



PROPOSAL OF STRATEGIES FOR THE IMPLEMENTATION OF THE SPANISH CONSTRUCTION COMPANIES IN INDIA

Author / Autor: Nazim Khan	Date / Fecha: June, 2017
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TITLE OF MASTER'S THESIS: PROPOSAL OF STRATEGIES FOR THE IMPLEMENTATION OF THE SPANISH CONSTRUCTION COMPANIES IN INDIA	
<p>1. Problem Statement</p>	<p>The economic crisis that began in Spain in 2008 has led to the collapse of the construction sector. The large Spanish construction companies, which already had a wide dedication to the international market, have seen their only way out for survival was to increase turnover abroad. On the other hand, medium and small size construction companies have also seen the need to internationalize as the only solution to the crisis.</p> <p>India is one of the fastest growing economies in the world now. According to industry estimates, the Indian construction industry was worth US \$161.22 billion in FY2016-17. The Twelfth Five-year Plan envisions investment of approximately US \$1 trillion in Indian infrastructure between 2012 and 2017.</p> <p>With the relentless pursuit of new markets of Spanish construction companies, this project is to make a study of the Indian market, studying their evolution, changes and policies that come taking these last years in construction, proposing strategies to minimize weaknesses and threats, and strategies maximize the strengths and opportunities in the sector.</p>
<p>2. Objectives</p>	<p>The objective of this thesis is to provide elements of analysis on the strategic horizon of construction in India for Spanish companies.</p> <ol style="list-style-type: none"> i. To know: the type and structure of Indian government; country's economy, both its past, present and future; regulations legislating state contracting system in India; the current situation of construction in India. ii. Applying the theory of SWOT analysis for the possible internationalization of Spanish companies in India. iii. Proposal of strategies: recommendations to consider for the internationalization of Spanish construction companies, based on the SWOT analysis. iv. To compare the strategies followed by already established Spanish construction companies in India with the proposed strategies in the thesis and analyse the current market condition of those companies.

<p>3. Organizational structure</p>	<p>Chap. 1. INTRODUCTION. Shows the approach to the problems, objectives and scope of the project to give a general idea of the work content.</p> <p>Chap. 2. SPANISH CONSTRUCTION SECTOR. Shows the history and current state of construction in Spain, the need for Spanish companies internationalize, their categorization, growth of companies abroad and their need for emerging countries.</p> <p>Chap. 3. INDIAN CONTEXT. Shows the current situation of India, the division and political geography, the governance of the public administration, the economy of the country, and a study of the construction market.</p> <p>Chap. 4. SWOT ANALYSIS. It is what might be called the heart of the thesis. In the theoretical framework, the description of the technique to be used is done, with its respective components and steps for its implementation. Then the information exhibited in the previous chapters is analysed and applied to the SWOT methodology, which is a methodology of study of the situation of a company, analysing its internal characteristics (Strengths and Weaknesses) and external situation (Threats and Opportunities) in a square matrix.</p> <p>Chap. 5. SPANISH CONSTRUCTION COMPANIES IN INDIA. Shows the current situation of Spanish construction companies present in India and the discussion about the strategies they have followed to implement in India.</p> <p>Chap. 6. CONCLUSIONS. Concludes the thesis and the most relevant facts has been mentioned to make a possible internationalization of Spanish companies in India.</p>
<p>4. Methodology</p>	<ol style="list-style-type: none"> i. First, the current construction market situation in Spain and need for the Spanish construction companies to internationalize is discussed. ii. Then the contracting system in India, the current situation of construction and the opportunity available for the Foreign Direct Investment (FDI) in India has been presented. iii. Next, SWOT analysis for the possible internationalization of Spanish construction companies in India has been done and possible

	<p>strategies has been proposed for the same.</p> <p>iv. In the end, we compare the strategies followed by already established Spanish construction companies in India with the proposed strategies and analyse the current market condition of those companies.</p>
5. Objective Fulfilment	<p>Chapter 3: Shows the current situation of India, the division and political geography, the governance of the public administration, the economy of the country, and a study of the construction market.</p> <p>Chapter 4: SWOT analysis has been performed by showing the internal strengths and weaknesses of the Spanish construction companies and external opportunities and threats presented by the Indian construction market.</p> <p>Later the Possible strategies has been proposed for the internationalization of Spanish construction companies in India.</p> <p>Chapter 5: Current situation of the already presented Spanish companies in India has been done and a comparison has been done of the strategies proposed and the strategies adopted by the already present companies.</p>
6. Contributions	<p>A detailed analysis of Indian economy and Construction market has been presented. Later the SWOT analysis has been done for the possible internationalization of Spanish construction companies in India, and for that Strategies has been proposed by analyzing the Strength and weaknesses of the Spanish construction companies and Opportunities and threats presented by Indian construction market.</p>
7. Recommendations	<p>Spanish construction companies which are looking to internationalize and find opportunities in India can refer to my thesis for the Current construction market and economy of India and for possible strategies to adopt to move to India.</p>
8. Limitations	<p>There is not much information available about the strategies adopted by already present Spanish construction companies in India, so only brief discussion is done on the comparison of strategies.</p> <p>As the SWOT analysis done in this work is general for all kind of Spanish construction companies. But in real it will differ according to the size of company, its revenue, type of construction it does etc.</p>

Abstract

The economic crisis that began in Spain in 2008 has led to the collapse of the construction sector. The large Spanish construction companies, which already had a wide dedication to the international market, have seen their only way out for survival was to increase turnover abroad. On the other hand, medium and small size construction companies have also seen the need to internationalize as the only solution to the crisis.

India is one of the fastest growing economies in the world now. According to industry estimates, the Indian construction industry was worth US \$161.22 billion in FY2016-17. The Twelfth Five-year Plan envisions investment of approximately US \$1 trillion in Indian infrastructure between 2012 and 2017.

With the relentless pursuit of new markets of Spanish construction companies, this project is to make a study of the Indian market, studying their evolution, changes and policies that come taking these last years in construction, proposing strategies to minimize weaknesses and threats, and strategies maximize the strengths and opportunities in the sector.

Keywords: SWOT, Strategies, Construction, Internationalisation, India, Spain, Companies

Resmen

La crisis económica que comenzó en España en 2008 ha provocado el desplome del sector de la construcción, tanto de edificación como de obra civil. Las grandes empresas constructoras españolas, que ya contaban con una amplia dedicación al mercado internacional, han visto que su única salida para la supervivencia era incrementar la facturación en el exterior. Por otro lado, también las empresas constructoras de mediano y pequeño tamaño, se han visto en la necesidad de internacionalizarse como única salida a la crisis.

India es una de las economías de más rápido crecimiento en el mundo hoy en día. Según estimaciones de la industria, la industria de la construcción indio valía US \$ 161,22 billones en FY2016-17. El duodécimo Plan quinquenal prevé la inversión de aproximadamente US \$ 1 trillón en infraestructura indio entre 2012 y 2017.

Con la incesante búsqueda de nuevos mercados, en este proyecto se plantea hacer un estudio del mercado indio, estudiando su evolución, los cambios y las políticas que vienen llevando estos últimos años en construcción, proponiendo estrategias que minimicen las debilidades y amenazas, y estrategias que maximicen las fortalezas y oportunidades del sector.

Palabras Clave: DAFO, Estrategias, Construcción, Internacionalización, India, España, Empresas

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Chapter 1: INTRODUCTION

1.1 Problem Statement:

Since 2007, the year which is known as the global crisis (started in the US), caused by the large amount of loans and high consumption, causing a global inflation, driving up prices of materials premiums, the overvaluation of products, a global food and energy crisis, which brought the fall in the home prices, mortgages and mistrust in banks, causing many companies go bankrupt, causing a lot of unemployment. (Ferrari, 2008)

In Spain, the construction sector is one of the hardest hit, the housing glut and rising cost of capital (higher rates of interest and lack of bullish expectations on housing prices) led to a huge decline in sales. In 2008 the great collapse occurs, causing many companies to suspend payments, causing a decrease in public works up to 70% (SEOPAN, 2009), facing this, the Spanish construction companies were forced to find ways to offset the losses i.e, Expansion. (Miguel, 2009).

In late 2008, the largest companies have already shown the way that other companies had to follow, generating large revenues abroad. Companies like Fomento de Construcciones y Contratas, ACS (Dragados), Acciona, Ferrovial, OHL, Sacyr-Vallehermoso had 35% of their total revenues abroad and according to the Public Works Financing magazine, they were part of the first 12 companies to have done so in the sector.

Since then until June 2011, the Construction magazine - DBK mentioned that there are more than 50 groups of Spanish construction companies working on major projects around the world and that 10% of them have more than 80% of its revenue abroad. (DBK, 2011)

According to the International Monetary Fund (IMF, 2016), at a time when global growth is projected at 3.4% in 2016 and 3.6% in 2017, therefore there is an obligation for companies to search for markets elsewhere. Developing economies with growth well above the world average (5% IMF) regions of Africa (5.5%) and Asia (6.8%) are areas that should be studied, seeking the fastest growing countries.

The Indian economy in 2017 it is the sixth-largest economy by market exchange rates, and is the third-largest by purchasing power parity, or PPP. With its average annual GDP growth rate of 5.8% over the past two decades, and reaching 6.1% during 2011–12, India is one of the world's fastest-growing economies and is expected to lead the world and emerging countries in terms of its growth this year and the next year as well, India is projected to grow at 7.6% in both these years (IMF, 2017).

With the relentless pursuit of new markets of Spanish construction companies, this project is to make a study of the Indian market, studying their evolution, changes and policies that come taking these last years in construction, proposing strategies to minimize weaknesses and threats, and strategies maximize the strengths and opportunities in the sector.

1.2 Justification for the use of the skills and knowledge acquired in the Master

In the curriculum of the official master's degree in planning and management in Civil engineering are subjects that undoubtedly will be the basis for the realization of this work. Subjects like management of projects, methodology of research in the construction, Organization and Management of Companies.

The SWOT analysis is important in this work to be able to search strategies and conclusions. The main features and knowledge of the procedure to perform the analysis was acquired in the Masters.

1.3 Objectives:

- The objective of this thesis is to provide elements of analysis on the strategic horizon of construction in India for Spanish companies.
- To know: the type and structure of Indian government; country's economy, both its past, present and future; regulations legislating state contracting system in India; the current situation of construction in India.
- Applying the theory of SWOT analysis for the possible internationalization of Spanish companies in India.
- Proposal of strategies: recommendations to consider for the internationalization of Spanish construction companies, based on the SWOT analysis.
- To compare the strategies followed by already established Spanish construction companies in India with the proposed strategies and analyse the current market condition of those companies.

1.4 Scope:

This work seeks to define the main advantages and disadvantages of the Indian government contracting system. We will focus on public works projects, show generally all the latest construction in India, and then by studying Weaknesses, Threats, Strengths and Opportunities in the sector (SWOT), proposing strategies that minimize or maximize these, and later compare the proposed strategies with the strategies followed by already established Spanish construction companies in India.

1.5 Content of final master's thesis:

- Chapter 1. INTRODUCTION. Shows the approach to the problems, objectives and scope of the project to give a general idea of the work content.
- Chapter 2. SPANISH CONSTRUCTION SECTOR. Shows the history and current state of construction in Spain, the need for Spanish companies internationalize, their categorization, growth of companies abroad and their need for emerging countries.

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- Chapter 5. SPANISH CONSTRUCTION COMPANIES IN INDIA. Shows the current situation of Spanish construction companies present in India and the discussion about the strategies they have followed to implement in India.
- Chapter 6. CONCLUSIONS. Concludes the thesis and the most relevant facts has been mentioned to make a possible internationalization of Spanish companies in India.

Chapter 2: SPANISH CONSTRUCTION SECTOR

2.1 Background:

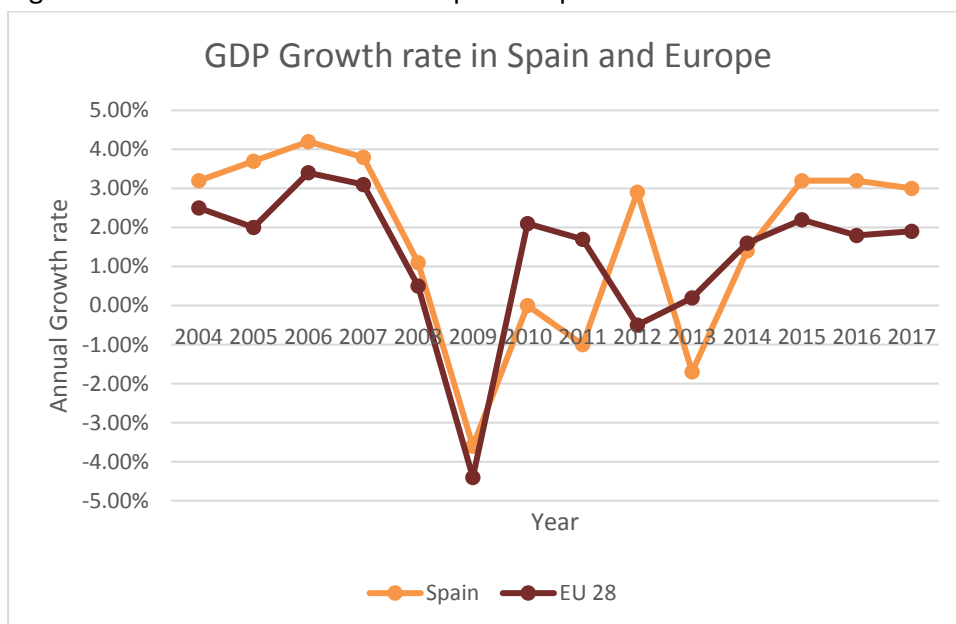
In the Problem Statement, it has been exposed how the economic crisis in Spain has led to the collapse of the construction sector.

The construction sector has a major influence on the cycle of economic activity in the country. The construction has two types of effects on the economy, on the one hand the construction activity exerts a momentum on other sectors of suppliers of intermediate products. It is what is called "direct effect". On the other hand, construction provides the necessary infrastructures so that the rest of the economic activities are developed, contributing to increasing the productivity and the economy's long-run growth. It is what is called 'indirect effect'.

The global economic crisis, which has hit Spain, has plunged the constructions sector in the country.

The following graph shows the evolution of Gross domestic product (GDP) in Europe and Spain.

Figure 2.1: Evolution of GDP in Europe and Spain



Source: Eurostat, 2017

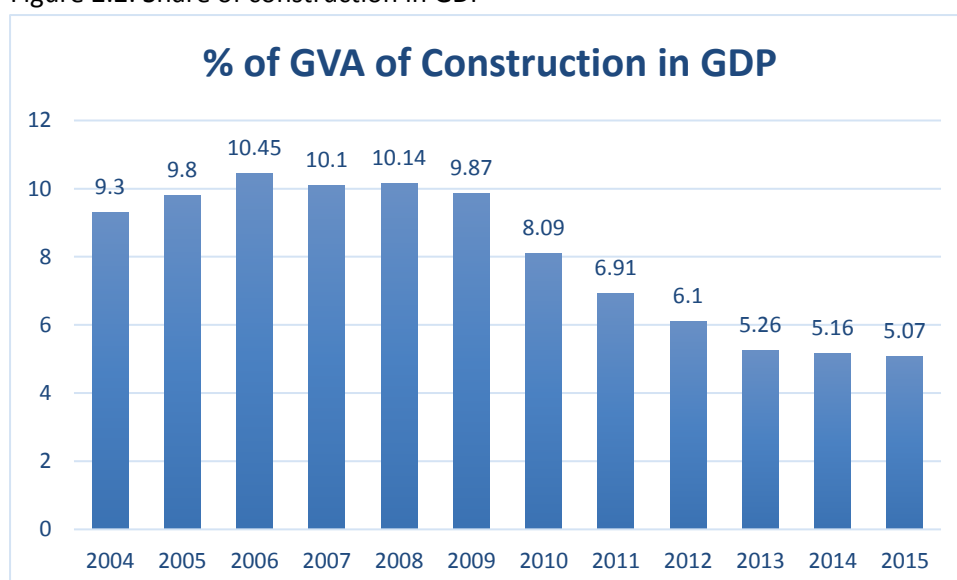
The Gross Domestic Product (GDP) in Spain expanded 3 percent in the first quarter of 2017 over the same quarter of the previous year. GDP Annual Growth Rate in Spain averaged 2.16 percent from 1996 until 2017, reaching an all-time high of 5.60 percent in the first quarter of 2000 and a record low of -4.30 percent in the second quarter of 2009. GDP growth is parallel to the evolution of construction. (Eurostat, 2017)

In the decade of expansion of nineties, the construction sector acted as a driver of economic growth. The factors that influenced this growth were: declining interest rates, having joined the Economic and Monetary Union, the incorporation of large amounts of cheap labour from immigration and European financial aid in the form of structural funds.

From 1996 to 2006, the Gross Value Added(GVA) of Construction in GDP grew at an average annual rate of 6%. Well above the annual growth rate of total GVA, which was 3.8%.

The share of construction in GDP rose from 7.3% in 1997 to 10.45% in 2006. (INE, 2016)

Figure 2.2: Share of construction in GDP



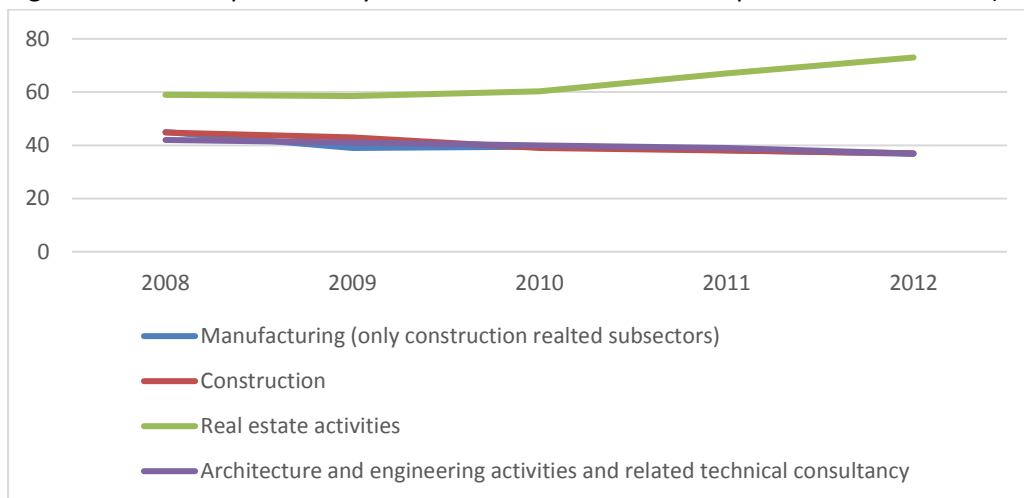
Source: INE, Eurostat, 2016

Key economic drivers of the construction sector

Productivity

Labour productivity in Spain has been declining for most of the construction sub-sectors since 2008. Narrow construction, manufacturing and architectural services have shown similar productivity trends, dropping by 16-22% in 2008-2012. Real estate activities have shown the opposite trend, increasing productivity by 25% since 2008. Labour productivity in real estate reached EUR 72,700 in 2012, almost double than in narrow construction (EUR 36,500) or manufacturing (EUR 35,300) (Figure 2.3).

Figure 2.3: Labour productivity in the construction sector in Spain over 2008-2012 (EUR k)



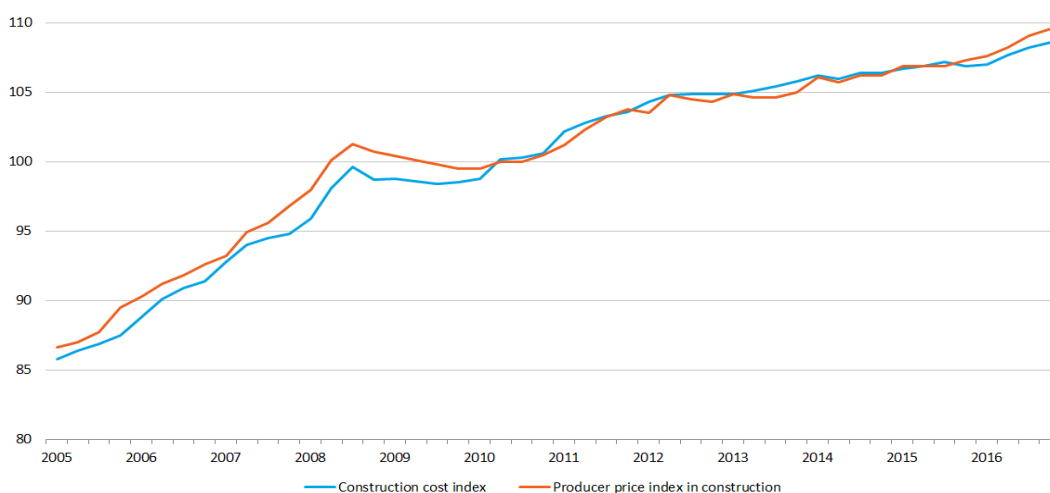
Source: Eurostat, 2015.

Profitability

The turnover of the broad construction sector in 2013 amounted to EUR 155.3 billion, 65% lower than in 2008 (EUR 441.1 billion). This drop was particularly pronounced in the construction sub-sector (-72%). In parallel, the cost of construction for residential buildings increased by 12.8% during 2007-2014 (Figure 2.4), both due to a 10.2% rise in prices for input materials and a 17.7% increase in labour costs.

Moreover, the gross operating surplus of the broad construction sector in Spain has been sharply decreasing since 2008, falling by 52.3% to EUR 21.6 billion in 2012. This was caused by sharp changes in demand, decrease of turnover and increase of construction costs.

Figure 2.4 Construction cost Index (CCI)



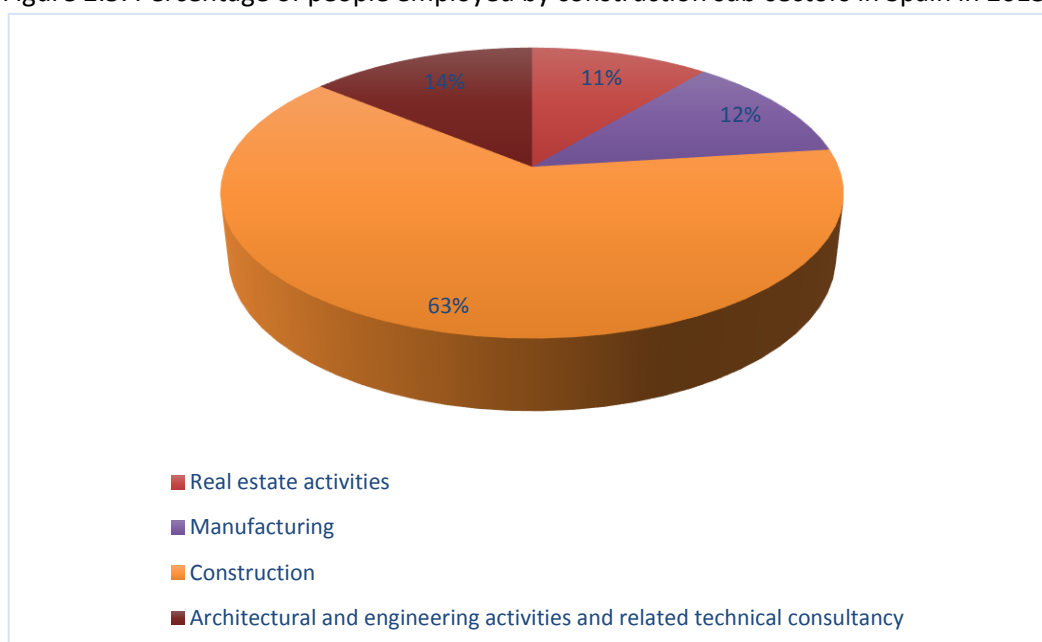
Source: Eurostat 2015

Employment

The number of people employed in the broad construction sector has been declining since 2008, reaching 1.6 million in 2013, 50.4% lower than in 2008. This decline was mirrored to a certain extent in all construction subsectors, varying from 23.5% for architectural and engineering activities to 56% for narrow construction, which employed 63% of the construction workforce (Figure 2.5).

The overall unemployment rate in Spain reached 24.4% in 2014, being one of the highest in the EU-28. It has been on the increase since 2007 (at 8.2%) and peaked in 2013, with 26.1% of the labour force being unemployed. For the last year, unemployment has shown a slight but important positive trend, declining by 1.7 percentage points².

Figure 2.5: Percentage of people employed by construction sub-sectors in Spain in 2013



Source: Eurostat, 2015

The share of people employed by SMEs in the broad construction sector in Spain has slightly decreased, from 89% in 2008 to 87.5% in 2013. Moreover, the average size of construction companies in Spain fell by 37.8%, from 4.5 employees in 2008 to 2.8 employees in 2013, increasing the proportion of microenterprises (0-9 employees) in the sector. Indeed, the share of people employed by micro companies in the construction sub-sector has grown from 43.8% in 2008, to 57.8% in 2013.

Access to finance in the construction sector

The economic crisis has affected the ability of Spain's construction sector to access loans and other sources of finance. The total volume of loans to construction sector in Spain has been drastically decreasing, reaching EUR 54.3 billion in 2014, 64.9% less than in 2008. This indicates difficulties for construction industry (and for most SMEs in the Spanish economy) to obtain credit and access the financial market.

Key issues and barriers in the construction sector:

Company failure

Within the broad construction sector, the number of businesses that terminated their activities (i.e. company deaths) decreased by 43.6% between 2008 and 2013, from 122,067 to 68,886. In parallel, the number of new companies created declined by 17.5%, reaching 52,037 in 2013. This trend can also be observed in the construction sub-sector (with a 53% decrease in company deaths and a 25% decrease in births) and in the real estate sub-sector (-44% and -5% in deaths and births, respectively). On the contrary, the architectural/engineering sub-sector experienced the opposite trend, with both company deaths and births increasing (+71% and +22%, respectively) and suggesting a more dynamic market. Overall, although the number of companies that terminated their operations still exceeds the number of new companies created, the data is indicative of a gradual stabilisation of the business demography within the broad construction sector.

