



# **Emergence of Indian Multinationals in Germany: Results of a TUHH Study**

Preliminary Results of an Empirical Survey Conducted for Research Project Global Innovation as a part of the Study: "The Emergence of Indian Multinationals: An Empirical Study of Motives, Status-quo and Trends of Indian Investments in Germany"

January 2009

 $\mathbf{B}\mathbf{y}$ 

Rajnish Tiwari

&

Jayachandran K. Mani

Institute of Technology and Innovation Management Hamburg University of Technology (TUHH) Schwarzenbergstr. 95 E 21073 Hamburg, Germany

Tel: +49 - (0)40 - 42878 - 3776

Fax: +49 - (0)40 - 42878 - 2867

http://www.tuhh.de/tim

http://www.global-innovation.net

#### Emergence of Indian Multinationals in Germany: Results of a TUHH Study

This report is a part of our study "The Emergence of Indian Multinationals: An Empirical Study of Motives, Status-quo and Trends of Indian Investments in Germany". The study was conducted under the aegis of our "Research Project Global Innovation" at the Institute of Technology and Innovation Management at Hamburg University of Technology. The full study, for the first time, has identified all German subsidiaries of Indian firms. The study is unique in the sense that it for the first time has collected information on Indian corporate investments in Germany including on their motives, patterns, employment effects, criteria of location selection, and, last but not least, their experiences in the Federal Republic of Germany. The present report, a preliminary draft of the survey results, describes the results of the empirical survey of the German subsidiaries of Indian firms conducted by the authors and thus constitutes an important cornerstone of the study in question. The preliminary draft is being released to satisfy a large and persistent demand for the survey results from many interested quarters.

## **Research Issues**

Our desk research, based on an extensive review of academic and management literature as well as of news reports appearing in business publications, revealed that there exists a wide gap in the understanding of Indian multinational enterprises' (MNE) investments in Germany. In line with the objectives of the scope of the study and based on the results of literature survey and expert interviews following research issues were derived:

- 1. What are the motives leading Indian firms to invest in Germany? To what extent have they been able to realize their motives?
- 2. What is the preferred mode of initial investment for Indian MNEs to enter Germany? Whether there have been subsequent investments by them?
- 3. How do they select their location in Germany?
- 4. What are the technology implications of these investments to the MNEs in question, and to India and Germany?
- 5. What is the employment effect of the Indian investments in Germany?
- 6. What are the challenges they typically face during the investment process and in day-today operations in Germany?
- 7. What are their future plans in Germany?

Table 1: Research issues

An empirical survey was conducted in July/August 2008 among the subsidiaries of the Indian MNEs in Germany, to find answers to the research issues described above. To our knowledge no such survey has been carried out till date.

# **Research Design and Survey Methodology**

To collect data that may provide satisfactory answer to the research issues identified earlier, a planned approach was charted out. The flowchart below explains the different steps carried out in conducting this empirical research.

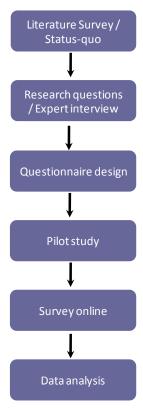


Figure 1: Empirical survey methodology

By carrying out the literature survey the current status of the Indian MNEs in Germany was identified. The research issues were formulated based on the literature survey and the status quo of the Indian investments in Germany. To better reflect practical issues and concerns, 10 interviews were conducted with the experts from various agencies in India and in Germany. Based on the inputs and feedback, a questionnaire was framed. This questionnaire was tested with a couple of Indian firms in Hamburg and their feedback incorporated. Using this questionnaire as a base, Indian firms in Germany were contacted for the purpose of data collection.

## **Expert interviews**

To align the study to the practical situation as well as to assess the significance of the identified research issues, 10 experts were interviewed before finalizing the survey questionnaire. The experts represented various institutions that are – in many instances – one of the first contacts an Indian firm might make while deciding to invest in Germany. The organizations are listed below.

No.	Organization
1	Hamburg Chamber of Commerce (Handelskammer, Hamburg)
2	Indo-German Chamber of Commerce, Düsseldorf
3	HWF Hamburg Business Development Corporation, Hamburg
4	German consulate General, Mumbai
5	Invest in Germany GmbH, Berlin
6	Institute for Studies in Industrial Development (ISID), New Delhi
7	ELGA Biotech, Hamburg
8	KPMG, Hamburg
9	IGEP Foundation, Gurgaon
10	German-Indian Business Center Hanover

*Table 2: Organizations of the experts interviewed (individual names withheld)* 

The interviews were conducted over telephone except those in Hamburg. They were generally in the form of a lively discussion on the topics hovering from motives of Indian firms to invest in Germany; the main challenges they face; the factors for a successful investment; and the expert's expectations from this study.

