



Indian Investments in Germany

Prospects for Shared Prosperity



Confederation of Indian Industry



| BertelsmannStiftung

Indian Investments in Germany

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Bertelsmann Stiftung, Ernst & Young GmbH, Confederation of Indian Industry (CII)

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From the editors' desk

The Bertelsmann Stiftung and EY Germany are both active in building a strong relationship between India and Germany. EY's India Competence Center, together with its German and India Business Networks, focuses on the business relationship between the two countries, whereas the Bertelsmann Stiftung's Germany and Asia program looks at the socioeconomic impact of this relationship. In the second half of 2016, these organizations initiated the project on Indian investments in Germany, supported by the then-Indian ambassador to Germany, Shri Gurjit Singh and the Confederation of Indian Industry (CII) as a cooperation partner.

Numbering among the seven largest economies in the world, India's rate of GDP growth is expected to grow steadily by more than 7% per annum. Germany has been a strong trading and investment partner for India over several decades, with some of its traditional firms having a presence in India for more than a century. Given the fact that Germany and India complement each other in terms of human capital, size of market and technological development, it is unsurprising that firms in both countries are active in each other's markets.

As India's economy grows, its firms are expanding into international markets – not only to increase their global market share, but also to gain access to the latest technologies. Germany, with its high-tech economy, robust infrastructure, stable political and policy environment occupying a central position in Europe, offers Indian firms an attractive location for both greenfield investments and takeovers. Indian companies have expanded into Germany and have made several targeted acquisitions there and elsewhere in Europe. Most of these investments and acquisitions have taken place without attracting much media attention in Germany.

The statistics on these investments have been sketchy in terms of both regular coverage as well as comprehensiveness of data. This study aims to bridge this gap by answering the following questions: Why are Indian firms expanding into Germany? What are the patterns of Indian investments in the country? What are the sectors that attract investments? What do Indian CEOs identify as challenges to building their presence in Germany? What are the critical factors to consider when expanding into Germany and ensuring success?

The study presents thoroughly researched data from the last seven years and qualitative inputs provided by in-depth interviews with the CEOs of leading Indian companies active in Germany. We hope to portray an overall picture of both the sectoral and geographic spread of Indian investments in Germany while providing a list of the factors critical to the successful integration of Indian companies in the German business landscape. Attention has also been paid to relevant topics like the impact of Brexit, Indian private wealth in Germany as well as succession planning and acquisitions in the German Mittelstand. Recommendations for improving the investment climate and lowering entry barriers are laid out for policymakers as well as cities targeting such investments.

We hope that stakeholders in business, politics and academia find this report helpful and that it contributes to an improved understanding of how best to work with one another across national, geographical and regulatory boundaries. India and Germany have a highly complementary economic relationship, and every step taken to realize this potential is a win-win for Germany and India alike.



Murali Nair

Senior Project Manager
Bertelsmann Stiftung



Hermann Mühle

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Foreword

I am delighted to present the “Indian Investments in Germany: Prospects for Shared Prosperity” study that has emerged through a partnership between the Confederation of Indian Industry (CII), Ernst & Young, and the Bertelsmann Stiftung. This study has done much to enhance Indo-German trade and industrial cooperation.

Providing a comprehensive overview of Indo-German business relations and an in-depth analysis of key sectors for India’s economic presence in Germany, this study offers a thorough understanding of the strategic issues regarding Indian investment in Germany. These include the long-term objectives and market entry strategies for investment in Germany, their key drivers and success factors, their underlying economic and political incentives, and the cross-cultural issues and challenges faced by investors.

The results of the study show clearly that most Indian investors, drawing on past experience with overseas expansion, value strong professional advisory services that facilitate market entry and help investors overcome the challenges they typically encounter. In another key finding, the study shows that Indian investors are reticent to engage in reckless low-valuation acquisitions and prefer to engage in serious due diligence before investment decisions are made.

The summary results with recommendations will hopefully help potential Indian investors, the German government and the Government of India improve the economic and business environment in both countries more generally as they support future bilateral investment activity in particular.

On behalf of the CII, I wish to thank our esteemed partners, Ernst & Young, and the Bertelsmann Stiftung while also extending my sincere thanks to all the industry associations and German and Indian companies, government bodies, academic and financial institutions for their inputs that are reflected in the study.

It is my hope that our collective efforts will, in the coming years – particularly in the context of Brexit which will make Germany an important gateway to Europe – enhance India’s economic footprint in Germany.



Mr. Chandrajit Banerjee
Director General
Confederation of Indian Industry

Executive summary

1 In 2016, Europe was the second-largest market in the world, with a GDP of \$12 trillion. Germany represented \$3.5 trillion of this total. Some 17% of India's total outward foreign direct investment (FDI) projects in Europe flowed to Germany between 2010 and Q1 2016, as compared to 46% targeting the United Kingdom. The upcoming Brexit event will increase Germany's importance as a gateway to Europe in the future.

2 An analysis of around 80 leading subsidiaries of Indian companies operating in Germany indicates that four sectors account for 97% of India-related revenues within the Federal Republic. At 40% of the total, the metals and metal-processing industry is the strongest such sector, followed by the automotive industry (29%), the chemical and pharmaceutical industry (19%), and the professional, scientific and technical services sector (9%).

3 In the current trend of Indian-led FDI and M&A, sectors such as metals and chemistry hardly play a significant role. Instead, the automotive sector, together with mechanical engineering and other high-tech fields such as Industry 4.0 or IoT, are playing an increasingly important role in acquisitions and the founding of new firms. These developments are driven largely by the desire to gain access to German technology. Increasingly motivated to access the German market, the traditionally important Indian service industry is strongly represented in new acquisitions and greenfields in both IT services and software. In addition, the pharmaceutical sector remains highly attractive, placing Germany at the top of Indian investors' shopping lists or founders' destinations.

4 Indian investors appreciate Germany's high-quality infrastructure, transparency (low level of corruption), favorable R&D and innovation environment, political stability, and the workforce's high skill and educational levels.

5 A total of 83% of German Mittelstand (small and medium-sized) companies do not have a succession plan in place. As of 2015, more than 40% of company owners in this economic strata were 55 or older. A total of 9% of companies envisioned succession taking place within the controlling family, but 8% or around 290,000 owners expected external succession by 2018. This represents a huge potential for Indian investors.

6 Key drivers for Indian investment in Germany include the desires to develop new markets, improve company reputation, gain access to technology, establish proximity to customers, gain new impetus for innovation, and use Germany as a gateway to Europe.

7 Perceived challenges in Germany include the high competition intensity, difficulties in the search for business partners, the high cost of international activities, the need to adapt products and product quality, and exchange-rate risks.

8 “Soft” factors such as quality of life, knowledge about German culture and language, and safety concerns are not perceived to be challenges. Especially for Indian expatriates who have already lived in the United States, the United Kingdom or other European metropolitan cities, the high quality of life at affordable prices is seen as a strong positive factor. There is a growing Indian community in Germany, and it is possible to communicate in English in large parts of Germany. Finally, German public-safety standards are among the highest in the world.

9 The most important success factors for Indian investment in Germany are identified as a suitable go-to-market strategy followed by cooperation with the right local partners, along with preparation for the investment through the establishment of appropriate contacts and by training the investing partner’s own personnel. In addition, increased in-house research activities is considered critical. Further success factors include support by experienced high-quality service providers for critical tasks such as the search for acquisition targets and regions; understanding relevant laws, tariffs and modes of dealing with authorities; the search for partners; and performing market and competitive analyses.

10 Many previous Indian investments were driven by a focus on low costs, leading to the acquisition of distressed enterprises. In these cases, prices paid were often still too high, and the new owners were unable to turn the companies around. This led to the circulation of bad news about investments in Germany, undermining Germany’s reputation as a destination for Indian investment. Today, however, most Indian investors have gained experience with expansion abroad, and are no longer focused solely on perceived bargains.

Introduction and approach

Context

The liberalization of the Indian economy in 1990 triggered a global expansion among Indian companies that initially targeted countries such as the United Kingdom and the United States. Since 2005, however, this has increasingly also included Germany. As a high-tech industrial leader, Germany today numbers among India's 10 top trading partners, with accumulated FDI by Indian companies in Germany exceeding €6 billion.

Germany and India have shared a sustained bilateral relationship for many decades. In the year 2000, the two countries took a decisive step toward greater bilateral cooperation by signing the Agenda for Indo-German Partnership in the 21st century. This was followed by a Joint Statement on the Further Development of the Strategic and Global Partnership between Germany and India in 2007. The 2011–2012 year was celebrated as the Year of Germany in India. Since 2011, bilateral intergovernmental consultations (IGCs) have been held every two years, the latest one being organized in Berlin in May 2017.

Approach and methodology

This study combines insights from expert interviews with existing economic data. This approach enables the development to get an integrated picture that combines economic reality as expressed by robust facts with the personal perceptions of key stakeholders – in this case, Indian investors.

Interviews were conducted with CEOs and managers responsible for strategic expansion at 32 Indian companies that either are already operating in Germany or plan to be there in the future. The aim was to obtain C-level perceptions of Germany's potential and its attractiveness for investment, as well as expected barriers.

In-depth workshops were conducted with key figures from Indian and German government bodies, academia, financial institutions, companies and industry associations. This helped to create a competent and diverse sounding board to interpret the primary data and market facts.

The study identifies sectors that have been most attractive to Indian investors, and draws conclusions as to how the German and Indian governments and other stakeholders can improve the economic and business environment in general, and support future bilateral investment activity in particular.

The first part of this study gives an overview of Indo-German business relations. It summarizes trade-related figures as well as FDI and M&A statistics before then exploring the Indian economic footprint in Germany more deeply, primarily in terms of investment activity. The second part provides an in-depth analysis of major focal sectors for Indian investors in Germany, with the aim of offering guidance to potential future investors. The third part introduces the results of the survey conducted for this study. The goal was to explore Indian investors' motivations in expanding their operations to Germany, identify perceived challenges experienced in the process of doing so, and derive lessons in the form of potential success factors.

1 Indo-German business relations

Indian companies are increasingly integrating into the world economy. Private and public enterprises are developing new markets by exporting directly to these markets, establishing new subsidiaries, creating joint-venture alliances or acquiring foreign companies. In parallel with these strategic investments, private individuals and wealthy families are increasingly regarding foreign countries as attractive destinations for private-wealth portfolio investments. Thanks to its political and economic stability, technological leadership and high degree of public security, Germany has become one of the most attractive investment destinations worldwide, ranking at 4th place in the A.T. Kearney Foreign Direct Investment Confidence Index in 2016,¹ ahead of the United Kingdom (5th place), holding its highest position in 14 years.

These developments have been backed by robust economic growth in the Indian domestic market, which has enabled companies to look abroad for further sales potential and proximity to customers, as well as for opportunities to benefit from technologies and raw materials available in the target country. Winning access to these goods in turn allows Indian companies to better serve the home market, secure production networks, and improve India's R&D and innovation capabilities.

In this chapter, we will first examine global, Indian and German economic developments, and then narrow the focus specifically to Indo-German trade relations. This will be followed by an analysis of Indian FDI within Germany and an examination of Indian-initiated mergers and acquisitions in Germany, as Indian investment in Germany encompasses both categories. Finally, the Indian economic footprint with regard to companies already operating in Germany will be analyzed through a closer look at factors such as revenues, employee numbers, key sectors and geographic locations.

1.1 Germany and India in context

Global focus: Multipolar world

The global economy is transforming into a multipolar world increasingly less dominated by developed countries. In this new environment, future business decisions by emerging-market entities are receiving new attention. Growth rates in India, China and the ASEAN-5 region (consisting of Indonesia, Malaysia, Philippines, Thailand and Vietnam) continue to outpace those in mature economies (see Figure 1). These emerging countries are already large markets for consumer and investment goods, due both to the size of their populations and the favorable framework conditions that foster successful economic activity (see Table 1).

TABLE 1 GDP and population 2016

| | GDP (trillion USD) | Population (million) |
|----------|-----------------------|-------------------------|
| Eurozone | 12.0 | 339.9* |
| Germany | 3.5 | 82.6 |
| UK | 2.6 | 65.6 |
| India | 2.3 | 1309.7 |
| ASEAN-5 | 2.1 | 556.3 |
| China | 11.4 | 1379.0 |
| US | 18.6 | 324.0 |

IMF (2016), based on current prices | *Eurostat

¹ AT Kearney (2016)

Unique forces shaping the future

In the years since the 2008 economic and financial crisis, recovery in global growth has been both subdued and volatile, making predictions difficult. This trend has continued through the present, though unique developments in 2016 will shape the course of future events.

One such development is the upcoming Brexit, produced by UK citizens' decision in a 2016 referendum to leave the European Union. It remains impossible today to forecast the precise impact of this historic decision on the European Union and on the world as a whole. In November of the same year, U.S. citizens elected Donald Trump as their president. The implications of this election, of the agenda promoted during the exceptional pre-election campaign, and of the first steps of the new U.S. administration are similarly unforeseeable, and thus contribute to further uncertainty regarding prospective global developments. Furthermore, recent efforts to rebalance China's economic drivers away from exports and more toward domestic demand have already affected global trade patterns and thus worldwide economic development.²

Global growth sustained by emerging markets

Despite these developments, global growth is expected to gain momentum in 2017 and onward. In early 2017, the International Monetary Fund (IMF) projected a worldwide growth rate of 3.4% for 2017 and 3.6% for 2018, up from 3.1% in 2016. This growth is expected to be sustained predominantly by emerging and developing markets, with two specific factors playing a role here. First, several countries in deep recessions, including Russia and Brazil, are experiencing a gradual renormalization of macroeconomic conditions. Second, the increasing weight of fast-growing emerging and developing countries within the world's total economic activity is leading to a global improvement.³

India as important future source for global investment

In recent decades, India has demonstrated an ability to grow rapidly, even though it still trails China, its emerging-country counterpart, by a significant amount. Key economic indicators show positive developments particularly with regard to

inflation, budget deficits and currency stability over the past few years. The average annual rate of consumer-price inflation decreased from 9.4% in 2013 to 5.5% in 2016. In the same period, the deficit as a percentage of potential GDP improved from -7.5% in 2013 to -6.7% in 2016, indicating effectiveness and efficiency gains in government spending.⁴

The ruling Bharatiya Janata Party (BJP) under Prime Minister Narendra Modi was recently able to win elections in the important and most populous Indian state of Uttar Pradesh, thus stabilizing the party's power. The ongoing liberalization of FDI in the context of the "Make in India" campaign, along with tremendous investments in infrastructure and technology with initiatives supporting the internet of things, smart cities and start-ups more generally, the expected growth rate of 7.2% in 2017 is based on a solid foundation with additional potential even available (see Figure 1).

Developed countries still stability anchors

Despite the world's increasing multipolarity, developed countries remain stability anchors, thus proving their continuing relevance. Specifically, Germany showed stable growth based on a strong export sector and increased domestic demand, in part due to increased government spending on refugees. This latter factor was possible precisely because of Germany's stability, including that of the *Mittelstand* as the country's economic backbone, which has allowed for the provision of outstanding humanitarian support.

Germany's current-account balance stood at a staggering 8.6% in 2016, a sign of the economy's extraordinary competitiveness.⁵ GDP growth rates have also proved stable, despite the uncertainty produced by last year's Brexit referendum results. The overall economic situation has produced a robust labor market characterized by an unemployment rate of around 3.8% in January 2017, the lowest such rate in the eurozone and the second-lowest in the European Union.⁶

On the EU level, stability has been boosted by elections in the Netherlands and France that offered hope that right-wing populists may not erode the basis for a strong European economic development.