Trade credit

The importance of trade credit in the Spanish economy as a whole is relatively high compared to other sources of financing, being equivalent to 33% of the GDP in 2014 (Banco de España, 2015). It is more widespread among small and medium-sized enterprises (SMEs), both in terms of credit granted and received, particularly in the wholesale/retail trade, accommodation and food industries. Conversely, construction and real estate SMEs had a trade debtors-to-total assets ratio of about 8% and a trade creditors-to-total liabilities ratio of about -2.5% in 2013 (compared to about 18% and -18%, respectively, for the former industries), showing the lower weight of trade credit in their balance sheets.

Late payment

The Spanish construction sector reports the longest payment terms in the general economy. The average number of days required by construction and real estate SMEs to pay their suppliers has remained relatively stable between 2007 and 2013, at about 80 days from the invoice date. This is higher than for industries such as trade, accommodation and food, averaging 50 days. As for large construction and real estate enterprises, the average supplier payment period is considerably higher than for SMEs, peaking at almost 240 days in 2010, but subsequently decreasing to 160 in 2013. This constitutes a problem for Spanish construction SMEs, particularly when working as sub-contractors in public procurement tenders, since they are typically paid by large contractors at the end of the contract and with long delays, resulting in liquidity issues (European Builders Confederation, 2009).

The Spanish construction sector displays the highest levels of late payments in the domestic economy. According to a recent survey, 37.2% of overdue payments originated from this industry (Atradius, 2015). These are ascribed to the use of outstanding invoices as sources of financing, but also to the complexity of payment procedures (especially for foreign payment delays). The situation is also expected to worsen slightly in the coming year in the Spanish construction sector. Public administrations reported the longest payment delays, with an average of 103 days, still considerably above the 30-day target set by the Late Payment Directive (2001/7/EU), which came into force in

Spain in 2013 (Intrum Justitia, 2015). Namely, the average delays from public administrations to self-employed workers has increased from 83 days in September 2015, to 86 in January 2016, with regional governments reaching 101 days (Federación Nacional de Asociaciones de Trabajadores Autónomos (ATA), 2016).

Time and cost of obtaining work permits and licenses

Spain ranks 101st in 2015 in “Dealing with construction permits”, faring worse than the previous year (97th). Building a warehouse requires 13 administrative procedures (slightly above the OECD high-income average of 12.4) and takes 205 days (considerably above the 152.1 average) (Table 2.1) (World Bank Group, Doing Business, 2016). The estimated cost is approximately 5.2% of the warehouse value, higher than the average of 1.7%. Namely, obtaining the building permit takes 45 days and costs EUR 44,835. Once the building is completed, it takes 3 days to obtain the completion certificate, at a cost of EUR 204, and another 60 days for the occupancy permit (free of charge). Requesting and obtaining water connection requires 10 days and costs EUR 1,200.

Table 2.1: Construction procedures timing and costs in Spain

Procedure	Time to Complete (days)	Associated costs (EUR)
Request and obtain the official alignment (alineamiento oficial)	14	186
Request and obtain a certificate of compliance (certificado de conformidad)	60	5,902
Request and obtain a building permit (licencia de obras)	45	44,835
Obtain approval of draft project proposal and implementation plan (Visado del proyecto básico y proyecto de ejecución) from College of Architects of Madrid (Takes place simultaneously with another procedure)	3	1,155
Notify labour authority of the start of construction (apertura del centro de trabajo) at the Ministry of Employment, Tourism and Culture	1	No charge
Receive initial inspection	1	375
Obtain completion certificate (visado del certificado final de obra -CFO) from College of Architects of Madrid	3	204

Request final inspection in connection with the occupancy permit (licencia de primera ocupacion y funcionamiento)	1	3,601
Receive final inspection	1	No charge
Obtain occupancy permit (licencia de primera ocupación y funcionamiento)	60	No charge
Register the new building	18	1,223
Request and obtain water connection (Takes place simultaneously with another procedure)	10	1,200
Register the new building at the Cadastre	1	No charge

Source: Doing Business- overview for Spain, Word Bank, 2016.

Skills shortage

The number of job vacancies in the construction sub-sector increased by 30.9% between 2012 and 2013, from 2,286 to 2,992. Similarly, vacancies in the real estate sub-sector increased by almost 53.5% over the same period, from 271 to 416. However, adult participation in education and training in the construction sub-sector decreased from 7.8% in 2012 to 6.7% in 2014, although it is slightly higher than in 2008 (at 6.4%). A similar trend is observed in the real estate subsector, where adult participation fell from 13.1% in 2013 to 9.9% in 2014.

According to the Spanish Labour Foundation for Construction (Fundación Laboral de la Construcción – FLC), only 30% of Spanish construction workers received appropriate training, compared to the average of 60% across other industries (Fundacion Laboral de la Construcción, 2015). Indeed, the construction sector had traditionally been one of the main employers of relatively low-skilled workers, particularly youth (aged 15- 24) educated below upper secondary education (OECD, 2015). Many of these, currently unemployed, will need to be retrained.

Recent developments in national and EU legislation are pushing for the creation of new skills to meet energy efficiency and sustainability requirements. Namely, priority skills identified in this respect include joint sealant operators, PVC and aluminium metalwork assemblers and environmental/quality control technicians, but also builders, plumbers, electricians, and heating/air conditioning/gas/insulation installers (BUILD UP Skills – SPAIN, 2012). The development of such skills within the workforce requires a gradual adaptation of the current Vocational Education Training (VET) system. To this end, the national Organic Law 4/2011 amends previously existing laws that regulate VET in Spain, aiming to improve the adaptability of vocational training to the changing needs of the labour market. The Law is further supported by the Royal Decree 1147/2011, which sets the framework for a more flexible and better-integrated VET.

2.2 Internationalization of Spanish Construction Companies:

According to ICEX, the term internationalization of Spanish companies signifies, both the implementation of the Spanish company abroad, whether commercial or productive, such as the formation of business cooperation agreements abroad, which enables the company to a prolonged presence in the country of operation.

The economic and financial crisis has forced Spanish companies to internationalize, supported by the globalization of markets, multinationals companies, small and medium enterprises (SMEs), expanded its geographic scope to supply its products and to provide its services.

F. Medall Vella, in his book 'Estrategias de internacionalización de las constructoras españolas (2006)' considers three stages:

- Stage of adjustment and consolidation (1975-1985)
- Fall of abroad activity (1985-1990)
- Internationalization of trade and growing investment (1990-2006)

This study, conducted in 2006, analyses the evolution until that year. the analyses referred to in this study is attached and is complete with what happened during the period 2006-2008 and 2008-2017.

Adjustment and consolidation Stage (1975-1985)

Since the mid-seventies to mid-eighties there was a crisis in construction in Spain. Companies needed new markets to maintain their contracting work.

The main destination was Latin America. The loans made by the World Bank and the Inter-American bank helped governments to develop transport and energy works (López Duarte, C. & Garcia Canal, E. 2002).

Fall of exterior activity (1985-1990)

At the end of the eighties, construction companies focused on the domestic market, due to the severe crisis of Latin American countries. Also during this period, Spain was granted large amounts of funding for infrastructure in the form of the Cohesion Funds. The big plans of major highways that form the backbone of Spain are made at this time.

The Seville Expo, the Barcelona Olympics in 1992: large specific investments were also made.

Internationalization of trade and growing investment (1990-2006)

Since the nineties, construction companies began carrying out mergers and going out abroad to diversify their risk and not rely on a single market. At first companies work only in construction to engage in concessions as the decade progresses.

In the year 2000 a maximum of almost 4,000-million-euro contract is reached. Two years later there would be a significant decrease to go up in the year 2006 (Galán Zazo, J.I. et al., 2007).

2006 to 2008 European market

In this period, the distribution of both turnover and the contract work has a clear majority destination: European Union. The entry of Eastern European countries has revolutionized the investment of European companies, overturning to these markets which are clearly expanding.

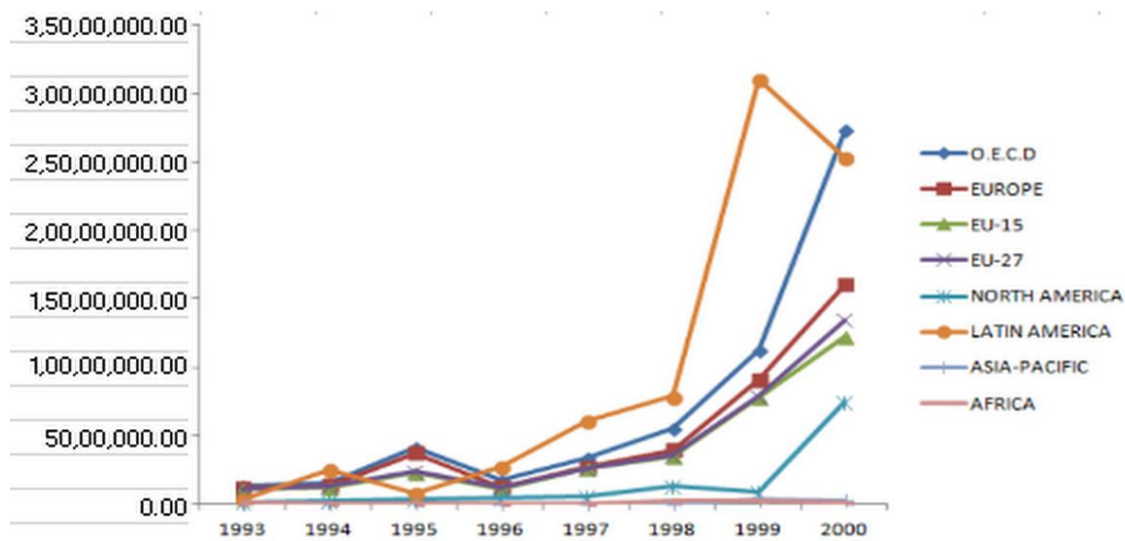
The European Economic Community grants cohesion funds to these countries to improve their infrastructure and Spanish construction companies compete in this new market. (Valdemoro Erro et al., 2010)

2008-Present

The Spanish economic crisis that begins in 2008, already was foreseen by the Spanish construction firms from 2006. Since then, the activities abroad were growing fast.

Figure 2.5 shows the trend of the Spanish foreign direct investment during the last decade of the twentieth century. As can be seen clearly, Latin America was the main destination of Spanish foreign direct investment outflows, garnering the 59.61% of the total investment realized by Spanish firms, while Europe was the second most important region with the 30.45%. On the other hand, North America was the third region in discord, but with a fairly low weight (8.75%) in comparison with the other two regions mentioned above. The foreign direct investments in the rest of the world were insignificant, already that the Asian-Pacific region received the 0.614% and Africa the 0.652% of all the Spanish foreign direct investments (Batalla, 2015).

Figure 2.6: Spanish FDI outflows, 1993-2000

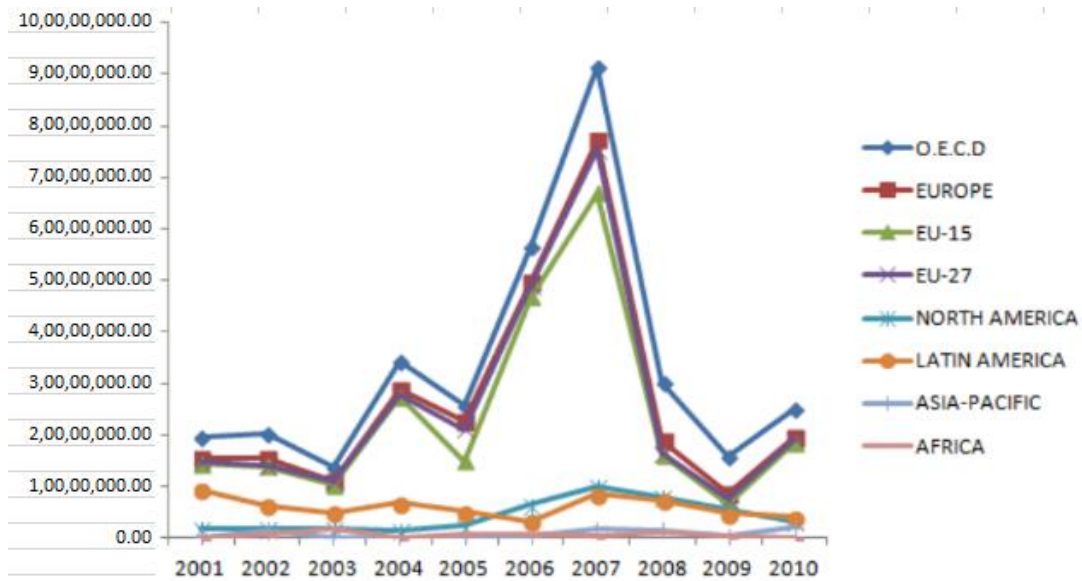


Source: Batalla, 2015

In 2001 took place an event that will mark the decade in foreign direct investment trends terms: the entry of Spain into the Eurozone. Thus, between 2001 and 2010, the Spanish foreign direct investment is focused on UE-15 member states (61.5%), Latin America (14%), North America (11.5%), EU-12 countries (7.2%), other European countries (3.5%) and, to a lesser extent, China (0.72%), Australia (0.35%), India (0.1%) and Morocco (0.46%). The

underlying trend can be observed in Figure 2.6.

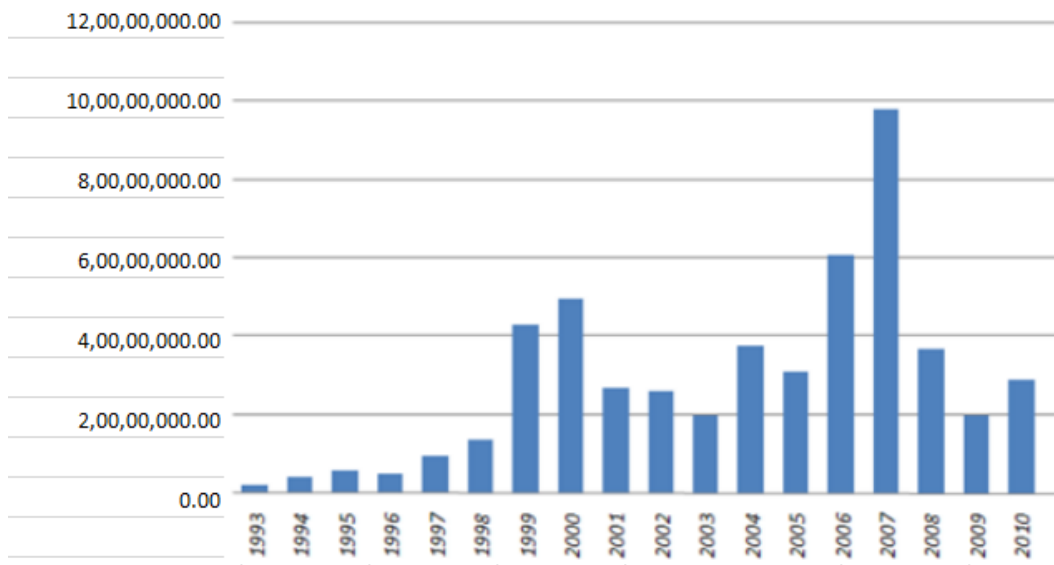
Figure 2.7: Spanish FDI outflows, 2001-2010



Source: Batalla, 2015

As shows, foreign direct investment flows continued an increasing footpath during the nineties, with their climax in the years 1999 and 2000, caused for investment done by Telefónica, Repsol, Endesa, BBVA and Banco Santander. At the beginnings of twenty-first century, investment outflows were decreasing in amount, but were still high between 20-40 billions of euro. Spanish foreign direct investments reached its apogee in 2006 and 2007, precisely the two years preceding the start of the global and Spanish crisis that began in 2008 (Pilar Sierra Fernández, M., 2007).

Figure 2.8: Spanish FDI in thousands of euro



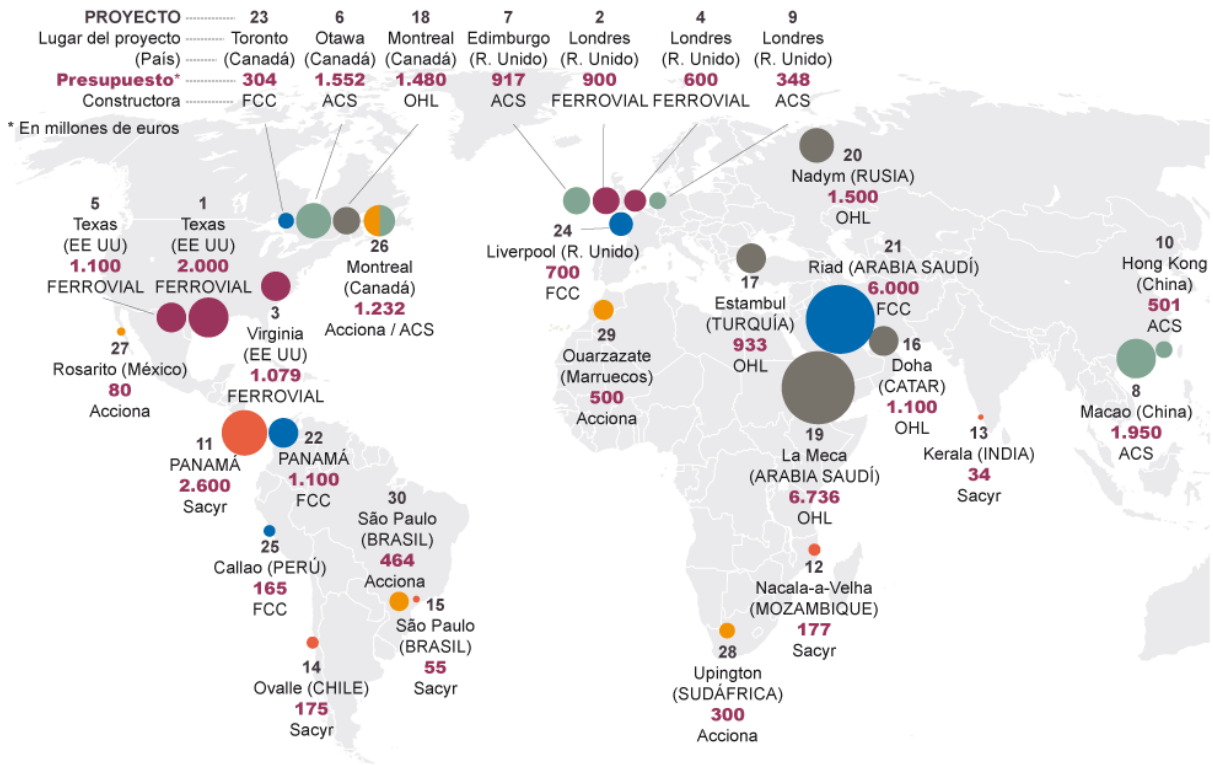
Source: Batalla, 2015

In 2006 the amount of Spanish foreign direct investment reached the figure of 60.7 billion euro, while in 2007 the Spanish economy lived its international heyday in terms of foreign direct investments outflows refers to a total of 97.9 billion euro. Despite the global finance crisis and Spanish one in particular, the Spanish foreign direct investment has continued to maintain a great weight in relation to GDP (2008-2011), and its average amount is even higher than the period before to the crisis (2000-2005), 28.7 billion euro compared to the previous 28.2 billion euro. This has been due to fact that Spanish companies have offset the decline in domestic demand with international sales and revenues, gaining more and more weigh international markets in the balance sheets of Spanish companies.

As an example of this and of the confidence of the Spanish multinational firms on the international markets, it can be mentioned different investments that Spanish multinational firms have been realized in this period of crisis, especially in the United States of America, final target of many companies that initiated its international journey in Latin American lands: Iberdrola has invested in USA a total of \$8 billion in line with its strategic US plan 2008-2010, including the purchase of Energy East; Mapfre invested 2,000 million dollars in the purchase of The Commerce Group; Banco Santander acquired Sovereign for 2,000 million dollars in 2008; and BBVA bought Compass Bancshares for a whole of 9,600 million euro (Ronderos Torres, C., 2010).

Spanish Construction companies have also undertaken many international projects.

Figure 2.9: Construction Projects by Spanish companies around the world



PROYECTO	INFRAESTRUCTURA	CONSTRUCTORA	PROYECTO	INFRAESTRUCTURA	CONSTRUCTORA
1 Autopista LBJ Express	Carretera	Ferrovial	16 Dos estaciones del Metro de Doha	Metro	OHL
2 Terminal T2A de Heathrow	Edificación	Ferrovial	17 Túneles/FFCC bajo el estrecho del Bósforo	Ferrocarril	OHL
3 Autopista US 460	Carretera	Ferrovial	18 Centro Hospitalario de la Univ. de Montreal	Edificación	OHL
4 Enlace ferroviario subterráneo Crossrail	Ferrocarril	Ferrovial	19 Ferrocarril Alta Velocidad La Meca-Medina	Ferrocarril	OHL
5 Autopista North Tarrant Express	Carretera	Ferrovial	20 Línea ferroviaria Ural Polar	Ferrocarril	OHL
6 Light Rail Train	Metro	ACS	21 Tres líneas de metro en Riad	Metro	FCC
7 Puente atirantado Firth of Forth	Edificación	ACS	22 Línea 1 de metro de Panamá	Metro	FCC
8 Casino Wynn Cotai	Edificación	ACS	23 Línea Metro Toronto-York Spadina (Tysse)	Metro	FCC
9 Estación de Metro de Bank	Metro	ACS	24 Puente de Mersey	Construcción marítima	FCC
10 Tramo ferroviario Shatin-Central Link	Ferrocarril	ACS	25 Muelles del puerto de Callao	Construcción marítima	FCC
11 Ampliación del Canal de Panamá	Construcción marítima	Sacyr	26 Autopista A-30	Carretera	Acc. / ACS
12 Corredor de Nacala	Ferrocarril	Sacyr	27 Central Eléctrica Baja California	Edificación	Acciona
13 Carretera SH-30	Carretera	Sacyr	28 Complejo Termosolar Bokpoort	Edificación	Acciona
14 Autopista Serena-Ovalle	Carretera	Sacyr	29 Complejo Termosolar de Ouarzazate	Edificación	Acciona
15 Estaciones Línea 15 de Metro	Metro	Sacyr	30 Autopista Rodanel	Carretera	Acciona

Source: Engineering News-Record (ENR), 2015

The list leads the contract of the high speed trains of Mecca to Medina, in Saudi Arabia, with a budget of about 6,700 million euros; was made with a consortium of 12 Spanish companies commanded by the public company Adif.

By millions, it remains the metro in Riyadh, also in Saudi Arabia, which has fallen on the side of FCC with a budget of 6,000 million. For its part, ACCIONA was awarded in 2014 the largest infrastructure project in the history of Australia, an urban motorway in Melbourne for the trifle of around 5,000 million euros (Marca España, 2015).

ACS and FCC have begun to build, with limited partnership, the metro from Lima (Peru), contract totalling 3,900 million. Over 2,000 million is also the extension of the Canal of Panama (Sacyr), an emblematic work of engineering dating back to early last century, involving a budget of around 2,500 million euros (Marca España, 2015).

These are not the only works of the list: a resort in Macau (ACS), for 1,950 million; the light metro Ottawa (ACS), for other 1,600 million; highways in Texas that will bring nearly 6 billion (Ferrovial); the metro of Fortaleza in Brazil (Acciona), 800 million; modernisation of motorways with the value of 2 billion, also in Brazil (Abertis); a hospital center in Montreal (OHL), 1,500 million; The modernization of a refinery in Peru (Técnicas Reunidas), which will bring to the coffers of the engineering company almost 2,100 million euros; a motorway in Italy (Sacyr), by other 2 billion; electric lines in the middle of the Amazon (Isolux-Corsán) 970 million, or the subway lines in the Turkish capital (Comsa-Emte) (Marca España, 2015).

Thousands of kilometers of highways that are built and railways, bridges, meters as those of London or New York, hospitals and industries, refineries and combined cycle plants, on five continents, carry Spanish stamp (Marca España, 2015).

Spain is therefore a world power in the construction sector, resulting in its international presence. In the sum of orders that have the large Spanish companies as a whole, more than 80% comes from abroad. The magazine Engineering News-Record (ENR) places Spaniard ACS at the top of the world constructors ranking, with a turnover of 34,260 million.