Most of the experts mentioned that the main motive for Indian MNEs to invest in Germany is to gain new technology and to expand in the EU and in Germany. One expert mentioned that the Indian MNEs already have a strong presence in the USA, UK and Australia and now they intend to exploit the opportunities in the continental European market. He added that Germany being the largest economy in Europe, the Indian MNEs like to enter Europe via Germany. Some of the other factors mentioned by the experts as the motive for investments are to acquire new brand, widen their current product portfolio, to integrate their supply chain and to exploit the home country cost advantages. Other factors mentioned by the experts were to support the export and trade activities, and to serve the existing customers.

Expert interviews brought to fore some of the challenges Indian MNEs usually face during their investment process: the difference in work culture, language, organizational restructuring after acquisition due to strict laws, getting work permits and visa for their expatriate. Specific to pharmaceutical sector, one expert mentioned that the language plays a key role for a company from this sector; since understanding the feedback from the sales personnel in the market is important to adapt the product to Germany.

Identifying and selecting the right partner and understanding German rules and regulations were mentioned as critical success factors. In this respect, one expert added that a through due-diligence and understanding the target's contracts with its supplier is very important to avoid any surprises after the deal. Additionally, many experts mentioned that the adaptation of the product and services to the local market is a crucial key to success.

Commenting on the mode of entry, experts mentioned that Indian firms usually prefer acquisitions as entry mode. Especially in the case of pharmaceutical industry acquisitions were seen as useful due to the fact that the local laws and regulations are very stringent, the market is very complex, and creating a brand image would take a long time and considerable efforts.

An interesting problem that many experts mentioned, and which we also encountered during our desk research, relates to data collection for the purpose of official statistics. It is very time- and resource consuming to find the actual flow of Indian investments in Germany. For, both German and Indian official agencies take into account only direct capital flows between India and Germany. Thus, capital flows that are routed through a third country and the investment made by a firm's local subsidiary are not reflected. The experts usually rely on the data published by consultancies and they strongly recommend a better OFDI measuring system. Valuable inputs on the survey methodology and the questionnaire format were received from some experts, which helped to carry out the survey more efficiently.

# Questionnaire design

Based on the literature survey and the inputs received from the experts, a questionnaire and questions were prepared that addressed the research issues appropriately. The questionnaire was designed in a way to ensure that the participants did not require more than 20 minutes to answer all the questions.

The questionnaire contained both close- and open-ended questions to strike a balance between the three-pronged objectives of a) providing a good and structured overview and thereby shorten the time taken to fill the questionnaire; b) providing enough opportunities to the participants to share their views on a wide range of topics including those which might have not been included in the questionnaire; and c) to ensure quantitative analysis. To measure the opinion on certain factors, a semantic differential scale with value ranging from 1 to 6 was used. For questions where the participants were requested to provide data on the performance of the company, choices with broad value range (e.g. investment volume "up to 5 million", "between 5 and 15 million") were provided to ensure participants did not feel uneasy sharing sensitive information. Of course, the participants were assured of complete anonymity and confidentiality of the data. Utmost care has been taken during data evaluation to keep this promise.

## Pilot study and field survey

Before going live with the field survey, the questionnaire was tested with two Indian MNEs in Hamburg. The feedback given by the participants was incorporated and the questions were fine-tuned. Apart from the pilot study, the questionnaire was sent to some experts for review. All known Indian firms in Germany were sent the questionnaire by post. Additionally, the questionnaire was uploaded on our project website for online survey as well a PDF download option was provided. The survey was also carried out personally among 5 Indian MNEs in Hamburg.

A major task was to identify the right participants within Indian firms' subsidiaries. An extensive web research on the corporate websites was conducted to identify the members in the top management position in the German subsidiaries. Business network website XING was also used to make the first contact with the people. Experts, through their personal contact also helped to get in touch with some persons in top management. Also, the Directory of Indian companies in Germany, published by Indo-German Chamber of commerce, was consulted.

# **Composition of survey participants**

The questionnaire was sent to 148 firms known Indian MNE. Of these, 25 questionnaires returned for the firm in question had ceased to exist. In these 148 MNEs, 201 persons were contacted by sending the questionnaire by post.

	Indian MNEs contacted		No of perso	ns contacted
Sector	No	%	No	%
Auto	10	7%	21	10%
Bank & Finance	2	1%	2	1%
Bio technology	2	1%	2	1%
Ceramics	1	1%	1	0%
Chemical	2	1%	2	1%
Consultancy	27	18%	29	14%
Electrical &Electronic	5	3%	5	2%
ICT	61	41%	91	45%
Logistics	4	3%	4	2%
Machinery & parts	9	6%	9	4%
Packaging	2	1%	2	1%
Pharmaceutical	14	9%	21	10%
Ferrous & non-ferrous	2	1%	4	2%
Textile	2	1%	2	1%
Travel & tourism	3	2%	3	1%
Wind energy	2	1%	3	1%
Total	148	100%	201	100%

Table 3: Indian MNEs in Germany contacted for the survey

# Descriptive analysis of results

The present report is based on the responses by 21 participants from 20 German subsidiaries of Indian MNE. Among these, 5 participants were from Hamburg and they were met face to face. Three persons participated in the survey by answering the online questionnaire and two telephonic interviews were conducted. The rest 11 responses came from the questionnaire sent

<sup>&</sup>lt;sup>1</sup> It seems to be a fair assumption that the non-traceable firms have ceased their operations in Germany. There is however a distinct possibility of them having changed their name and location for some reason or the other. A separate study has been initiated to identify the actual status of such Indian firms in Germany.

by post.<sup>2</sup> Among these 21 participants, 7 participants were Indian nationals whereas the rest of the participants were European nationals (12 of them from Germany). Table 4 shows the breakup of the survey participant sector wise.