² IMF (2016)

³ IMF (2017a)

⁴ IMF (2017b)

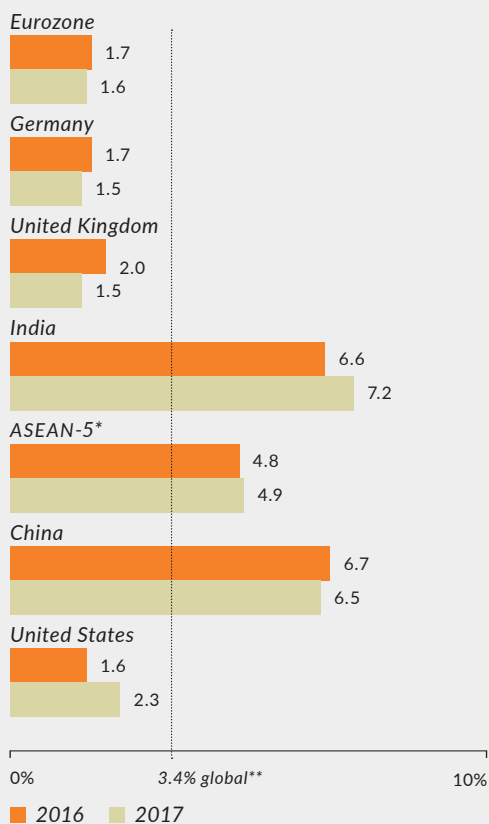
⁵ IMF (2017c)

⁶ Eurostat (2017)

For all of these reasons, Germany and India are natural partners with regard to future developments in trade, investment, innovation and cultural exchange in both directions.

This report primarily analyzes such exchanges in the India-to-Germany direction, offering a different perspective on Indo-German business relations, which are usually observed from the Germany-to-India standpoint.

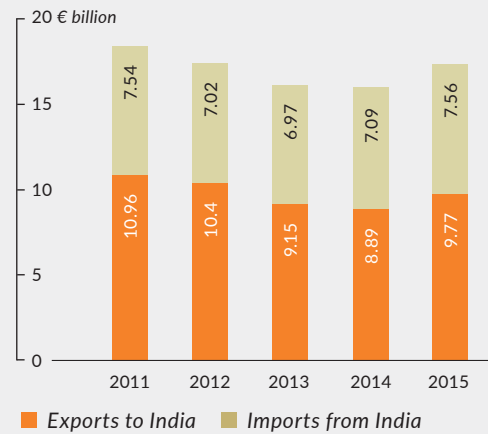
FIGURE 1 Forecast GDP growth rate, 2016/2017 (in percent)



* Indonesia, Malaysia, Philippines, Thailand, Vietnam
 ** World projected GDP growth rate 2017

IMF (2017)

FIGURE 2 German merchandise trade with India, 2011 to 2015



Destatis (2016)

Indo-German trade relations

On an EU level, Indo-European trade totaled €77 billion in 2016, down from its 2011 peak of around €80.6 billion. Nevertheless, Indo-European trade has stabilized on a high level as compared to its value of €46.9 billion in 2006 or €68.4 billion in 2010. In 2016, India was the EU-28's ninth-most-important trade partner.⁷

Germany specifically is India's most important EU trade partner, ranking sixth among the country's global trade partners as a provider of goods and services. In turn, India is Germany's 25th most important trade partner, ranking 28th in the area of imports and 27th for exports. The total bilateral volume of trade in merchandise and services amounted to €22.1 billion in 2015, slightly down from €22.3 billion in 2011, but remains on a high level.

Indo-German trade increased significantly after the implementation of reform policies in India in the 1990s, yet underperformed from 2011 to 2014.

Trade in merchandise

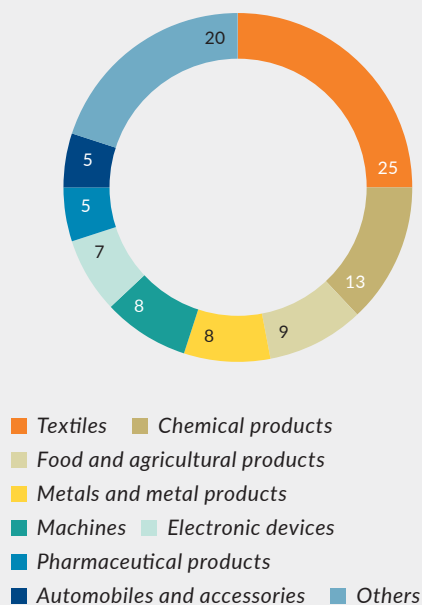
Total merchandise trade values decreased from around €18.4 billion in 2011 to €16 billion, with exports to India decreasing more than imports from India (see Figure 2). Following this decline, trade in merchandise regained momentum, totaling €17.3 billion in 2015 and €17.4 billion in 2016. With regard

⁷ European Commission (2017)

to merchandise trade with India, Germany has consistently shown a surplus in recent years.⁸

Almost one-third of German exports to India are machinery and engineering goods. Further export goods include electronic components, metal and chemical goods, and automobiles and automotive components. By contrast, textiles account for the largest share of imports from India, amounting to around 25% of the total in 2015 (see Figure 3). Chemical products ranked second, with a 13% share, followed by food and agricultural goods, at about 9% of total imports.

FIGURE 3 Merchandise imports from India by sector, 2015 (in percent)

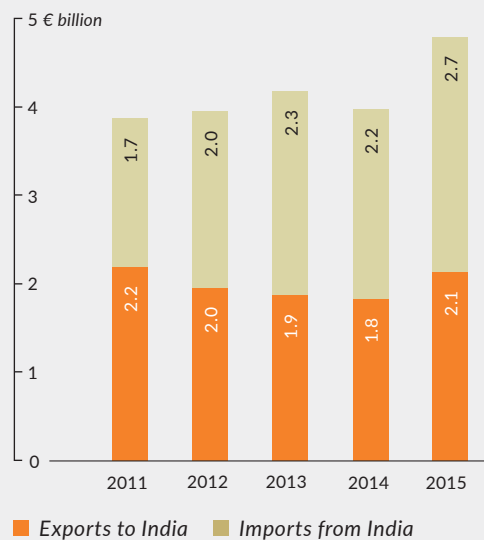


Destatis (2016)

Trade in services

The development of Indo-German trade in services shows a different picture. With 2014 as an exception, trade volumes increased steadily from around €3.9 billion in 2011 to €4.8 billion in 2015 (see Figure 4). In contrast to merchandise trade, India has shown a trade surplus in services with Germany from 2012 onward, with this surplus totaling around €0.5 billion in 2015. This is in line with India's strong position in the services field, especially in the business-process outsourcing (BPO) and IT services

FIGURE 4 German services trade with India, 2011 to 2015



Destatis (2016)

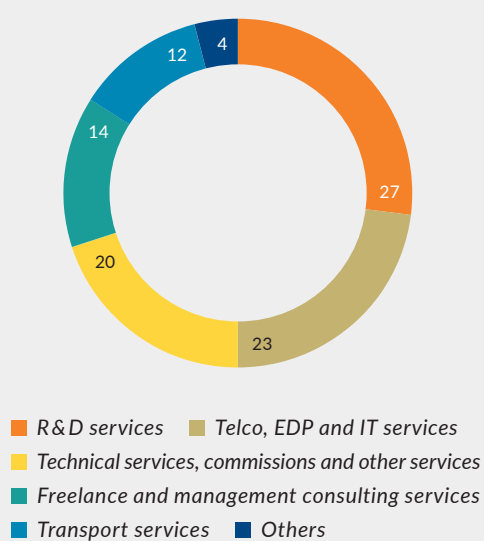
Also in 2015, around 39% of German service-sector exports to India were transport services, followed by electronic data-processing (EDP) services with a share of about 22%. This illustrates Germany's strength and world leadership in the logistics sector.

R&D services, with a share of around 27%, are the most significant sector for imports from India, followed by telecommunications, EDP and IT services, which have a collective share of about 23%. Together, these two sectors account for around half of all services imports from India to Germany (see Figure 5). India thus supports Germany in sectors that are crucial for future development and competitiveness as a high-tech location (see "Hot topic: Indian professionals in Germany," page 30).

⁸ Destatis (2016)

As can be seen, Indo-German trade plays a substantial role in Indo-German business relations. Nevertheless, examining trade alone does not produce a complete picture of the relationship between the two countries. The next chapter will describe and analyze investment flows in the form of FDI and M&As, focusing again on the India-to-Germany direction.

FIGURE 5 Services imports from India by sector, 2015 (in percent)



Destatis (2016)

1.2 Indian investment in Germany

Since 2010, nearly 140 major investment projects by Indian companies have been initiated in Germany. This includes all major FDI announcements through Q1 2016, as well as major completed mergers and acquisitions through Q1 2017 – the most accurate picture available with data current as of the time of writing.

It should be noted that true cross-border and investment-flow figures might be different, as many companies route investments through third countries in order to benefit from regulations affecting these other jurisdictions. Thus, the actual number of Indian-led FDI projects and M&A deals might be higher.

FDI includes new investments, new co-location projects, and any expansion of existing locations. It does not include mergers, acquisitions or joint ventures unless these result in new facilities and new jobs created. It is therefore possible that an M&A deal could simultaneously qualify as an FDI project. Figures on the number of jobs created by Indian-led investment projects are available for about 57% of projects in Europe and around 36% in Germany. The M&A category includes publicly disclosed and undisclosed completed deals regarding deal values with bidders originating predominantly from India and targets predominantly within Germany. Some deals may not be recorded here due to immaterial size.

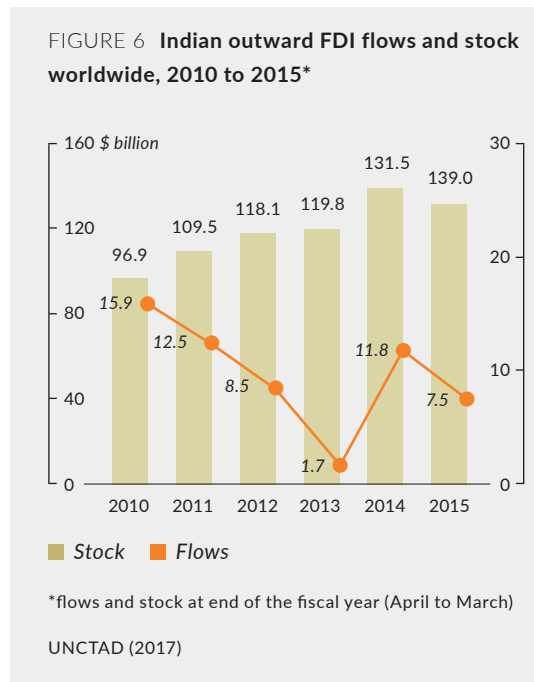
During the specified time period, several joint ventures were established especially in the IT sector that later resulted in a full takeover by the Indian business partners, thus representing successful examples of Indo-German cooperation. These are detailed in the M&A section below.

Indian FDI worldwide

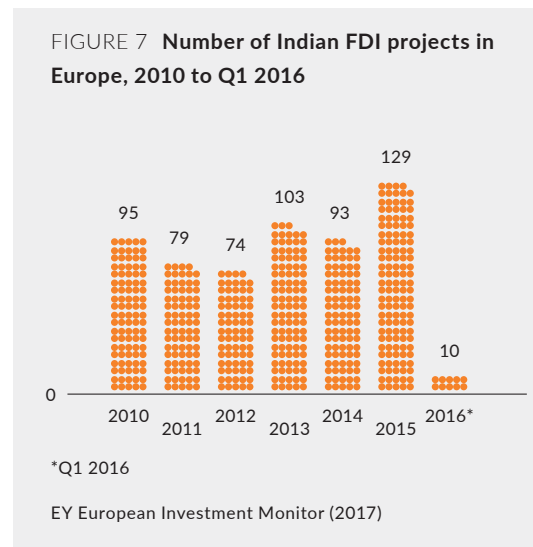
Indian outward FDI flows showed some retreat in recent years, in 2013 reaching their lowest levels since the easing of outward FDI regulations in India in 2002. The worldwide total decreased from \$15.9 billion in FY 2010 to just \$1.7 billion in FY 2013 (see Figure 6). Despite this development, India possesses a tremendous cumulative stock, amounting to \$139 billion at the end of FY 2015. The significance of this figure is even more evident given that outward FDI stock stood at less than \$1 billion at the end of FY1998.⁹

⁹ UNCTAD (2017)

However, India's FDI outflow stock as a percentage of GDP is still relatively low (6.3%) in comparison to developed countries like the United States (36%), Germany (41%), the United Kingdom (54%) or Japan (25%).¹⁰



Between 2010 and Q1 2016, parent companies originating from India announced around 583 FDI projects in Europe. Looking at annual numbers since 2010, it can be observed that the annual number of new projects reached a peak in 2015 with 129, after a decline from 2013 to 2014 (see Figure 7). This decline is likely attributable to the tense economic situation in India during that time, which was characterized by general economic uncertainty before Prime Minister Modi came into power in 2014.



UK and Germany top destinations for Indian FDI

On a country level, the United Kingdom was able to attract by far the highest number of FDI projects during this period, with a total of 265 projects. This encompasses around 45.5% of all Indian projects in Europe (see Figure 8). In this regard, the United Kingdom offers particular benefits deriving from its use of the English language as well as its role as a gateway to the rest of Europe, a function valued by many Indian companies. While it trails considerably, Germany is the second-most-attractive European country for Indian investors, with around 96 projects or a share of about 16.5% of the whole.¹¹ Together, the UK and Germany account for almost two-thirds of all Indian FDI undertakings in Europe, highlighting the attractiveness and importance of these countries as destinations for investments.

Jobs created by Indian investors

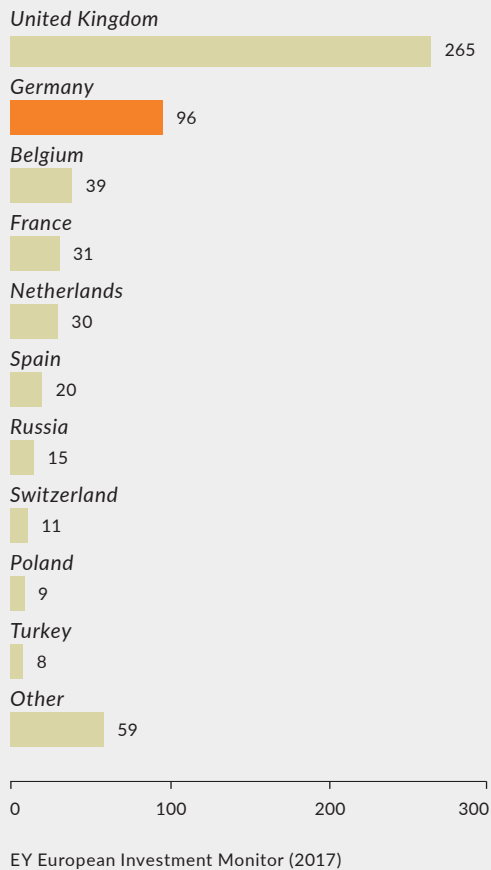
During the same period, a total of 33,900 jobs were created by Indians investing in Europe. The largest portion of these were in the United Kingdom, where 21,029 jobs were created, for a share of around 62%. Trailing significantly behind were the Eastern European countries of Slovakia, Hungary and Poland, where a respective 2,800, 1,975 and 1,615 jobs were created.