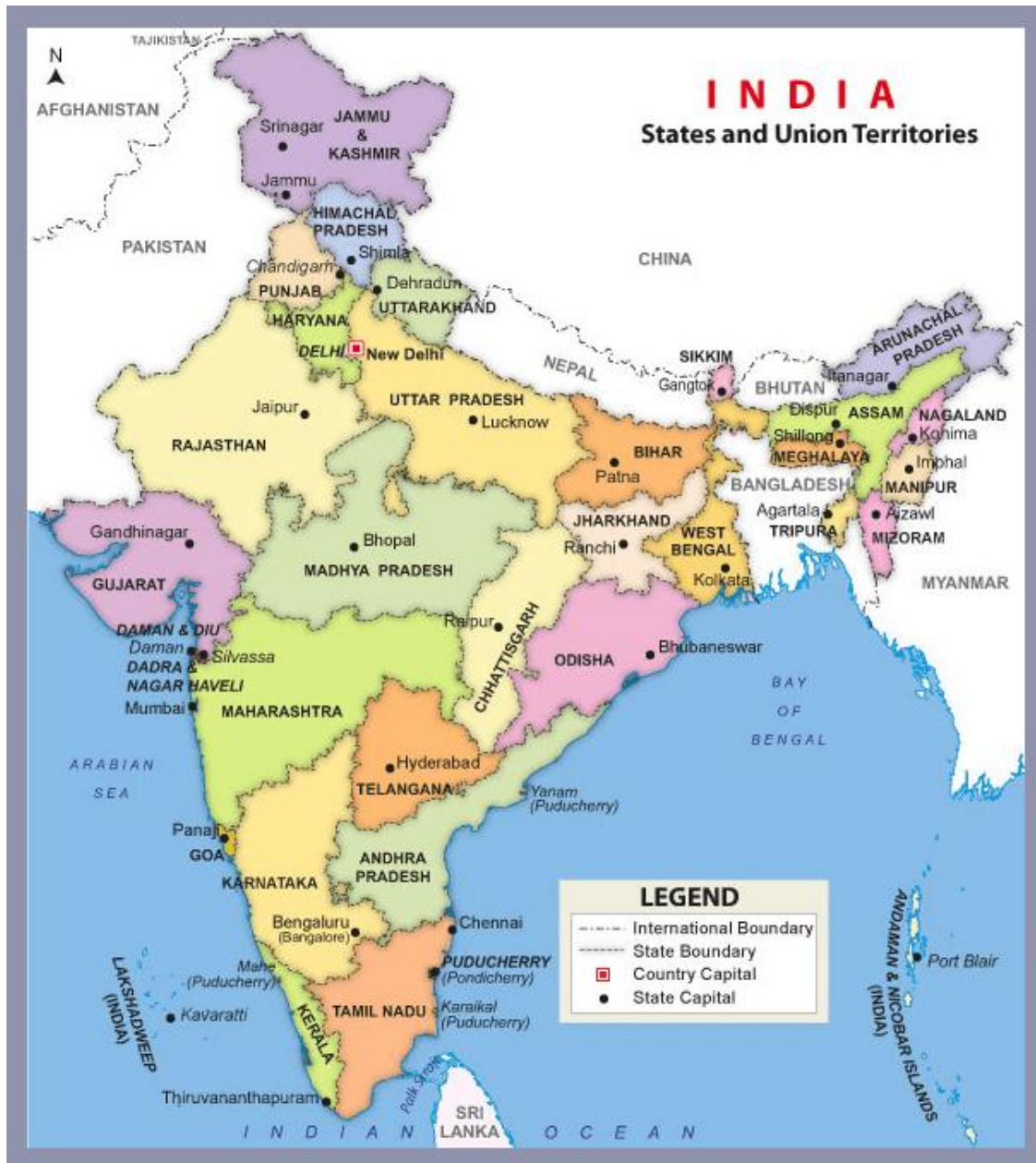
Chapter 3: INDIAN CONTEXT

3.1 General Features

India, officially the **Republic of India**), is a country in South Asia. It is the seventh-largest country by area, the second-most populous country (with over 1.2 billion people), and the most populous democracy in the world. It is bounded by the Indian Ocean on the south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast. It shares land borders with Pakistan to the west; [f] China, Nepal, and Bhutan to the northeast; and Myanmar (Burma) and Bangladesh to the east. In the Indian Ocean, India is in the vicinity of Sri Lanka and the Maldives. India's Andaman and Nicobar Islands share a maritime border with Thailand and Indonesia.

The Indian subcontinent was home to the urban Indus Valley Civilisation of the 3rd millennium BCE. In the following millennium, the oldest scriptures associated with Hinduism began to be composed. Social stratification, based on caste, emerged in the first millennium BCE, and Buddhism and Jainism arose. Early political consolidations took place under the Maurya and Gupta empires; the later peninsular Middle Kingdoms influenced cultures as far as southeast Asia. In the medieval era, Judaism, Zoroastrianism, Christianity, and Islam arrived, and Sikhism emerged, all adding to the region's diverse culture. Much of the north fell to the Delhi sultanate; the south was united under the Vijayanagara Empire. The economy expanded in the 17th century in the Mughal Empire. In the mid-18th century, the subcontinent came under British East India Company rule, and in the mid-19th under British crown rule. A nationalist movement emerged in the late 19th century, which later, under Mahatma Gandhi, was noted for nonviolent resistance and led to India's independence in 1947. (Wikipedia, 2017)

Figure 3.1: Map of India



Source: Wikipedia, 2017

In 2016, the Indian economy was the world's seventh largest by nominal GDP and third largest by purchasing power parity. Following market-based economic reforms in 1991, India became one of the fastest-growing major economies and is considered a newly industrialised country. However, it continues to face the challenges of poverty, corruption, malnutrition, and inadequate public healthcare. A nuclear weapons state and regional power, it has the third largest standing army in the world and ranks fifth in military expenditure among nations. India is a federal republic governed under a parliamentary system and consists of 29 states and 7 union territories. It is a pluralistic, multilingual and multi-ethnic society and is also home to a diversity of wildlife in a variety of protected habitats. (Wikipedia, 2017)

3.2 Political Structure

India is a Union of States. According to its constitution, India is a "sovereign, socialist, secular, democratic republic." India has a federal form of government. However, the central government in India has greater power in relation to its states, and its central government is patterned after the British parliamentary system. India's central government is divided into three distinct but interrelated branches: legislative, executive, and judicial. As in the British parliamentary model, the leadership of the executive is drawn from and responsible to the legislative body. Although Article 50 stipulates the separation of the judiciary from the executive, the executive controls judicial appointments and many of the conditions of work. In addition, one of the more dramatic institutional battles in the Indian polity has been the struggle between elements wanting to assert legislative power to amend the constitution and those favouring the judiciary's efforts to preserve the constitution's basic structure. (Department of Economic and Social Affairs (DESA), United Nations, 2016).

Legislative Branch

Parliament consists of a bicameral legislature, the Lok Sabha (House of the People--the lower house) and the Rajya Sabha (Council of States--the upper house). Parliament's principal function is to pass laws on those matters that the constitution specifies to be within its jurisdiction. Among its constitutional powers are approval and removal of members of the Council of Ministers, amendment of the constitution, approval of central government finances, and delimitation of state and union territory boundaries.

The Rajya Sabha is to consist of not more than 250 members - 238 members representing the States and Union Territories, and 12 members nominated by the President. Rajya Sabha is a permanent body and is not subject to dissolution. However, one third of the members retire every second year, and are replaced by newly elected members. Each member is elected for a term of six years. The Vice President of India is the ex-officio Chairman of Rajya Sabha. The House also elects a Deputy Chairman from among its members. Besides, there is also a panel of "Vice Chairmen" in the Rajya Sabha. The senior most Minister, who is a member of Rajya Sabha, is appointed by the Prime Minister as Leader of the House.

The Lok Sabha is composed of representatives of people chosen by direct election on the basis of Universal Adult Suffrage. The Constitution provides that the maximum strength of the House be 552 members - 530 members to represent the States, 20 members to represent the Union Territories, and 2 members to be nominated by the President from the Anglo-Indian Community. At present, the strength of the House is 545 members. The term of the Lok Sabha, unless dissolved, is five years from the date appointed for its first meeting. However, while a proclamation of emergency is in operation, this period may be extended by Parliament by law for a period not exceeding one year at a time and not extending in any case, beyond a period of six months after the proclamation has ceased to operate (Indian Government Portal, 2005).

Executive Branch

India has a federal form of government and the central government in India has greater power in relation to its states, and its central government is patterned after the British parliamentary system. The government exercises its broad administrative powers in the name of the president, whose duties are largely ceremonial. The president and vice president are elected indirectly for 5-year terms by a special electoral college. Their terms are staggered, and the vice president does not automatically become president following the death or removal from office of the president. Real national executive power is centered in the Council of Ministers (cabinet), led by the prime minister. The president appoints the prime minister, who is designated by legislators of the political party or coalition commanding a parliamentary majority. The president then appoints subordinate ministers on the advice of the prime minister (Indian Government Portal, 2005).

Judiciary Branch

The Supreme Court has original, appellate and advisory jurisdiction. Its exclusive original jurisdiction extends to any dispute between the Government of India and one or more States or between the Government of India and any State or States on one side and one or more States on the other or between two or more States, if and insofar as the dispute involves any question (whether of law or of fact) on which the existence or extent of a legal right depends. In addition, Article 32 of the Constitution gives an extensive original jurisdiction to the Supreme Court in regard to enforcement of Fundamental Rights. Under the Arbitration and Conciliation Act, 1996, International Commercial Arbitration can also be initiated in the Supreme Court.

The Supreme Court has also a very wide appellate jurisdiction over all Courts and Tribunals in India in as much as it may, in its discretion, grant special leave to appeal under Article 136 of the Constitution from any judgment, decree, determination, sentence or order in any cause or matter passed or made by any Court or Tribunal in the territory of India.

The High Court stands at the head of a State's judicial administration. There are 18 High Courts in the country, three having jurisdiction over more than one State. Among the Union Territories Delhi alone has a High Court of its own. Other six Union Territories come under the jurisdiction of different State High Courts. Each High Court comprises of a Chief Justice and such other Judges as the President may, from time to time, appoint. The Chief Justice of a High Court is appointed by the President in consultation with the Chief Justice of India and the Governor of the State. The procedure for appointing puisne Judges is the same except that the Chief Justice of the High Court concerned is also consulted. They hold office until the age of 62 years and are removable in the same manner as a Judge of the Supreme Court. To be eligible for appointment as a Judge one must be a citizen of India and have held a judicial office in India for ten years or must have practised as an advocate of a High Court or two or more such Courts in succession for a similar period.

Each High Court has powers of superintendence over all Courts within its jurisdiction. It can call for returns from such Courts, make and issue general rules and prescribe forms to regulate their practice and proceedings and determine the manner and form in which book entries and accounts shall be kept (Indian Government Portal, 2005).

Local Government

India has 29 states and 7 union territories. At the state level, some of the legislatures are bicameral, patterned after the two houses of the national parliament. The states' chief ministers are responsible to the legislatures in the same way the prime minister is responsible to parliament.

Each state also has a presidentially appointed governor who may assume certain broad powers when directed by the central government. The central government exerts greater control over the union territories than over the states, although some territories have gained more power to administer their own affairs. Local governments in India have less autonomy than their counterparts in the United States. Some states are trying to revitalize the traditional village councils, or panchayats, which aim to promote popular democratic participation at the village level, where much of the population still lives.

Local Government Categories and Hierarchies is included in the constitutional amendment act (CAA) of 1992 that sought to bring some uniformity in the constitution of the municipal bodies by classifying them as follows: (i) Nagar Panchayat, to be constituted in rural-urban transition areas. These have been conceived to properly channelize the growth impulses in such settlements and also to bring some sort of order in their growth and provision of service; (ii) Municipal Councils for smaller urban areas; and (iii) Municipal Corporations for larger urban areas.

Local Government Functions are divided in two categories of obligatory or discretionary. Obligatory functions (i) Supply of pure and wholesome water; (ii) Construction and maintenance of public streets; (iii) Lighting and watering public streets; (iv) Cleansing public streets, places and sewers; (v) Regulation of offensive, dangerous or obnoxious trades and callings or practices; (vi) Maintenance or support of public hospitals; (vii) Establishment and maintenance of primary schools; (ix) Registration of births and deaths; (x) removing obstructions and protections in public streets, bridges and other places; and (xi) Naming streets and numbering houses.

Discretionary functions: (a) laying out of areas, (b) securing or removing dangerous buildings or places; (c) Construction and maintenance of public parks, gardens, libraries, museums, rest houses, leper homes, orphanages and rescue homes for women, etc.; (d) Planting and maintenance of roadside and other trees; (e) Housing for low income groups; (f) Making a survey; (g) Organizing public receptions, public exhibitions, public entertainment, etc.; (h) Provision of transport facilities with the municipality; (i) Promotion of welfare of municipal employees; and (j) providing music for the people.

In addition, compulsory primary education is the responsibility of the local bodies in a large number of states. The Municipalities elect the school-based members. Thus, local governments are required to provide for services irrespective of their administrative capacity to do so and have to face unexpected new terms of their own as a consequence of new sets of standards (Indian Government Portal, 2005).

3.3 Indian Economy

India has become the sixth largest manufacturing country in the world, rising up from the previous ninth position, and thus retaining its bright spot in the world economic landscape. Post the demonetization announcement, the pace of remonetisation has picked up, and it is expected that the effects of demonetisation will not spill over into the next financial year.

In the Fiscal Year (FY)2016-17, India’s GDP grew by 7 per cent following a 7.5 per cent growth rate in the previous year. With a growth of over 7.5 per cent in 1H FY2017-18, India is considered the world’s fastest-growing large economy. The World Bank is more optimistic and has projected a GDP growth of 7.6% in 2017–18 and 7.8% in 2018–19. The International Monetary Fund (IMF) predicted that India would retain the status of fastest growing economy until 2020 (World Economic Outlook, 2015).

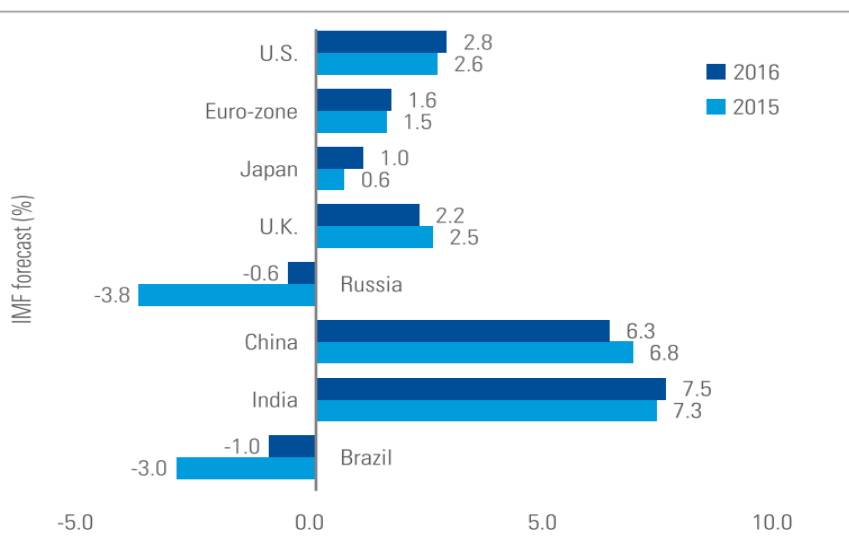
Domestic consumption and investment were major contributors to growth in FY2014-15, accounting for 57 per cent and 33.1 per cent of GDP, respectively (Ministry of Statistics and Programme Implementation, 2015).

Both manufacturing and electricity outputs experienced strong growth (4.4 per cent and 4.6 per cent respectively) in 1H FY2015-16, boosting overall industry performance. Following the downward trend in global commodity prices, the retail inflation averaged 4.5 per cent in 1H FY2015-16 (Ministry of Programme Implementation, 2015), and is expected to remain below the Reserve Bank of India (RBI) inflation target of 6 per cent by January 2016. This has allowed RBI to cut its policy rate by 125 basis points in 2015, which is expected to underpin the domestic demand (Ministry of Statistics and Programme Implementation, 2015).

NOMINAL GDP and GROWTH RATE GRAPH

India - world’s fastest-growing large economy

Figure 3.2: GDP growth rate of India



Source: IMF, World Economic Outlook, 2015

Retail inflation is likely to remain below RBI's target of 6 per cent by January

Figure 3.3: Consumer Price index (CPI)



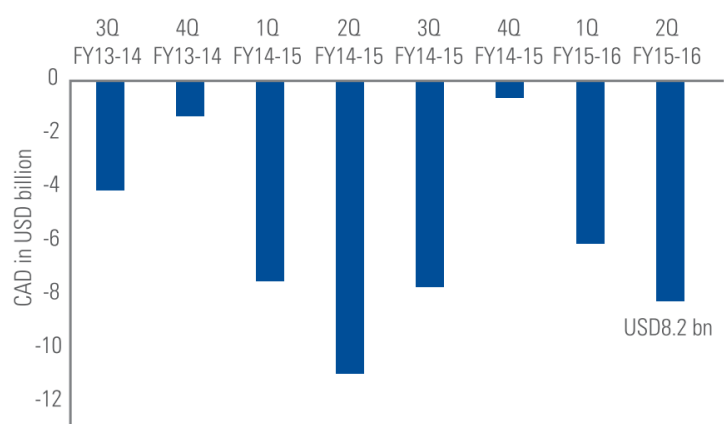
Source: Ministry of Statistics and Program Implementation, 2015 and Reserve Bank of India, 2015

To scale up investments in infrastructure, the Indian government during the Union Budget FY2015-16 earmarked USD11 billion (Union Budget, 2015-16). This increase in public spending is also likely to support economic growth. To ensure that increased infrastructure spending does not exert upside pressure on inflation, the government and the RBI have come to an agreement that the latter would target to maintain inflation in the range of 2 to 6 per cent from FY2016-17 onward (Monetary Policy Framework Agreement, 2015). This arrangement is expected to keep inflation expectations anchored.

Benefitting from softer oil prices (the Brent crude has declined more than 55 per cent since June 2014), India's current account deficit has continued to narrow, enabling the RBI to increase the foreign exchange reserves. This could safeguard the economy against potential disruptions in global financial markets caused by a change in monetary policy stance in advanced countries.

Narrowing Current account deficit (CAD) strengthens macroeconomic stability

Figure 3.4: Current Account Balance



Source: Reserve Bank of India, 2015

India’s strong economic fundamentals limit the rupee’s depreciation against the dollar (per cent)

Figure 3.5: Rupee depreciation against dollar

Currency	February 2014 to December 2015
Dollar index	24
Russian Rubble	102
Thai Baht	11
South African Rand	44
Brazilian Real	70
Indian Rupee	7

Source: Forex rates, www.investing.com, accessed 8 January 2016

Fiscal consolidation on track

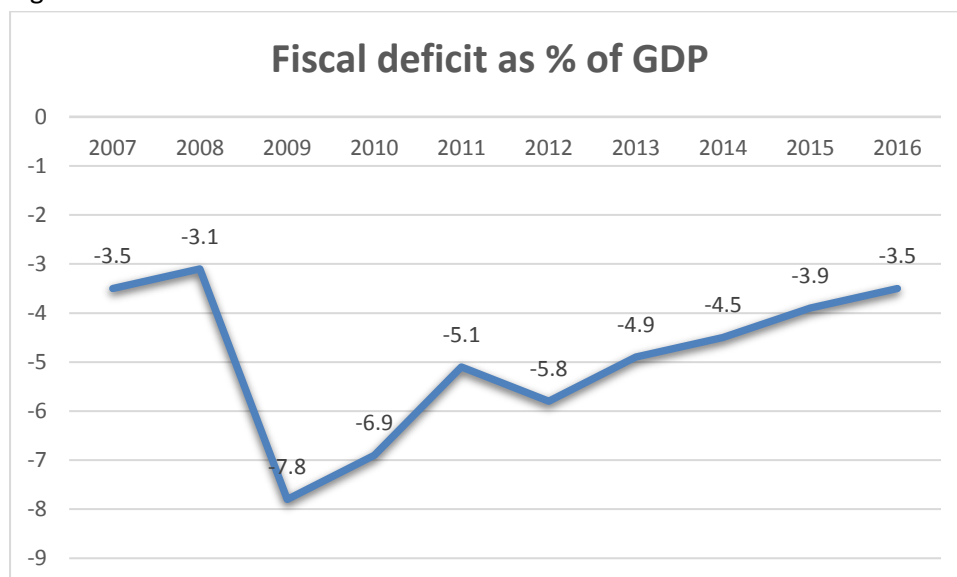
Continuing on its path of fiscal consolidation, the Budget 2016–17 had projected the fiscal deficit to inch down from 3.9% in 2015–16 to 3.5% in the following year. This was aimed to be achieved despite the committed expenditure as a pay-out for the implementation of the Seventh Pay Commission. The government did perform impressively as the receipts surpassed the budget expectations. The non-debt receipts during April–November 2016 grew by 25.8% as against the budgeted growth of 16.4% for the full year. Gross tax revenue also exceeded expected growth as it grew by 21.5% during April–November, while the budget had expected growth of 11.9%. This was achieved particularly through excise duty and service tax collection. The revenue collection also achieved a strong boost from the government’s Income Disclosure Scheme, which mopped up over

₹65 thousand crores in a matter of three months. While keeping itself on track to achieve the Fiscal Responsibility and Budget Management (FRBM) targets, the government formed a committee to review the working of the FRBM Act and examine the feasibility of a fiscal deficit range instead of targets. The review calls for a modification to deal with the dynamic developments that India has undergone from 2003, when the FRBM Act was introduced, until now, when the economy is much larger, open and growing at the fastest rate.

Fiscal deficit

The revised estimate of fiscal deficit in 2016–17 is 3.2% of the GDP, down from a budgeted 3.5%. It is expected to stay at 3.2% in FY2018 and then down to 3.0% in the following year, in accordance with the recommended 3.0% fiscal deficit for the next three years by the newly constituted Fiscal responsibility and budget management (FRBM) committee. The FRBM committee recommends a sustainable debt target with a debt-to-GDP ratio of 60% percent by 2023 and the fiscal deficit to come down to 3.0%. The gradual decline in fiscal deficit assures prudent fiscal consolidation without sacrificing public expenditure, while private sector investment is expected to be sluggish. The focus now will be on revenue and capital expenditure as the new budget does away with the plan and non-plan expenditure. The total expenditure in Budget 2017–18 has been placed at ₹21.47 lakh crores (US\$ 317 billion). With the abolition of plan and non-plan classification of expenditure, the focus is now on revenue and capital expenditures, said the Union Minister of Finance and Corporate Affairs while presenting the General Budget 2017–18 in Parliament. He said that considering the fiscal deficit roadmap for the next three years and the need for higher public expenditure in the context of sluggish private sector investment and slow global growth, the fiscal deficit for 2017–18 has been pegged at 3.2% of the GDP, and he further committed to achieve 3% in the following year, that is, in 2018–19.

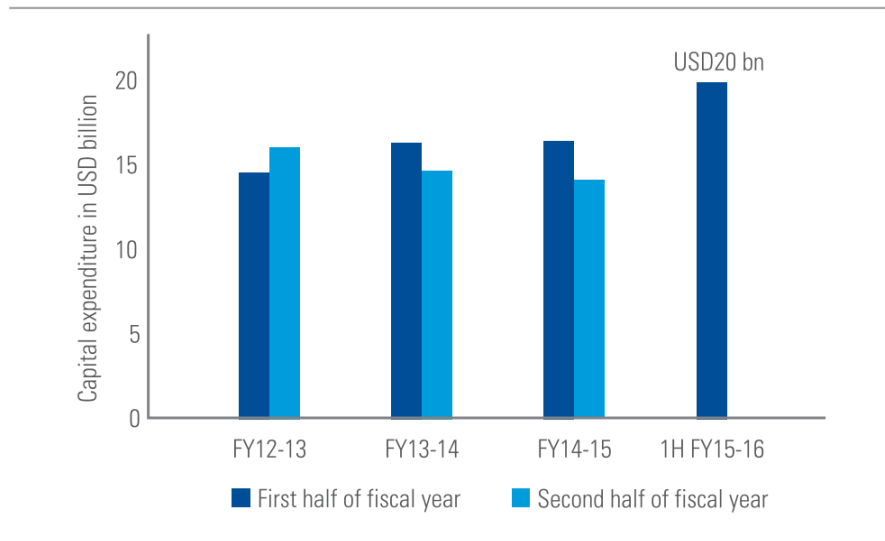
Figure 3.6: Fiscal deficit



Source: Reserve Bank of India and Controller General of Accounts, 2016 | Ministry of finance, Government of India