Sector	Participants	%
Automotive	6	29%
Consultancy	3	14%
Electrical & Electronics	1	5%
ICT	8	38%
Logistics	1	5%
Pharmaceutical	1	5%
Wind energy	1	5%
Total	21	100%

Table 4: Survey participants

There were 8 responses from firms in the ICT sector, followed by the automotive component manufacturer with 6 responses and engineering consultancies with 3 responses.

# **Organization**

In this section, we describe the size of Indian MNEs that made investment in Germany, the mode of entry, the operations they carry out in Germany and the subsequent investments they made are discussed in detail.

Turnover of parent	No	%
company in million EUR	NO	76
>5000	2	10%
>1000-5000	4	20%
>500-1000	4	20%
>250-500	2	10%
>100-250	4	20%
>50-100	1	5%
>10-25	1	5%
up to 10	2	10%
Total	20	100%

Table 5: Turnover of parent firms

<sup>&</sup>lt;sup>2</sup> Some responses were received later. They are not included in the present report.

The 20 German subsidiaries' parent firms have a turnover ranging from a minimum of EUR 10 million to more than EUR 5 billion. It is interesting to note that 16 firms have a group turnover of at least EUR 100 million.

#### *Type of first investment:*

Among the 20 firms, 10 firms entered Germany by doing acquisition, 3 firms by having joint venture and the rest 10 firms entered Germany via Greenfield investment.

Unique Sector	Acquisition	Greenfield	Joint venture	<b>Grand Total</b>
Automotive	3	1	2	6
Consultancy		2		2
Electrical & Electronic	1			1
ICT	3	4	1	8
Logistics	1			1
Pharmaceutical	1			1
Wind energy	1			1
Grand Total	10	7	3	20

Table 6: Type of first investment

In the automotive sector 5 of the 6 investments were brownfield investments, whereas ICT firms chose both greenfield and brownfield modes. It seems that establishing a new production facility is considered rather capital and time consuming process. A manufacturing sector greenfield investment in a high-cost country with language and culture difference is probably considered too risky.

#### Business activities done in Germany:

When asked about the nature of the activities carried out in Germany (multiple answers possible), 16 participants responded that they carry out production of good and services, 13 participants reported presence of R&D operation, whereas 8 reported customer support and after-sales services. Six participants had marketing operations.

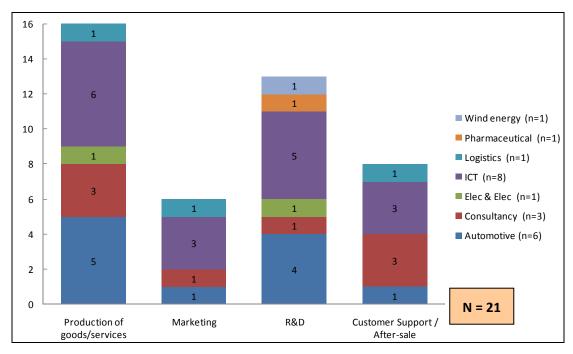


Figure 2: Type of business activity

It is interesting to note that the participants from the pharmaceutical and wind energy sector mentioned that they carry out only R&D<sup>3</sup> in Germany. Among the 8 participants from ICT sector, 5 mentioned that they do R&D here.

#### Subsequent investments:

Of the 20 Indian firms surveyed 12 made further investment after their entry into Germany.

	Subsequent investments done by the participant firm				
Unique Sector	Greenfield	Acquisition	Merger	None	
Automotive	2	3		1	
Consultancy	1	1		1	
Elec & Elec			1		
ICT	2	1		4	
Logistics				1	
Pharmaceutical				1	
Wind energy	1	1			
<b>Grand Total</b>	6	6	1	8	

Table 7: Subsequent investment

<sup>&</sup>lt;sup>3</sup> The term R&D, for the purpose of this survey, was defined in accordance with the Friscatti Manual.

Among the 6 firms from automotive sector, 5 did a subsequent greenfield investment or acquisition in Germany. This decision to do further investment after the entry into the market comes from the learning experience. After getting to know the market and opportunities in Germany, these firms go for expansion organically or inorganically.

#### *Employees and expatriates in German subsidiaries:*

From the survey it was identified that among the participant firms, each firm had an average of 190 employees. The firms from automotive sector employ on average 258 people, followed by ICT firms with an average of 214 and consultancy with 202.

Sector	No. of firms	Total	Avg. no. of employees in a firm
Automotive	5	1290	258
Consultancy	2	404	202
Elec & Elec	1	35	35
ICT	6	1283	214
Logistics	1	16	16
Pharmaceutical	1	90	90
Wind energy	1	120	120
Total	17	3238	190

Table 8: Employment provided by Indian MNEs in Germany

Though the employment provided by Indian MNEs in German looks impressive it is interesting to note the expatriates sent from parent company to Germany.