Although Germany was Europe's second-most-attractive country in terms of the number of Indian-led FDI projects, only 1,330 jobs were created here during the reviewed time period. This

¹⁰ UNCTAD (2015)

¹¹ EY European Investment Monitor (2017)

FIGURE 8 Top-ten European countries by number of Indian FDI Projects, 2010 to Q1 2016



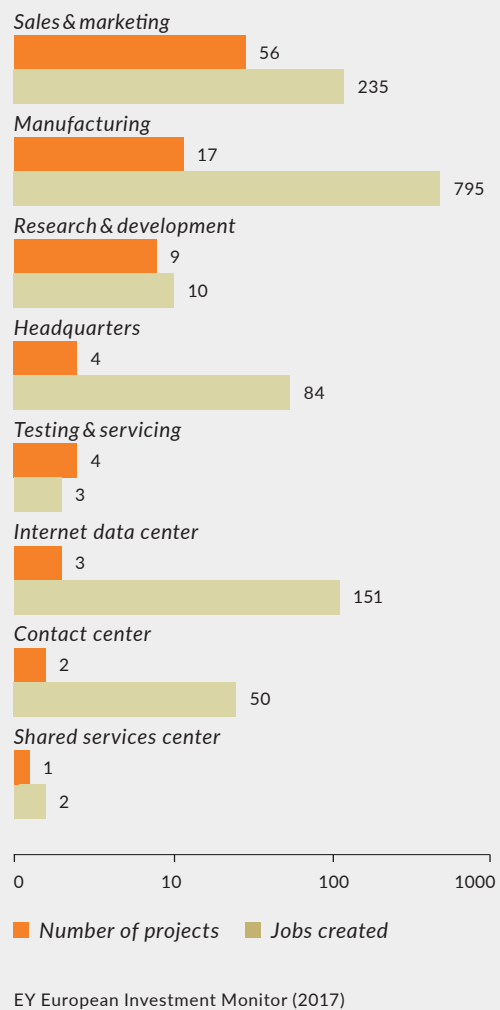
bolsters the notion that the number of FDI projects is not necessarily correlated with the number of jobs created. The Eastern European countries cited served as investment destinations primarily for labor-intensive business activities such as automotive-assembly facilities. For instance, the Tata Group is planning to open a new automotive-assembly plant for their Jaguar Land Rover division in Slovakia, with this alone responsible for the 2,800 jobs announced in that country. It can be assumed that the facility will primarily serve Western European countries via Eastern Europe, a role possible thanks to the European single market. However, it may also serve markets worldwide.¹²

Returning to Germany, it is apparent that most projects can be related to the establishment of local sales and/or marketing functions, which are not as

labor-intensive as manufacturing activities. A total of 56 projects, accounting for more than 58% of all projects conducted, involved the creation of sales and marketing offices. As a result, 235 jobs were created in this area, accounting for only around 17.7% of total jobs created by Indian-led FDI in Germany (see Figure 9). Additional FDI projects including the establishment of manufacturing activities, a category which included just 17 projects during the reviewed time period, but accounted for almost 60% of total job creation associated with Indian-origin FDI.

Almost half of all Indian-led FDI projects in

FIGURE 9 Indian FDIs in Germany per activity by number and jobs created, 2010 to Q1 2016



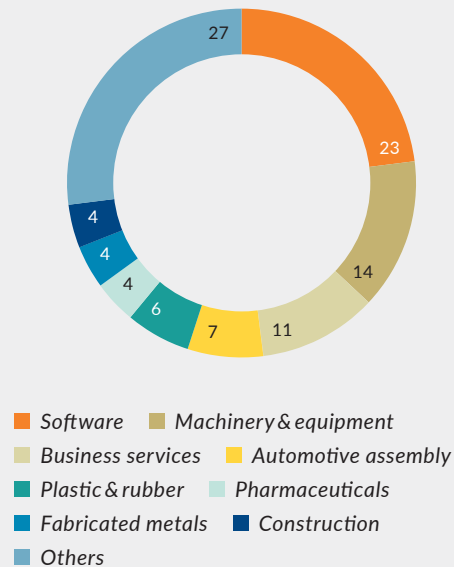
¹² Tata Motors (2016)

Germany took place in the software, machinery and equipment, or business services sectors, the latter predominantly comprising IT services (see Figure 10). The interest of Indian investors in the secondary sector becomes apparent when comparing the proportion of projects per sector in the rest of Europe. For example, only 3% of FDI projects in other European countries went to the machinery and equipment sector, as opposed to a share of 14% in Germany. By contrast, Indian investors in the rest of Europe were more likely to target the business-services sector, which drew a share of almost 20% Europe-wide as compared to an 11% share in Germany.¹³

Given the number of jobs created per project, investments in internet data centers, with more than 50 jobs per project, seem to be highly attractive from a German investment-policy point of view. (see Figure 9)

The largest relative shares of projects were announced in Hessen, North Rhine-Westphalia and Baden-Württemberg, which together attracted almost two-thirds of Indian-led FDI projects in Germany during the period being reviewed here (see Map 1).

FIGURE 10 Indian FDI projects in Germany by sector, 2010 to Q1 2016 (in percent)



EY European Investment Monitor (2017)



Hot topic | Brexit-related opportunities

On 23 June 2016, the citizens of the United Kingdom made a historic decision by voting 51.9% to 48.1% for their country to leave the European Union. The UK government invoked Article 50 of the Lisbon Treaty on 29 March 2017, thereby triggering negotiations on the terms of departure with the remaining 27 EU member countries.

A hard Brexit becomes more likely

The implementation of Brexit will be a complex process, and its modalities remain hard to predict. Current developments indicate the likelihood of a so-called hard Brexit, which means the United Kingdom would cut off most

¹³ EY European Investment Monitor (2017)

preferential ties with the European Union, which would include the loss of preferred access to the European single market.

FDI is vital to economic well-being in Europe; thus, the impact of Brexit on investment mobility and location decisions are crucial factors for companies and governments alike. For this reason, no matter how Brexit is ultimately implemented, investors are already experiencing uncertainty regarding their future business decisions, and are already developing alternatives aimed at mitigating possible harms.

In the EY European Attractiveness Survey, the continent's investors highlighted European instability as the number-one risk factor.¹⁴ However, despite the uncertain political and economic environment, around 56% of foreign investors said they planned to invest in Europe in the next three years – a sign of continuing optimism.

UK as top destination for FDI in Europe

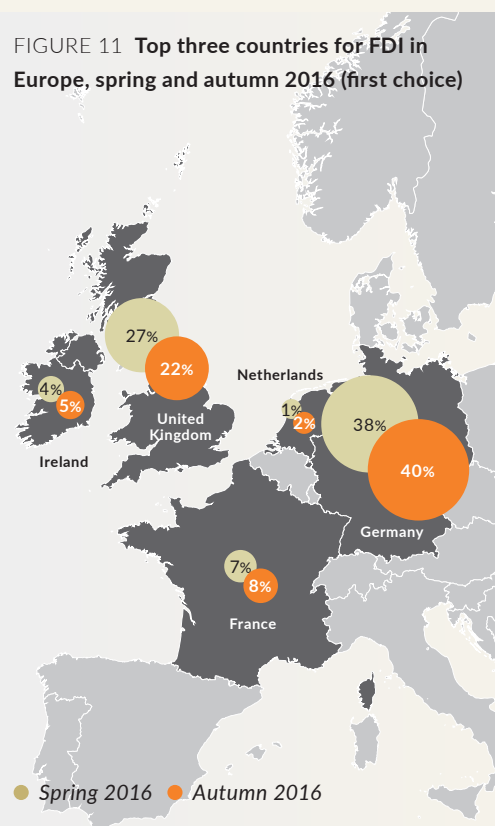
Historically, the United Kingdom has been the top destination for FDI in Europe, accounting for around 20.9% of all projects in 2015. Brexit is already having a tangible impact, however. Around 71% of foreign investors included in the EY survey report having already felt some effect from the EU referendum results in at least one of their European business areas, with sales, cost of purchases and operating margins particularly susceptible to this influence. It is therefore hardly surprising that Brexit figures among the top three concerns of foreign investors – identified by around 33% of survey respondents – and is especially worrisome among those with investments in the UK. Only about 15% of companies lacking operations in the United Kingdom mentioned Brexit as a risk.

Rethinking pan-European activities

In this regard, a process of rethinking pan-European activities and investments is already underway. A closer look at foreign companies already invested in the United Kingdom illustrates the changing attitudes toward the country as a location. Around 86% of foreign companies currently active in the UK have no plans to change or relocate their European operations in the next three years even if the UK is no longer part of the European single market. However, 14% of foreign companies active in the UK say they will change or relocate some activities if Brexit does take place.

This is a significant trend given the significance of FDI for the UK, where FDI stocks amounted to 49.4% of GDP in 2015, compared to 47.2% within the broader EU-28.¹⁵ Some

FIGURE 11 Top three countries for FDI in Europe, spring and autumn 2016 (first choice)



EY's European Attractiveness Survey (2017)

¹⁴ EY's European Attractiveness Survey (2017)

¹⁵ OECD FDI Stock (2017)

companies in certain sectors may need to relocate some operations to an EU-27 country in order to retain access to rights accorded only to EU companies. For instance, companies in the pharmaceutical sector may be forced to relocate in order to secure EU approval for some of their drugs. Similarly, companies within the highly regulated banking sector may need to establish an entity in the European Union in order to continue selling their products throughout the single market.

As noted in section 1.2, India also has a substantial stake in the United Kingdom when it comes to FDI. In this regard, the UK has benefited from its use of the English language as well as its function as a gateway to the European market. If this latter characteristic is removed, the pattern of Europe's FDI flows may start to shift. The UK might become a less attractive location for specific companies and operations.

Pre- and post-Brexit Attractiveness Survey results

A first indication of this prospective change is apparent when looking at the surveys conducted before and after the Brexit referendum in 2016. The UK Attractiveness Survey asked decision makers how they expected the country's attractiveness to change in the coming three years. In the spring 2016 poll, the proportion of respondents expecting improvement dropped to 36% from 54% in 2015. In the autumn 2016 poll, this share fell further to 29%, while the proportion of respondents expecting a decline doubled from 16% to 34% within six months. This is the highest level of pessimism recorded since these surveys began in 2004.¹⁶

As a comparable indicator, preference for the United Kingdom as a European FDI destination dropped from 27% in spring 2016 to 22% in autumn of the same year (see Figure 11). In this same time period, other European countries increased in attractiveness – especially Germany, whose attractiveness share rose from 38% to 40%, making it the most popular destination country for FDI at the moment. In this case, the country is attractive due to its strong economic performance as well as the fact that English-language skills are widespread.

Nevertheless, the United Kingdom's appeal might actually be strengthened for some companies, dependent on the return of stability and the evolution of public policies in the UK and throughout Europe. The UK still offers good governance, a flexible and skilled labor market, and tax-rate competitiveness, among other benefits, and London undeniably remains one of the most important global cities.¹⁷

In this study, survey participants supported the notion that Germany would become more attractive as an investment location, in this case from an Indian perspective.

Despite the perceived risks and general uncertainty, only 4% of the participants in EY's European Attractiveness Survey stated that they were well prepared regarding the changing regulatory and risk environment. This highlights Brexit's already significant influence on future investor decisions.

¹⁶ EY's European Attractiveness Survey (2017)

¹⁷ *ibid.*

Indian M&A in Germany

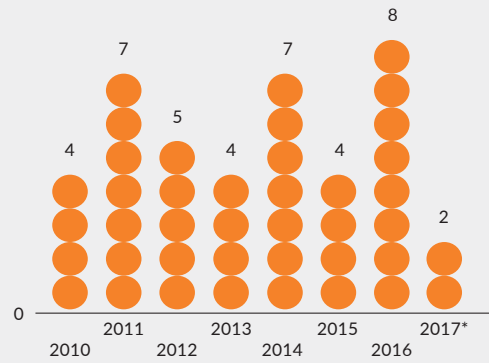
Along with trade and FDI figures, M&A activities indicate the extent of economic integration between countries and regions. Generally, most mergers and acquisitions take place within the developed world; however, emerging economies such as China and India are increasingly involved in such activities worldwide.

In 2016, Germany held a 9.9% share of all European M&A activity as measured by transaction value, behind the United Kingdom at 23.6% and France at 10.5%. The combined value of all 866 deals in Germany in 2016 was €72.2 billion. With regard specifically to M&A deals conducted by bidders from India, Germany has been the second-most targeted country in the EU, following the United Kingdom and before Italy, in terms of the number of completed M&A deals since 2010. Within the EU as a whole, Indian bidders have most often invested in the industrial products and services, automotive, business support services, pharmaceutical, and computer software and computer services sectors.¹⁸

Between 2010 and Q1 2017, a total of around 41 major Indian-led M&A deals took place in Germany. While the previously mentioned data-collection issues must be taken into account, Figure 12 depicts the distribution of Indian-led deals completed from 2010 to date, with an average of five to six major M&A deals per year. While no trend is detectable here, the years 2011, 2014 and 2016 mark deal-making peaks with seven deals or above. The combined value of all Indian-led deals for which information is publicly available was at least €852 million during this period.¹⁹

A sectoral analysis of major M&A deals completed between 2010 and Q1 2017 demonstrates Indian bidders' strong interest in the industrial products and services sector (encompassing sub-sectors including industrial machinery and equipment and metal production), which accounts for around 30% of all deals completed (see Figure 13). This is likely due in large part to a desire to acquire technology and gain access to customers, since Germany is considered a lead market in this sector. This notion is given further credence by an examination of Indian M&A activity in the rest of the European Union, in which the industrial products and services sector accounted for a share of only around 15%.

FIGURE 12 Number of major M&A deals, 2010 to Q1 2017

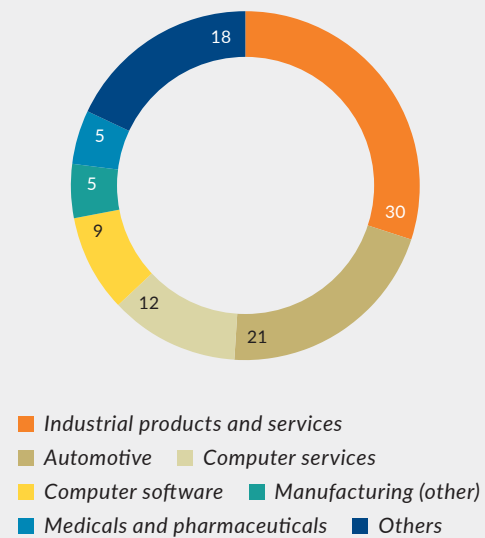


*Q1 2017

Mergermarket (2017)

FIGURE 13 Number of major M&A deals by sector, 2010–Q1 2017

(in percent)



Mergermarket (2017)

The automotive sector falls into second place among the German deals, with a share of around 21%. Notable deals include the €142 million acquisition of Peguform GmbH, a Germany-based company that supplies interior and exterior products for the automotive and related industries, by Motherson

¹⁸ Mergermarket (2017)

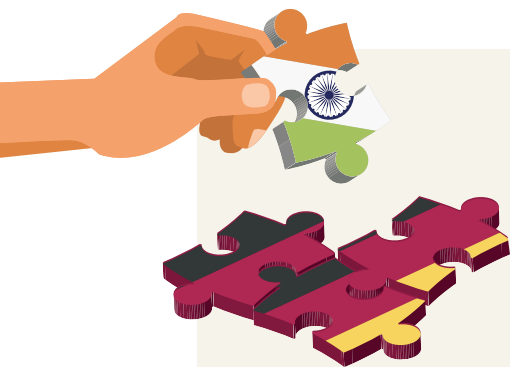
¹⁹ Mergermarket (2017)

Sumi Systems Ltd. in 2011, as well as the acquisition of Neumayer Tekfor GmbH in 2013 by Amtek Group. Indian investors also showed more interest in the automotive sector in Germany than in the rest of the EU, where the sector accounted for a share of only about 14% of all M&A deals.

Further sectors of focus include computer software and computer services, respectively with a 12% and 9% share (see Figure 13). A notable deal here was the 2016 acquisition of Cellent AG by Wipro Ltd. Cellent AG is a Germany-based company providing IT consulting and system-integration services, with more than 800 consultants and revenues of around €87 million in 2014. This acquisition was valued at around €73.5 million.²⁰ This specific acquisition appeared to be driven by the opportunity to gain access to customers; however, as

in the industrial products and services sector, deals in the computer software and computer services sectors are often also aimed at the acquisition of technology.

In many cases, Indian businesses alternatively sought to enter the German market initially through a partnership or joint venture. These have been particularly common in the software and IT services sectors. Starting as outsourcing efforts by German IT departments, these projects have frequently developed into joint ventures (JVs) that have allowed optimization of and innovation within existing IT structures. In many cases, these JVs were ultimately taken over by the Indian partners. One of the first such examples is the partnership between Deutsche Bank and HCL.



Hot topic | Opportunities in the Mittelstand

The German economy is characterized by a diverse economic landscape with a strong industrial base, especially in the country's south and west, where most "hidden champions" are located (see Figure 14).

Over 99% of all companies belong to the Mittelstand (small and medium-sized business sector) according to the German definition, which contributes to around 55% of the country's total GDP and around 18% of all export revenues. Furthermore, around 68% of all employees in Germany work for such companies, more than 95% of which are family-owned.²¹

Germany's Mittelstand produces leading-edge technology products on a global scale, with more so-called hidden champions – that is, a position in the top three firms in their respective market segment – than any other country. These companies are also typically characterized by a long-term business orientation, stable customer and employee relationships, and a strong regional bond.