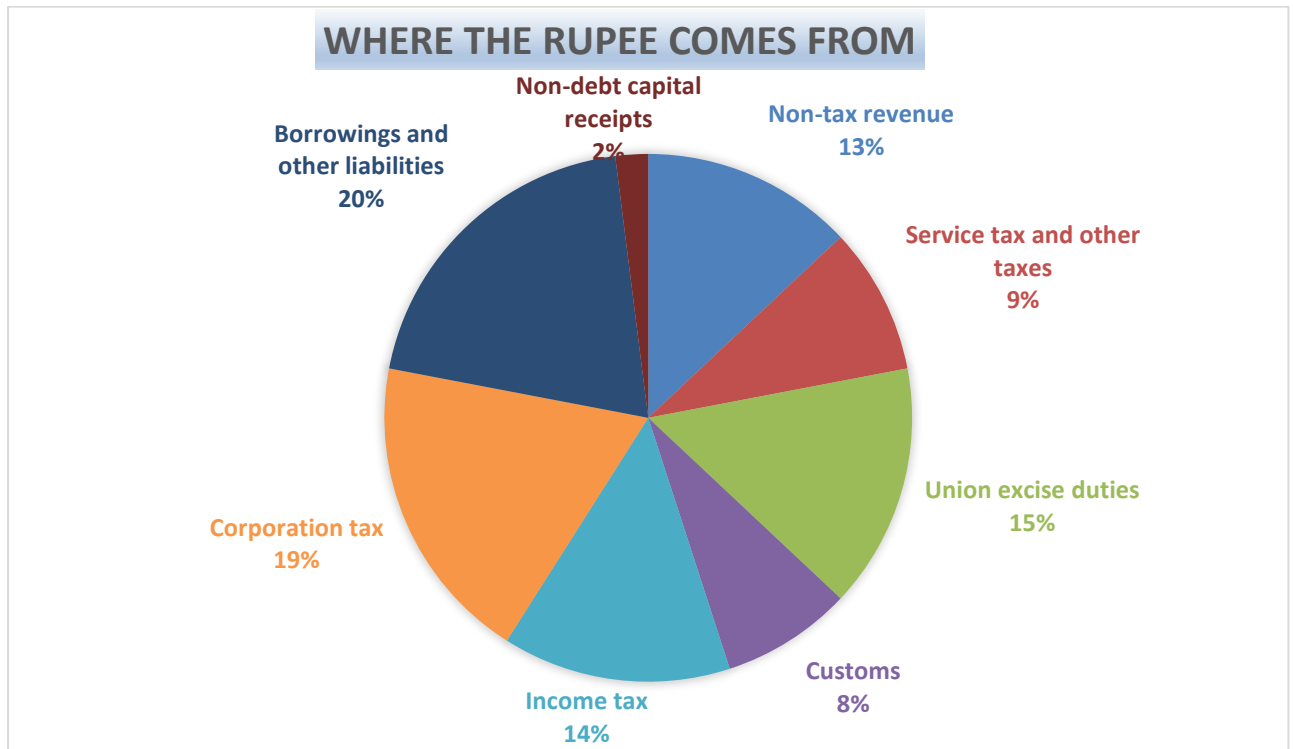
Greater emphasis on capital expenditure

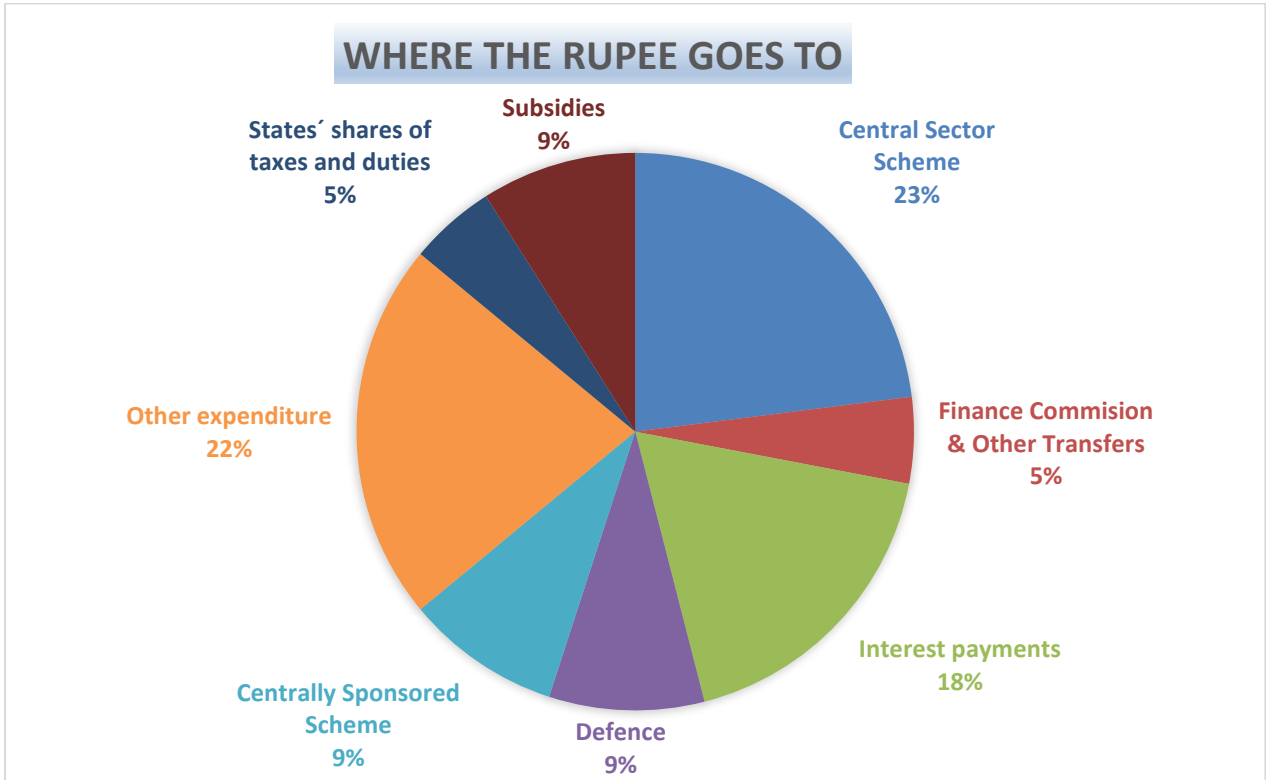
Figure 3.7: Capital expenditure



Source: Reserve Bank of India and Controller General of Accounts, 2015

Figure 3.8: Budget Financials 2016-17





Source: PwC - India Budget 2017: On the growth path 2017

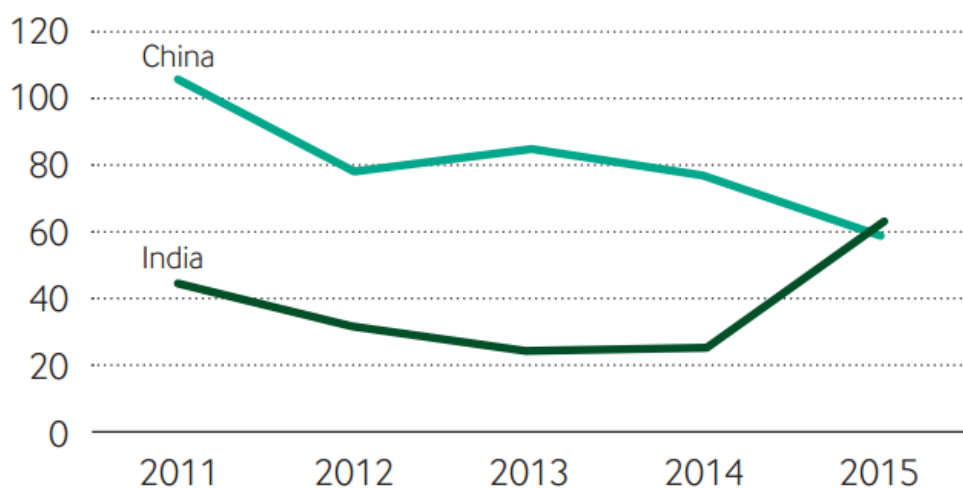
Foreign Direct Investment (FDI) policy

Government of India has introduced key reforms to the FDI policy, to help attract further investments. To achieve this goal, some measures such as the introduction of the composite cap that does away with the distinction between FDI and Foreign Portfolio Investment (FPI) and liberalising FDI norms in 15 major have been taken.

Factors such as the lack of progressive FDI reforms, retrospective taxation, excessive permit requisites, centre-state political stalemates, inflexible labour markets, land acquisition issues and inadequate infrastructure hindered large-scale FDI into India prior to 2013. Subsequently, FDI flows into India increased from \$24bn in 2013 to \$59bn in 2015. The floodgates had been opened.

In 2015, India replaced China as the leading destination for FDI projects in the Asia-Pacific region with \$63bn of announced inward capital investment across the year, accounting for 53% of FDI into China and India collectively.

Figure 3.9: FDI into China and India by capital investment (\$ bn)



Source: fDi Markets Note: Includes estimates, 2016

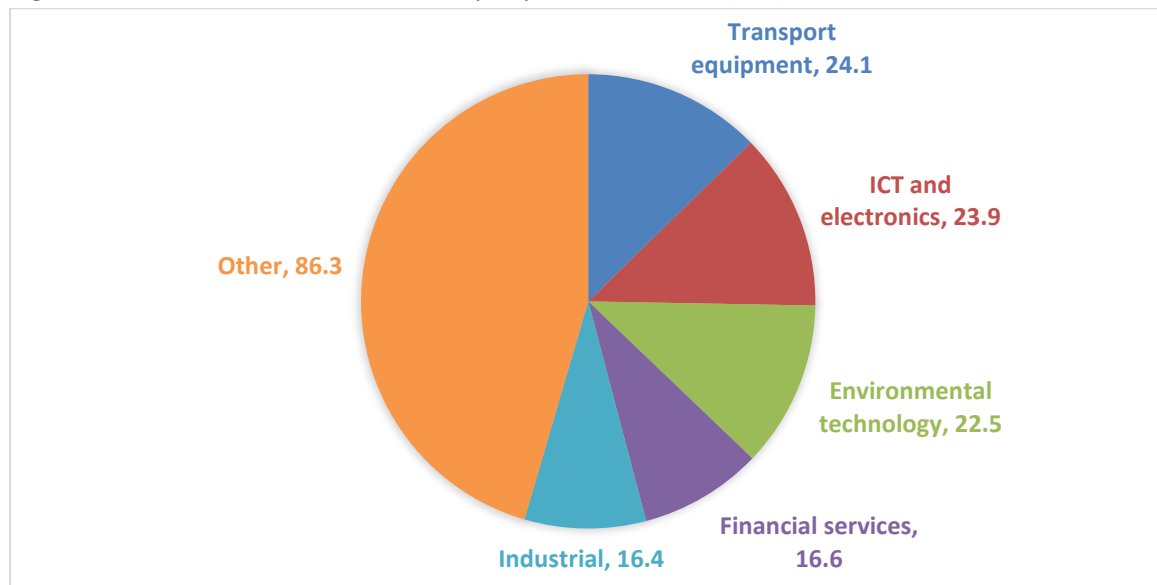
Table 3.1 FDI in Asia-Pacific in 2015 (in Capital investment)

% Asia-Pacific market share	Country	Capital Investment (\$bn)
20%	India	63
18%	China	56.6
12%	Indonesia	38.5
7%	Vietnam	21.1
6%	Pakistan	18.9
5%	Australia	15.2
4%	Malaysia	13.4
3%	Myanmar	10.8
3%	South korea	8.9
3%	Philippines	8.5
20%	Other	65.6

Source: fDi Markets Note: Includes estimates; percentages rounded up/down, 2016

India’s dramatic ascension in the global FDI rankings has largely been due to a dynamic Modi-led government focusing on ‘big bang’ FDI and labour law reforms. Relative stability within the government coupled with an effort to reduce the stagnating effects of bureaucracy has given foreign investors, across many industries, confidence in India as a remunerative investment opportunity.

Figure 3.10: FDI into India 2011-2015 By Capital Investment (\$bn)



Source: fDi Markets Note: Includes estimates, 2016

India announced itself as a global force in the FDI sector as it broke into the top 10 economies in terms of incoming FDI flows in 2014. Mr Modi's marquee visit to New York in late 2015 saw a plethora of US-based CEOs of Fortune 500 companies such as Google, Ford, Cisco, IBM, Lockheed, Marriott, Starwood, MasterCard, Merck, Pepsi, DuPont, Dow and EY hosting the prime minister and citing plans to expand in India. This event turned out to be a causative indicator for 2015 as India moved up to number six in the world for FDI flows in 2015 (and number four if entrepôt countries Hong Kong and Netherlands are excluded). In terms of greenfield FDI, India overtook economic superpowers China and the US with an estimated \$60bnplus of announced FDI projects; for the first time India became the world's leading location for greenfield investment.

Table 3.2: FDI into Asia-Pacific by Project Numbers In 2015

Country	Projects 2015	% change
China	789	-16%
India	697	8%
Singapore	355	-13%
Australia	288	-19%
Vietnam	224	-8%
Philippines	168	16%
Indonesia	166	6%
Malaysia	159	-15%
Thailand	159	7%
Japan	153	-22%
Other	725	-4%
Total	3883	-7%

Source: fDi Markets Note: Percentages rounded up/down, 2016

Mr Modi's iconic 'Make in India' campaign is structured to attract more FDI to India and make the country a global manufacturing and industrial hub. This campaign has garnered global attention as he has encouraged foreign investors to privatise key sectors such as the railways, defence manufacturing and insurance, as well as the liberalisation of medical devices. Ease of doing business has always been a problem in India, and Mr Modi's campaign has addressed this by removing archaic laws. The controlled elevation of FDI caps and the elimination of unnecessary red tape restrictions in decision making has gone a long way towards ensuring India's exponential growth of inward FDI. The campaign and the resultant boost in FDI has resulted in a whopping increase in FDI job creation from 116,000 new jobs in 2013 to 225,000 in 2015 – the highest number in the world.

There seems to be no doubt that under current circumstances, India is poised to become a major investment destination for the global community. Its macroeconomic stability, resilience and ability to deal effectively with external shocks and the Government's proactive initiatives are making India a large market that is capable of yielding steady and attractive returns to investors in the medium-to-long term.

Foreign investment

Entry options

A foreign entity setting up operations in India can either operate as an Indian entity by creating a separate legal entity in the country or as a foreign entity with an office in India (PwC-Destination India, 2016).

Operating as an Indian entity

Wholly owned subsidiary

A foreign company can set up a wholly owned subsidiary in India to conduct business activities. Such a subsidiary is treated as a separate legal entity and an Indian resident. An Indian corporate enterprise needs to have at least two shareholders in the case of a private limited company and seven shareholders for a public limited organisation.

Such companies are required to comply with the provisions of India's Foreign Direct Investment (FDI) policy.

Limited Liability Partnership (LLP)

An LLP is a hybrid entity structure in India. It combines the advantages of a company, such as being a separate legal entity with perpetual succession, along with the benefits of organisational flexibility associated with a partnership. At least two partners are required to form an LLP, to which they have a limited liability.

No tax is levied on distribution of profits to partners in the dividends of an LLP, unlike in the case of a company where Dividend Distribution Tax is applicable on repatriation.

An LLP (with foreign investment) can be set up under the automatic route, subject to it operating in sectors that are open for 100% FDI under the automatic route without any performance-linked conditions.

Joint Venture (JV) with Indian partners (equity participation)

Although a wholly owned subsidiary is generally the preferred option in view of the associated brands and technologies involved, foreign companies also consider conducting their operations in India by forming strategic alliances with Indian partners. Typically, such foreign companies identify partners engaged in the same area of activity as them or those who can add synergies to their strategic plans in India. Sometimes, JVs are necessitated due to restrictions on foreign ownership in select sectors under the FDI policy, e.g. in the Insurance and Multi-Brand Retail Trade segments.

A JV can be formed in India in the form of an Indian company or LLP.

Operating as a foreign entity

A foreign entity can set up an office in India in the form of a liaison office (LO), a branch office (BO) or a project office (PO), based on the nature of activities it proposes to engage in and its underlying commercial objective. Such an office can be set up by the foreign company by submitting an application to an authorised dealer (AD) bank. However, the approval of RBI is required if the foreign entity:

- is mainly engaged in the Defence, Telecom, Private Security, and Information and Broadcasting sectors;
- is registered or incorporated in Pakistan;
- is headquartered in Bangladesh, Sri Lanka, Afghanistan, Iran, China, Hong Kong or Macau, and is opening a liaison office in Jammu & Kashmir, the Northeast region and the Andaman and Nicobar Islands;
- is a Non-Government Organisation/body/agency/ department of a foreign government. Once an office has been set up, it needs to be registered with the Registrar of Companies.

Each type of office can be established for the specific objectives mentioned below.

LOs

Setting up an LO or representative office is common practice for foreign companies/entities seeking to enter the Indian market. The role of LOs is limited to collecting information about the market and providing data pertaining to the company and its products to prospective Indian customers. An LO is only allowed to undertake liaison activities in India, and therefore, cannot earn any income in the country.

BOs

Compared to an LO, a BO can be set up and engage in a wide scope of activities. It can undertake revenue-generating activities in India. Foreign entities can set up branch offices in India to carry out the following activities:

- Export and import goods
- Provide professional or consultancy services
- Conduct research in which their parent companies are engaged
- Promote technical or financial collaboration between Indian companies and their parent organisations
- Represent their parent companies in India and act as buying or selling agents in the country
- Offer Information technology (IT) and software development services in India

- Provide technical support for products supplied by their parent or group companies
- Act as foreign airlines or shipping companies

Project offices

Foreign companies planning to execute specific projects in India have the option of setting up temporary project and site offices.

Approval for a PO is typically valid for the tenure of a project. Where none of the criteria mentioned above are met, approval is required from RBI to set up a PO.

Foreign investment in India

Currently, FDI is permitted in all sectors except for:

- Activities and sectors that are not open to private sector investment, e.g. atomic energy and railway operations (other than railway infrastructure permitted in specific activities)
 - The lottery business, including government or private lotteries, online lotteries, etc.
 - Gambling and betting, including casinos
 - Real estate business (including construction of farmhouses)
 - Chit funds, Nidhi companies
 - Trading in transferable development rights
 - Manufacture of cigars, cheroots, cigarillos, cigarettes, tobacco and tobacco substitutes
- India's FDI policy covers 27 sectors/activities, and prescribes conditions, a foreign equity cap or approval-related requirements. These sectors include Defence, Financial Services (insurance, construction and development), Retail, Telecom and Media.

India's FDI policy covers 27 sectors/activities, and prescribes conditions, a foreign equity cap or approval-related requirements. These sectors include Defence, Financial Services (insurance, construction and development), Retail, Telecom and Media.

Foreign investment can be made in India via the following routes:

- Automatic route: Prior approval is not required from the Foreign Investment Promotion Board (FIPB).
- Approval route: This requires the Government's approval through the FIPB under the Ministry of Finance, or the Department of Industrial Policy and Promotion (DIPP) under the Ministry of Commerce and Industry, or both, subject to sectoral caps and/or certain conditions.

Foreign investment proposals under the FIPB route (involving a total foreign equity inflow of more than INR 50 billion) need to be placed before the Cabinet Committee on Economic Affairs (CCEA) for further consideration.

Computation of FDI

From the perspective of the FDI policy, investments made directly by a non-resident entity in an Indian company are counted for foreign investment limits or sectoral caps, along with any investment made by a resident Indian entity (the majority of which is owned or controlled by non-residents). Any downstream investments made by an Indian company (owned or controlled by non-residents) also need to comply with sectoral caps and conditions. Downstream investments made by foreign-owned and controlled companies need to be intimated to the DIPP, FIPB or Secretariat for Industrial Assistance (SIA).

India has been on the fast track to transform itself into an open and investor-friendly economy. The DIPP, Ministry of Commerce and Industry, has liberalised India's FDI policy with the objective of opening up the majority of sectors (barring a few strategic ones) in the country for FDI under the automatic route. Changes introduced in the FDI policy include an increase in sectoral caps, activities being brought under the automatic route, easing of conditions for foreign investment, etc. Some of the key changes are given below:

- FDI in LLPs has been brought under the automatic route. Subject to their compliance with the Limited Liability Partnership Act, 2008, LLPs are now permitted to make downstream investments. They are, however, not allowed to raise External Commercial Borrowing (ECB).
- Sourcing norms for entities undertaking single-brand retailing of products, using state-of-the-art/cutting-edge technology, have been relaxed for the first three years in cases where local procurement is an impossibility. After the third year, sourcing norms (as prescribed) need to be followed for the next five years.
- FDI of up to 100% has been permitted for marketing food products, produced and manufactured in India under the approval route.
- FDI of up to 100% has been permitted under the automatic route in the marketplace model of e-Commerce, but not in the inventory-based model. • NRI investments under the non-repatriation window are regarded as domestic investment.
- The policy pertaining to the Construction and Development sector has been liberalised and has no minimum area- and capitalisation-related requirements. FDI of 100% under the automatic route has been allowed in the case of completed projects for operation and management of townships, malls/shopping complexes and business centres.
- FDI of up to 49% has been allowed in the Insurance and Defence sectors, which have been brought under the automatic route.
- The FDI cap under the automatic route has been increased from 26% to 49% in the Pension segment.

- FDI in Asset Reconstruction Companies (ARCs) has been increased from 49% to 100% under the automatic route.
- FDI of up to 74% has been permitted in the brownfield Pharmaceutical sector, which has been brought under the automatic route.
- The FDI cap in Indian stock exchanges has been increased from 5% to 15% under the automatic route.
- FDI of up to 100% has been allowed for tea plantations, which have been brought under the automatic route, and has also been permitted for coffee, rubber, cardamom, palm oil tree and olive oil tree plantations.
- The FDI cap has been increased from 49% to 74% in private security agencies under the Government's approval route.
- FDI of up to 100% has been permitted for broadcasting carriage services, i.e. teleports (setting up of uplinking HUBs/teleports), DTH, cable networks, mobile TV, Headend-in the Sky, which have now been brought under the automatic route.
- The FDI limit has been increased from 26% to 49% for broadcasting content-related services on Terrestrial Broadcasting FM radio and uplinking of news and current affairs channels under the Government's approval route. FDI of up to 100% has been allowed for uplinking of non-news and current affairs TV channels and downlinking of TV channels, and has been brought under the automatic route.
- FDI of up to 100% has been allowed in the Civil Aviation sector, which has been brought under the automatic route. The FDI cap has been increased from 49% to 100% in Scheduled Air Transport Services, with FDI of more than 49% requiring the Government's approval. The FDI cap for non-scheduled Air Transport Services has been increased from 74% to 100%.
- The FDI cap in establishment and operation of satellites and credit information companies has been increased from 74% to 100% under the Government's approval route and automatic route, respectively.
- Foreign investment in a company (without any operations or investments) is to be permitted without any conditions under the automatic route for activities undertaken.

Foreign Venture Capital Investors (FVCIs) permitted to acquire securities under private arrangements

FVCIs can invest in eligible securities (equity, equity-linked instruments, debt, debt instruments or debentures), the units of Indian Venture Capital Undertakings (IVCUs) or start-ups, a Venture Capital Fund (VCF), a Category I Alternative Investment Fund (AIF) and units of schemes or funds set up by a VCF, an AIF through private arrangements or purchase from third parties, subject to their complying with certain conditions (PwC-Destination India, 2016).

Foreign investment made by Registered Foreign Portfolio Investors (RFPIs)

RFPIs are permitted to invest in India, subject to individual and aggregate investment limits of 10% and 24%, respectively, of the total paid-up equity capital of the investee companies. This limit can be increased up to the sectoral limit after a board resolution, followed by a special resolution passed by the general body and subject to prior intimation to RBI. Moreover, where there is a composite sectoral cap under the FDI policy, the limits for RFPIs are also to be within the cap. RFPIs' investments (of up to 49%) do not specifically require compliance with conditions or approval-related requirements, even if these are prescribed under the FDI policy.

RFPIs are also eligible to invest in government securities and corporate debt, subject to limits specified by RBI and the Securities and Exchange Board of India (SEBI), from time to time.

Valuation norms

Issue of shares to non-residents or transfer of shares from residents to non-residents, and vice versa, is subject to valuation-related guidelines where fair valuation of shares has to be carried out, in accordance with internationally accepted pricing methodologies on an arm's length basis, duly certified by a chartered accountant (CA) or SEBI-registered merchant banker in the case of unlisted companies. However, if shares are listed, the consideration price cannot be less than that worked out, in accordance with SEBI's guidelines.

When non-residents (including NRIs) make investments in Indian companies by subscribing to the Memorandum of Association, such investments may be made considered at face value.

Continuing the momentum towards enhancing ease of doing business in India, a host of reforms have been introduced by the Government during the year. Some of the key initiatives:

- A policy for foreign investment in AIFs, real estate investment trusts (REITs) and Infrastructure Investment Funds (InvITs) has been announced and permitted under the automatic route, subject to guidelines on Indian ownership and control.
- Setting up business in India has been made easy by the Government through the introduction of a single integrated form for incorporation of companies. The minimum capital requirement for companies has been done away with and initiatives taken to reduce the long interface and processing time through single window clearance on the e-Biz portal for requisite initial registrations including PAN, TAN, EPF and ESIC.
- The Government's launch of the Startup India initiative is an important step taken by it to foster entrepreneurship, promote innovation and encourage the growth of start-ups.
- Significant amendments have been proposed in the Companies Act, 2013, in an amendment bill, based on suggestions received from industry to minimise roadblocks and give an impetus to ease of doing business in India.

- The Real Estate (Regulation and Development) Act, 2016, has come into force to safeguard the interest of consumers in commercial/residential real estate markets.
- The National Company Law Tribunal (NCLT) and National Company Law Appellate Tribunal (NCLAT) are being constituted.
- The Insolvency and Bankruptcy Bill, 2016, has been introduced and approved by the Lok Sabha.
- The Enforcement of Security Interest and Recovery of Debt Laws and Miscellaneous Provisions (Amendment) Bill, 2016, has been tabled in the Lok Sabha to bring about amendments in the SARFAESI Act, 2002, and other related Acts to streamline the process of debt recovery further.

Funding options in India

A foreign company setting up an Indian entity (subsidiary or JV) can fund it through the following options:

Equity capital

Equity shares constitute the common stock of a company. Equity capital comprises securities representing equity ownership in a company, provides voting rights to and entitles the holder to a share in its success via dividends or capital appreciation or both.

Issue of equity shares by an Indian company to a foreign resident need to comply with the sectoral caps detailed in the Government's FDI policy.

Investments in equity can only be repatriated on a company's liquidation or through transfer of shares. There are limited provisions that allow buy-back of equity shares under India's corporate law. Reduction of capital is possible in certain circumstances after obtaining the court's approval. There are restrictions on repatriation of investments from the perspective of the Government's FDI policy.

Partly paid equity shares and warrants can be issued by an Indian company to a foreign resident in accordance with the provisions of the FDI policy, the Companies Act, 2013, and SEBI's guidelines, whichever are applicable. The pricing or conversion formula of partly paid equity shares and warrants should be determined upfront and 25% of the total consideration amount (including share premium, if any) received in advance. The balance consideration for fully paid equity shares and warrants should be received within 12 months of the partly paid shares and within 18 months in the case of warrants. The time frame for receipt of the balance consideration in the case of partly paid up shares may be exempted by the RBI in certain specified cases.

Foreign Institutional Investors (FIIs), Registered Foreign Portfolio Investors (RFPs) and Qualified Foreign Investors (QFIs) are also allowed to invest in the capital of Indian companies under the Portfolio Investment Scheme, subject to an individual limit of 10% of a company's capital and an aggregate limit of 24%. The aggregate limit can be increased, based on the sectoral cap/statutory ceiling (individually or in conjunction with other kinds of foreign investment), as applicable, by an

Indian company through a resolution passed by its Board of Directors, followed by a special resolution ratified by its shareholders, subject to its giving prior intimation to RBI.

Fully and compulsorily convertible preference shares and debentures

Indian companies can receive foreign investments through issue of fully and compulsorily convertible preference shares and debentures. The conversion formula or price for issue of equity shares, based on their conversion needs, needs to be determined in advance at the time they are issued.

This is subject to the following guidelines:

- Only compulsorily and fully convertible preference shares and debentures without any option or right to exit at an assured price can be issued.
- Optionality clauses are allowed in fully and compulsorily convertible preference shares, debentures and equity shares under the FDI scheme, provided:
 - There is a minimum lock-in period of one year.
 - This lock-in period is effective from the date of allotment of the capital instruments.
 - After the lock-in period of one year and subject to the provisions of the FDI policy, non-resident investors exercising the option or right will be allowed to exit without any assured returns, in accordance with the pricing and valuation guidelines issued by the RBI from time to time.