Expatriates	Auto-	Consul-	Elec &	ICT	Log-	Pharma-	Wind	Grand
%	motive	tancy	Elec	ici	istics	ceutical	energy	Total
0%	1							1
up to 5%	3			1		1	1	6
>5-15%	1			1	1			3
>25-50%			1	1				2
>50-75%		2						2
>75-100%				3				3
<b>Grand Total</b>	5	2	1	6	1	1	1	17

*Table 9: Expatriates sent from parent company to Germany*<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> In % of the total workforce in Germany

Among the 5 Indian automotive subsidiaries in Germany, all of them have less than 15% of their total employees sent from parent company. 3 firms have just up-to 5% of their employees sent from parent company. In ICT sector among 6 firms, 3 have over 75% of their employees sent from their parent firm to Germany. Some reasons for this pattern among the sectors are; all the 5 automotive firms became a subsidiary of an Indian MNE via acquisition, so the Indian MNEs retained the workforce. In case of ICT sector, the expatriates are required for after-sales service and customer services.

# **Motives for investing in Germany**

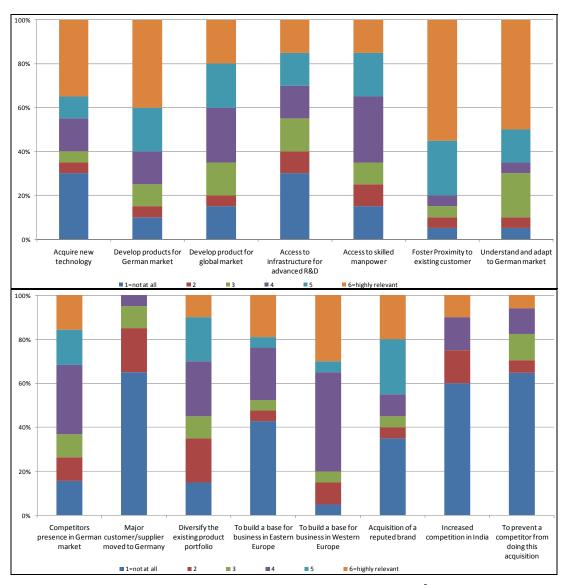


Figure 3: Motives for investing in Germany<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> The total participants in this survey are 21, but some participants didn't give their opinion for all the factors.

In the questionnaire, factors that usually influence a firm's decision to invest in Germany were listed and the participants were asked to rate them on a scale of 1 to 6 with 6 being high relevance. The participant had the option of mentioning additional factors. Among the factors, to serve the existing customer by fostering proximity to them was rated as the most important reason for the firms to invest in Germany. The next important factor was to understand and adapt their products and services to German market, followed by the intention to acquire new technology. It is interesting to notice that the next important reason for the firms to invest in Germany was to build a base to expand business in Western Europe.



Figure 4: Motives for investment - Comparison Automotive & ICT sector<sup>6</sup>

It may be interesting to compare the motives between the Automotive and ICT sectors, since both of them represent a relatively large number of respondents in the sample. For the firms

<sup>&</sup>lt;sup>6</sup> Note: 21 participants in total; 6 from automotive sector & 8 from ICT, but some participants didn't give their answers for all the factors.

from automotive sector it is clear from the responses that their primary motive was to acquire new technology. But this is not the primary motive for the firms from ICT sector. It is therefore not surprising that the access to infrastructure to do advance R&D is the next important factor for the automotive sector firms and not at all relevant for ICT firms. Among the ICT firms understanding and adapting to the German market and fostering proximity to their existing customer was the primary motive.

Some of the factors that did not exert any major influence on the investment decision of the firms were the "restrictive policy" of the Indian government, to reduce the transaction cost (e.g. import duty) and increased competition in India. Risk spreading (e.g. exchange-rate hedging) was also not a significant factor for their investment decision. But during an interview with a consultant firm in Hamburg, the participant mentioned that during their investment in 2002 in Germany they didn't consider risk spreading as an important factor. But in the present scenario of currency fluctuation between USD and INR they take advantage of their investment in Germany.

-

<sup>&</sup>lt;sup>7</sup> The policies back home were therefore not regarded as "restrictive".