Despite its apparent health, the German Mittelstand faces significant future challenges. Mittelstand companies are in a fundamental conversion phase due to demographic change among the owners. About 40% of owners of German Mittelstand companies were 55 years old or more in 2015, up from 38% in 2005 (see Figure 15). The growth in the share of owners 50 or over was

²⁰ Wipro Technologies (2015)

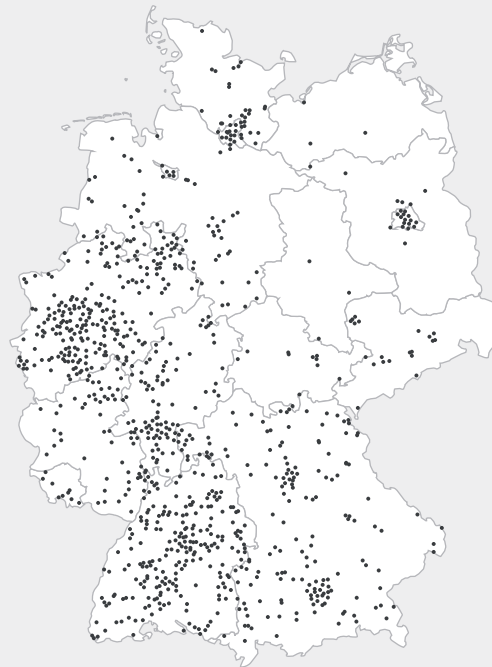
²¹ KfW (2016)

even more dramatic, with this proportion rising from 54% in 2005 to 60% in 2015. In the same time period, the proportion of owners under 40 years old decreased from 20% to 14%, indicating a slower inflow of young entrepreneurs.

About 620,000 companies reported in 2015 that they were planning for executive succession by 2018. Around 9% of all Mittelstand firms reported plans for an internal succession within the controlling family, while around 8% or approximately 290,000 companies envisioned an external succession, meaning sale to an investor, employee or enterprise acting as a strategic investor (see Figure 16).

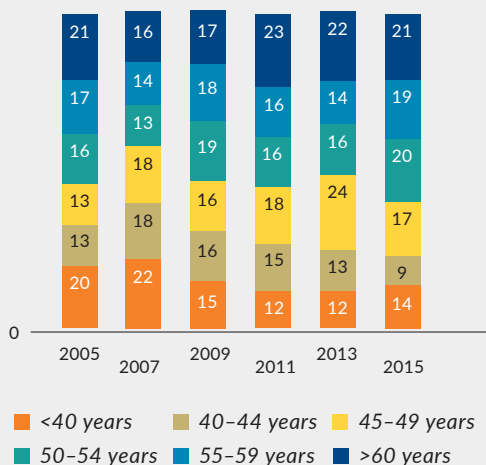
As this transformation is taking place, the number of entities interested in acquiring Mittelstand companies is decreasing in Germany, thus opening new opportunities for Indian investors seeking access to high-end technologies and new customers. The opportunities are particularly strong given that R&D-intensive Mittelstand companies have a disproportionately low share of young owners.²²

FIGURE 14 Location of “hidden champions” and market leaders in Germany, 2011



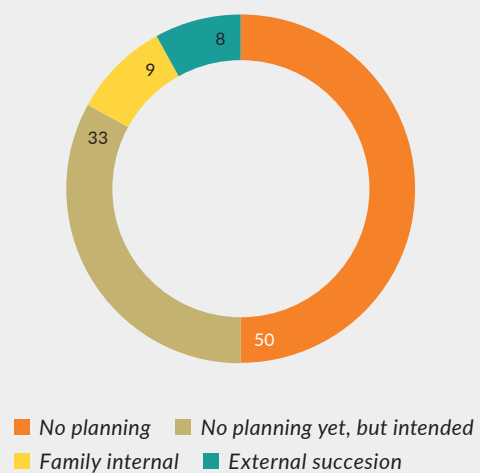
Leibniz Institut für Länderkunde (2011)

FIGURE 15 Age distribution of Mittelstand company owners, 2005 to 2015 (in percent)



KfW (2016)

FIGURE 16 Type of succession planned by German Mittelstand companies, 2016 (in percent)



KfW (2017)

²² KfW (2016)

MAP 1 Indian Foreign Direct Investments (FDI) and Mergers & Acquisitions (M&A) 2010–2016/17*

- Name of the Indian investor
year of the investment
- Major cities with more than three FDI projects or M&As
The larger the circle, the greater the number of projects
- Foreign direct investment (FDI) [until Q1 2016]
- Mergers & Acquisitions (M&A) [until Q1 2017]



* For cities and towns with more than three FDI projects or M&As, only the most recent two are shown.

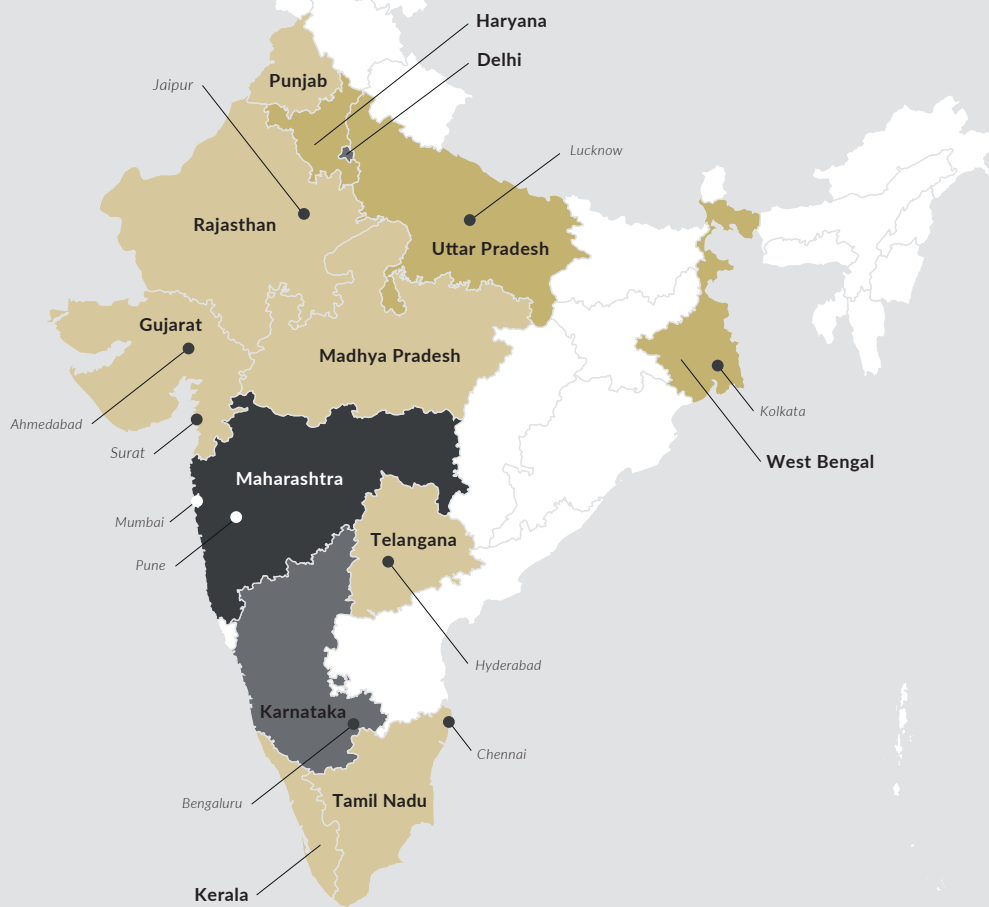
Based on the data bases Mergermarkets and European Investment Monitor, 2017

MAP 2 **Where do the Indian investors active in Germany come from?**

Indian Investment according to investor's home state, from 2000 to 2016

Number of investment projects

- >40
- 16-40
- 6-15
- ≤5



Based on the data bases Mergermarkets and European Investment Monitor, 2017

1.3 Indian economic footprint in Germany

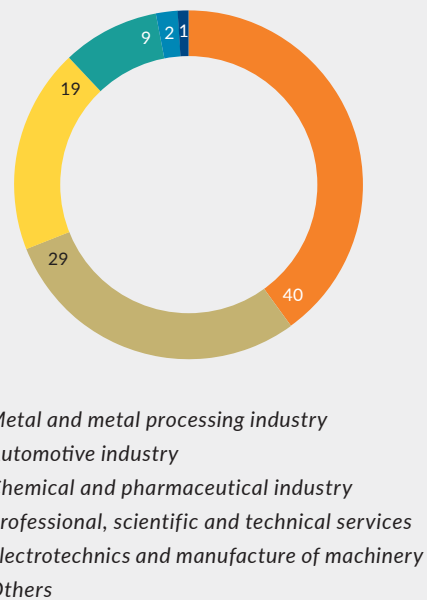
The investment activities of Indian companies in Germany, as noted above, have already produced a significant economic footprint.

The analysis below will be based on the following assumptions and criteria: Companies whose global ultimate owners (GUO) are headquartered in India and hold a stake in the subsidiary of at least 50.01%, thus implying controlling power by the parent company, will be defined as Indian companies. For example, the ArcelorMittal Group is excluded from this category because its post-merger headquarters is in Luxemburg, and it is thus no longer primarily embedded in the Indian context. Moreover, as noted in section 1.2, many investors conduct business through entities in third countries, in part to benefit from regulations in these separate jurisdictions. Therefore, the true number of Indian subsidiaries (and thus total revenue and employee figures) might be de facto higher than what is indicated by publicly available data.

Additionally, our definition includes only those subsidiaries with revenues over €10 million per annum, which thus fall into the category of small- and medium sized enterprises (SMEs) – as defined by the EU – or larger. This former group of companies accounts for over 98% of revenues in Germany relevant to this study that were recorded in publicly available databases (Amadeus, Dafne and Markus databases). The revenue figures cited here are generally (70%) current as of at least 2015, with 87% current as of at least 2014. Employee numbers are current as of 2015, the most accurate figures available as of the time of writing describing the current Indian economic footprint in Germany.

Taking these assumptions and criteria into account, out of a total number of more than 460 subsidiaries operating in Germany, approximately 80 Indian companies each with annual turnover of more than €10 million generated combined annual revenues of approximately €11.4 billion. These companies are responsible for a combined workforce of more than 27,400 employees. The top 10 Indian companies alone account for more than 70% of all revenues generated by Indian companies, and employ almost 58% of this group's total workforce.²³

FIGURE 17 Indian economic footprint by revenues generated per sector, last available year* (in percent)



*years 2009 to 2016, of which 87% not older than 2014

EY Analysis (2017)

Indian presence concentrates in four sectors

A closer examination of Indian companies in Germany on the basis of revenues generated indicates that four sectors in particular dominate (see Figure 17).

The metals and metal-processing industry alone accounts for around 40% of revenues, or about €4.6 billion annually. This sector encompasses activities such as the manufacture of basic metals including steel and aluminum, as well as the manufacture of fabricated metal products aside from machinery and equipment. Fabrication activities include forging, pressing, stamping and roll-forming metals, as well as powder metallurgy. Key Indian figures here include Hindalco Industries Ltd., Tata Steel Ltd. and Sona Autocomp Private Ltd.

The second-largest sector for Indian companies in Germany is the automotive industry, which is responsible for around 29% of total revenues generated by Indian companies, or €3.3 billion. In this regard, most Indian companies are suppliers within the automotive industry, and thus engage in activities such as the production of auto parts and

²³ Amadeus, Dafne, and Markus data bases (2017); EY Analysis

components. Key industry figures here include Motherson Sumi Systems Ltd., Amtek Auto Ltd. and Bharat Forge Ltd. Additionally, Tata Motors Ltd. - the only Indian OEM with a subsidiary in Germany - operates through Jaguar Land Rover Deutschland GmbH, which mainly carries out sales and aftersales functions.

The chemical and pharmaceutical industry ranks third in terms of revenue generation among Indian companies in Germany, accounting for a share of around 19% and annual turnover of €2.1 billion. The pharmaceutical industry constitutes €0.4 billion of this revenue block, primarily focusing on R&D, production and sales predominantly in the generics sector. Activities in the chemical industry include the manufacture of rubber and plastic products as well as chemicals serving as inputs for downstream industries.

The final dominant sector is professional, scientific and technical services, which accounts for 9% or around €1 billion of revenues within this group. Sub-sectors include software, IT services and telecommunications, among others. Key figures here include Tata Consultancy Service, Wipro Technologies, HCL Technologies, Infosys and Tech Mahindra. Indian companies are highly competitive and increasingly active in the German market in this sector (see section 2.4).

In sum, these four dominant sectors account for almost 97% of the revenue generated by Indian companies in Germany, as well as 93% of the 27,400 people employed by this group of companies (see Figure 18).

Indian automotive companies employ more than 10,000 people, followed by metals and metal-processing companies with around 8,200 employees. Despite posting lower revenues than the chemical and pharmaceutical industry, the professional, scientific and technical services industry boasts a comparable workforce of around 3,600 people.

For the purposes of this study, trend analyses for the time period 2010 to 2016 were carried out on the basis of available data, and based on the above-described assumptions and criteria. All available figures were used for 2010, and wherever numbers for 2016 were not yet available, the most recent available figure was used. Despite gaps in the data, these analyses can provide useful indications regarding Indian companies' developmental trends. Overall, the combined turnover of the top 79 Indian companies in Germany grew with a CAGR of 7.5% since 2010, reaching €11.4 billion in 2016 (see Figure 19).

The number of individuals employed by these firms grew even faster, with a CAGR of around 10%,

FIGURE 18 Indian economic footprint by employee numbers and sector, last available year* (in percent)

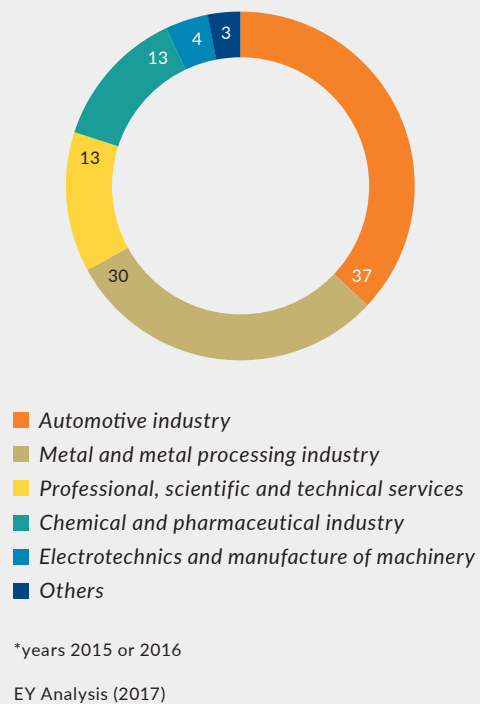


FIGURE 19 Development trends of Indian companies in Germany, 2010 to 2016*



reaching more than 27,400 in 2016. These significant increases are due in particular to M&A deals conducted by Indian investors in Germany. In this regard, each of the four dominant sectors has shown

strong growth, with the software and IT services sector leading the way.

However, the overall profit reported by these companies decreased during the time period examined, a fact explained in large part by the overall weak performance of the metals and metal processing industry.

Strong Indian footprint in Germany's south and west

The majority of the 79 largest Indian companies operate within the industrial centers in western and southern Germany. North Rhine-Westphalia is home to 29% of these companies, followed by Hesse with 26% and Bavaria with 14%. Baden-Württemberg is at fourth place with around 12%. This is no coincidence, as these regions are all characterized by a strong industrial base, with a high density of "hidden champions" (see Figure 14 in "Hot topic: Opportunities in the Mittelstand"). Indian companies investing there have sought proximity to customers, suppliers and partners, or have simply settled in these areas since their brownfield investment targets were already located there. Hotspots include North Rhine-Westphalia with regard to the metals and metal-processing industry, or Hesse with regard to professional, scientific and technical services. The latter includes the

Frankfurt-Rhine-Main agglomeration, which has traditionally drawn significant Indian-led activity as well as a large Indian population, in part due to its large international airport hub. Companies such as Infosys, HCL Technologies, Tata Consultancy Service and Wipro Technologies can all be found there, additionally because the financial sector, which also has strong roots in the area, makes up a large part of these companies' customer base.