External Commercial Borrowings (ECBs)

ECBs are commercial loans, including bank loans; buyers' credit; suppliers' credit; securitised instruments, e.g. floating rate notes and fixed rate bonds; FCCBs; FCEBs or a financial lease from non-resident lenders in any freely convertible foreign currency or Indian rupees. However, the ECB framework is not applicable for investments in Nonconvertible Debentures (NCDs) made by RFPs in India.

ECBs can be availed either under the automatic or the approval route. Eligible borrowers such as corporate organisations in the industrial, infrastructure and service sectors raise funds through ECBs for permissible end uses from recognised lenders. Under the approval route, prior permission of RBI is required to raise ECBs. Under either route, periodic post-facto intimation filings are mandatory, as prescribed under the Foreign Exchange Management Act (FEMA), 1999.

The framework for raising loans through ECBs (herein after referred to as the ECB framework) comprises the following three tracks:

Track I: Medium-term foreign currency denominated ECB with minimum average maturity of 3 years

Track II: Long-term foreign currency denominated ECB with minimum average maturity of 10 years

Track III: Indian rupee (INR) denominated ECB with minimum average maturity of 3/5 years

Regulations under the Foreign Exchange Management Act (FEMA) prescribe a ceiling for the cost of raising funds through ECB. This includes the rate of interest and other expenses in foreign currency and depends on the track under which ECB has been obtained.

Borrowers eligible for ECB include companies in the manufacturing and software development sector, shipping and airline companies, core investment companies, enterprises in the Infrastructure sector, organisations engaged in the Miscellaneous Service sector, etc. The list is separate for each of the tracks mentioned above. The RBI has prescribed limits up to which ECB can be availed of. Raising further funds beyond these limits requires the prior approval of RBI.

The purpose for which ECB can be utilised also depends on the track under which it has been obtained. Some of the permitted end uses include import or local sourcing of capital goods, for general corporate purposes, etc. However, ECB is not permitted for the following purposes:

- i. Real estate activities
- ii. Investment in the capital market
- iii. Use of the proceeds of equity investment in India
- iv. Giving loans to other entities with any of the objectives mentioned above
- v. Purchase of land

Conversion of ECB into equity has been permitted by the RBI, subject to prescribed conditions.

Other types of preference shares and debentures (nonconvertible, optionally convertible or partially convertible) issued on or after 1 May, 2007 are considered as debt, and all norms applicable to ECBs relating to eligible borrowers, recognised lenders, amounts, maturity, end-use stipulations, etc., are applicable in such cases.

Rupee-denominated bonds ('Masala' bonds)

In addition to the tracks mentioned above for raising ECB, any corporate or body corporate as well as REITs and InvITs can issue rupee-denominated bonds of up to INR50 billion for one financial year, with a minimum maturity period of three years, to any investor from a Financial Action Task Force (FATF)-compliant jurisdiction.

The all-in cost of rupee-denominated bonds needs to be commensurate with prevailing market conditions. End user related restrictions in the case of these bonds are generally aligned with end use restrictions relating to ECBs.

Depository Receipts (DRs) and Foreign Currency Convertible Bonds (FCCBs)

Foreign investments made through DRs and FCCBs can also be treated as FDI for the purpose of sectoral caps. Indian companies are permitted to raise capital in international markets by issuing DRs and FCCBs, subject to prescribed restrictions.

Issuance of DRs does not require prior approval to be obtained from the Ministry of Finance, FIPB or RBI, except when FDI exceeds sectoral caps or policy requirements, in which case the

prior approval of FIPB is needed. There are no end-use restrictions on DRs, except for a ban on their deployment in the Real Estate sector or the stock market.

FCCBs are subject to all the regulations that are applicable for ECBs. AD banks have been permitted to allow Indian companies to refinance their outstanding FCCBs under the automatic route, subject to the conditions prescribed.

Foreign Currency Exchangeable Bonds (FCEBs)

FCEBs can be issued under the Government's FCEB scheme.

The salient features of the scheme:

- FCEBs are foreign currency bonds and their principal and interest are payable in the same foreign currency.
- An FCEB is issued by a company that is a part of the promoter group of a listed company (offered company), which is required to hold the equity share(s) offered at the time the FCEB was issued. The listed company should be engaged in a sector that is eligible to receive FDI. Individuals residing outside India subscribe to FCEBs, which are exchangeable with the equity shares of the company on the basis of any equity-related warrants attached to its debt instruments.
- Investments made under the scheme need to comply with FDI norms and ECB policy-related requirements. The proceeds of FCEBs can be invested in a promoter's group companies, which must ensure that this investment is:
 - Used in accordance with the end uses prescribed under the ECB policy
 - Not used to make investments in the capital market or the Real Estate segment in India

The proceeds of FCEBs can also be invested by an issuing company abroad through direct investment, including in a JV or wholly owned subsidiary, subject to existing guidelines on Overseas Direct Investment in a JV or wholly owned subsidiary.

Policy announcements to encourage investment

Continuing the momentum towards enhancing ease of doing business in India, a host of reforms have been introduced by the Government during the year. Some of the key initiatives are as follows:

- The Government has liberalised the FDI Policy for various sectors, including Construction Development, Defence, Private Banking, Broadcasting and Trading, and has brought in the much-awaited policy on FDI in e-Commerce.
- Foreign investment in sectors including insurance and pension with investments of up to 49% and white labelled ATM operations, asset reconstruction companies, plantations, non-scheduled transport services and other carriage services with investments of up to 100% have been brought under the automatic route, subject to the conditions prescribed.

- Foreign investment in Limited Liability Partnerships LLPs has been liberalised and brought under the automatic route.
- A policy has been announced for foreign investment in Alternate Investment Funds and Infrastructure Investment Funds and permitted under the automatic route, subject to guidelines on Indian ownership and control.
- To boost the domestic food processing industry, it is proposed that FDI of up to 100% is to be allowed in food processing.
- In line with the proposals, NRI investment under the non-repatriation mode has been equated with domestic investment.
- Setting up business in India has been made easy by the introduction of a single integrated form for incorporation of companies. The minimum capital requirement for companies has been done away with and initiatives taken to reduce multiple interfaces and the processing time. Single window clearance on the e-Biz portal has been put in place for initial registrations required such as PAN, TAN, EPF and ESIC.
- One of the major reforms introduced by the Reserve Bank of India (RBI) with regard to foreign entities with a place of business India has been implemented by doing away with the need to seek the RBI's approval. Powers have been delegated to authorised dealer banks to grant approval for the establishment of a liaison/branch/project office in India, subject to its meeting the prescribed conditions.
- Introduction of the 'Startup India' policy is another important step towards fostering entrepreneurship and promoting innovation for the growth of start-ups in the country.
- Substantial amendments have been proposed in the Companies Act, 2013 by way of an amendment bill, based on suggestions received from the industry to minimise roadblocks and give a further impetus to ease of doing business in India.
- The Real Estate (Regulation and Development) Act, 2016 was brought into force to safeguard the interest of consumers in commercial/residential real estate markets.
- The constitution of National Company Law Tribunal (NCLT) and National Company Law Appellate Tribunal (NCALT) is being taken up expeditiously.
- The Insolvency and Bankruptcy Bill, 2016 has been introduced in and approved by the Lok Sabha.
- The Enforcement of Security Interest and Recovery of Debt Laws and Miscellaneous Provisions (Amendment) Bill, 2016 has been tabled in the Lok Sabha to bring in amendments in the SARFAESI Act, 2002 and other related Acts to further streamline the process of debt recovery.

Make in India - transforming India's manufacturing scenario

INTRODUCTION

Accelerating growth of the manufacturing sector is key to stimulate higher economic growth of a nation. To this effect, the Make in India flagship initiative was launched in 2014 to give a comprehensive push to industrial development by introducing a business friendly regulatory environment, enhancing the ease of doing business and improving manufacturing infrastructure, among others. The initiative is based on 4 fundamental principles, which are mentioned below:

New processes

The Government of India (GoI) recognised Ease of Doing Business (EoDB) is critical to attract investments into the country. Thus, it introduced new de-licensing and deregulation measures to significantly reduce complexity in the government procedures and help increase efficiency and transparency (Make in India website, 2015).

New infrastructure

The manufacturing infrastructure and innovation capacity are expected to witness growth owing to the development of smart cities and industrial clusters across different regions identified as potential investment destinations (Make in India website, 2015).

New sectors

The government has liberalised norms and opened up new sectors for foreign investments under the Make in India initiative. The 10 key sectors identified by the government to play a major role in manufacturing are (Make in India website, 2015):

- Aerospace and defence
- Automobiles and automobile components
- Chemicals and petrochemicals
- Construction equipment, materials and technology
- Food processing
- Infrastructure development
- IT and electronics
- Industrial equipment and machinery
- Pharmaceuticals
- Textiles

New mind-set

Aiming global recognition, the government tried to represent an attitudinal shift in its relation with investors through the Make in India initiative, which limits interventions in setting-up and operating manufacturing units and promotes governance.

STATUS

Steps taken so far

Invest India - investor facilitation cell

- The government has set up an Invest India agency — a joint venture between the Federation of Indian Chambers of Commerce & Industry (FICCI), Department of Industrial Policy & Promotion (DIPP) and the state governments — to promote and facilitate investments.
- The agency established an Investor Facilitation Cell to guide, assist and handhold investors during the entire life cycle of the business.

Ease of Doing Business

- India improved its EoDB ranking to 130 in 2015 by constantly working on parameters that address investors' concerns on conducting business in India.
- The government has released a 98-point action plan for states and union territories, on which they were ranked on ease for investors to acquire land, get access to infrastructure related utilities such as electricity, get clearances and approvals from the government and pay taxes.

Liberalised FDI norms

The government, under its Make in India initiative, has eased FDI norms in key sectors which include defence, insurance, railways infrastructure, etc., resulting in a surge in proposals and investments that the country received in FY2015-16.

Modified Industrial Infrastructure Upgradation Scheme (MIUS)

- Under MIUS, 24 projects have been approved in principle, involving a central grant of about USD100 million. Out of the 24 projects, final approval was accorded to 11 projects in February 2014, and a grant of USD2.7 million was further released for 5 projects.
- So far, 5 projects have been completed in FY2014-15 as compared to 2 in FY2013-14.

Promoting merchant exports through incentives

To overcome challenges faced by exporters to ship products, the government has extended duty incentives on several products. About 110 new tariff lines or products have been introduced, including the textiles and electronics sectors, to the existing list of 2,228 products under the Merchandise Exports from India Scheme (MEIS). The duty benefits are a part of increased allocations, from USD2.8 billion to USD3.3 billion, for MEIS.

Protection of Intellectual Property Rights (IPR)

To modernise and strengthen Intellectual Property (IP) offices, the scheme aims at reducing transaction costs, improving transparency in the functioning of the IP offices and augmenting human resources to enable timely evaluation of applications.

EXPECTED NEXT STEPS

Net zero imports by 2020

The government aims at curtailing the net import-export balance for the electronics and IT sectors to zero by 2020. Proposals worth USD12.5 billion have been received for reviewed under the Modified Special Incentives Scheme (MSIS), launched by the government. According to the scheme, electronics manufacturers get a capital subsidy of 20 to 25 per cent from the government.⁰⁶

Start-up India mission

- The Start-up India mission to be run by DIPP, would promote bank financing for start-ups and offer them incentives. India also announced setting up of the Aspiration Fund and Atal Innovation Mission (AIM) to encourage start-ups.
- The government is expected to launch a slew of measures to enable and promote entrepreneurship and make India a leader in start-ups across the world.

Automotive Mission Plan

- The Automotive Mission Plan (AMP) 2016-26 was announced in September 2015 by the Society of Indian Automotive Manufacturers (SIAM) and GoI to make the country among the top 3 automotive industries in the world. The plan also envisages to grow the Indian automotive industry to USD260 to 300 billion by 2026.
- AMP aims to make the Indian automotive industry the engine of Make in India initiative. (Automotive Mission Plan: 2016-26 (A Curtain Raiser), 2015).

Industry status for gems and jewellery sector proposed

- At present, India is a leader in global jewellery consumption with a share of 29 per cent. The sector contributes 6 to 7 per cent to the Gross Domestic Product (GDP) and is the second highest contributor to the nation's commodity exports with a share of 13 per cent, after petroleum products.⁰⁹ During April to September 2015, the exports from gems and jewellery sector was USD19.2 billion (Invest India website, 2016).
- India is the world's largest cutting and polishing centre for diamonds and has made technological advancements in diamond cutting. It is also one of the lowest-cost producers of polished gems and jewellery (Invest India website, 2016).

Micro Units Development and Refinance Agency Ltd (MUDRA)

The GoI launched MUDRA Yojana (plan) in April 2015 with a corpus of USD3.1 billion and a credit guarantee fund of approximately USD470 million. The objective is to provide finance and credit support to the Micro-Finance Institutions (MFI) and other agencies, which lend money to small businesses and individuals.¹² It would also help in registering all the MFIs and introduce a system of performance rating and accreditation and thus, help the last-mile borrowers of finance to evaluate and approach the best MFIs.

Impact

Increased GDP

- The Make in India and other development initiatives are expected to help the country to grow at an average rate of 8.8 per cent annually during 2015-25. The nominal GDP is expected to reach USD3.4 trillion by FY2019-20 and further, to USD7 trillion by FY2024- 25.
- The Make in India initiative aims at increasing the manufacturing sector's share in GDP from 16 to 25 per cent by 2022.

Revival of Indian manufacturing industry

The initiative is expected to revive the manufacturing sector and make it self-reliant. The sector grew at an annual average rate of 5.77 per cent for the period 2011- 15, and Make in India initiative would push the growth rate of manufacturing to 12 to 14 per cent over the next 3 to 5 years.

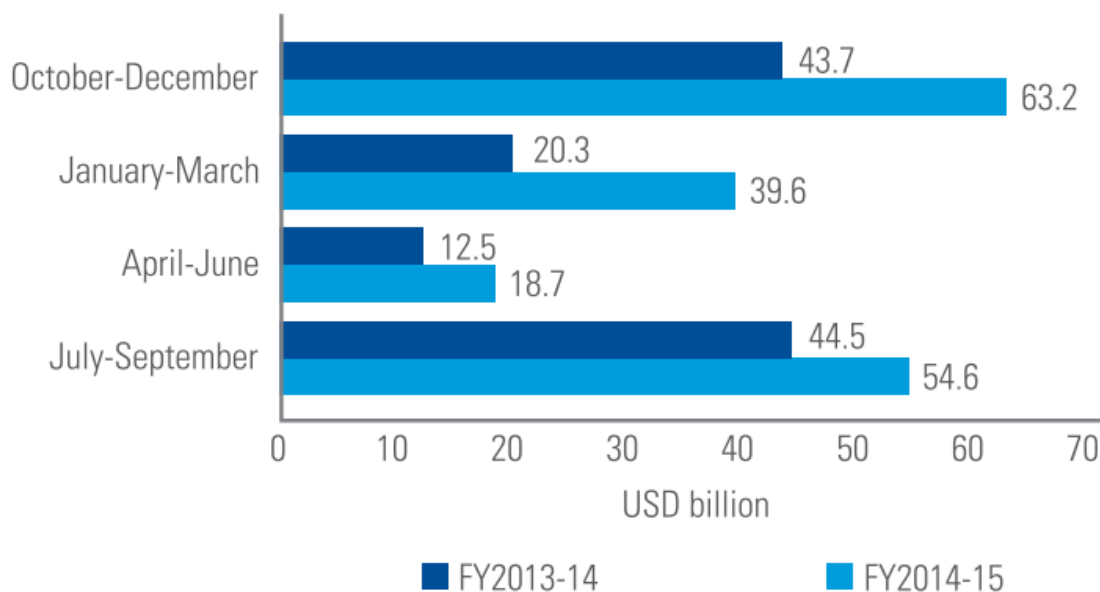
Increased employment

The Make in India initiative is expected to create employment opportunities for about 100 million additional people by 2022.

Increase in new projects

There has been an overall increase in value of new projects announcements (government and private) on a quarter-on-quarter basis over the last 4 quarters (October 2014 to September 2015). The chart below depicts the increase:

Figure 3.11: New project announcements (October 2014 to September 2015)



Source: Centre for Monitoring Indian Economy (CMIE), 2016

Reviving stalled projects and reducing CAD

- Through initiatives led by the Prime Minister's office, the stalled projects' value has decreased from a peak of 8.5 per cent of the country's GDP in 4Q FY2013-14 to 7.6 per cent of the GDP in 2Q FY2015-16.
- Indigenous manufacturing would gradually reduce dependence on imports and control Current Account Deficit (CAD) of the country. This is indicated by the April to June 2015 CAD which fell to a five-quarter low at USD6.2 billion (1.2 per cent of GDP) as compared to USD7.8 billion (1.6 per cent of GDP) during the corresponding period previous year. Reduced CAD was on account of a decline in merchandise imports of the nation and falling crude prices globally.

Turning India into an attractive investment destination

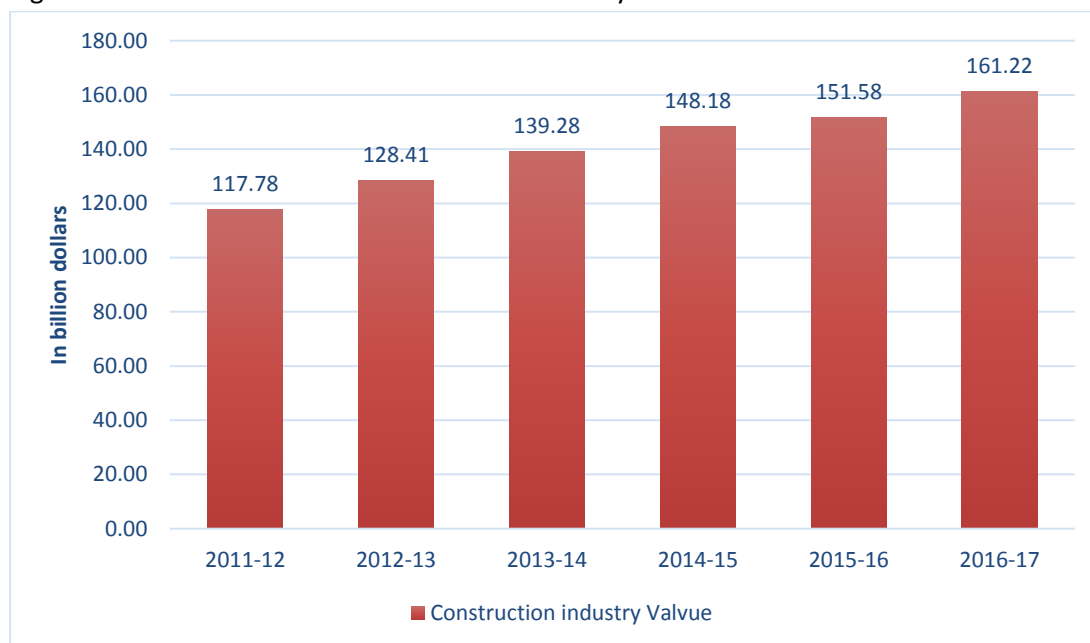
- FDI equity inflows in the country totaled USD44.3 billion in FY2014-15, up 23 per cent on FY2013-14 value of USD36 billion. In the first 2 quarters of FY2015-16 (April to September 2015), FDI inflows amounted to USD16.6 billion.
- India's ranking in the World Economic Forum's Global Competitiveness report FY2015-16, showing a jump of 16 places. The country is also ranked as the fastest growing economy by the International Monetary Fund (IMF).

3.4 Construction Market in India:

The construction sector in India is the country's second-largest economic segment after agriculture. It employs more than 40 million people and contributed 7.74% to the national GDP in 2016–17 Economic Survey (2016-17).

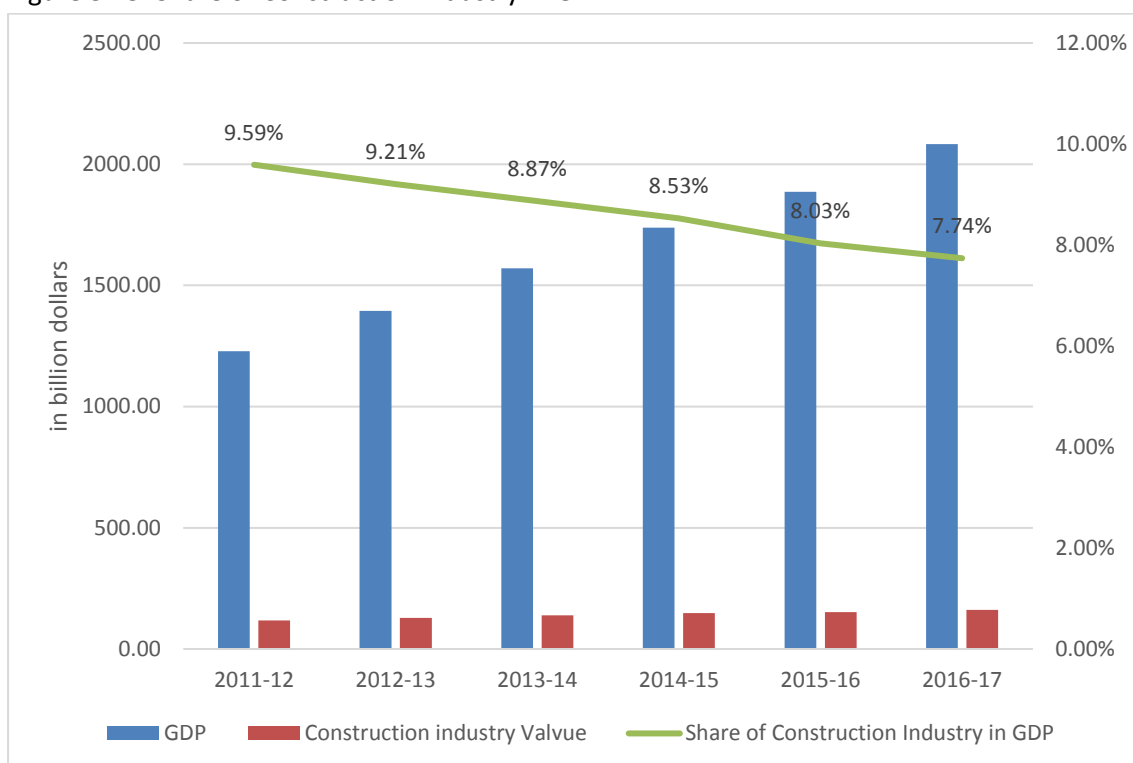
According to industry estimates, the Indian construction industry was worth \$161.22 billion in FY2016-17 (India Infrastructure Report, 2017). Prior to the global economic crisis in 2008, the industry grew at more than 10% during 2005–07. After 2008, the growth moderated, with the industry registering an average real growth rate of 4.8% during 2008–2014. However, the industry is now expected to recover with the formation of a stable government at the center and its thrust on infrastructure development to revive economic growth.

Figure 3.12: Growth of India's Construction Industry



Source: India Brand Equity Foundation (IBEF), 2017

Figure 3.13: Share of Construction Industry in GDP



Source: India Brand Equity Foundation (IBEF), 2017

Table 3.3: Indian Construction Industry Value and it's share in GDP

Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
GDP	1228.28	1394.74	1570.65	1737.94	1886.66	2083.45
Construction industry Value	117.78	128.41	139.28	148.18	151.58	161.22
Share of Construction Industry in GDP	9.59%	9.21%	8.87%	8.53%	8.03%	7.74%

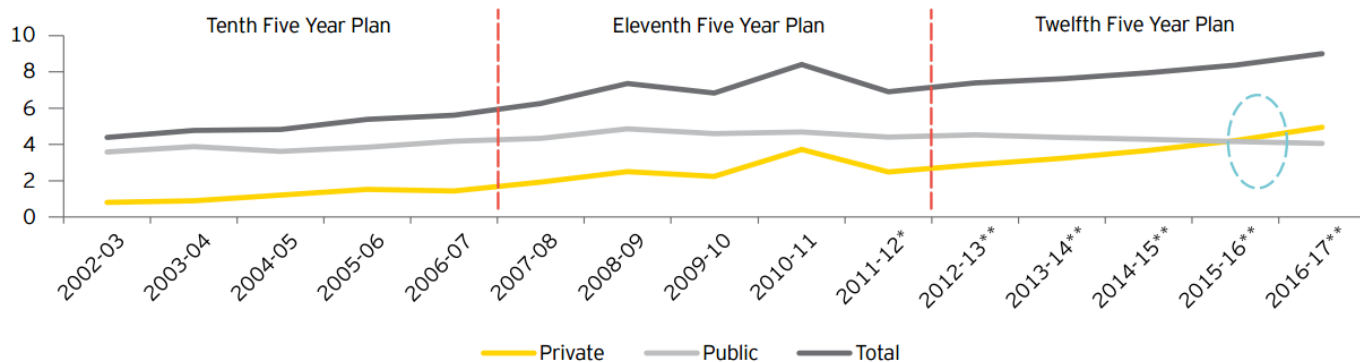
Source: Ministry of Statistics and programme implementation, 2017 | Planning commission, Government of India

Infrastructure projects are major demand drivers in the Indian construction industry accounting for an estimated 49% of industry value followed by real estate and housing (42%) and industrial projects (5%) (EPC World, 2014).

India's economic growth has primarily been driven by considerable investment in infrastructure development after liberalisation. These investments have increased sharply to \$1000 billion in the Twelfth Five Year Plan from \$ 360 billion during the Eleventh Five Year Plan. These investments are spread across infrastructure sectors such as roads and highways, telecom, airports, ports, power, oil and gas and railways and have helped the Indian economy attain an improved growth trajectory in the last ten years prior to 2012. The share of infrastructure as a percentage of GDP increased from 5% in the Tenth Five Year Plan to around 7.2% in the Eleventh Five Year Plan on the back of a

favourable policy support (“Twelfth Five Year Plan 2012-2017 – Economic Sectors (Volume II),”, 2014). Over the past decade, public sector investment as a percentage of GDP has remained consistent and the increase in total share can be attributed to an increasing share of private sector investment as percentage of GDP.