#### Satisfaction level on the investment:

Partici-	Sector	Primary intention for investing in Germany	1=Not satisfied
pant	Sector	Primary intention for investing in Germany	6=Fully satisfied
1	Automotive	Acquire new technology	6
2	Automotive	Acquire new technology	5
3	Automotive	Acquire new technology	6
4	Automotive	Acquire new technology	4
5	Consultancy	Develop products for German market	6
6	Consultancy	Foster Proximity to existing customer/supplier	6
7	Consultancy	Foster Proximity to existing customer/supplier	6
8	ICT	To build a base for business in Eastern Europe	1
9	ICT	Foster Proximity to existing customer/supplier	6
10	ICT	Foster Proximity to existing customer/supplier	5
11	ICT	Foster Proximity to existing customer/supplier	5
12	ICT	Foster Proximity to existing customer/supplier	6
13	ICT	To serve existing customers in Germany better	6
14	ICT	Acquire new technology	6
15	ICT	Understand and adapt to German market	3
16	Logistics	Foster Proximity to existing customer/supplier	6
17	Pharmaceutical	Develop product for global market	4
18	Wind energy	Acquire new technology	5

Table 10: Primary motive and level of satisfaction

The participants were asked to pick three primary motives for investing in Germany and evaluate the satisfaction level based on their realization till date. It is interesting to note that most of the participants stated to have achieved their primary motive via their investments. Table 10 shows the primary motive and the response from 18 participants on the satisfaction level.

# **Location selection in Germany**

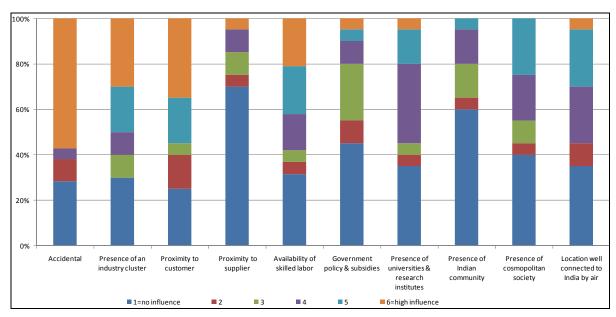


Figure 5: Factors influenced location selection<sup>8</sup>

To understand the criteria behind the selection of location in Germany, in the questionnaire participants were presented with a list of factors that they might have considered while selecting the location in Germany. From the Figure 5 it can be seen that the participants responded that the location selection is more of an accidental decision. This is due to the fact that among these 20 firms, only 7 firms did a greenfield investment and the rest are either an acquisition or a JV. In these two modes of investment the location presents limited scope for choice. So it is more of interest to analyze the response given by the 7 firms. Among these 7 firms 6 are from ICT and consultancy sector.

<sup>&</sup>lt;sup>8</sup> The total participants in this survey are 21, but some participants didn't give their opinion for all the factors.

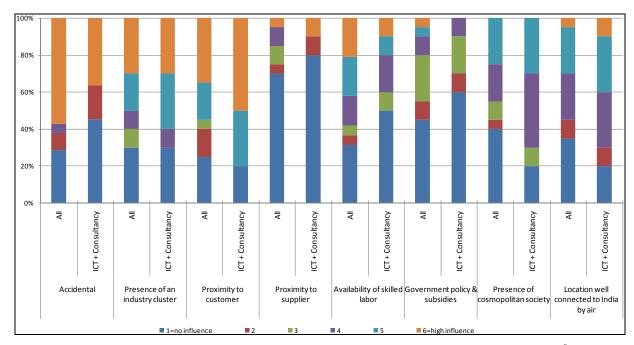


Figure 6: Criteria for location selection by firms from ICT and consultancies<sup>9</sup>

Analyzing the responses given by the ICT and consultancy firms, their location selection decision are highly influenced (rating 5 & 6) by the location where their customers are located followed by the presence of allied industry cluster. When all the greenfield investments made by the Indian ICT and consultant firms in Germany were analyzed, German state Hessen tops the list.

State	Subsidiary	%
Baden-Württemberg	12	17%
Bavaria	11	15%
Hamburg	5	7%
Hesse	29	40%
North Rhein-Westphalia	10	14%
Rhineland-Palatinate	2	3%
Saxony	2	3%
Schleswig-Holstein	1	1%
Grand Total	72	100%

Table 11: Greenfield investments made by Indian ICT and consultancy firms in German states

<sup>&</sup>lt;sup>9</sup> Note: 21 participants in total; 8 from ICT sector & 3 from Consultancy, but some participants didn't give their answers for all the factors.

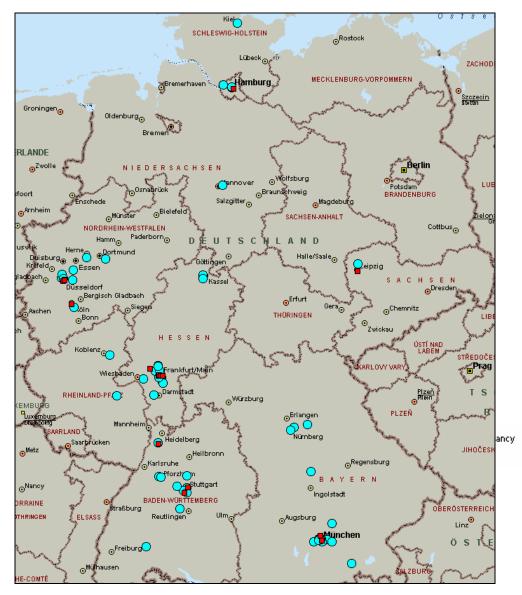


Figure 7: Geographical location of Indian ICT and Consultant subsidiaries in Germany 10

29 subsidiaries were found in the state of Hesse and there 20 firms are in Frankfurt alone. Baden-Württemberg has attracted 12 investments from India and in Baden-Württemburg 8 subsidiaries were in Stuttgart and Walldorf (where SAP is headquartered). The next state of maximum Indian ICT and consultant subsidiaries is Bavaria with 11 (10 in city of Munich) and North Rhein-Westphalia 10 (8 in Cologne and Düsseldorf) respectively.