The region also offers a good infrastructure with regard to the Indian community such as places of worship, food supplies and international schools; this is especially advantageous for labor-intensive industries that rely on highly skilled individuals, who, in turn, tend to value soft locational factors.

However, these high-level figures don't yet sufficiently illuminate the specific reasons Indian companies invest in Germany, the challenges they face, or how the success of such internationalization might be best measured and improved. To address these issues in more detail, Indian investors who have already invested in Germany or who plan to do so in the future were surveyed. Before we examine these survey results in detail, we will provide a brief snapshot of and outlook for each of the key sectors characterizing the current Indian presence in Germany.



Hot topic | Indian professionals in Germany

Germany and India have a long history of intellectual and economic cooperation. However, the degree of exchange of persons between the two countries has been underwhelming. This has changed in the recent past as an increasing number of highly skilled Indians have moved to Germany for higher education and professional work. Indian nationals accounted for 17% of the 28,008 skilled third-country economic migrants who entered Germany in 2015. In this regard, India was the most significant origin country for skilled economic migrants moving from third countries to Germany – ahead of the United States and China.

The magnitude of the demographic changes faced by Germany means that even higher levels of inward migration among skilled individuals would be beneficial. However, as compared to many other countries, the rate of economic migration to Germany is relatively low. OECD calculations indicate that countries such as the United Kingdom and Canada show long-term economic-migration rates that are almost three times Germany's level. Given the right-wing xenophobic movements rising in the United States and United Kingdom (currently the leading destinations for Indian professionals), Germany would do well to position itself as an open and welcoming society.

A Bertelsmann Stiftung²⁴ study carried out by Prof. Thomas Faist, Mustafa Aksakal and Kerstin Schmidt of the University of Bielefeld examines the motivations and intentions of people coming from India to Germany for economic and/or education purposes, and additionally examines associated development-related effects.

The study indicates that economic and education-driven migration from India has increased in recent years, reflecting the progressive loosening of German immigration legislation as well as the strength of the German labor market. In addition, Indians today are staying longer in Germany than was the case previously. Among the main drivers of this change have been opportunities for professional development and better career prospects, the relatively open German society, and good integration prospects. Hence, it is fair to conclude that Germany has gained in attractiveness for Indian migrants.

However, not all is going smoothly. Factors such as perceived barriers between migrants and the local population, experiences of discrimination, and difficulties associated with German bureaucracy can complicate the migration experience for Indians in Germany. However, social capital represents a powerful tool to overcome some of these impediments. Migrants' decisions to stay in Germany or not are also influenced by home-country factors. While migrating to Germany can boost personal independence and instill a feeling of emancipation, family ties may also trigger an eventual return to India.

Migration to Germany also holds significant development potential for India itself, for instance through knowledge and skill transfers or remittances. Yet these advantages are distributed unevenly across India, as they primarily benefit persons, companies and regions with access to migrant networks, reinforcing existing social and regional disparities.

Germany could become more attractive by expanding existing information platforms such as the "Make it in Germany" website. Moreover, it will be important to improve support services for family members, facilitate graduates' transition into the labor market – for example by providing more internships – and offer particular assistance to small and medium-sized companies in recruiting skilled Indian graduates from German universities or directly from India.

²⁴ Bertelsmann Stiftung (eds.) (2017)

2 Sectoral snapshots

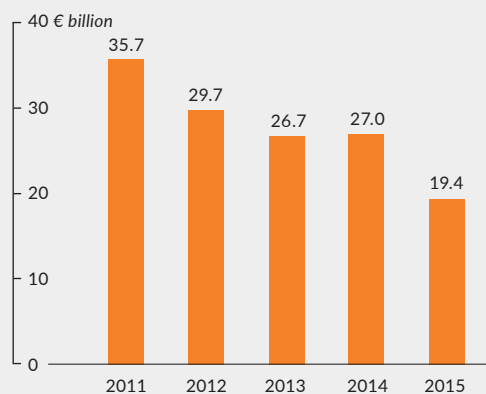
2.1 Metals and metal processing

The metals and metal-processing industry includes the production of basic metals such as steel or aluminum along with the further processing of such metals. The two sub-sectors are highly interconnected, with one delivering crucial inputs for the other.

The German steel sector, a key part of the country's metal industry, has in recent years experienced performance fluctuations primarily due to steel-price volatility. Difficulties in the construction sector, high unemployment rates and cheaper products especially from China have led to adverse performance in Europe.²⁵

The German steel market generated total revenues of €19.4 billion in 2015, showing a CAGR of -14.1% between 2011 and 2015 (see Figure 20).

FIGURE 20 German steel industry revenues, 2011 to 2015

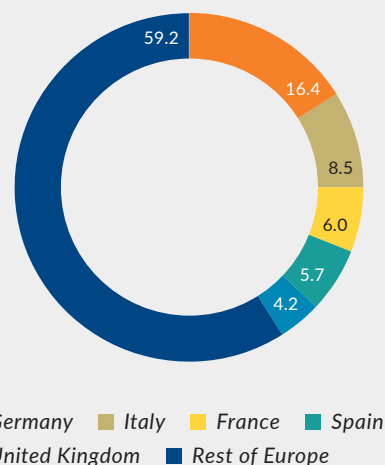


MarketLine (2016)

During the same period, the French and UK steel markets declined as well, with respective CAGRs of -13.4% and -10.2%. German production volumes showed a less significant decline, from 44,284 metric tons in 2011 to 42,676 metric tons in 2015. The

corresponding CAGR of -0.9% highlights the effect of declining steel prices on the market. Nonetheless, the German steel sector remains the EU's largest in terms of market value. It accounted for around 16.4% of the EU total in 2015, followed by Italy with an 8.5% share and France with a 6% share (see Figure 21). Similarly, Germany is the largest steel producer in the EU in terms of production volume, as well as the seventh-largest globally.

FIGURE 21 Geographic segmentation of European steel industry, 2015 (in percent)



MarketLine (2016)

The steel sector provides crucial inputs for downstream industries, supplying about 21% of the machine-construction sector's input purchases, and around 13% of automotive-industry inputs. Other key customer sectors include the electrical-engineering and construction sectors, each of which use steel products as approximately 10% of their inputs, and the steel- and metal-processing industry, 59% of whose inputs come from the steel-production sector.²⁶

Germany's steel industry is characterized by a relatively high degree of government intervention. Foreign steel imports, especially from China, represent

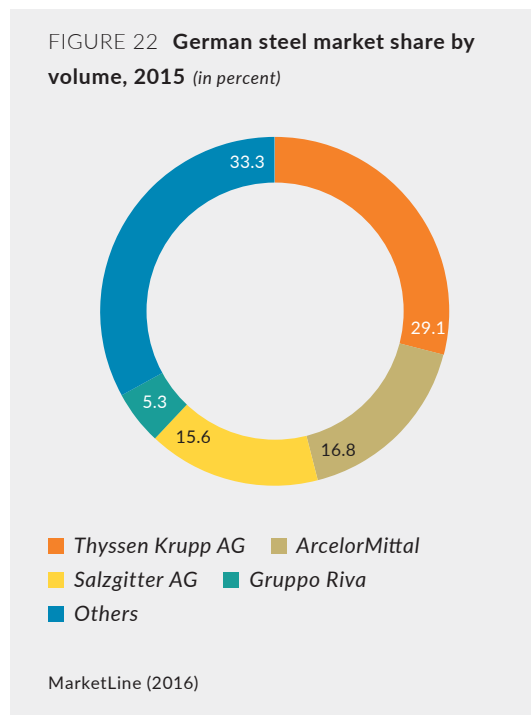
²⁵ MarketLine (2016a)

²⁶ WV Stahl (2016)

a major challenge for domestic producers. In May 2015, the EU introduced temporary duties of up to 35.9% on Chinese, Japanese and other foreign producers, a policy that lasted for six months. Subsequently, duties of up to 73.7% were imposed on Chinese steel in October 2016.

Despite strong competition, the market is expected to grow at least through 2020. Increases to 47,170 metric tons in terms of production volume are expected alongside revenue growth to an aggregate €22.65 billion by the end of 2020, up from €19.54 billion in 2017.²⁷

The market is dominated by several large multinationals, including ArcelorMittal, Thyssen-Krupp AG, Riva and Salzgitter AG (see Figure 22).



Although steel production techniques make it difficult to diversify, customers do have varying requirements. Therefore, producers tend to specialize, a strategy that reduces rivalry but also the size of each firm's potential market.

Economies of scale are critical in order to remain profitable in the current market, thus favoring large companies. This means that consolidation through mergers or acquisitions is to be expected, especially

in comparatively fragmented markets. Some companies formed out of such M&As have turned out to be quite successful, typically functioning as very large multinationals.

The cyclical market is highly affected by general macroeconomic conditions and demand patterns in end-use markets. This produces eras of intensified competition, especially within a declining industry that is difficult to exit.

Prices tumbled in 2015 due to considerable excess production capacities, significantly undercutting the sector's health. However, prices have recently increased somewhat, easing conditions for the industry. Alongside this price volatility, further challenges for steelmakers include shifting demand centers, the need to improve productivity and cost efficiency, and complex supply chains.

The German aluminium sector, also a key part of the metal industry, is smaller than the country's steel sector, showing revenues of €1.1 billion in 2015 and a CAGR of 0.9% between 2011 and 2015. Here, Germany trails European market leader Norway, with a 2015 European market share of around 9.7% as compared to Norway's 20.5%. Sectoral revenues are expected to grow at a CAGR of 3.5%, reaching €1.3 billion in 2020.²⁸

As noted, the metal-processing industry is a key customer of the metals industry. Given its high material intensity, the sector is characterized by a high dependence on metal prices. Furthermore, companies here tend to be small or medium-sized with a high product specialization. Competition among the sector's approximately 5,000 companies is therefore also intensive. The industry employs around half a million people with Germany and generates revenues of approximately €80 billion a year. Due to its links to the steel industry, the sector is geographically highly concentrated in the state of North Rhine-Westphalia.²⁹ This correlates with the previously noted high density of Indian companies in that state as well. As with the metal industry, important customers include the automotive, electrical engineering, construction and machinery sectors.

²⁷ MarketLine (2016a)

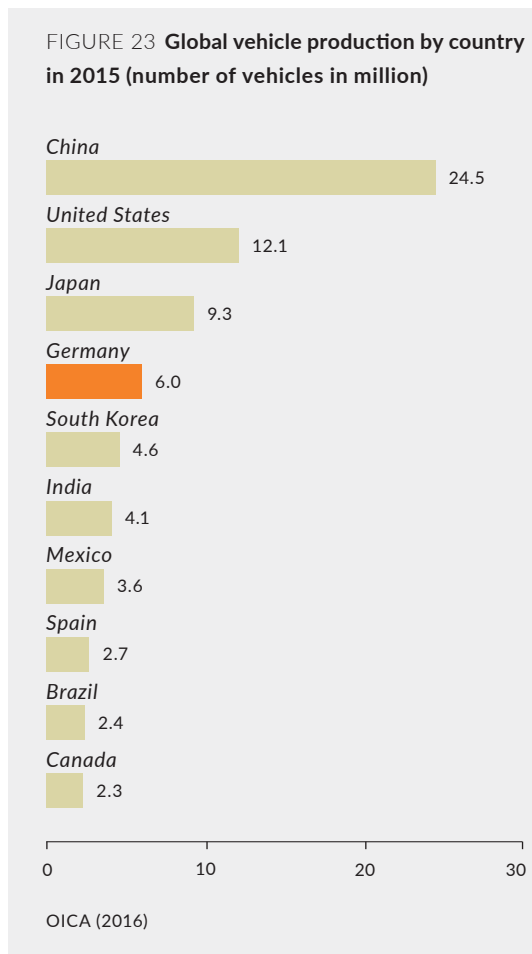
²⁸ MarketLine (2016a)

²⁹ WSM (2017)

2.2 Automotive sector

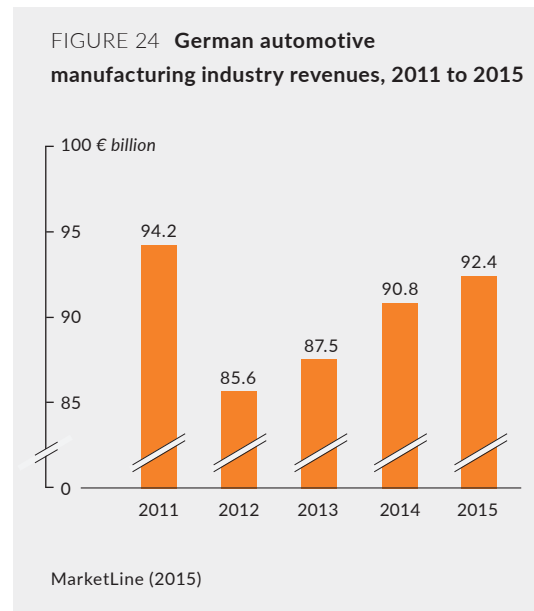
The automotive sector can be split into two sub-sectors – automotive manufacturing and automotive components. While quite distinct, the two sub-sectors have strong interdependent relationships, and are affected by the same market forces and developments.

The automotive manufacturing industry encompasses the production of trucks, passenger cars and motorcycles. Germany's sector is the EU's largest, but remains modest in size as compared to the US or Chinese auto-production sectors. Germany is the largest vehicle manufacturer in Europe and the fourth-largest worldwide, with annual average new-car sales of around 3.2 million and commercial vehicle sales of 300,000 since 2000 (see Figure 23).³⁰



However, production capacities are nearing their limits given the current plant infrastructure. Major brands operating in Germany also have overseas production facilities; indeed, nearly 60% of German-branded cars are manufactured abroad. Nevertheless, most major brands have plans to keep producing in Germany, in part to benefit from the “Made in Germany” image.³¹

Car manufacturing accounts for more than 90% of the sector's total production volumes, with truck and motorcycle manufacturing taking shares of 7.6% and 2.1% respectively. Total market revenues were €92.4 billion in 2015, showing a CAGR of -0.5% between 2011 and 2015. After a steep decline in 2012, the market recovered in recent years (see Figure 24).³²



During the same period, the French and UK sectors respectively showed CAGRs of -2.6% and 3.5%.

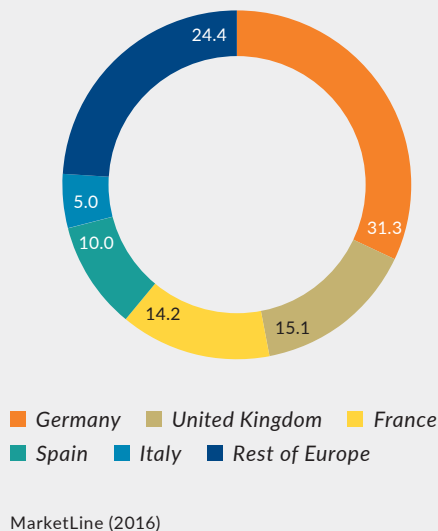
As noted, the German sector is Europe's largest, accounting for around 31.1% of total 2015 industry value in the region. This was followed by the United Kingdom with a 15.1% share, and France with a 14.2% share (see Figure 25).

³⁰ The Economist Intelligence Unit (2016)

³¹ The Economist Intelligence Unit (2016)

³² MarketLine (2016b)

FIGURE 25 **Geographic segmentation of European automotive manufacturing industry, 2015** (in percent)



The outlook through the end of 2020 promises further growth, to a total forecast market value of €104.9 billion.

The German automotive market is driven by replacement and cyclical demand. Around 45 million passenger cars are registered in Germany, or 554 cars per 1,000 inhabitants.³³ Alongside this large domestic market, the export market plays a significant role, with motor vehicles accounting for nearly one-fifth of all goods shipments by market value from Germany, thus constituting the country's most significant single export product. The country is also a large importer of cars, but nevertheless maintains a significant surplus in the automotive trade.

This economic significance heightened the impact of the recent Volkswagen scandal. The illegal manipulation of emission values undermined Volkswagen's profitability due to compensation agreements struck with authorities in the United States totaling around \$15 billion. Similar compensation deals in Europe have been avoided so far.

