a global country, and it is a problem of China. I am not so in in patents but I think similar things may happen there. I guess, I don’t have evidences, but there is a possibility. And such a things must be followed by international law. International common sense must pass for such thing. But there are many people in china, 1400 million people, and so very small number of them doing this. It is not a problem of overall Chinese people. But some very …people doing such a imitation, manufacturing imitation products. They are doing such a register, changing brand names, doing such things they can, just for making money. But I think it is a very limited people, because of big amount of population in China, %1 is still a big number. Big scale. As a probability such thing may happen, but government must control such a things.

But what about know how?

But now technology is very hard to keep it as a secret. Very difficult. Even in case of patents showing everything. So, some people read it and they can make same thing. It is also a possibility. So patent is not a block to keep a technology, its actually one effective way to keep the light of the company. For example “Sharp” they don’t want to register the patents and want to keep it in company. So they are closed, they do not show their factories. If they show, register patent, then some engineer can modify it a little bit and escape from that limitation. Therefore that is not effective, they think. So, but as a …for example before in Korea Samsung, many Samsung people came to Japan and they... For example in Toshiba they make friends and went back to Korea. And then invited Japanese engineer to Samsung. That means companies know how was …they could catch up Japanese know how from Japanese companies. And that already happened between Japan and Korea. In case of China the same thing may happen. It may, so Japanese companies must, we must run in front of them, always. All the technology or know now transferred to China or Korea, even to Thailand or Myanmar will be taken, they will get it. So, I think it is impossible to protect it, can not keep. That means Japanese companies always run in front of this countries in technology matter, I think. So now the global world is, the information simultaneously expands to the world. The know-how also does, it takes more time than information but, know how also spreads to the world. And if people want to know that they will know that, that know how. They will get it, there is no a good protector for that. Therefore must think, we will always develop the new idea, technology, product. That is the way of that. It is a very hard job. Japanese way of life. The direction is that I think.

Mr. Igor Boyarchuk

Purchase manager

Astera – Heat Saving Systems

Rostov, Russia

According to your estimates, is it still cheaper to manufacture in China rather than in your home country?

Taking into consideration only financial aspect and forgetting about all other important components of products and services our company renders to clients, I may agree with the statement that manufacturing in China currently is still cheaper than in Russia. However, the difference in costs is diminishing and currently is 5-10% in in Heat Exchangers sector.

Is your company considering reshoring production? If so, what is driving that conversation, and when might you act?

Currently our company does not manufacture in Russia. But we are approaching to it. We already manufacture in Europe (Spain, Germany, Denmark and Turkey) because manufacturing of high-quality products of European countries became cheaper and approached to Chinese costs of production. So, we experience a little bit different kind of reshoring, from China to Europe. We expect to start manufacturing in Russia in next years, and the reason for that is government policy which increases taxes on import and decreases taxes for in-country productions.

How do you perceive both the magnitude and the meaning of this phenomenon? Do you see it as trend? How wide spread reshoring is and how far it will go?

This phenomenon would happen one day and this day came. Looking at the situation in European countries, we may see that unemployment is high and crisis is experienced by several members of EU. This led to the fact that more and more employees accept lower salaries only to have a work. Lower cost of production helps companies to sell their products cheaper. Moreover, governments help their national companies by giving grants and lowering taxes, raising the import tariffs on the other side. This is the trend in Europe. In China cost of manufacturing is rising year by year, the population’s level of life is becoming higher demanding higher salaries. So, we may observe move of two rays moving one to another, that are supposed to meet one day, like in market equilibrium point in economy. What happens next? We will see all together.

Recent surveys provide some data on increasing China labor and logistics costs. Do you see other important reasons driving reshoring decisions by companies?

As I said, not only the trend of increasing cost of logistics and labor is the thing that led to start or reshoring phenomenon. The condition of life, the economic situation, the circumstances of crisis or pre-crisis forced European countries and Russia with them to invest in own real sector of economy, and the worsening financial situation of population led to decrease in labor cost. So, reshoring was not forced only by rise of manufacturing costs in China. This is global and complex process, but it could not be evaded.

To which degree to you find difficulties in communicating with business partners due to different time zones and geographic locations important?

Difference in time zone becomes an obstacle in high season and rush projects. Even one day delay may cause problems for us. But in 90% of cases we do not experience any problems in communication and do not see time zone difference as a problem.