From the Figure 7 the cluster of ICT and consultancy firms can be clearly seen. In an interview conducted with a participant in Hamburg, he mentioned that apart from the presence

<sup>&</sup>lt;sup>10</sup> Note: Total of 90 subsidiaries; 16 consultancies and 74 ICT

of his customers in Frankfurt, it is an attractive location for him to have an office since it is the transit location for most flights between India and USA.

# **Technology implications**

In a foreign direct investment it is interesting to analyze the technology benefits it brings to its organization as a whole and to the home and host country. In the questionnaire participants were asked to answer a list of questions pertaining to the technology aspects.

#### *R&D spending:*

Firm	Sector	R&D Spending Group	R&D spending in
FILIII	Sector	(% of sales)	Germany (% of sales)
1	Automotive	-NA-	>75%
2	Automotive	>5-10%	>2.5-5%
3	Automotive	>5-10%	>5-10%
4	Automotive	>5-10%	>5-10%
5	Automotive	>5-10%	No R&D
6	Automotive	>2.5-5%	No R&D
7	Consultancy	>15-25%	0-2.5%
8	Consultancy	0-2.5%	0-2.5%
9	Elec & Elec	>25-35%	>35-45%
10	ICT	-NA-	-NA-
11	ICT	>10-15%	0-2.5%
12	ICT	>2.5-5%	>2.5-5%
13	ICT	>10-15%	No R&D
14	ICT	-NA-	-NA-
15	ICT	>5-10%	>2.5-5%
16	ICT	-NA-	>45-55%
17	ICT	>5-10%	>2.5-5%
18	Logistics	-NA-	-NA-
19	Pharmaceutical	0-2.5%	0-2.5%
20	Wind energy	0-2.5%	>75%

Table 12: R&D spending of the Indian subsidiaries in Germany 11

The idea was to find out the R&D spending they do in Germany, type of R&D carried out in India and in Germany, the role of the R&D unit, the collaboration they have with different organization so to understand the linkage effect and the technology transfer that happened between India and Germany.

<sup>&</sup>lt;sup>11</sup> Note: NA = data not available

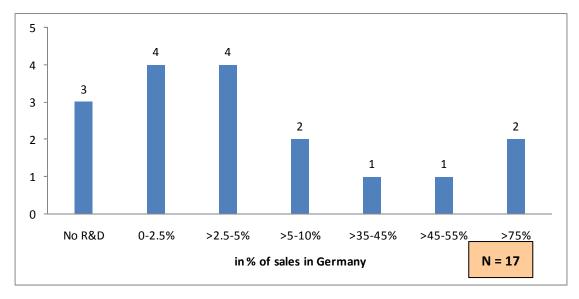


Figure 8: R&D spending (in % of sales) of Indian subsidiaries in Germany

From the data received from 17 firms, 3 firms don't carry out any R&D in Germany but do R&D in India. Other 10 firms have a R&D spending of more than 5% of their sales value in Germany. A firm from energy and automotive sector has a R&D spending of greater than 75% of their sales.

#### *Type of R&D carried out:*

Participants were asked to specify the type of R&D carried out by their parent firm in India and their Germany subsidiary, responses received may be seen in the figure below.

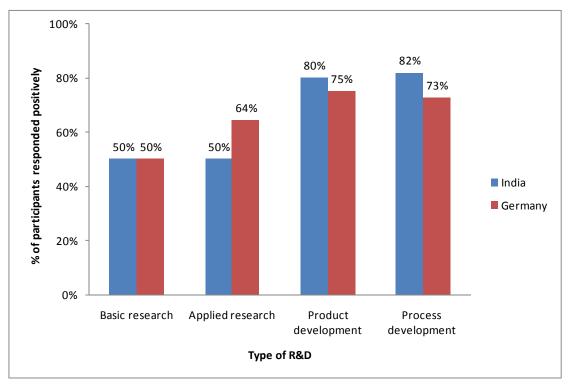


Figure 9: Type of R&D carried out in India and in Germany

It is interesting to note that these firms try to adapt their product and process to the local market and this may be one of the reasons for more of R&D focusing on the product and process development in Germany.



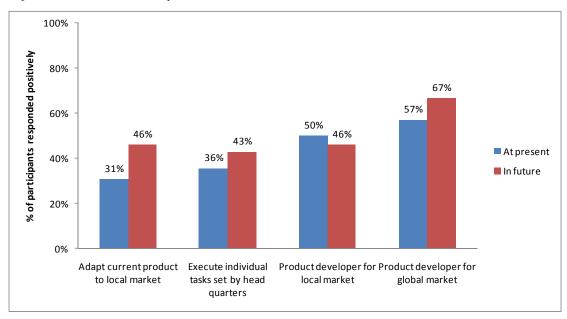


Figure 10: Role of German R&D unit

When asked about the current role of the German R&D unit the participants responded that they are more of product developers for German and global market It is also interesting to note that these R&D units intend to strengthen their role as product developers for the global market.