Overall, Germany's automotive-industry reputation was significantly damaged by the scandal, and its impact on future production values are still not fully understood, though some very small effects can

already be observed. The scandal also triggered a shift in investment and focus toward hybrid and electric vehicles, as well as toward self-driving cars and related technologies. These developments have been supported by the Federal Ministry of Transport and Digital Infrastructure, which has set a goal of having 1 million electric vehicles on German roads by 2020.³⁴

Developments in the automotive supplier sector are closely linked to growth patterns in the automotive production sector. The automotive supplier market has shown positive growth in recent years, with revenues of €75.8 billion in 2015, up around 3% from 2014. In this regard, revenues from foreign markets increased more than did domestic sales, with approximately 38% of revenues coming from the export market in 2015. More than 300,000 employees work in this sector, which is characterized by quickly changing market conditions.³⁵

The automotive sector as a whole is undergoing structural changes particularly with regard to supply-chain partnerships between OEMs and suppliers. The industry is being transformed by increased model diversity, shorter product life cycles and new technologies, among other factors. New OEM business models are heightening the importance of automotive suppliers, which, in turn, are being challenged to keep pace with their customers' needs, for instance with regard to providing the items needed for the increasing share of electric vehicles on German streets, or supporting the growing demands for vertical integration.³⁶

Overall, Germany's automotive sector is the world leader with respect to R&D, with OEMs accounting for around one-third of the industry's worldwide R&D expenditure.³⁷

³³ The Economist Intelligence Unit (2016)

³⁴ The Economist Intelligence Unit (2016)

³⁵ VDA (2016)

³⁶ GTAI (2017a)

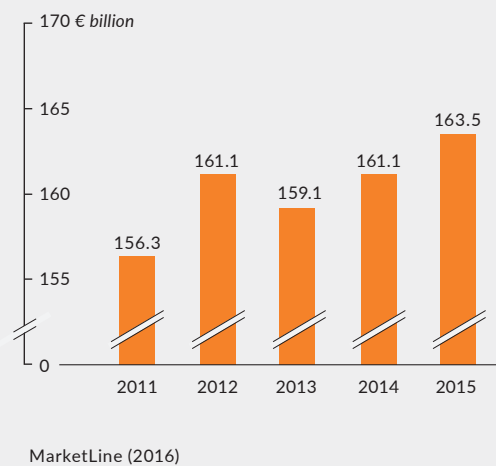
³⁷ GTAI (2017a)

2.3 Chemicals and pharmaceuticals

The chemicals sector encompasses production of specialty chemicals, commodity chemicals, agricultural chemicals and other chemicals (including products such as pharmaceutical chemicals).

The German chemicals market generated total revenues of €163.5 billion in 2015, demonstrating a CAGR of 1.1% between 2011 and 2015 (see Figure 26).

FIGURE 26 German chemical-industry revenues, 2011 to 2015



During the same period, the French and UK sectors respectively grew with CAGRs of 0.5% and 0.4%. The German sector is Europe's largest, accounting for around 22.5% of total 2015 market value in the region, followed by France and Italy, each with a share of 11.7% (see Figure 27).

A closer look at the market-segment level within Germany reveals that commodity chemicals accounted for the largest portion of revenues in 2015 with a share of approximately 46.4%, followed by a 24.9% share for specialty chemicals. Agricultural chemicals accounted for 13.9% of the market, with other chemicals contributing the remaining 14.8% (see Figure 28).

The German chemicals market is expected to show growth at least through 2020, when annual market revenues are projected to be €181.6 billion.³⁸

Competition in the sector is intense, since sunk costs are substantial due to the nature of the chemicals manufacturing process. This in turn makes

FIGURE 27 Geographic segmentation of European chemical industry, 2015 (in percent)

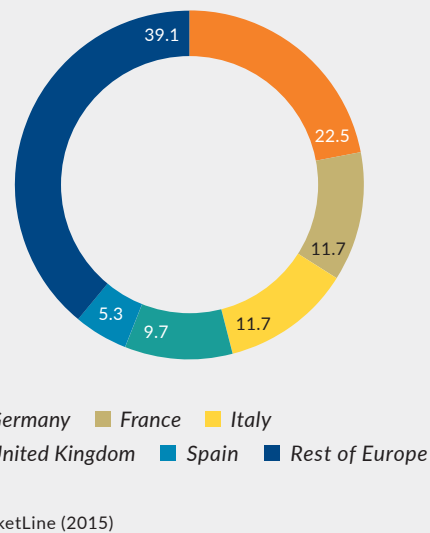
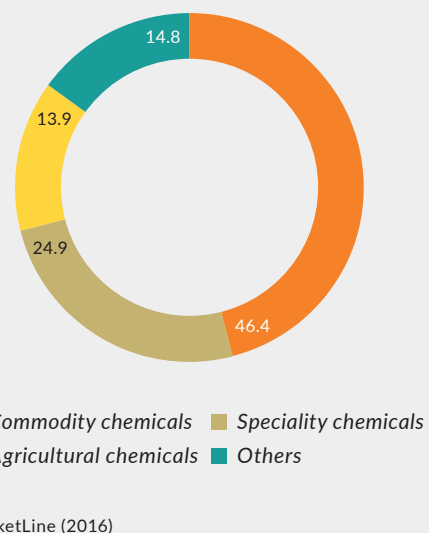


FIGURE 28 Category segmentation in German chemical market, 2015 (in percent)



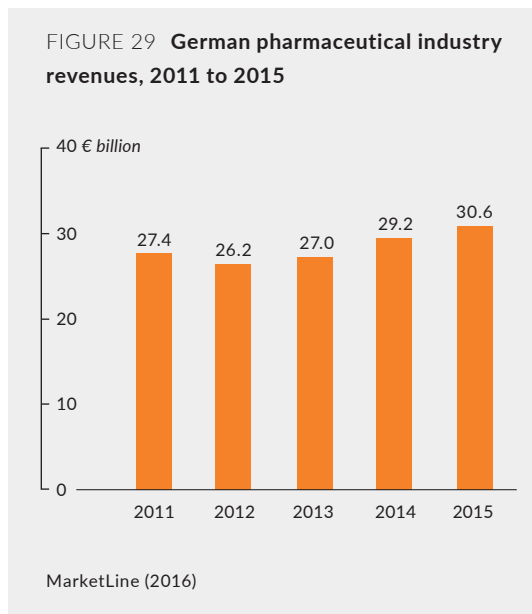
it difficult to exit the market. Strict government regulations and high start-up costs complicate market entry. Nevertheless, the relatively low degree of product differentiation attracts new entrants, as does the promise of producing raw materials used by a large variety of downstream industries.

³⁸ MarketLine (2016c)

The pharmaceutical industry can be subdivided into prescription drugs, patented drugs, generic drugs and over-the-counter (OTC) medicines.

The German pharmaceuticals market generated total revenues of €30.6 billion in 2015, demonstrating a CAGR of 2.8% between 2011 and 2015. The market has returned to growth in recent years after a decline in 2012 (see Figure 29).

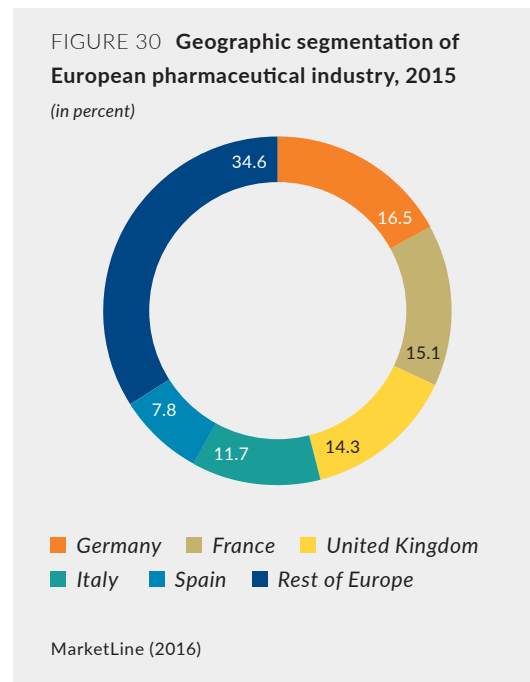
FIGURE 29 German pharmaceutical industry revenues, 2011 to 2015



During the same period, the French and UK markets respectively showed CAGRs of -0.8% and 8.8%. The German sector is Europe's largest, accounting for around 16.5% of total 2015 industry market value in the region, followed by France with a 15.1% share and the United Kingdom with a 14.3% share (see Figure 30).

Germany is a mature market characterized by a high level of domestic production and high healthcare expenditures. Government policies that aim at saving costs represent the largest barrier to future growth. The reorganization of the pharmaceutical market was initiated in 2011 with the Pharmaceuticals Market Reorganization Act (Arzneimittelmarkt-Neuordnungsgesetz, AMNOG), which was intended to decelerate drug expenditure in the public healthcare sector. Most drug manufacturers opposed the measures introduced by this law. Despite increased government regulation, the German pharmaceuticals market is expected to show

FIGURE 30 Geographic segmentation of European pharmaceutical industry, 2015 (in percent)



accelerating growth through the end of 2020, when the sector is forecasted to show total annual revenues of €41.8 billion.³⁹

Competition is intense in the sector, as large global companies and smaller firms focused on generics production fight for every single approval in the lucrative market. Furthermore, the market is characterized by stringent legal and regulatory conditions that strongly affect new market entrants. Germany operates a universal healthcare system (Gesetzliche Krankenversicherung), with 77% of total healthcare spending coming from within the public system.

There is significant opportunity particularly in the generics and biosimilars markets, since many of the so-called blockbuster drugs will emerge from patent protection in the next few years. Indian generics producers stand to profit from this development in particular, even though regulatory requirements and thus market-entry barriers are relatively high.⁴⁰

³⁹ MarketLine (2016d)

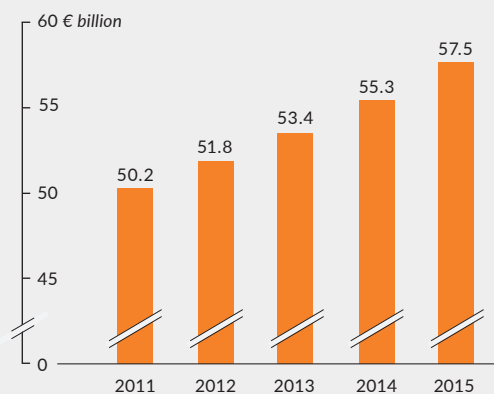
⁴⁰ MarketLine (2016e)

2.4 Software and IT services

The software and IT services market consists of two separate segments. The software segment includes systems and application software, while the IT services segment includes IT outsourcing and processing, IT consulting and support, and cloud computing.

The German software and IT services sector generated total revenues of €57.5 billion in 2015, with a CAGR of 3.4% between 2011 and 2015 (see Figure 31).

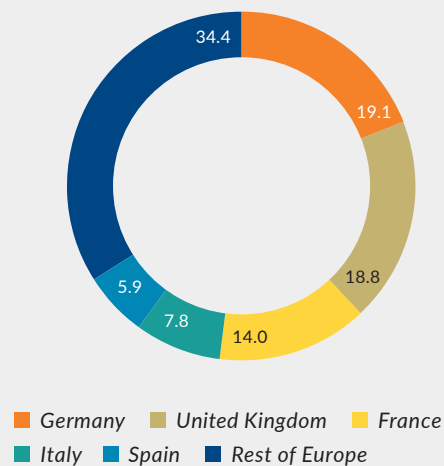
FIGURE 31 German software and IT services industry revenues, 2011 to 2015



MarketLine (2015)

During the same period, the French and UK markets grew with respective CAGRs of 1.1% and 2.4%. The German sector is Europe's largest, accounting for around 19.1% of total 2015 industry market value in the region, followed by the UK with a 18.8% share and France with a 14% share (see Figure 32). The competition to become the dominant regional technology hub in Europe is intense. Various German regions present good investment opportunities and strong talent pools, with Berlin, Oberbayern (Munich), Darmstadt (encompassing Frankfurt am Main) and Karlsruhe all home to vibrant technology companies. Indian IT company subsidiaries in Germany (e.g., HCL, Infosys or TCS in Frankfurt am Main) tend to fall into these regions.

FIGURE 32 Geographic segmentation of European software and IT services industry, 2015 (in percent)



MarketLine (2015)

The intense competition has produced a skilled labor force that allows the delivery of high-end services.⁴¹

Despite financial uncertainties in recent years, the German software and IT services sector has continued to expand, as businesses in all sectors are increasingly realizing the need to digitize their organizations in order to compete successfully. Germany possesses a large and diverse economy that offers IT service providers access to a dynamic customer base. German authorities are providing additional momentum through their support of the Industry 4.0 trend, aimed at further computerizing manufacturing. The construction of high-tech networks for energy and transport should support further growth for IT services and software firms for some time.

A closer look at the two market segments indicates that the IT services segment accounted for the majority of revenues in 2015, with a share of approximately 65% as compared to the software segment's 35% share.

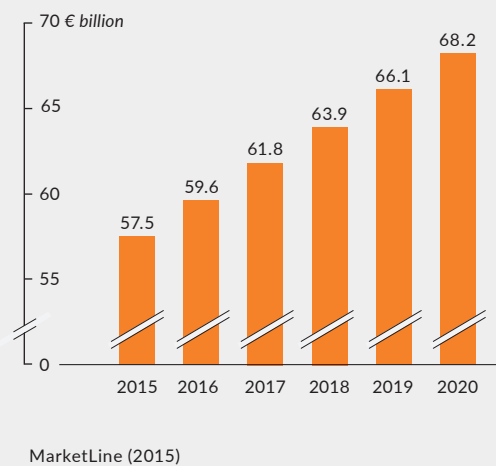
Growth in the sector is expected to continue through 2020, when total revenues are projected to reach €68.2 billion (see Figure 33).⁴²

Constant advances in technology, the presence of large international competitors, and the regular entrance of providers with new business models have kept competition fierce, and have increasingly

⁴¹ MarketLine (2015)

⁴² MarketLine (2015)

FIGURE 33 German software and IT services industry revenues forecast, 2015 to 2020



forced existing market players to pursue strategies based on competitive pricing.

Companies within the software segment routinely acquire or partner with other firms. Niche firms can often take advantage of their competitors' underlying infrastructure and middleware software in this way.

By contrast, firms in the IT services segment tend to seek market shares in higher-margin sectors

through an evolution from offering services improving productivity and efficiency (e.g., outsourcing) to providing value-added services (e.g., analytics consulting).⁴³

Brand recognition plays a significant role in this strategy, especially in IT outsourcing and data processing, since security and quality are crucial factors in winning contracts. T-Systems, for instance, is one of the sector's larger firms, and has benefited from a good reputation. As previously noted, Indian companies are highly competitive and increasingly active in the German market.

Apart from brand reputation, the ability to produce and offer software, services and hardware represents an advantage, since hardware components tend to be purchased from a single supplier. Large companies such as IBM and Microsoft are in a good position due to their diversified product portfolios. Moreover, some software companies have hardware divisions, while IT services firms have software competencies, in each case allowing the firms to be more independent of external suppliers. Diversification of this kind requires a skilled pool of programmers and other professionals.

In general, the positive prospects within the German software and IT services market paired with the internet as a distribution channel appeals to new entrants, including Indian firms.