Figure 3.14: Investment in infrastructure as a percentage of GDP



* Revised estimates, ** Projected investment

Source: Investment during the Eleventh Plan as Percentage of GDP and Twelfth Five Year Plan (2012-2017), Planning Commission, Govt. of India

Considering the new Government’s emphasis on infrastructure development, the total construction opportunity, both infrastructure and industrial, is expected to grow substantially, going forward. This growth in construction opportunity will be driven by infrastructure investment in the following areas:

- ▶ National highways, state highways and expressways
- ▶ Dedicated freight corridors and freight terminals
- ▶ Water supply and waste treatment systems
- ▶ Piped-gas distribution networks
- ▶ Mass Rapid Transport System
- ▶ Initiative to provide housing for all by 2022
- ▶ High-speed rail corridors
- ▶ Greenfield airports
- ▶ High-voltage transmission lines
- ▶ Greenfield major ports
- ▶ Ultra Mega Power Plants

The new Government has also introduced few initiatives such as incentives for the establishment of Real Estate Investment Trusts and Infrastructure Investment Trusts to bring infrastructure financing back on track. These instruments will be granted a tax-pass through status to avoid double taxation and encourage investment.

Opportunity in the Twelfth Five Year Plan (Twelfth Plan)

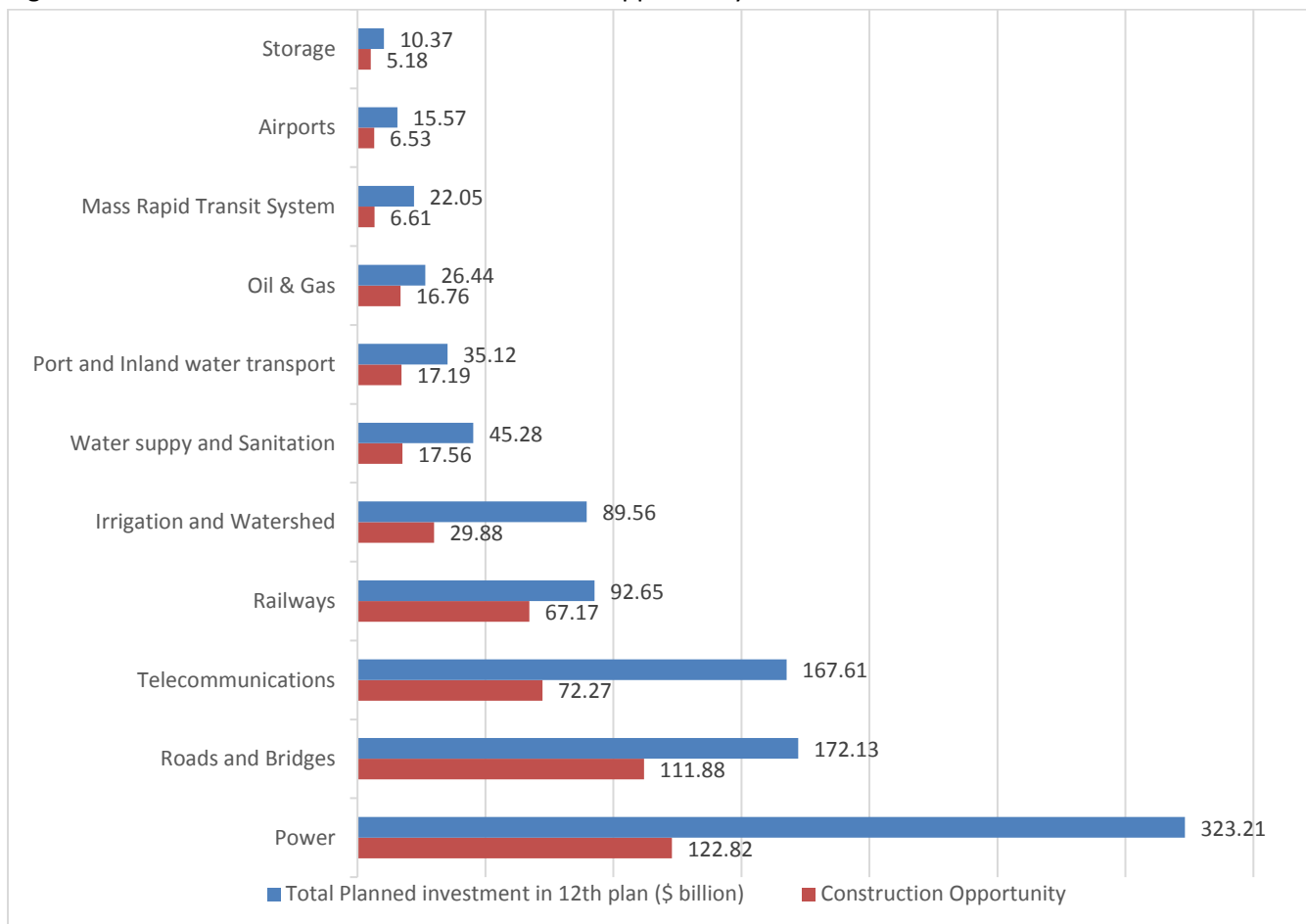
The Twelfth Five-year Plan envisions investment of approximately US \$1 trillion in Indian infrastructure between 2012 and 2017. This, in turn, is expected to offer significant opportunities for EPC players across various sectors. During the period, the construction opportunity in the infrastructure sector is estimated to be around US \$474.24 billion. Significant investments in

infrastructure projects, along with the revival in the real estate sector and growth in industrial capital expenditure are likely to boost the construction industry and act as a catalyst for growth of EPC companies in India (Planning commission of India, 2014).

Planned investments and construction opportunity in infrastructure in the Twelfth Plan

Total planned investment: \$ 1 trillion

Figure 3.15: Planned investments and construction opportunity in infrastructure in the Twelfth Plan

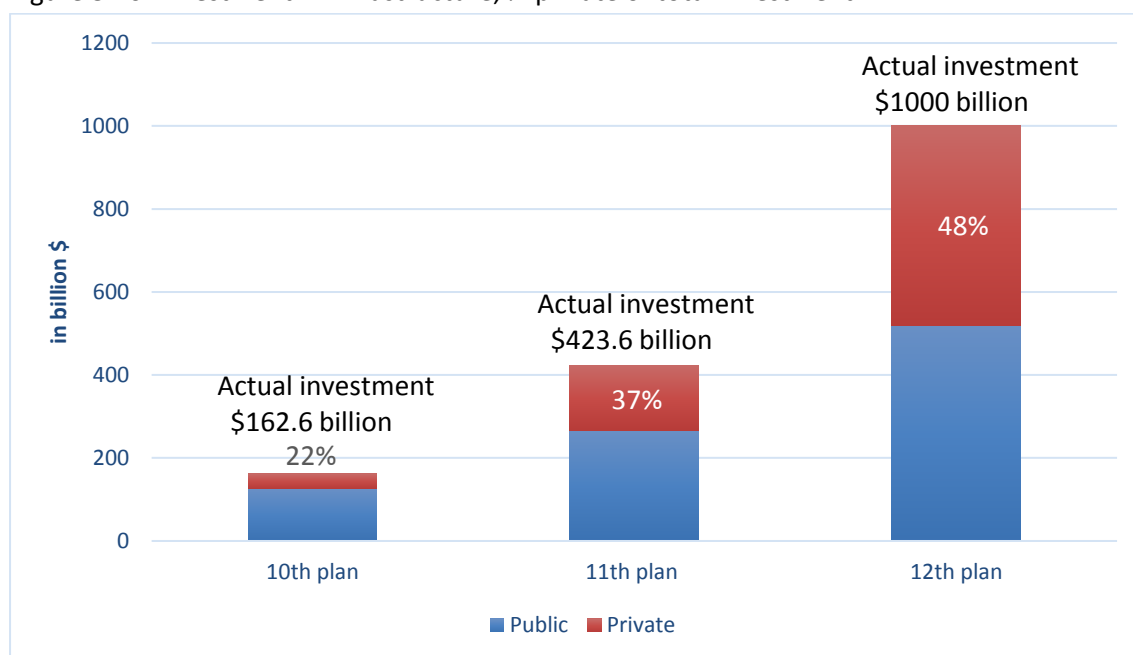


Source: Twelfth Five Year Plan document, Planning Commission, 2014

The construction intensity, which varies significantly across infrastructure sectors, impacts the opportunity for EPC players more directly than the investment planned. While construction-intensive sectors such as roads, railways and MRTS together account for 28% of infrastructure investments, they contribute nearly 42% to the total EPC opportunity. On the other hand, the telecom sector, which has the third-largest investment in infrastructure, accounts for only 3.5% of the total EPC opportunity.

Going forward, the Planning Commission has projected that investment in infrastructure will more than double at \$ 1 trillion during the Twelfth Plan from the Eleventh Plan. The private sector is expected to contribute nearly half of the total investment.

Figure 3.16: Investment in infrastructure, % private of total investment



Source: Twelfth Five Year Plan and Eleventh Five Year Plan, Planning Commission of India, 2014

The Government has been driving policy reforms to enable this, making way for ample opportunities for EPC players. It has recognised infrastructure as one of the core sectors to revive the economic growth. The Government is taking initiatives to remove the hurdles in the way of ongoing projects along with inviting re-bids for some of them. In addition, it is envisaging new projects across sectors to modernise the infrastructure of the country. In order to ease the liquidity crunch, the Government is promoting low-cost, long-term funding mechanism besides allowing for more External Commercial Borrowing (ECB) (The Economic Times, 2014).

It has recently relaxed the process of obtaining environmental clearances for rail projects in border areas, which is expected to FastTrack the construction of railway lines in these regions. Recently, the Government has diluted the Environment Impact Assessment (EIA) notification of 2006 to exempt many categories of buildings and construction projects (with built-up area of more than or equal to 20,000 sq. m. but less than 150,000 sq. m.) from seeking environmental clearances. Furthermore, it plans to set-up regulators in the road and coal sectors to handle disputes efficiently and reduce the time and cost overruns and quickly ramp-up capacities in these sectors.

Key infrastructure sectors: investment scenario

Roads and highways

India has one of the largest road networks in the world, behind only the United States and China. Roads account for 80 per cent of passenger traffic and 65 per cent of freight traffic in India. The annual growth of road network in India is projected at over 12% for passenger traffic and over 15% for cargo traffic.

Indian Road Network is divided into National Highways, State Highways/PWD roads and rural roads. The Indian Government estimates around US\$ 27 billion plus private investments is required over FY12-FY17 to improve the country's road infrastructure.

The National Highways Development Project (NHDP) is a project to upgrade, rehabilitate and widen major highways started in early 2000s. NHDP is planned to be implemented over seven phases. The program envisages an investment outlay of over US\$ 40 billion. Currently 33,500 kms are already developed or are under implementation with balance 21,000 kms are yet to be awarded. Extensive contribution of the private sector is being utilized for implementation of NHDP through contracting and Public Private Partnership (PPP).

The current Government has approved more than \$ 6.15 billion worth of road projects to be implemented in the next two-three years (NDTV News, 2014). The EPC model is expected to be the preferred mode of project execution in the near term. Consequently, the Government plans to award around 2,300 km of highway projects with a total project cost of more than INR150 billion through the EPC route in 2014–15 (The Economic Times, 2014). In fact, in October 2014, the NHA floated tenders for 14 road projects worth INR290 billion and majority of these projects will be awarded on an EPC basis. It has revived another 34 road projects worth \$ 4.46 billion, which will now be executed through the EPC mode instead of the original plan of PPP mode of execution.

EPC route has become the preferred mode of award for state road projects as well. A total of seven key projects, covering more than 164 km and worth \$ 415.3 million were awarded during 2013–14. One of the biggest EPC projects — the \$ 198.46 million AIIMS-Digha elevated corridor project in Bihar — was awarded to Gammon India Limited in September 2013 by the Bihar State Road Development Corporation.

Around 50,000 km of rural roads have been approved for upgrades under the Pradhan Mantri Gram Sadak Yojna II across the country. This represent an EPC opportunity worth \$ 7.23 billion. Similarly, projects covering 6,295 km of road length will be awarded under the Special Accelerated Road Development Project-Northeast (SARDP-NE). In addition, a road length of 1,120 km will be upgraded under the National Highways Interconnectivity Project (Indian Infrastructure, 2014).

Railways

Indian Railways has the world's third largest rail network comprising 115,000 km (71,000 mi) of track over a route of 65,000 km (40,000 mi) and 7,500 stations. Indian Railways carried 1,009 mn tonnes of Freight Traffic and 8,501 mn passengers (more than 23 mn daily) in the FY 2012-13. There is an

estimated annual traffic growth of 4% to 5%. Indian Railways is also the world’s second largest employer with a workforce of 1.5 mn.

Indian Railways is one of the largest systems of passenger carriers in the world. However, passenger services tend to be cross subsidized in India through Freight earnings. Almost 70% of total earnings of Indian Railways come through freight services.

The Indian Railways network has an Operating Ratio of almost 90%. The Indian Government has recognised existing infrastructure gaps and capacity constraints in the rail system, and as a consequence plans large scale investment over the next five years. Projected investments total US\$ 86.5 billion, of which 19% is expected to be contributed by the private sector.

Table 3.4: Investment phasing and funding sources for railways till 2032 (\$ billion)

	Budgetary support	Internal sources	Borrowing	PPP	Total
Twelfth FYP (2012-17)	29.39	15.91	18.18	15.15	78.64
Thirteenth FYP (2017-22)	61.36	22.88	24.24	30.76	139.24
Fourteenth FYP (2022-27)	72.58	53.79	35.30	20.76	182.42
Fifteenth FYP (2027-32)	16.21	107.88	0.00	10.76	134.85

Source: Indian Infrastructure, January 2014; National Transport Development Policy Committee (NTDPC Report)

Traditionally, railway projects, including construction and doubling of new lines, electrification of tracks, signalling, construction of stations and other ancillary units were executed on EPC basis. The new Government plans to increase private participation in railways by awarding more projects through PPP route. This is expected to attract funds and lead to increased generation of EPC business.

Dedicated Freight Corridor (DFC)

(DFCCIL, 2014)

The project, which aims to addresses capacity constraints on high density networks and reduce the unit cost of transport, is being implemented by Dedicated Freight Corridor Corporation of India Limited. The project comprises two corridors in Phase I — the eastern corridor and the western corridor. The total completion cost is estimated at US\$16 billion, which will be funded at a debt equity ratio of 2:1. The western DFC will be completely funded by the Japan International Cooperation Agency (JICA) while the eastern DFC will be funded by the World Bank, the Central Government and PPP.

As of December 2013, more than 94% of the land acquisition has been completed. All environmental and wildlife clearances have also been received. Civil contracts have been awarded for more than 1,100 km length and work is in progress. Tenders for civil works for around 1,250 km and system contracts (electrification, signaling and telecom) have been invited. Mechanised maintenance

contracts have also been planned. With regard to funding, a total loan of US\$10.93 billion (US\$2.73 billion from the World Bank and US\$8.2 billion from JICA) has been committed and loan agreements of US\$9.18 billion have been signed.

The DFC offers multiple business opportunities in construction, development of economic zones around freight corridors, high capacity rolling stock for the DFC and the setting up of multi-modal logistics parks. It will also provide opportunities in civil and track works of 1,250 route km (double line), electrification works of 2,250 route km (double line) and signaling and telecom works over 2,250 route km (double line) by the end of FY15.

Going forward, four more corridors are planned to be undertaken in the future — 2,000 km east-west corridor (Kolkata-Mumbai), 2,173 km north-south corridor (Delhi-Chennai), 1,100 km east coast corridor (Kharagpur-Vijayawada) and 890 km southern corridor (Chennai-Goa).

Modernisation of Indian Railways presents immense opportunities for EPC players

Keeping in view that growth plans cannot be achieved without creating adequate capacity and modernizing the existing infrastructure, Indian Railways has set capacity augmentation targets in the Report of the expert group for modernisation of Indian Railways. The key recommendations of the report, which was released in 2012 are: (Ministry of Railways, 2014).

- ▶ Modernisation 19,000 km of existing tracks by building strong and robust tracks capable of carrying heavy freight trains at 25 tonne axle load and achieving increased speeds of 75/100 kmph. The tracks on A & B routes should be fit for passenger speeds of 160/200 kmph.
- ▶ Strengthening of 11,250 bridges to sustain improved loads at increased speeds
- ▶ Implementation of Automatic Block Signalling on A and B routes with Train Management System
- ▶ Modernisation of 100 major stations
- ▶ Development of 34 multi-modal logistics park to provide integrated transport infrastructure facilities
- ▶ Construction of North-South, East-West, East-Coast and Southern DFCs (6,200 Kms) in the next 10 years in addition to Eastern (Ludhiana-Dankuni) and Western (Mumbai-Delhi) Dedicated Freight Corridors (DFCs)

The Twelfth Plan, in combination with the Indian Railways modernisation plan, exhibit large-scale opportunities in the EPC sector.

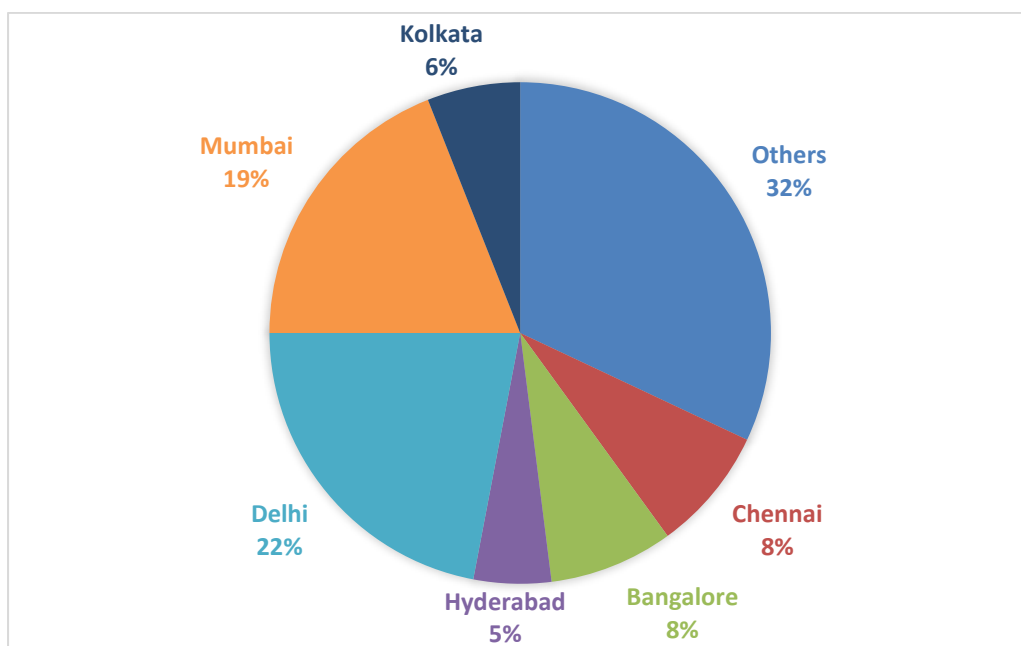
Airports

There are a total of 454 airports in India, out of which around 90 are open for commercial services and 16 are designated as international airports. Delhi and Mumbai are by far the busiest airports in India, carrying almost 2.5 times traffic as the next busiest airport. Air traffic has increased rapidly in the last decade, although this has slowed down in the last few years. During the period 2007-08 to 2012-13, Passenger traffic and Freight traffic grew at a cumulative annual growth rate of 6.4% and

5.0% respectively. Indians are still flying in much greater numbers. However, a number of Indian airlines have faced challenging market conditions in the recent years, and the rate of growth is likely to be significantly less than initially projected, estimates suggest that passenger traffic is expected to grow to 320 million by 2022-23 (an annual cumulative growth rate of 8.44%). It is anticipated by the civil aviation ministry that domestic cargo will grow by 8 times during the period 2009-10 to 2031-32 from its level of 2009-10 whereas international cargo will grow by 7.6 times. The growth so achieved has put tremendous pressure on current airport infrastructure in the country. The Indian Government has projected that an investment of around US\$ 12 billion in the next five-year plan will be needed to help cope with additional demand, and private sector participation is expected to play a key role. 75% of the investment envisaged in the next five-year plan is expected to be contributed by private sector.

Figure 3.17: Airport wise Passenger Traffic Share (%)

(April to June Quarter 2012-13)



Source: India Infrastructure Magazine, 2013

The private sector has already invested heavily to upgrade the airport infrastructure in several cases, with private participation in recent years at Delhi, Mumbai, Hyderabad, and Bangalore. Greenfield airport projects are planned in emerging Tier II cities such as Goa, Pune, Navi Mumbai, and Kannur. Further, 35 non-metro airports are proposed for development, which provide excellent avenues for private contracting and bringing in international technologies for construction.

Recent policy initiatives have brought some timely relief

The Government took two major policy initiatives in 2012 to improve the overall sentiment in the sector. Firstly, it has allowed FDI of up to 49% in domestic airlines by foreign airlines (so far foreign airlines were not allowed to directly invest in Indian carriers for security reasons, although 49% FDI by non-airline players was allowed). This is expected to facilitate equity infusion in the cash-starved domestic carriers, which can be used further to expand their fleet and operations. This will also help in generating improved revenues at airports with increased aircraft movement and passenger throughput. Following the easing of FDI policy, Malaysia's AirAsia has entered the Indian market in a joint venture with the Tata Group. Likewise, UAE-based Etihad Airways has acquired a 24% stake in India's Jet Airways for US\$379 million. Secondly, the Government allowed the direct import of aviation turbine fuel (ATF) by Indian carriers, which will result in significant cost savings for them.

Furthermore, in 2013, the Ministry of Civil Aviation (MoCA) allowed airlines to unbundle services and in turn, allowing them to charge extra for blocking seats in advance and check-in baggage. The Government also plans to set-up Civil Aviation Authority (CAA), which will replace the Directorate General of Civil Aviation (DGCA). The CAA will finance its functions through fees collected from airline operators and will act as the regulatory body for civil aviation in the country. The CAA bill is currently under discussion with the cabinet.

The RBI has included maintenance, repair and overhaul (MRO) operations in the airport in the infrastructure category. This will facilitate ECB for the segment and is likely to boost development of these projects. The Airports Economic Regulatory Authority (AERA) has released its guidelines for public consultation in July 2014. Once these guidelines are finalised, they will provide an increased impetus to PPP projects in the airports sector.

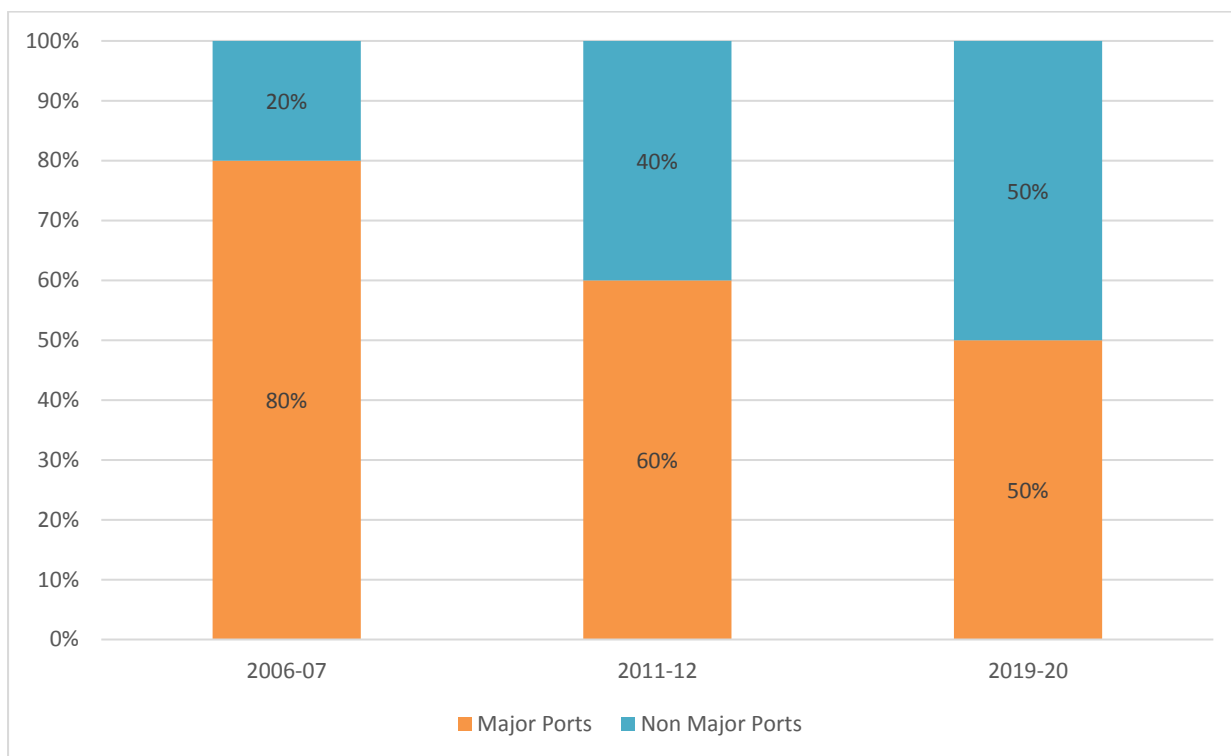
Upcoming opportunities in the sector

A study by aviation consultancy Centre for Asia Pacific Aviation (CAPA) has estimated an investment requirement of approximately US\$40 billion in 50 greenfield airports by 2025 to address the under-penetration and capacity challenges at major airports in India (The Times of India, 2014). The Government has proposed to build 17 new airports during the Twelfth Plan period, as well as 100 airports in small cities. The Government plans to develop these new airports as no-frills airports with low cost of operation. The move is driven by an urge to provide basic infrastructure in far-flung areas to act as a catalyst for future growth rather than having "world-class" airports. It is also planning to develop 24 airports as domestic air cargo terminals to establish a national logistics network for rapid movement of cargo goods. Some of the key upcoming airports projects in the country include a greenfield airport at Navi Mumbai (at an estimated cost of US\$ 480 million to US\$ 600 million) and an international airport at Kushinagar in Uttar Pradesh (worth US\$ 53 million) (Financial express, 2014). India's first private international greenfield airport is being developed at Aranmula in Kerala at a cost of US\$ 303.3 million (KGS Aranmula International Airport Ltd website, 2014). Similarly, the Government of Goa has invited applications from global companies seeking Request for Qualification (RfQ) for the development of a greenfield international airport at Mopa on PPP basis.