#### *R&D collaborations:*

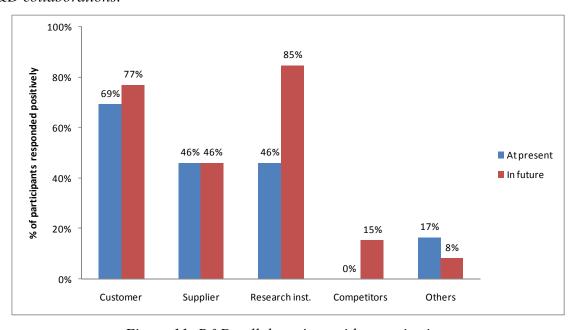


Figure 11: R&D collaborations with organizations

To understand the linkage effect on the Indian investments in Germany, the participants were asked about their R&D collaboration with other organizations in Germany. 69% of the participants responded that they have collaborations with their customer and they have plans to work even closer. When asked about their cooperation with research institutes including universities, 46% of the respondents already work with these institutes and 85% of the participants mentioned that they want to have collaborations with them. During direct interview with two participants in Hamburg, both of them showed interest to co-operate with the universities on their current projects and also interested to offer small projects to the students in these universities.

#### *Technology transfer:*

In a foreign direct investment, it is of great interest to note which country is the technology receiver. To understand the aspect of technology transfer between the parent firm in India and their German subsidiary, participants were asked about the process and product technology transfer between the two.

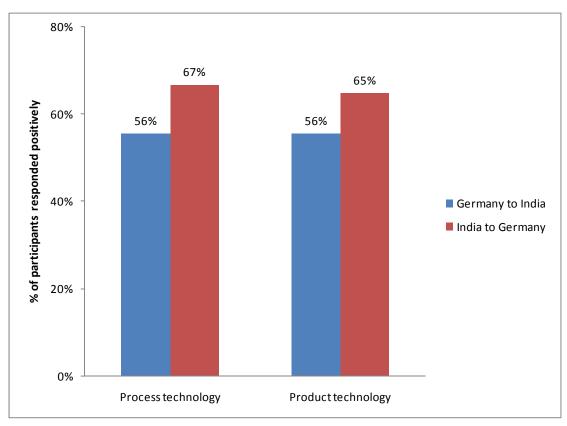


Figure 12: Technology transfer between the Indian parent firm and the subsidiary in Germany

Process technology includes the production and organization techniques and the product technology include the design aspects of the products. 56% of the participants responded that there is a process and product technology from Germany to India. It is interesting to note that there is more positive response from the participant about the technology transfer from India to Germany. 67% responded that there is a process technology transfer and 65% to product technology transfer from India to Germany.

## **Challenges**

One main objective of this study was to get to know the problems the Indian subsidiaries face during the investment process and in every day operations. To understand this, a set of issues was identified from the literature and from the discussion with the experts. These were listed in the questionnaire and the participants were asked to evaluate their impact. They also had the option of mentioning additional factors.

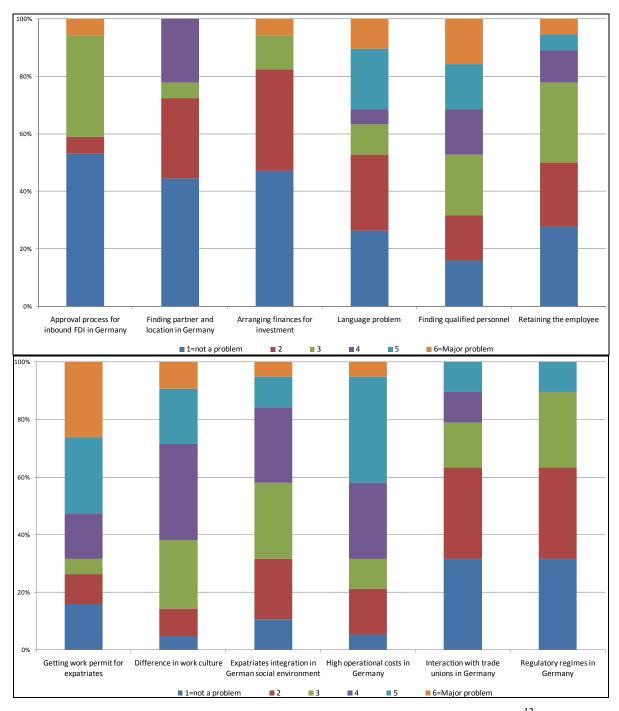


Figure 13: Challenges faced by the Indian subsidiaries in Germany 12

Analyzing the responses from the participants it can be understood that the problem of concern (rated 4 and above) are getting the work permit for their expatriates, difference in work culture and the language. One of the survey participant mention that his firm gives their expatriates training in German work culture and an introduction to the German language before sending them to Germany. One expert also mentioned that after acquisition of the

\_

<sup>&</sup>lt;sup>12</sup> The total participants in this survey are 21, but some participants didn't give their opinion for all the factors.