How do you perceive management practice in China? Have you encountered some operational (sourcing, production, distribution) challenges in China?

Actually, I perceive management practices in China as concentrated on volume of production, on stable and rising profit and only after that care about the quality. Our company tried several times to change the manufacturer and switch to lower costs, but we were always losing in quality and that was of little interest for our partners in China.

To what degree do rising costs in China make production in your home country more viable?

It is one of direct reasons in a bulk of circumstances. Rising cost of production in China, decreasing cost of labor in Russia and several other factors lead to appearance of reshoring phenomenon.

What are the main reasons why particularly your company considering to reshore?

Main 3 reasons are: cost of production, quality of products and fast shipping expenses. Cost of production is a little bit more important at first glance, however all three factors are equal for our company.

How do you deal with question of reshoring or moving to other low cost countries?

Our company for about 16 months is reshoring its production to European counties and we are happy with it.

Do you support an idea to reshore some manufacturing capacity while moving additional capacity from China to other low-cost geographies?

Yes

Which personal experiences with Chinese business partners support your decision on reshoring and which encourage you to continue manufacturing in China?

To what degree does your company's reputation play role in your decision on reshoring? Does country of origin matter? (E.g.: Made in U.S.A)

Matters but not significantly

Workers in China are now more aware of their rights. Their aspirations are rising and they are less willing to work long hours in boring factory jobs. What is your opinion on Chinese labor force?

In general I find Chinese people hard working and good workers. I see rising wages, as natural process as everything around becomes more expensive people also wants to earn more.

Have you encountered labor unrest situations and what was the reaction from government?

No, I did not experience anything like this. I herd from other business partners that such things exist but I have no personal experience.

Which factors discourage you from reshoring initiative in your home country? (Strong currency, low labor productivity etc.)

The biggest obstacle for manufacturing in Russia nowadays is the absence of skilled labor, especially technical staff. Once we were famous of our engineering and now we face a shortage of people able to manufacture and control manufacturing. However our government now is working on this problem and encourages young people to engineering professions.

APPENDIX B: Interview Questions:

1. According to your estimates is it still cheaper to manufacture in China rather than in your home country? What is the difference between the total cost of production in China and your home country?

2. Is your company considering reshoring production? If so, what's driving that conversation, and when might you act?

3. How do you perceive both the magnitude and the meaning of this phenomenon? Do you see it as trend? How wide spread reshoring is and how far it will go?

4. Recent surveys provide some data on increasing China labor and logistics costs. Do you see other important reasons driving reshoring decisions by companies?

5. To which degree to you find difficulties in communicating with business partners due to different time zones and geographic locations important?

6. How do you perceive management practice in China? Have you encountered some operational (sourcing, production, distribution) challenges in China?

7. To what degree do rising costs in China make production in your home country more viable?

8. What are the main reasons why particularly your company considering to reshore?

9. How do you deal with question of reshoring or moving to other low cost countries?

10. Do you support an idea to reshore some manufacturing capacity while moving additional capacity from China to other low-cost geographies?

11. Which personal experiences with Chinese business partners support your decision on reshoring and which encourage you to continue manufacturing in China?

12. To what degree does your company's reputation play role in your decision on reshoring? Does country of origin matter? (e.g.: Made in U.S.A)

13. Workers in China are now more aware of their rights. Their aspirations are rising and they are less willing to work long hours in boring factory jobs. What is your opinion on Chinese labor force?

14. Have you encountered labor unrest situations and what was the reaction from government?

15. Which factors discourage you from reshoring initiative in your home country? (Strong currency, low labor productivity etc.)

APPENDIX C: Table 3.3 Source (Full electronic sources provided on CD)

1. Manufacturing Business Technology

2. Reshoring manufacturing/ Coming home | The Economist

3.'Symbolic' reshoring will not lead to jobs boom, survey suggests - FT.com

4. China 2013/ The Year Of Reshoring to America? - Financial Executive/ Jan/Feb 2013 - FEI

5.'Reshoring' production from China to the US will benefit plastics industry - Reinforced Plastics

6. Made in USA/ 6 Companies That Came Home | Inc.com

7. Made in USA (Again)/ Manufacturing Is Coming Home | Inc.com

8. 'Reshoring'/ Why Manufacturing Jobs are Coming Back to America | Gold News

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