Ports

India is blessed with a coastline of more than 7500 kms and countless opportunities for natural ports. Ports in India are classified as Major and Non-Major Ports. There are currently 13 Major ports in India, out of which are under the jurisdiction of Central Government of India. Additionally, there are more than 180 non-major ports governed by the state governments. However, only about 60 of these non-major ports are currently operational.

Figure 3.18: Growth of Non-Major Ports Market Share



Source: Directorate General of Civil Aviation website, 2015

The eastern coast of India generally deals with Bulk Cargo, while the western coast deals majorly in containerized cargo transport. Ports in India handle more than 90% of the country’s trade by weight. Overall Indian ports handled close to 1 Billion MT of cargo in 2012-13. Port traffic expected to grow at a CAGR of 12% to reach 2500 million tonnes by 2019-20, with non-major ports expected to lead the growth and ease capacity constraints of Major Ports. 43 port modernization and expansion projects are currently under implementation with an estimated cost US\$ 2 billion. These projects are expected to provide capacity addition of about 220 MT.

Current capacity of major ports in India is 745 MMT against the traffic of 545.79 MMT 2012-13, giving them a capacity utilization of 73%. India’s existing ports infrastructure is not sufficient to handle the increased loads, even where ports have already been modernised. There are capacity constraints with containerization level at only 25% as compared to global average of 60-70%. Further, ports face huge congestion and average time for clearing import-export cargo is about 19

days. This is due to bottlenecks at almost all levels of the chain, including cargo handling and offtake capacities of road/ rail connections.

Investment targets and plans promise huge EPC potential

To meet traffic targets, an investment requirement of US\$ 48.9 billion has been estimated for the development of the sector. In addition, investment for the development of inland water transport (IWT) is projected at US\$ 9.8 billion over the same period. An investment of such proportion presents large-scale EPC opportunities in berth, jetty and quay construction; dredging requirements; port infrastructure including installation of heavy-duty handling equipment; support infrastructure including railway sidings, road connectivity and storage space (Indian Infrastructure, 2014).

Emergence of new growth areas

► **IWT and coastal shipping:** The new Government has emphasised on the development of these segments. It plans to develop an Inland Water Transport Grid, covering around 4,500 km., on the lines of National Highways grid. In a key announcement, the Union Budget 2014–15 allocated INR42 billion for the Jal Vikas Marg project for the development of National Waterway-1 between Allahabad and Haldia.

► **Port-based special economic zones:** The Government has formulated plans for the development of new port-based special economic zones (SEZs). Kandla port and JNPT have been identified as part of this plan. The work on the JNPT SEZ has started in August 2014 and the Kandla SEZ has also received in-principle approval.

► **Port connectivity projects:** The Government has proposed to award 16 new port projects this year with a focus on port connectivity. It has also allocated INR116.3 billion for the development of Outer Harbour Project in Tuticorin Port for Phase 1.

► **Corporatisation of ports:** The Government is also likely to push corporatisation of ports and move towards free market pricing of tariffs at major ports. The process for appointment of a world class consultant to come out with draft regulations has been initiated.

► **Multiple land use:** Commercial utilisation of land under the new land policy guidelines for major ports, 2014 opens up new EPC opportunities. Furthermore, the Government has planned the development of a port, based on the "landlord model" at Vizhinjam. Under this model, port estate development rights have been granted to the developer selected through the global bidding process. The model allows commercial use of 30% of land available with the port in order to cross-subsidise the project and reduce the requirement for VGF. This forms a part of the new port Model Concession Agreement (not yet approved) for minor ports. Going forward, the Mahanadi Deep River Port in Odisha, the Dugarajpatanam Port in Andhra Pradesh and the Sagar Island Port in West Bengal are expected to be developed through the PPP route, based on the landlord model.

Water and Solid Waste Management

As a rapidly urbanizing nation, India is facing major constraints in its water and waste water management sector. The country is home to 18% of the world's population, but contains only 4% of its water resources. Almost 90% of the usable water in the country is utilized for irrigation purposes. Realizing this, the government of India is providing a sustained impetus towards improving water and waste management infrastructure in the country. Total waste water generated by industries in India is about 90 thousand mld, of which only about 21% is treated. Further, less than half of solid waste generated in municipalities in India is treated.

In India's governing system, water and waste management is the responsibility of state government. Almost all state government have given this task to Urban Local Bodies for major cities. India's Water Sector is worth more than US\$ 1 billion, much of which consists of Industrial Water Treatment and Municipal Water Treatment.

The government of India is encouraging private investment in this sector through various initiatives. They are implementing stringent water quality standards and environmental regulations to drive increased spending, and introduce technology implementation. The government reforms are primarily guided by 3 policies/ programs:

- Jawaharlal Nehru National Urban Renewal Mission.
- National Water Policy, 2002
- National Water Mission

As part of these reforms, priority is being given to private sector participants to invest in water infrastructure in India.

Power

India has the fifth largest electricity grid in the world with 135 GW capacity, and the world's third largest transmission and distribution (T&D) network. During 2011–14, India has increased its installed generation capacity by a CAGR of 12% to 253 GW, with the share of the private sector rising from 23% to 36% (Central Electricity Authority, 2014). However, with the current power deficit at around 4%, the Government has planned to further augment generation capacity (Central Electricity Authority, 2014).

One of the biggest initiatives recently announced is the integration of the power and coal ministries, which would align the goals of various energy ministries and facilitate coordination between them. The Ministry of Environment and Forests (MoEF) has removed various provisions needed for acquiring clearances for power projects, to streamline the process. The Government has also decided to expedite the implementation of critical rail connectivity projects for coal movement in Jharkhand, Odisha and Chhattisgarh, which could potentially yield up to 200 million tons per annum (MTPA) of coal distribution by 2021–22.

The Government has also been increasing its focus on hydroelectric and renewable sources of energy, which account for approximately 30% of the country's power source. Approximately 14.4 GW of hydroelectric capacity is under construction; most of it is coming up in the North and North-East regions, which have been facing relatively high power deficit than others. Key upcoming projects include the 2.0 GW Subansiri project in Arunachal Pradesh and the 1.2 GW Teesta-III project in Sikkim.

An investment of US\$323.21 billion is projected for electricity projects in the five-year period from FY12-FY17. The massive number and scope of potential projects has attracted a number of new investors, lenders and operators. All new awards are through open, competitive bidding. A rush is on to develop new assets, harness natural resources, and attract global finance – but an industry focus and strategy is necessary to properly tap into this opportunity.

E&C companies may want to consider involvement in the construction of power stations, and T&D networks, particularly if sustainable building and generation technologies can be leveraged. The Indian Government is also looking to encourage the generation of wind and solar power by providing generation-based incentives to those companies who do not claim accelerated depreciation, so E&C companies with experience in building these types of alternative energy projects may find excellent opportunities.

Urban Infrastructure

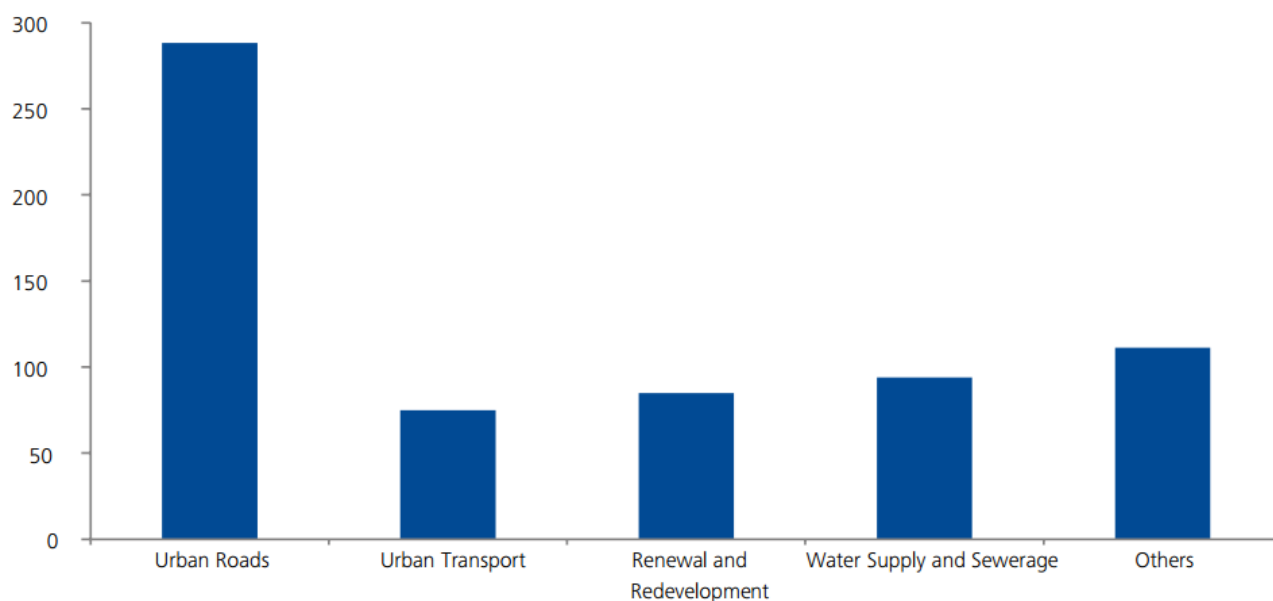
Only 30% of Indian population lives in urban areas. As per government of India estimates, urbanization in India is expected to grow at an astonishing rate of 38%. Indian Urban Infrastructure and Services, parts of which still bear markings of its British heritage, clearly isn't adequate to deal with such pressure.

Over the next 20 years, it is estimated that US\$ 650 billion investment is required in urban infrastructure. Of this, almost 45% is required for development of urban roads.

The Twelfth Five Year Plan document expects 48% of the Plan investment to come from private sources, conditional on several national policy initiatives to restore investor confidence.

To boost urban infrastructure across the country, the government has initiated numerous measures and has allocated almost US\$ 2 billion under JNNURM. The government has also launched the Urban Infrastructure Development Scheme for Small and Medium Towns with an outlay of US\$ 1 billion to address infrastructure needs of small towns and cities. Additionally, there is a renewed push towards PPPs in the sector.

Figure 3.19: Urban Infrastructure Investment Requirements (in US\$ billion)



Source: Report on Indian Urban Infrastructure and Services, MoUD, 2011

Delhi - Mumbai Industrial Corridor (DMIC) is an ambitious Infrastructure programme conceptualized with Japanese government and aiming at developing new industrial cities as "Smart Cities" and converging next generation technologies across infrastructure sectors. Projects worth investment of US\$ 200 Bn have already been approved under DMIC. Success of DMIC has prompted many similar corridors including Bangalore Chennai corridor etc.

There are key investment opportunities for foreign firms in this sector, particularly in the sphere of Solid Waste Management, Urban Transport, Water management etc. Further, with tier II cities also opting for metro systems, there is a space for foreign participation through technological and equipment supply.

Smart Cities Mission

Introduction

(Ministry of Urban Development, Government of India, 2015).

The Smart Cities initiative will help create cities which optimally tap into digital and information technologies, urban planning best practices, public-private partnerships, and positive policy changes.

The mission shall be implemented through area-based and pan-city developments. The area-based developments would include the following:

- Retrofitting which shall include transformation of existing built-up areas through more intensive infrastructure services and smart applications (e.g. city centres and central zones).

- Redevelopment of existing areas, including replacement of existing built-up environments to enable co-creation of new layouts with better infrastructure and land-use (e.g. redevelopment of slums).
- Greenfield developments to introduce smart solutions to the cities through innovation planning, financial planning and implementation planning tools to accommodate expanding populations (e.g. Industrial and Technology Parks and clusters, such as the Gujarat International Finance Tec-City (GIFT City) in Gujarat).

In addition to the above, pan-city developments would aim to enable the application of identified smart solutions to existing infrastructure across the cities. The application would leverage state-of-the-art Information and Communication Technology (ICT) tools to improve the living conditions and governance. (e.g. intelligent traffic management systems, waste water recycling, smart metering, etc.).

The above-mentioned developments have been set in place, to accommodate expanding populations in cities while improving the livability of the entire city.

Further, the core infrastructure of a smart city would include the following elements:

- Adequate water supply
- Assured electricity supply
- Sanitation, including solid waste management
- Efficient urban mobility and public transport
- Affordable housing, especially for the poor
- Robust IT connectivity and digitalization
- Good governance, especially e-governance and citizen participation
- Sustainable environment
- Safety and security of citizens, particularly women, children and the elderly, and
- Health and education.

It has been envisaged that the area-based and pan-city development objectives would converge with other initiatives including AMRUT and Clean India Mission.

Status

Smart cities

Identification and allocation of smart cities for each state/ Union Territory(UT)

- A total of 100 cities have been identified for the mission (Ministry of Urban Development, Government of India, 2015).
- First phase of India Smart Cities Challenge was conducted to promote competitive and cooperative federalism; about 97 cities submitted their Smart Cities Proposals (SCPs) to the Ministry of Urban Development (MoUD). Up to 20 of the best SCPs are set to be shortlisted to receive funding from MoUD after the first round.

Financing strategy

- The Smart Cities Mission is to be implemented as a centrally sponsored scheme with central government providing financial support to the extent of approximately USD7.2 billion over 5 years, which would be matched up by respective states and ULBs. In addition, it is expected that funding shall come from PPP, commercial/ multinational bodies. The private sector would have a role to play — by taking up projects in PPP mode or work as contractors, consultants, etc.
- Certain sectors of urban infrastructure such as power, ICT and integrated townships would bear the maximum impact of transformation. Both in terms of requirement (resources) and impact, these sectors are expected to play vital roles, and thus warrant conceptualisation of focussed financing mechanisms.

Mission statement and guidelines

- MoUD has made a comprehensive guide available, to assist states and ULBs to formulate their strategies and SCPs. The document also prescribes the implementation of Special Purpose Vehicles (SPVs) to plan, evaluate, release funds, operate and monitor the development projects under the initiative.
- Greenfield developments and other urban initiatives such as international airports, port cities and industrial clusters, among others are also being taken up to complement the Smart Cities Mission.
- To encourage the development of smart cities providing habitation for the neo-middle class, the requirement for the built up area and capital conditions for FDI are being reduced from 50,000 sq m to 20,000 sq m and from USD10 million to USD5 million, respectively. As a further impetus, projects that commit at least 30 per cent of the total project cost for low cost affordable housing would be exempted from the minimum built-up area and capitalisation requirements (The Indian Express, 2014).

Expected next steps

- With the conclusion of the first round of the Smart Cities Challenge, up to 20 cities will be selected in the first year, which would be eligible to receive funding of up to USD75.75 million from the government over the next 5 years in a phased manner.
- Special Purpose Vehicles (SPVs) would be set up for the implementation of the projects as per the plan envisaged in the SCPs.
- The remaining 77 cities are expected to be funded for Smart Cities transformation, over the next 2 years.

Impact

Transformative impact on urban infrastructure

The envisaged spend for the initiative is stated to come from the MoUD, the concerned states, ULBs and PPP/ commercial/multinational bodies.

Creation of market for manufactured goods and commodities

An approach towards urban living and smart living would entail significant procurement of steel, cement, electronics, furnishings, electrical equipment, sewage plants, ICT equipment and services, etc. triggering a growth in global trade.

Improved economic efficiency

Smart cities would require augmented safety, security, sustainability and energy efficiency that could help trigger a virtuous cycle of efficiency.

Business opportunities

Significant business opportunities are foreseen for both domestic and global players in light of the potential investments required for the implementation of the Smart Cities projects.

Investment potential

- The Centre's Expenditure Finance Committee has approved a central funding of approximately USD42 billion to develop 100 smart cities and upgrade the basic civic infrastructure in another 500 cities during the next 10 years. However, given the scale of development, the total funding requirement would be more than USD1 trillion at present value terms over the next 20 years.
- The magnitude of investments is extremely significant for the economy. For instance, the state of Maharashtra has been allocated 10 smart cities, which would add up to a spending of approximately USD6 billion over 5 years.
- India has also invited other countries for partnership in developing the smart cities and has signed agreements to build 8 such cities — 3 with Germany, 3 with the U.S., and 1 each with Spain and Singapore⁰⁶.

The following table lists the potential business opportunities for both domestic and foreign investors through different schemes in each sector:

Table 3.5: Potential business opportunities for both domestic and foreign investors

Sector	Investment Potential
Smart governance	USD83 million allocated for Digital India initiative
Smart energy	<ul style="list-style-type: none"> • Implementation of 8 smart grid pilot projects in India with an investment of USD10 million for energy storage • The Power Grid Corporation of India has planned to invest USD26 billion in the next 5 years; about 130 million smart meters would be installed by 2021.
Smart environment	The Ministry of Water Resources plans to invest USD50 billion in the water sector in the coming years.
Smart transportation	<ul style="list-style-type: none"> • The Government of India has approved a USD4.13 billion plan to spur electric and hybrid vehicle production by setting up an ambitious target of 6 million vehicles by 2020. • MoUD plans to invest more than USD20 billion on the metro rail projects in the coming years. • The proposed 534km Mumbai-Ahmedabad high speed rail project would have an investment of about USD10.5 billion.
Smart ICT	<ul style="list-style-type: none"> • Cloud computing is expected to evolve into a USD4.5 billion market in India by 2016. • Under the flagship Safe City project, the Union Ministry proposes USD333 million to make 7 big cities (Delhi, Mumbai, Kolkata, Chennai, Ahmedabad, Bengaluru and Hyderabad) to focus on technological advancement rather than manpower disaster management.
Smart building	<ul style="list-style-type: none"> • India is expected to emerge as the world's third largest construction market by 2020, by adding 11.5 million homes every year. • The Intelligent Building Management Systems market is estimated to be worth USD621 million and is expected to reach USD1,891 million by 2016.
Smart health and education	<ul style="list-style-type: none"> • The health budget was up by 27 per cent in FY2013-14 to USD5.26 billion, with special focus on improving affordable healthcare for all. • FDI limit in the insurance sector increased to 49 per cent from 26 per cent. • The Indian medical devices market is expected to reach USD11 billion by 2023.

Source: Make in India, 2015

Chapter 4: SWOT ANALYSIS

4.1 Basic Concepts:

4.1.1 Definition

The SWOT Analysis, also known as TOWS analysis is a methodology of study of the situation of a company or a project, analysing its internal characteristics (Strengths and Weaknesses) and external situation (Threats and Opportunities) in a square matrix. It comes from the acronym SWOT (Strengths, Weaknesses, Opportunities and Threats).

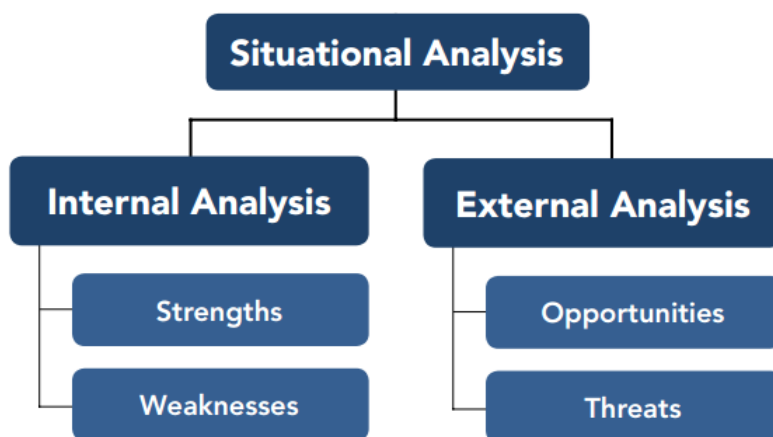
It is considered that this technique was originally proposed by Albert Humphrey during the sixties and seventies in the United States during a research of Stanford Research Institute which aimed to find out why corporate planning failed. It is a tool to know the real situation of an organization, company or project, and plan a strategy for the future.

This resource revolutionised the field of business strategy. The aim of SWOT analysis is to determine the competitive advantages of the company under analysis and generic strategy employed by the same that suits according to their own characteristics and the market in which it moves (Osita et al., 2014).

The analysis consists of four steps:

- External analysis
- Internal analysis
- Preparation of the SWOT matrix
- Determining the strategy to be used

Figure 4.1: Situational Analysis of Company



Source: Osita et al., 2014

4.1.2 INTERNAL ANALISIS

The internal elements to be analysed during the SWOT analysis correspond to the strengths and weaknesses with respect to availability of capital resources, personnel, assets, product quality, internal structure and market perception of consumers, among others.

The internal analysis allows to fix the strengths and weaknesses of the organization, carrying out a study to find out the quantity and quality of resources and processes available to the body.

For internal analysis of a corporation different techniques must be applied to identify within the organization which attributes allow to generate competitive advantage over the rest of its competitors.

Strengths

Strengths are those internal and positive elements that distinguish the program or project from others of same class.

Some of the questions that can be performed and that contribute to the development are:

How consistent is the company?

What advantages are there in the company?

What does the company do better than others?

What low cost resources or unique way does the company have?

What does the market people perceive as a strength?

(Coman, A., and Ronen, B., 2009).

Weaknesses

The Weaknesses refer to all those elements, resources, skills and attitudes that the company already has and which constitute barriers to the smooth operation of the organization. They can also be classified: aspects of the service provided, financial aspects, market aspects, organizational aspects, aspects of control.

Weaknesses are internal problems, which, once identified, can and should be eliminated by developing an appropriate strategy.

Some of the questions that can be performed and that contribute to the development are:

What can be avoided?

What should be improved?

What disadvantages are there in the company?

What do people in the market perceive as a weakness?

What factors reduce sales or success of the project?

(Coman, A., and Ronen, B., 2009).

4.1.3 EXTERNAL ANALYSIS

The organization does not exist or can exist outside of a surrounding environment; so the external analysis allows to fix the opportunities and threats that may occur to an organization or company.

The process for determining these opportunities or threats can be performed as follows:

- a- Establishing the main facts or events of the market that have or could have any relationship with the organization. These can be:

Of a political nature:

- Political stability of the country.
- Government system.
- International relations.
- Restrictions on import and export.
- Interest of public institutions.

Legal basis:

1. Tax Trends

- Tax on certain goods or services.
- Payment of taxes.
- Income Taxes.

2. Legislation

- Labor.
- Maintenance of the environment.
- Decentralization of enterprises in urban areas.

3. Economics

- Public debt.
- Salary Level.
- Price level.
- Foreign investment.

Social character:

- Growth and distribution of population.
- Employment and unemployment.

- Health and hygiene System.

Technological character:

- Rapid technological advances.
- Changes in the systems.

b- Determining which of these factors could have an influence on the organization in terms of facilitating or restrict the achievement of objectives. That is, there are circumstances or events in the environment that sometimes represent a good opportunity that the organization could use either to develop further or to resolve a problem. There may also be situations that rather represent threats to the organization and can make more serious problems.

(Agarwal, R., Grassl, W., and Pahl, J., 2012).

Opportunities

Opportunities are those factors, positive, generated in the environment and, once identified, can be exploited.

Some of the questions that can be asked and that contribute to the development are:

What circumstances improve the situation of the company?

What market trends may favour the company?

Is there a problem in the economy of the country?

What technology changes are occurring in the market?

What changes in legal regulations and / or policies are happening?

What changes in social patterns and lifestyles are occurring?

(Agarwal, R., Grassl, W., and Pahl, J., 2012).

Threats

The threats are negative situations, external to the program or project that may threaten it. It may be necessary to devise an appropriate strategy to circumvent them.

Some of the questions that can be performed and that contribute to the development are:

What obstacles is the company facing?

What are the competitors doing?

If there is problem with resources of capital?

Can any of the threats completely prevent the activity of the company?

(Agarwal, R., Grassl, W., and Pahl, J., 2012).

4.1.4 Organising the SWOT:

Once the list of Strengths, Weaknesses, Opportunities and Threats has been compiled; these are put in order by importance and are included in a matrix like the one in figure.

By arranging the analysis this fashion, the lists are separated into internal factors that can affect a project on the first row and external factors on the second row. In addition, the first column consists of the positive factors (strengths and opportunities) and the second column consists of negative actors (weaknesses and threats.). This method provides a simple framework to keep lists organized and conceptualize how the lists are related.

Table 4.1: Organising the SWOT

	POSITIVE ↓	NEGATIVE ↓
INTERNAL →	Strength S1 S2 S3	Weaknesses W1 W2 W3
EXTERNAL →	Opportunities O1 O2 O3	Threats T1 T2 T3

Source: Osita et al., 2014

Combining strengths with the potential opportunities arise, which indicate the most promising lines of action for the organization.

The limitations determined by a combination of weaknesses and threats, put a serious warning.

While the risks (combination of strengths and threats) and challenges (combination of weaknesses and opportunities), determined by their corresponding combination of factors will require careful consideration when it comes to mark the direction the Organization should take toward the desirable future like implementation in a new country.

4.1.5 PREPARATION OF THE SWOT MATRIX:

The SWOT matrix is a matrix of four elements representing four conceptually different strategies. Each strategy is formed from the relation of one of the external agents (Opportunity or Threat) with one of the internal agents (weakness or strength).

Table 4.2: Preparation of SWOT Matrix

		INTERNAL	
		STRENGTH - OPPORTUNITIES	WEAKNESS - OPPORTUNITIES
EXTERNAL	Opportunities	<p>"Maxi-Maxi" Strategy</p> <p>Strategies that use strengths to maximise opportunities.</p>	<p>"Mini-Maxi" Strategy</p> <p>Strategies that minimize weaknesses by taking advantage of opprtunities.</p>
	Threats	<p>"Maxi-Mini" Strategy</p> <p>Strategies that use strengths to minimize threats.</p>	<p>"Mini-Mini" Strategy</p> <p>Strategies that minimize weaknesses and avoid threats.</p>

Source: Chang, H-H., and Huang, W-C., 2006

4.1.5.1 SO STRATEGY (STRENGTHS-OPPORTUNITIES)

SO type strategies are the most normal, as they try to use the strengths of the company to take advantage of external market opportunities. Expose a market with opportunities and an organization with resources and capabilities that want to take it’s advantage.