Hot topic | Portfolio investments (private wealth)

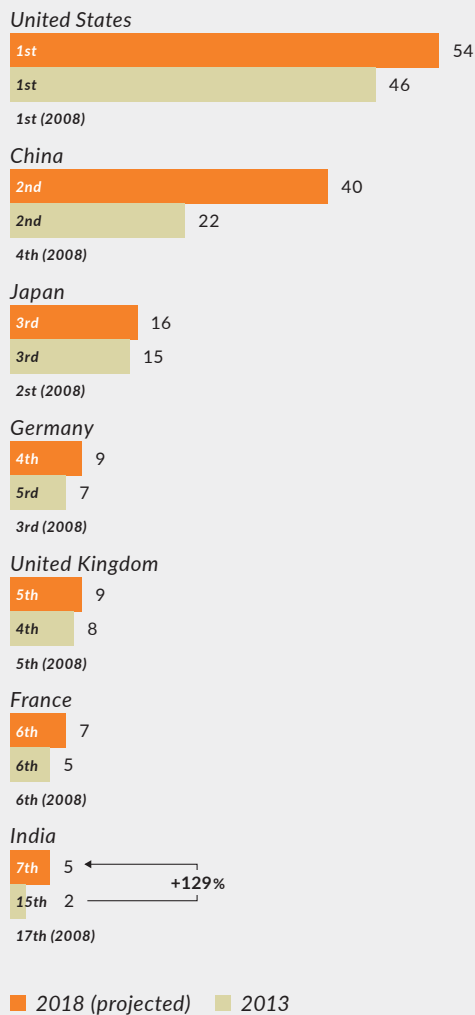
Driven by high GDP growth and savings rates of about 20% of GDP, the stock of private wealth in India has risen significantly in the past years. While the country was ranked at 17th place worldwide in 2008 in terms of aggregate privately held wealth, and 15th place in 2013, it is expected to move to 7th place by 2018 with private financial wealth totaling \$7 trillion (see Figure 34).

In the Asia Pacific region as a whole (excluding Japan), private wealth is expected to grow at a projected compound annual growth rate (CAGR) of 10.5%, reaching an estimated \$61 trillion in 2018, as compared to a global CAGR of 5.4% (see Figure 35). Thus, the region is expected to overtake North America and Western Europe as the wealthiest region in the world.



⁴³ MarketLine (2015)

FIGURE 34 **Top private financial wealth countries, 2013 and 2018** (in trillion USD, Rank)



BCG Global Wealth Market Sizing Database (2014)

With high and sustainable GDP growth rates projected, India is expected to make a disproportionate contribution to this growth. This can also be seen through an examination of the number of millionaire households (measured in USD). In 2013, India counted 175,000 millionaire households, ranking at 15th place worldwide on this measure.⁴⁴ By 2015, this number had reportedly increased to 198,000.⁴⁵

Indians are increasingly investing their private wealth abroad, seeking to diversify risks. Under Indian regulations, Indians are allowed to invest \$250,000 per head outside the country. However, given that numerous wealthy families live abroad (non-resident Indians (NRIs) or overseas citizens of India (OCIs)) are not subject to this limitation, there is a huge investment potential for countries such as Germany, which are considered safe havens due to their political stability and sustainable economic strengths.

After the demonetization in November 2016 forced Indians to convert their bank notes, a sum estimated in the low single-digit trillions of dollars is currently lying in Indian banks as additional liquidity waiting to be invested.

According to interviews with Indians living outside India, a growing Indian community is investing its privately held wealth in Germany, with the bulk flowing into real estate. Despite a clear increase in the past few years, real estate prices in Germany are still deemed low relative to other comparable markets. The strong demand is pushing investors who previously invested only in completed properties to invest in early-stage projects today.

This development has been amplified by several recent events. While Britain was previously the favored country for such investments, Brexit has pushed the trend today toward Germany. The United States is the biggest market for IT and software services; however, due to rumored restrictions on the issuance of H1B visas, Indian businesses are looking for access to other markets. This has also created a greater tendency to invest in Europe, and thus in Germany as Europe's strongest economy.

Due to attractive conditions for students, the number of Indian students in Germany has tripled in the past few years. The German language is taught in numerous Indian schools, helping to improve Germany's reputation beyond the reputational value already provided by numerous well-known German products. Indians who want their children

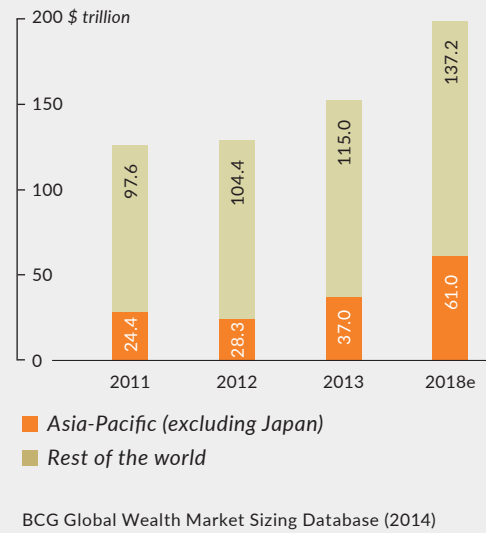
⁴⁴ BCG Global Wealth Market Sizing Database (2014)

⁴⁵ Capgemini Global Wealth Report (2015)

to obtain an education abroad are increasingly considering countries such as Germany, France or the Scandinavian nations in addition to the United States and United Kingdom. Strong arguments for Germany include the country's cultural openness, quality and affordability of life, public safety, and social stability, in addition to the presence of growing Indian communities in various regions, and the facts that spoken language (due to the widespread use of English) and the availability of Indian food are no longer challenges. More than 70% of graduating Indian students are likely to remain in Germany, where they become high-earning residents that are increasingly likely to invest.

All of these factors indicate that Germany is poised to profit from its increased attractiveness to Indian individuals, and that the country will accordingly be able to attract private wealth investment.

FIGURE 35 Global private financial wealth, 2011 to 2018



3 Survey results: Indian investors and their attitudes toward Germany

In the following section, the motivations, challenges and success factors for Indian investment in Germany will be analyzed in more detail.

For this purpose, a survey was conducted among Indians who have previously invested or plan to invest in Germany. The goal was to find out more about what had driven them to expand their businesses in Germany, highlight the challenges they have perceived in doing so, and derive lessons from their experiences in the form of potential success factors.

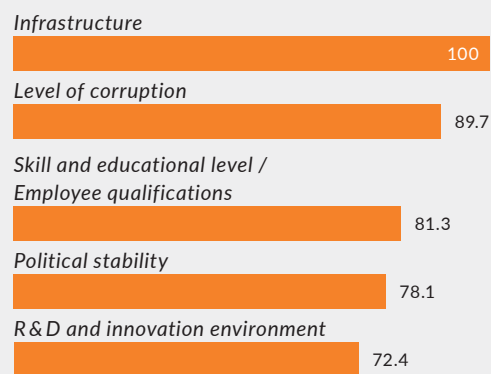
The ultimate goal is to provide a robust foundation of knowledge enabling recommendations to be derived for investors, governmental bodies and other stakeholders involved in international business.

Germany is a preferred destination for Indian investors due to its strong economic conditions and well-developed infrastructure (see Figure 36).

Transportation, communications and energy-supply infrastructures are world class, and links to other major markets in the world are strong. Its central location in Europe is a further advantage. Low levels of corruption and a high degree of political stability promote investor trust in the market. Furthermore, the R&D and innovation environment, backed by a highly skilled labor force and excellent educational institutions, is highly regarded. For these reasons, it is not surprising that Germany ranks 17th out of the 190 countries evaluated by the World Bank in its 2016 Ease of Doing Business report, which includes factors and indicators such as the regulatory environment, quality of infrastructure, tax framework and access to finance.⁴⁶

Given these favorable general conditions, the survey aimed at identifying specific key drivers in Indian investors' decisions to expand to Germany. The results are introduced below.

FIGURE 36 Top-rated business environment factors (in percent)



EY Survey on Indian Investments in Germany (2017)

3.1 Key drivers for Indian investment in Germany

Although motivations for investing in Germany vary depending on specific company goals, sectors, sizes and other factors, certain common tendencies emerged across all companies participating in the survey (see Figure 37).

Market potential

More than 93% of the interviewees emphasized the importance of market potential. Germany is generally regarded as a large and developed market that offers substantial sales potential for Indian investors, no matter what the sector. This is enhanced by the fact that a German location can be used as a gateway to the rest of Europe. In some cases, products successful in India can be adapted for the German market to be sold at prices significantly higher than in other established or emerging markets. For instance, the pharmaceuticals market offers pricing structures

⁴⁶ Worldbank (2017)

for Indian generics that are several times higher than what can be achieved in India.

To profit from this, products and services must be adapted to specific market needs, and appropriate sales structures must be developed, which in turn often requires a local presence. However, some sectors are regarded as already saturated or too highly competitive, with further sales potential exploitable only through great effort.⁴⁷ In the metals industry, for example, market development by Indian companies takes place mostly in the form of mergers or acquisitions, thus providing turnkey access to a significant customer base in a weak performing and highly competitive market (see section 2.1).

Proximity and access to customers

Proximity and access to customers also represents a significant driver for Indian investment in Germany, according to more than 81% of survey respondents. The metals and metal processing industry again provides a good illustration. As noted in the sector snapshot, this industry provides crucial inputs to downstream industries such as the automotive sector and other manufacturing sectors. Gaining access to such important customers fosters the development of the domestic German sector, while also generating opportunities to serve these customers worldwide, including in India, leading to even greater sales potential.

The software and IT services sector offers a somewhat different picture. Here, development of the German market is achieved not only through M&As, which remain a part of some companies' expansion strategies, though greenfield investments are more common. The software sector, for instance, accounted for almost one-fourth of all FDI projects launched by Indian companies in Germany between 2010 and Q1 2016 (see section 1.2). Indian firms are highly competitive in this field, and therefore rely not only on M&As as an entry strategy, but also set up their businesses in Germany from scratch. Indian companies' key motivation for investment in this sector is particularly the desire to profit from the large and growing German market.

Access to technology

More than 82% of interviewees identified the desire to gain access to technology as being very

important, especially in sectors in which India continues to trail more mature economies. Germany offers leading-edge technologies in numerous industries such as the automotive sector. Along with being Europe's largest automotive market in terms of vehicles produced and sold, Germany's auto sector is also a global leader in terms of R&D (see section 2.2). Indian automotive suppliers, while also seeking to gain access to international customers, are driven in large part by the desire to improve their competitiveness and productivity both abroad and in the highly competitive Indian market by gaining access to cutting-edge technology. M&As are a common way of achieving this goal, with the sector accounting for more than one-fifth of all completed deals by Indian bidders in Germany between 2010 and Q1 2017 (see section 1.2), making it the second-ranked sector on this measure. Examples include acquisitions by Motherson Sumi, Amtek and Ruia Group.

New impetus for innovation

More than 62% of the interviewees identified innovation as a crucial motivation for entering the German market. This desire to gain new impetus for innovation is closely linked to the above-noted strategies for gaining access to technology. Germany offers a high density of renowned research institutes in a variety of fields, including, for instance, the Fraunhofer Gesellschaft and the Max Planck Gesellschaft. Furthermore, universities and businesses often work closely together to produce marketable innovations. The collaboration between Bosch and Tech Mahindra in the field of connected industry tools as part of the internet of things offers a prime example of beneficial Indo-German cooperation for Germany-based innovation. In this joint venture, Tech Mahindra provides application software while Bosch contributes the know-how regarding the tools themselves.⁴⁸

Alongside the access to research institutes and beneficial cooperative ventures, the general socio-economic setting in Germany produces an innovation-friendly environment. The country is regarded as a lead market in many industries.

Lead markets are of significant importance in global business strategy. They are usually described as large markets that are relatively free from government regulation and restrictions, which in

⁴⁷ GTAI (2014)

⁴⁸ Bosch (2015)

addition feature demanding customers and strong competitors, and are generally strong producers of high-end products.⁴⁹ Such country markets have a competitive advantage in certain industries that have been shaped by special configurations of factors including firm strategies; competition-enhancing rivalries; the presence of related and supporting industries, factor and demand conditions; and a supportive government. Having a foothold in such markets can boost a firm's capabilities and skills to the highest level on a worldwide scale.⁵⁰

Examples of lead markets in Germany include the automotive industry, the chemical and pharmaceutical industry, and the metals and metal processing industry. Indian investors' strong interest in these sectors is therefore not surprising, as each industry offers access to important know-how based on innovation. Acquiring such knowledge and capabilities helps the Indian firms compete abroad as well as in the Indian market. The location of Indian companies in Germany thus correlates with the presence of German lead industries (see section 1.3).

Reputation gain

While entering competitive country markets can offer an opportunity to boost capabilities and skills, companies can also use their presence in lead markets as a valuable credential as they seek to expand to third markets.⁵¹ This is particularly the case when it comes to Indian investments in Germany. In this regard, Germany benefits from the strong reputation of products "Made in Germany," which is associated worldwide with high quality. More than 87% of the interviewees said they strongly valued this reputation, and identified it as one of the key drivers in choosing to invest in Germany. In some cases, their companies' entire business model is in fact constructed around this factor. In such cases, the companies aim at building a product portfolio that combines inexpensive mass-market products produced in India with high-value products produced in Germany, thus increasing the value of their product spectrum as a whole. The German production can be based on greenfield or brownfield investments. Either way, the investing Indian company can profit from the "Made in Germany" label by selling their products at a

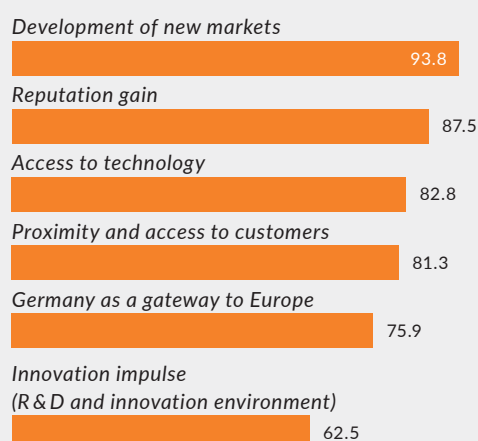
higher price due to the higher perceived quality, both in India and in other countries.⁵²

Germany as a gateway to Europe

As previously noted, the United Kingdom's Brexit decision may further amplify motivations to invest in Germany. Today, nearly 76% of Indian investors that have already invested or plan to invest in Germany mention the country's role as a gateway to Europe, conveniently located in the region's heart, as an important reason to expand there. An examination of siting decisions within Germany shows that Indian investors chose their locations with regard to proximity to customers, suppliers, partners and other Indian companies (see section 1.3) as opposed to being swayed by potential government subsidies.⁵³ In line with this, government incentives were not mentioned as important key drivers for decisions to invest in Germany.

Different motivations and businesses strategies require different modes of entry for the German market. The survey's participants reported existing strategies or plans distributed fairly evenly between export models, cooperative ventures, and the creation of subsidiaries. In this regard, export models are often used as initial entry strategies, as the risks are comparatively lower, and they can provide a foundation for further growth.

FIGURE 37 Key drivers for investments in Germany (in percent)



EY Survey on Indian Investments in Germany (2017)

⁴⁹ Koch (2001); Elliott and Cameron (1994)

⁵⁰ Porter (1990)

⁵¹ Koch (2001)

⁵² GTAI (2014)

⁵³ GTAI (2014)

3.2 Perceived challenges for Indian investors

In the EY survey, Indian investors that have already invested or plan to invest in Germany identified a variety of existing or perceived challenges of doing business in the country (see Figure 38).

High competition intensity

The biggest challenge, identified by more than 82% of interviewees, is the high level of competitive intensity in Germany. However, to some extent, Indian investors also appreciate the strong competition, as it fosters a focus on innovation and efficiency. As described above, Germany functions in many industries as a lead market characterized by strong competition. To be successful in these markets, Indian companies thus need to offer a competitive product quality or gain market share through competitive pricing.

Product adaptation and quality

45% of survey respondents identified the necessity to adapt products and improve quality standards as a challenge, significantly fewer than with the previous category. These respondents indicated that high regulatory standards, demanding customers and local preferences make it more difficult for Indian players to be successful in the German market. Whereas product offers in other emerging and developing markets might be made on a “one-to-one” basis due to similarities to the Indian home market, the German market demands more adaptation and customization.⁵⁴

This is more true of some sectors than for others, and typically depends on the maturity level in the home market. The Indian software and IT services sector, for instance, is a worldwide leading-edge industry able to compete effectively anywhere. In this case, the intensity of competition in the German market presents more of a challenge than does the need to adapt the quality of products and services offered. In contrast, the German automotive sector is a difficult field in which to compete on the basis of product quality. The Indian automotive sector has not yet achieved a reputation as strong as the Indian software and IT services sector; thus, it is harder for Indian brands to compete overseas. While in some cases product quality and technological capabilities

may need to be improved, the lack of brand recognition is itself a factor, making it challenging for Indian companies to gain a foothold in the market.