German unit, managers from German and Indian subsidiary were trained in Germany on the cross-cultural aspects. Rising operational cost in Germany and finding qualified persons is sometimes mentioned as factors of concern. One participant from Energy sector mentioned that his firm faced problem in finding qualified person due to the fact that the Indian companies are not much known in Germany and there is a lack of qualified applicants. It is interesting to note that the approval process for investment and the regulatory regime in Germany were not mentioned as major concerns by the participants.

## **Future plans**

The participants were asked about their medium-range plans (next 2-3 years), especially regarding expansion plans, the mode of further investment and the budget. 19 out of 20 participants said they want to expand in Germany in the next 2-3 years time frame.

#### Investments in operations:

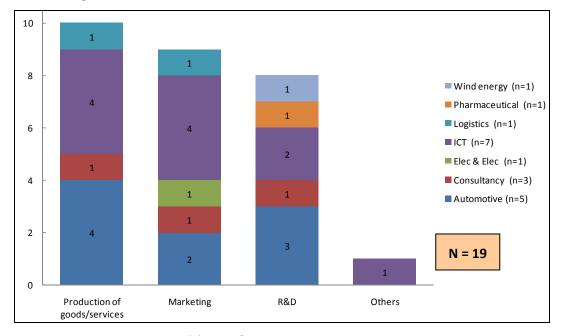


Figure 14: Further investments in operations

The responses show that the participants want to invest significantly in their production, marketing and R&D. One participant mentioned plans to invest in improving client relationship in Germany. 4 out of 5 participants from the automotive sector said that they want to expand their production facilities in Germany and 3 out of 5 would like to invest further in their R&D. Firms in ICT sector would like to ramp up their production capacities and marketing operations. This is a clear sign that the firms in general are satisfied with their operations in Germany and would, therefore, like to expand further.

# Size of further investment:

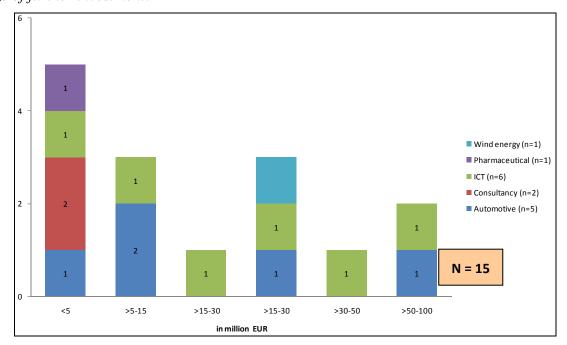


Figure 15: Expected volume of further investments

## Mode of further investment:

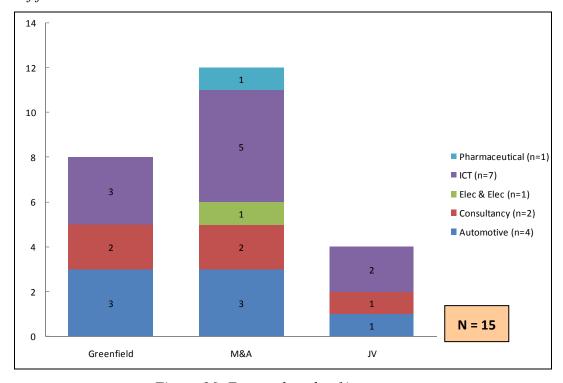


Figure 16: Expected mode of investment

When asked about the expected mode of further investments, mergers and acquisitions stood as the preferred choice. 3 out of the 4 respondents from automotive sector have plans to do

M&A and greenfield investments. Among ICT firms, apart from making greenfield investments, one very interesting trend to notice is their quest to do further investments via M&A. 5 out of 7 respondents would like to do M&As in Germany.

# **Conclusions & summary**

From the survey, it can be understood that Indian firms are involved in production and R&D in Germany and would like to invest further to strengthen their marketing and R&D activities.

Most participants in the survey mentioned that they have achieved their primary motive for investing in Germany and would like to make further investments in the next 2-3 years. This will be a great motivation for the other Indian firms to consider investing in Germany. Many more acquisitions from ICT sector can be expected in future.

#### **Project Team**



Dipl.-Kfm. Rajnish Tiwari

Project Leader, Research Project Global Innovation

Institute of Technology and Innovation Management

Hamburg University of Technology (TUHH)

Schwarzenbergstr. 95

D-21073 Hamburg, Germany

Tel: +49 - (0)40 - 428 78 - 37 76

Fax: +49 - (0)40 - 428 78 - 28 67

E-mail: tiwari@tuhh.de



Jayachandran K. Mani, M.Sc.

Hamburg University of Technology (TUHH)

(with TUHH at the time of conducting this survey; since Jan. 2009

has joined Pleyma GmbH, Hamburg)

Tel: +49 176 2482 5804

Email: kandiappanmani@yahoo.com