Product quality can be adapted and improved in part through merging with or acquiring competitive local firms; however, interviewees indicated that ongoing activities including R&D efforts and internal company optimization measures were also necessary.

Government regulations

The German regulatory environment can present its own challenges, as various industries must abide by a large number of often very complex regulations. For instance, employees cannot be laid off in order to optimize cost structures as easily as in countries such as the United States. Germany has strong labor laws protecting their interests. Furthermore, many workers are organized in unions, whose input must be considered in important company decisions. Employees are taken seriously as relevant stakeholders with regard to the German practice of co-determination (Mitbestimmung). However, Indian investors are familiar with such environments, since there are also many trade unions in India. This may be why half of the interviewees mentioned government regulations as a significant challenge.

Additional examples of regulatory hurdles include visa regulations that in general make the international transfer of employees time consuming, especially for smaller firms. However, applying for business-related visas for Germany in particular was not generally regarded by interviewees as a challenge. The software and IT services companies in particular, which accounted for the vast majority of visa applications within the group, indicated that they do not regard this as a major challenge. Nevertheless, to avoid delays in the visa-granting process, applicants are advised to carefully read the information on the homepage of the German government’s Ministry of Foreign Affairs, or the relevant pages on the website of the German consular missions in India. Applying for the appropriate visa for the intended purpose is crucial. The German embassy in New Delhi or consulates in cities such as Mumbai have efficient processes in place that ensure fast processing of visa applications. Interviewees said delays in the process were typically caused by applying for the wrong types of visas – for example, for business visas instead of employment-related visas, or vice versa.

⁵⁴ GTAI (2014)

The challenge associated with government regulations also derives from investors' expectations regarding the German market. The regulatory environment often hampers Indian investors from achieving their most ambitious goals, causing dissatisfaction with the investment. An example is the expectation of increasing profits in the short-term through the aforementioned cost optimization that can be achieved by laying off staff. However, Germany's highly regulated market does not allow for such measures. This gap between perception and reality can be in part attributed to intercultural differences. Even though survey participants did not identify this as a major perceived challenge, their reported experiences indicated the importance of such challenges in the past. Language barriers are generally less of a problem than previously, but still more significant than in wholly English-speaking countries such as the United Kingdom. However, interviewees report that huge improvements have been made in this area.

High cost of international activities

Indian investors' high expectations with regard to profitability are particularly relevant given the relatively high costs of investing in Germany as compared to Eastern Europe, for example. As international activities, M&As and FDI usually entail high costs. For Indian companies, investing in Germany is on comparison more expensive than investing in emerging and developing markets. Investors try to mitigate this challenge through strategies such as acquiring bankrupt niche players in certain industries (e.g., in the machinery sector) and bringing them back on track. However, this strategy has frequently proven unsuccessful in the past, and some interviewees have concluded that acquiring companies in good shape is a better option. Thus, identifying suitable local business partners for cooperative ventures is perceived as a challenge, survey participants said.

Along with high costs, the exchange-rate risks involved in any international expansion were also mentioned as a perceived challenge. The exchange rate was relatively stable in 2016, but showed considerable volatility especially in the 2013 – 2015 period. The depreciation of the rupee in 2013 made FDI and M&As more expensive for Indian companies, which in part explains the slump in outward investment flows (see section 1.2). This slump was also attributable to financing problems in India. Financing

international activities represents an additional challenge to Indian investors, especially since they prefer cash transactions. Smaller companies are particularly susceptible to this challenge, since they often lack sufficient liquidity.

While these challenges are real, the company representatives interviewed indicated that they are largely manageable. Thus, Indian investors seem to be relatively prepared for their expansion to Germany. Germany is regarded as a country with a good political system, excellent infrastructure and a highly skilled workforce. Thus, the success factors that will be identified below are largely focused on individual company characteristics, as these are what can be most readily influenced.

FIGURE 38 Perceived challenges associated with expanding to Germany, as identified by Indian investors (in percent)



EY Survey on Indian Investments in Germany (2017)

3.3 Success factors

What lessons can be learned from Indian investors who have already invested or plan to invest in Germany? The analysis of key drivers leading to decisions to expand in German, along with the identification of perceived challenges, allows the derivation of a set of success factors that increase the probability of successful entry in the German marketplace (see Figure 39).

Local partners

More than two-thirds of the interviewees indicated that one of the best ways of increasing the chances of market success in Germany is through cooperation with a local partner. Indian investors regard such cooperative ventures as the key to gaining a foothold in the market, as this enables them to take advantage of existing networks, profit from local expertise with regard to such challenges as product adaptation and quality, and draw on local knowledge when dealing with the authorities and regulations. Partnerships are usually established through mergers or acquisitions, or less frequently through classic joint ventures (see section 1.2). This entails establishing contact prior to entering the German market. The exchange of experiences with other Indian investors is also seen as useful, but to a lesser extent.

Go-to-market strategy

More than 79% of survey respondents indicated that developing a suitable go-to-market strategy was crucial for success in the German market. This often entails adapting products and quality levels in order to meet German market requirements. Offering products of the highest quality, with cutting-edge technology, is regarded as crucial for market success. As previously noted, Germany is home to lead markets in many industries that demand the latest and best products in order to compete effectively. If Indian companies cannot offer this, competitive pricing is another means of gaining market access. This is an especially effective strategy in markets demanding economies of scale to stay profitable, as in the metals industry (see section 2.1). The steel sector, for instance, does not allow for a high degree of product differentiation based on cutting-edge technology, which makes pricing more important.⁵⁵

Staff training

A further success factor is based on expanding knowledge and capabilities within the investing company, as opposed to engaging in external measures such as partnerships. Indian investors identified the presence of skilled employees along with training and skills-development programs as vital to success. People and “soft” skills are an underestimated factor in the success of international expansions. Though intercultural differences and

language barriers were not identified as significant challenges, transcending these hurdles through training and staff development was regarded as a success factor. Especially during the initial phase of the overseas investment, people are the key to successful expansion.

These success factors can either be led by the investing company itself or fostered through the engagement of external support organizations

In this regard, survey participants indicated that external support is particularly important in order to gain access to networks and local expertise. The top three areas in which external support was deemed necessary included the search for acquisition targets, the search for appropriate business partners, and in dealing with authorities (including complying with regulations). Further areas in which external support was deemed useful included financing activities, the selection of investment locations, and personnel recruitment.

Since international activities are associated with high costs, especially in Germany (see section on challenges), access to sufficient financing and financial resources was regarded as a crucial prerequisite for expansion to Germany. Smaller companies thus face higher hurdles than do their larger counterparts. However, the increased presence of Indian banks in Germany, often with programs aimed at supporting such expansion, helps mitigate these challenges. In addition, as outlined below (see “Hot topic: German government incentives”), the German-state-owned KfW Bank offers incentive funding for investors in partnership with local banks.

FIGURE 39 Success factors prior to internationalization effort (in percent)



EY Survey on Indian Investments in Germany (2017)

⁵⁵ MarketLine (2016a)



Hot topic | German government incentives

Germany has a diverse landscape of government-funded and government-supported incentives for foreign investors. These incentives are provided through various institutions that aim to improve the investment climate, boost inbound investment flows and improve investor success rates.

Some German federal states and regions within these states offer incentives to investors. These are designed to promote the establishment of companies in specific industries, or to accomplish goals such as the creation of manufacturing jobs. Those grants vary from state to state, and in the type of promotion offered. In some cases, offers include special depreciation on assets, or grants for capital expenditure if this demonstrably creates jobs. Some offers subsidize investment in research and innovation, while others grant special terms and conditions for activities such as the acquisition of land. In some cases, entire industries are encouraged, for example, through investments in renewable energy by stimulating demand with favorable feed-in tariffs. The establishment of innovative enterprises is often supported with measures such as the promotion and establishment of infrastructure for IT or technology parks and start-ups.

The Federal Ministry for Economic Affairs and Energy (BMWi) has shifted the task of business promotion to Germany Trade and Invest (GTAI), the government's economic-development agency. With its extensive network in Germany and abroad, this agency supports German companies in foreign markets, promotes Germany as a business location and assists foreign companies in setting up operations in Germany. The GTAI provides informational reports and market analyses, and helps identify advantages associated with specific business locations. The entity is supported in these tasks by regional economic promotion agencies such as FRM GmbH (FrankfurtRhein-Main) or Hamburg Marketing GmbH.⁵⁶

The German government also provides financing support for investment undertakings through the Kreditanstalt für Wiederaufbau (KfW Bank). KfW is Germany's most important state-owned promotional bank. It has a wide array of tasks, supporting private individuals as well as enterprises, cities, municipalities, non-profits and other social organizations. Its promotional activity largely extends to granting loans on favorable terms. KfW funds its business in the capital market at competitive terms, and makes its loans to enterprises backed by a federal government guarantee. It grants these loans in partnership with regular banks, savings banks, cooperative banks and commercial banks, which represent KfW's main distribution partners.⁵⁷ Indian investors can apply for these loans through their local banks in Germany, many of which are also active in India or have cooperative agreements with Indian banks that are present in Germany, such as ICICI Bank or the State Bank of India.

⁵⁶ GTAI (2017b)

⁵⁷ KfW (2017)

Among the KfW products offered are entrepreneur loans (Unternehmerkredite). The target group for this credit category includes self-employed professionals, enterprises, and leasing companies from Germany and other countries that have been in the market for longer than five years and want to invest in Germany. Financing is available for working capital or capital expenditures. Loans of up to €25 million can be granted, with a maximum term of 20 years. Financing of up to 100% of expenditure is possible. Interest rates start at an annual rate of 1%, and investors can opt for a repayment-free start-up period.

4 Conclusion and strategic considerations

The following section identifies strategic considerations for the future of the Indo-German partnership, based on the survey results and the secondary research cited in the first part of this study.

The target audience for these recommendations includes all stakeholders, interested companies, governments, industry and trade associations, and financial and R&D institutions in India and Germany.

Governments in both India and Germany have created a framework for economic and business interactions, with policies preparing the ground for successful investment projects in both countries. Government institutions may also act as investors or co-investors in certain projects.

Other stakeholders such as industry and trade associations provide information and support for investors. Those with Germany-based offices have access to region-specific information, and can support investors locally during all business-related procedures.

Financial institutions play a relevant role not just as potential investors providing venture capital and private equity, but also by providing other useful financial products (e.g., insurance to cover product warranties and other liability claims) and financing options (e.g., leasing models for machines).

R&D institutions support joint research, helping companies to adapt their products and production practices to German market requirements.⁵⁸

This study's interviews with investors and potential investors revealed that Germany needs to market itself in a more innovative and effective way, including the use of state-of-the-art media channels. As described above, the country offers unique and advantageous conditions for foreign investment. Nevertheless, most Indian investors identified the United Kingdom as their first choice for overseas expansion. Although this might change with the upcoming Brexit, Germany needs to intensify its marketing efforts especially with regard to countries that

promise bilateral potential. Indians can offer significant benefits to the German economy through the provision of R&D and innovation capabilities, by mitigating the shortage of professionals in certain industries, or simply through supporting the Mittelstand in its succession challenges, for instance.

Thus, German authorities on the federal, state and even municipality levels should increase their efforts to attract Indian investors. Generally, the public and government leaders view FDI more positively than are mergers or acquisitions, since it implies the creation of new jobs, among other benefits. In contrast, M&As are often seen as a loss of German technology and know-how to foreign countries. This is not necessarily the case, as we see good examples of Indian investors today who are successfully growing the businesses they have acquired in Germany.

For their part, Indian companies should increasingly look at Germany as opposed to the United Kingdom as an investment destination – not only because of the impending effects of Brexit, but also due to the excellent market conditions available here. For example, language barriers are far lower than typically perceived, and Germany today offers a politically stable, high-quality business environment. However, the strategic use of high-quality external support to gain in-depth insights and a foothold in the local market should be seen as a critical factor in the success of overseas investments.

The following strategic considerations outline areas of potential improvement and identify actions that could help sustainably attract and support Indian investment in Germany.

⁵⁸ EY Study on Prospects for Indo-German Collaboration in High-Technology Manufacturing (2015)

1 Marketing for Germany should focus more on “soft” factors such as the quality and affordability of life in Germany, and high public-safety standards. As investment decisions are ultimately made by people whose well-being is critical for the success of any project, marketing campaigns seeking to attract investment will be more successful if it focuses on the people themselves.

2 Indian expatriates tend to choose locations abroad in which an Indian network and infrastructure is already in place. This typically includes an English-speaking environment and amenities such as the availability of Indian food. There are already several centers with a large Indian presence in Germany; moreover, these are rapidly growing, in part due to the increasing number of Indian students in Germany. Local governments, business associations and relevant companies should encourage the establishment and further development of such multicultural environments.

3 Investors regard Germany’s regulatory and tax regimes to be transparent and reliable. However, tax and social-security costs are considered to be quite high. A European-level tax harmonization connected with appropriate incentives could help attract more investment, including highly skilled employment in innovation-intensive and start-up businesses.

4 The prospect of gaining access to German engineering and technology attracts Indian investment. The specific strengths of German engineers paired with Indians’ IT affinities could be the key to a fruitful cooperation, especially in a world that increasingly requires IoT and Industry 4.0 capabilities. Cooperation with leading Indian IT and software developers could thus help to preserve Germany’s competitiveness, innovation capabilities and standard of living in an era of demographic change.

5 The pharmaceutical industry and other sectors facing strict regulation in the European Union, many of which have previously chosen to use the United Kingdom as a gateway to Europe, may face high costs associated with registration of their products in the EU-27 or Germany following a “hard” Brexit. The German government should thus develop a solution that facilitates registration for products currently registered in the UK produced by companies moving to Germany.

6 Indian investors seeking access to technology should also focus on the marketability of technology following an acquisition rather than favoring distressed assets. Commissioning commercial, financial, technological and legal due diligence by a professional adviser would help to minimize risks in such a situation.

7 Indian expatriates in Germany say they appreciate German society’s openness and liberal attitude toward people of different skin colors or religions. However, interviewees said that an understanding of German culture and thus customer and market preferences was necessary to gain quick access to society, customers and the market. German governments, companies and associations could strongly support this process by offering training programs in this area. For potential investors, faster market success could be achieved by training employees before they are sent to Germany.

8 Investors focused on cost- and tax-effective investments can find attractive conditions in Germany. While tax rates in Germany are not Europe’s lowest, several state support schemes enable costs to be significantly reduced. Labor costs, while also among the highest in Europe, are more than balanced by high productivity, low workforce turnover rates, and strong loyalty toward employers. Investors should consider whether such long-term benefits may contribute more significantly to long-term, sustainable successes than do short-term cost savings.

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Abbreviations

| | |
|----------|---|
| ACMA | <i>Automotive Component Manufacturers Association of India</i> |
| AG | <i>Aktiengesellschaft (corporation)</i> |
| BCG | <i>Boston Consulting Group</i> |
| BJP | <i>Bharatiya Janata Party</i> |
| BPO | <i>Business-process outsourcing</i> |
| BMWi | <i>Bundesministerium für Wirtschaft und Energie (Federal Ministry of Economic Affairs and Energy)</i> |
| CAGR | <i>Compound annual growth rate</i> |
| EDP | <i>Electronic data-processing</i> |
| EYG | <i>Ernst & Young Global</i> |
| EY | <i>Ernst & Young</i> |
| FDI | <i>Foreign direct investment</i> |
| FRM GmbH | <i>FrankfurtRheinMain GmbH</i> |
| GDP | <i>Gross domestic product</i> |
| GTAI | <i>Germany Trade and Invest</i> |
| GUO | <i>Global ultimate owners</i> |
| IMF | <i>International Monetary Fund</i> |
| JV | <i>Joint ventures</i> |
| KfW | <i>Kreditanstalt für Wiederaufbau</i> |
| M&A | <i>Mergers and acquisitions</i> |
| NRI | <i>Non-resident Indians</i> |
| OCI | <i>Overseas citizens of India</i> |
| OEM | <i>Original equipment manufacturer</i> |
| OTC | <i>Over-the-counter</i> |
| SME | <i>Small or medium-sized enterprise</i> |
| TCS | <i>Tata Consultancy Service</i> |

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