It describes the ideal situation where both the strengths and opportunities are maximized (maxi-maxi). It is to take advantage of the internal strengths of the company, using resources to seize the market opportunity for its services.

(Chang, H-H., and Huang, W-C., 2006)

4.1.5.2 WO STRATEGY (WEAKNESSES / OPPORTUNITIES)

WO type strategies attempt to overcome internal weaknesses operating in fields where the opportunities are large.

This strategy attempts to minimize the weaknesses and maximize opportunities (Mini-Maxi). A company could identify opportunities in the external environment but have organizational weaknesses that make it difficult to take advantage of the market.

(Chang, H-H., and Huang, W-C., 2006)

4.1.5.3 ST STRATEGY (STRENGTHS / THREATS)

ST type strategies take advantage of the internal strengths to counteract or prevent external threats. Although the threats cannot be avoided but it's impact can be minimized.

This ST strategy is based on the strengths of a company that can face the threats of the external environment. Its aim is to maximize the former while the latter are minimized (maxi-mini). This, however, does not necessarily mean that a consolidated company must search for threats in the external environment to confront them.

(Chang, H-H., and Huang, W-C., 2006)

4.1.5.4 WT STRATEGY (WEAKNESSES / THREATS)

WT type strategies are defensive tactics that attempt to reduce the internal weakness and barricade the threats of the environment.

In general, the objective of the strategy is to minimize both the weaknesses and threats (mini-mini). An organization faced with external threats and internal weaknesses may be in a difficult situation, and may have to fight for its survival to stay in business. In order to overcome the weaknesses, or allow the threat to diminish over time, the organization might have to consider merging/partnering with another organization, exit certain markets, discontinue certain product lines etc.

Until now, factors that are incorporated into the SWOT matrix correspond to the analysis at a particular point in time. But both the internal and the external environment are dynamic, some factors change strongly over time, other very little. Due to this dynamic nature of the environment, the designer of strategies must submit several matrix SWOT at different points of time. Thus, it is possible to address a SWOT analysis of the past, continue with a SWOT analysis of the present, and perhaps more importantly, to make several SWOT analysis at different times in the future.

(Chang, H-H., and Huang, W-C., 2006)

4.1.5.5 INTERACTION SWOT MATRIX Analysis

The description in the previous sections provides a framework for identifying relationships, but can be extremely complex when many factors are involved.

The aim is to make a matrix in which the combinations of Weaknesses, Threats, Strengths, Opportunities, are reflected and which generate each of the strategies. We would obtain a matrix like Figure.

Table 4.3: SWOT Matrix

	Internal Strength (S)	Internal Weakness (W)
	S1	W1
	S2	W2

	Sn	Wn
Opportunities (O)	SO Strategy	WO Strategy
O1	"Maxi-Maxi"	"Mini-Maxi" Strategy
O2	use strengths to maximise opportunities.	minimize weaknesses by taking advantage of opprtunities.
....	1. (S1, S4, O3, O9..)	1. (W2, W7, W8, O1, O5....)
On	2.	2.
Threats (T)	ST Strategy	WT Strategy
T1	"Maxi-Mini" Strategy	"Mini-Mini" Strategy
T2	use strengths to minimize threats.	minimize weaknesses and avoid threats.
....	1. (S2, S7, T2, T8, T9....)	1. (W4, W7, W9, T3, T7....)
T4	2.	2.

Source: David, F. (1993)

By following the steps shown above, taking great care to involve important factors, it is time to relate the factors, as in Table, which shows an approach for identifying combinations or relationships, which at the same time are the basis for selecting the strategy.

This combination linking the characteristics used in the strategies outlined in the previous paragraph, describing the degree of each aspect ratio with the other, is the Matrix of Interactions in the SWOT analysis.



The "+" sign indicates a relationship between the strengths of the sector and opportunities abroad, while the sign "0" indicates a very weak or no relationship. Particularly close relationships can be expressed with two signs, such as "++".

Analysis of Figure below indicates that one strength can be matched with several opportunities. Similarly, many strengths can be utilized to exploit one opportunity. Although this figure shows only the relationship between strengths and opportunities, similar tables can be used for analysing the other three strategy boxes (WO, ST, WT) shown in Table 4.3.

Table 4.4: Interaction SWOT Matrix

		STRENGTHS					
		S1	S2	S3	S4	.....	Sn
OPPORTUNITIES	O1	++	0	+	+	.....	0
	O2	+	+	+	0	.....	0
	O3	+	+	0	++	.....	0
	O4	0	0	0	0	.....	+
	O5	0	0	0	+	.....	+
	O6	0	++	+	+	.....	0
	.....	+	+	+	0	.....	+
	On	+	0	0	+	.....	0

Source: Weihrich, 1982

4.2 SWOT ANALYSIS: IMPLEMENTATION OF A SPANISH CONSTRUCTION COMPANIES IN INDIA

Once the methodology to be performed has been explained, now we proceed to use it for the analysis of strategies that a company Spanish construction company should perform to be implanted in India.

First the internal factors have been discussed (strengths and weaknesses) that Spanish construction companies have in common with respect to its implementation in India.

Then external factors have been analysed (opportunities, threats) that the Indian construction industry presents to the Spanish construction companies which wish to establish there.

4.2.1 STRENGTHS OF THE SPANISH CONSTRUCTION COMPANIES:

S1. International Exposure

In the world of concessions for infrastructure development, Spanish construction companies lead the international market. Six of the 10 top transportation concession companies are based in Spain, constructing and/or managing about 40 percent of all major transportation concessions in the world. Spain is currently ranked fifth in the world in terms of its degree of internationalisation, with an exposure to overseas countries (measured as trade plus direct investments over GDP) of 166%, similar to Germany and higher than France, according to a recent report by PricewaterhouseCoopers (PwC -España goes global, 2014).

S2. Experience of Spanish companies and technicians

The decades of civil construction boom in Spain has created a sector with extensive experience and technological innovation, both businesses and professionals. Some of the biggest Spanish companies have more than 100 years of experience like Acciona, FCC and OHL. Other companies like Ferrovial with 65 years and Sacyr with 30 years of experience. The experience accumulated by Spanish companies in the ambitious infrastructure construction projects carried out in Spain and abroad in recent decades is their finest recommendation when making the leap abroad. (Official website of Acciona, FCC, OHL, Ferrovial, Sacyr, 2017)

S3. Access to finance

The large Spanish construction companies associated with International and Spanish banks can have funding options that allow them to overcome periods of imbalance between receipts and payments. Like ACS bagged a new construction project of new 26km bypass with a total scheduled investment of US \$557 million for which the bond was syndicated by J.P. Morgan and Barclays Capital (GrupoACS, 2015). Ferrovial recently placed a 500 million euro 6 year bond in 2016 at 0.375% with European Central Bank. (Ferrovial Website, 2016).

S4. Brand name among costumers

Spain is home to some of the world's largest and most diversified construction companies; Acciona, ACS, FCC, Ferrovial, OHL and Sacyr, also known as 'the big six' are proof of local companies who have gathered expertise know-how from executing advanced projects in their domestic market and managed to position themselves in the global arena (Business Sweden Iberia, 2016).

Some of the world's largest and most ambitious infrastructure projects are either being overseen or being carried out by Spanish companies -- from the high-speed rail link between Mecca and Medina to Manhattan's East Side Access tunnel and the widening of the Panama Canal.

S5. Diversified Expertise

Given that, construction tends to be an expensive field to enter. If a company has a diversified array of projects and expertise, that provides a cushion against a slowdown in any one particular sector and Spanish companies are doing all types of infrastructure projects around the world.

S6. Exports of construction products and services

Construction sector exports have grown by an average of 9.4% in the last three years. In 2012, exports of construction products contributed 9,631 million euros to the economy, representing 1% of the Spanish GDP (Construmat 2014).

Spanish equipment offers a good quality-to-price ratio; on the one hand, it includes a high level of technology, while on the other hand it offers more competitive prices than German, Japanese and American products (ICEX sector reports, 2012).

S7. Innovation, competitiveness and technology transfer

Among the world's top 2000 R&D investing firms, Spain numbers 13. Companies mainly active in the construction and materials sector are (Acciona, ACS, Obrascón-HuarteLain), and in the energy or industrial engineering sectors are (Gamesa, Abengoa, Repsol).

The largest increases of 20-40% in R&D investment was registered in the construction and material sector made by firms (European Commission Report, 2014).

The application of international quality level Spanish technology, which improves production management processes in new markets and industries, promotes technology transfer.

(Ministry of Science and innovation, Government of Spain, 2011)

S8. Better qualification, efficiency, hard work and responsibility

The Spanish staff is more qualified, is more effective, work more and more responsible than Indian.

32% of the Spanish population has higher education (ISCED (International Standard classification of Education) 5-6) which is above of the EU average of 29%. In fact, in 2010 Spain already complied with the EU benchmark for tertiary attainment for 2020 (40.6% of the 30-34 year-old population

should have higher education qualifications), although the national target is more ambitious: 44% by 2020 (Ministry of employment and social security, Government of Spain, 2012).

They are characterized by their strong technical aptitude, great capacity for work, high potential for project management, strong problem-solving ability, the ability to adapt to different work environments and surroundings, potential to create customer confidence, great creativity.

S9. Better organization/Project Management of Spanish construction companies

The Spanish construction companies are world-class regarding its internal organization, procedures, management skill.

4.2.2 WEAKNESSES THE SPANISH CONSTRUCTION COMPANIES.

W1. Corruption & Lack of knowledge of access channels

Before settling into a new market, the peculiarities of clients is not known.

Public clients in India are highly corrupt. Corruption reaches from the lowest levels up to the ministries level. Typical percentages requested as "cut" percentages reach 20% of the budget allocation and is requested before starting of the work. During the execution of the work, almost all departments client request "bribes" for any management work to the construction company.

Only companies that have a long relationship with these customers can reduce the percentage of "cut" and postpone payments until after executing the work.

W2. Lack of knowledge of suppliers

India is a country where reliability of supply or service by suppliers and subcontractors is irregular and reckless. It is normal that they do not meet deadlines, qualities, quantities requested.

A new construction company that settles in India takes time to know which suppliers are reliable and which are not.

W3. Language difference

English and Hindi both are the official administrative language in India. However, it mainly depends on the state government. English is becoming increasingly adopted as the standard language for business interactions, but still the local language remains important, especially regarding marketing issues. (Hamill and Gregory, 1997)

Spanish employees generally are not proficient in English. It might be a problem when they go to do business in India.

W4. Absence of own machinery in India

In India there are medium and large size construction companies that have their own fleet of machinery. The Spanish companies that settle abroad often do not have a minimum fleet of own machinery. This is poorly regarded by the customer and competition.

W5. High wage levels of Spanish employees

Spanish employees are more expensive than the Indian employees. In addition, the displacement/moving is an extra charge, combined with diet, air travel from time to time to Spain, etc.

W6. Unwillingness to travel to India

Because of the cultural and environmental difference (Really hot and humid), the staff of the Spanish construction companies, may not want to travel to India.

However, the Spanish construction companies that decide to settle in India should consider that key personnel to carry out the works must be Spanish and reliable: Chief, Project Manager, Production Manager, Managers, Surveyors, administrative, accounting, etc.

The technical qualifications and performance of the Indian professionals are not at par with Spanish Professionals. In addition, there's a high degree of corruption that reaches all levels of society.

This means that Spanish construction companies should consider India to mobilize all technical personnel, which means high cost.

W7. Superiority complex

While it is true that the qualification of Spanish is higher, this can create a superiority complex that bothers Indians. It creates reluctance and resentment and can complicate professional relationships.

W8. Laidback attitude

The Spanish style of life is very different to other western European cultures, with a much more laidback attitude. Spanish people tend to be less worried and more relaxed. Which might send a wrong impression to Indians that they are not hardworking.

4.2.3 OPPORTUNITIES FOR SPANISH CONSTRUCTION COMPANIES IN INDIA.

O1. Robust economic development.

India is one of the world's fastest growing economies and growth expected to continue at 7-7.5% despite the global downturn. And construction is the Second biggest component of GDP, around 8% of GDP includes construction industry. Regardless of the nature and extent of the economy, growth in construction spending in the longer term is likely to be enormous, driven by a rising population and a growing middle class (Economic Survey, 2016-17).

O2. Infrastructure growth (Lot of tenders)

At this time, the Indian government has a plan for civil works tenders for large amounts. The government has launched a major package of works, including roads, ports, dams, hospitals, etc.

On roads & bridges: US\$111.88 billion

In railways projects: US\$ 67.17 billion

In Port & Inland Water transport projects: US\$17.19 billion

In Mass rapid transit system: US\$ 6.61 billion

In airport projects: US\$ 6.53 billion

(Planning commission of India, 2014)

O3. Fewer restrictions on foreign direct investment (FDI) for infrastructure projects

Government policies inviting foreign companies in India like - 'Make In India' and 'FDI' will increase demand for factories and plants. The government has recently permitted 100% FDI in construction sector. Non Resident Indians (NRIs) are permitted to invest in Housing and Real Estate sector. Further, Persons of Indian Origin (PIOs) are also allowed to acquire residential/ commercial property in India. (Make in India, 2015).

O4. Opening up of the infrastructure sector through PPPs (Public private partnership)

There are many opportunities through PPP in Public sector projects. The PPP India database (Department of Economic Affairs, Ministry of Finance) indicates that 758 PPP projects costing US\$ 58.07 billion is awarded/underway status (i.e., in operational, constructional or in stages wherein at least construction/implementation is imminent).

According to world bank, India is second only to China in terms of the number of public private partnership (PPP) projects. Encouragingly, the government is set to continue promoting PPP models to help achieve its investment targets. During the 12th Five-Year Plan, the Planning Commission targets to achieve 47 % of the total infrastructure investments through private funding, up from 25% in the 10th Five-Year plan. (Planning commission of India, 2014)

There exists significant untapped potential for the use of the PPP model in e-governance, health and education sectors. At the central level, the National Highway Authority of India (NHAI) is the leading user of the PPP model.

O5. Cheap Labour

Low cost well-educated and skilled labour force is widely available across the country. 524 rs (8 \$) per day is the average daily wage for a man educated beyond high school working in an Indian city (The wall street journal, 2015).

O6. Low prices of materials

Prices of construction materials in India are lower than the Spanish. Apparently India is the cheapest country in the world for construction according to International Construction Cost Report by ARCADIS. (ACARDIS, 2015)

O7. Need of construction equipment and machinery

The equipment rental and leasing business in India is smaller compared to Japan, USA and China. Demand for rental equipment is set to witness strong growth in the medium term due to large investments in infrastructure. New players can also explore opportunities in the equipment finance business. Hence it's a great opportunity for Spanish Companies (A.T. Kearny, 2014).

O8. Financial stability

Financial supports like loan, insurance and growth in income of people is in support of construction industry. With the easy availability of housing loans and tax redemption on loans the demand for houses is increasing and construction is gaining weight.

O9. Continuous urban housing increase will create more construction opportunities

India's urban population grew by 32% in the decade leading up to 2011, rising from 285 million to 377 million, out of the current total population of 1.2 billion. Growing concentration of people in urban areas has resulted in an increase in the number of people living in slums and squatter settlements. Understanding this pivotal need of providing housing to all the people, the new government has given its approval for launch of "Housing for All by 2022" aimed for urban areas with following components/options to States/Union Territories and cities (PMIndia, 2015):

- a) Slum rehabilitation of Slum Dwellers with participation of private developers using land as a resource;
- b) Promotion of affordable housing for weaker section through credit linked subsidy;
- c) Affordable housing in partnership with Public & Private sectors and
- d) Subsidy for beneficiary-led individual house construction or enhancement.

O10. Sufficient availability of raw material and natural resources

The predominant materials used in the construction sector are sand, stones (as aggregates), soil (for bricks) and limestone (for cement). India has considerable limestone reserves. India is currently the

second largest producer of cement in the world, producing 210 million tonnes in 2010, which was 6.3% of global production (WBCSD & IEA, 2013). India nearly quadrupled its cement production between 1996 and 2010 (Internationale Zusammenarbeit (GIZ), 2016).

O11. Need of advance technology in India

Use of low grade technology in the construction sector leads to low value addition and low productivity apart from sub-standard quality of construction and time over runs in projects. Due to lack of technology, construction can suffer in terms of quality and design.

O12. Demographics

India is one of the youngest countries in the world, with an average age of 25 and likely to get younger. India's working-age population will increase by 240 million over the next 20 years. With a population of 1.2 billion, a strong work ethic, high levels of education, democracy, English language skills and an entrepreneurial culture, India is poised to dominate the global economy in the next 20 years.

4.2.4 THREATS FOR SPANISH CONSTRUCTION COMPANIES IN INDIA

T1. Award of contracts to local companies

As usual in this sector, governments prefer to award contract works to local construction companies, with which they have years of relationship and trust.

T2. Excessive legal documentation to be submitted to tender

The legal documentation required in an international tender in India, is complicated and slow processing. Usually the public administrations use the absence of any document or certification or stamp, to disqualify companies to award the work to the preferred company.

This implies the need for a team of lawyers and notaries, both in Spain and in India, working coordinated and high speed to get all the documents requested in the tender (and those which are not asked explicitly but can cause disqualification if not presented). Indian lawyers must have a very close and trusted relationship with administration for clarification of doubts.

T3. Competition with Indian construction companies

There are around 1000 medium to large construction firms in India capable of handling small to large construction projects. Spanish Construction companies that want to establish in India would have to compete against them and offer a cost competitive proposal for tendering of projects.

T4. High tax rates

Currently foreign construction agencies working in India are subject to various taxes including:

- Income Tax – all companies generating income in India are subject to Income Tax. For companies incorporated in India, currently the base income tax rate is 30% while the same for foreign companies it is 40%. Additionally, corporates are liable to pay surcharge and education cess on applicable income tax.
- Service Tax – A service tax is payable on all services provided except those in a negative list issued by government of India. Current Service Tax rate is 12.36%
- Value Added Tax – India has introduced an indirect tax, value added tax to replace the erstwhile sales tax. This amount of tax varies from state to state and product to product.
- Excise Tax – Tax applied on products sold within India.
- Custom Duty – Tax applied on products sold outside India.

(Deloitte Report, 2014)

T5. Preference of unskilled labour

As the labour cost is significantly lower for unskilled labour in India. They are preferred over skilled labour which decreases the overall quality of the project and might result in health and safety accident and hazards at the construction site.

T6. Variability in OEM (original equipment manufacturer)

A few years ago the construction industry was facing 21 per cent – 45 per cent annual growth rate and had predicted a remarkable growth potential with 15 per cent annual growth rates in future. But unfortunately, in the recent years, the construction industry has witnessed a decline in the work order; 77.1 per cent (Dec 2012) to 11 per cent (March 2014). The equipment manufacturing companies too have projected low sales volume. For example, the market size of industrial crane segment has dropped from Rs.2500 crore to Rs. 1800 crore in the last two years. The excavation manufacturers had earlier estimated 42,000 units annually by 2017. However, the current estimate is only 27,000 units by 2018. Thus the market would be around 65,000 units by 2018 instead of 100,000 units, which was estimated a few years back (The Economic Times, 2016)

There is no consistency in the demand owing to the fluctuations in the market thereby making capacity planning challenging for the equipment suppliers.

Since the market is price and value cognizant, the equipment providers are also constrained for operating margins. Also the Reserve Bank of India (RBI) has tightened its monetary policy, increasing the cost of borrowing for equipment financiers.

T7. Lack of execution discipline and government support

The majority of construction projects in India are awarded to the lowest bidder. Given the limited focus on other criteria such as quality of construction, timeliness, and safety commitment, contractors—especially small contractors—do not see the point of investing in the latest

technologies or purchasing high-end equipment. Because there is very little procedural discipline, and quality checks are intermittent at best, contractors opt for the least expensive route, employing manual labor and using only low-end or even obsolete equipment. Unlike governments in most developed nations, the Indian government does not mandate the use of construction equipment in projects.

Another roadblock to ECE adoption is the host of regulatory and taxation issues that prevent equipment operators from performing their work seamlessly. For example, because there is no national registration procedure, it is difficult to obtain an all-India permit, meaning interstate movement of construction equipment becomes a major challenge for large national operators. The problem is compounded by the different entry taxes, RTO (motor vehicle) taxes, octroi (local entry taxes), and other taxes imposed by individual states.

In addition, the government has delayed the release of funds for approved infrastructure projects pending various policy decisions, which has adversely affected the liquidity of contractors and reduced the demand for ECE (A.T. Kearny, 2014).

T8. Lack of skilled and trained manpower for ECE

Finding enough skilled manpower for the operation and maintenance of ECE is a major challenge for the construction equipment industry. By 2020, the ECE industry will need an estimated one-lakh trained operators and three-lakh trained mechanics to match its projected growth.

A lack of coordination among government agencies, OEMs, and construction companies has plagued efforts to create specialized skill development programs. ECE training institutes run by OEMs tend to be too expensive for most personnel seeking employment in this field. Cost is also an issue for technical training institutes, which have trouble affording the costly equipment needed for hands-on vocational training.

For the three-quarters of the construction industry comprised of small contractors, finding qualified workers is not even a priority. They prefer the lower-cost alternative of offering on-the-job training to their pool of unskilled operators and mechanics. The lack of national safety and quality guidelines for construction sites only encourages small contractors to make do with less-qualified workers (A.T. Kearny, 2014).

T9. Land acquisition delays

Global best practices suggest that land acquisition should be complete before a project is tendered. In India, projects are often awarded with only part of the land physically acquired, sometimes as low as 30 per cent. Delays in subsequent land acquisition are possibly the single largest factor causing project delays. These delays are driven by three factors: 1) under-valuation of land price; 2) dependence on state governments for land acquisition; and 3) the ambiguous definition of the term “unencumbered land”¹ (McKinsey&Company, 2009).

1. The National Highways Act, 1956, defines land as “free from all encumbrances” after issuing a 3D notification. This does not necessarily imply the absence of physical encumbrances such as dwellings.

T10. Delay in regulatory and environmental clearance

There are various categories of approvals required across the project cycle at every stage, right from the pre-tendering stage to post-construction. For instance, at the pre-tendering stage, there are substantial delays in inviting bids. Moreover, approval is required from multiple layers of the government at the central, state, and local levels. In most cases, there is lack of coordination between the different agencies, leading to standoffs on critical approvals, which seriously affect the execution of projects. (Agrawal, 2015).

Environmental safeguards and guidelines are evolving, which are similar to the scale and complexity of infrastructure projects. While new projects need to comply with these regulations, even a project under construction may sometimes need to comply with revised standards midway through the execution stage (or because some concerned government department or agency had 'overlooked' its duties and wrongfully issued required approvals). Clearly, better governance will be a big help in mitigating long delays in infrastructure projects.

T11. Extreme environmental or natural condition

Uncertain environmental hazards like earthquakes, floods etc. have a disastrous impact on the construction industry and can delay construction as well. This has been witnessed during the construction of the Metro line in the capital of INDIA, New Delhi where one of the railway lines being constructed collapsed due to heavy rainfall and delayed the total completion time of metro.

T12. Religious Tension

Hindu nationalism is a growing threat to India's constitutionally enshrined secularism. Communal tensions between Hindus and minority Muslims, Christians, Sikhs and Buddhists can lead to violence. There have been 7 religious riots during the last 7 years mainly between Hindus and Muslims killing 293 people and more 500 injured (Wikipedia, 2017).

4.3 SWOT Analysis result:

4.3.1 Organised List:

The conclusions of the SWOT analysis carried out is presented in the following sections:

Table 4.5: SWOT analysis

SWOT ANALYSIS					
S	STRENGTHS		W	WEAKNESSES	
1	S1	International Exposure	1	W1	Corruption & Lack of knowledge of access channels
2	S2	Experience of Spanish companies and technicians	2	W2	Lack of knowledge of suppliers
3	S3	Access to finance	3	W3	Language difference
4	S4	Brand name among costumers	4	W4	Absence of own machinery in India
5	S5	Diversified Expertise	5	W5	High wage levels of Spanish employees
6	S6	Exports of construction products and services	6	W6	Unwillingness to travel to India
7	S7	Innovation, competitiveness and technology transfer	7	W7	Superiority complex
8	S8	Better qualification, efficiency, hard work and responsibility	8	W8	Laidback attitude
9	S9	Better organization/Project Management of Spanish construction companies	9		
10			10		
O	OPPOTUNITIES		T	THREATS	
1	O1	Robust economic development	1	T1	Award of contracts to local companies
2	O2	Infrastructure growth (Lot of tenders)	2	T2	Excessive legal documentation to be submitted to tender
3	O3	Fewer restrictions on foreign direct investment (FDI) for infrastructure projects	3	T3	Competition with Indian construction companies
4	O4	Opening up of the infrastructure sector through PPPs (Public private partnership)	4	T4	High tax rates
5	O5	Cheap Labour	5	T5	Preference of unskilled labour
6	O6	Low prices of materials	6	T6	Variability in OEM (original equipment manufacturer)
7	O7	Need of construction equipment and machinery	7	T7	Lack of execution discipline and government support
8	O8	Financial stability	8	T8	Lack of skilled and trained manpower for ECE
9	O9	Continuous urban housing	9	T9	Land acquisition delays
10	O10	Sufficient availability of raw material and natural resources	10	T10	Delay in regulatory and environmental clearance
11	O11	Need of advance technology in India	11	T11	Extreme environmental or natural condition
12	O12	Demographics	12	T12	Religious Tension



4.3.2. Strategies-SWOT MATRIX:

Now following the SWOT analysis presented above, strategies are proposed combining the different SWOT elements.

4.3.2.1 SO STRATEGIES (STRENGTHS/OPPORTUNITIES)

These types of strategies are called "overlapping" or "offensive". It is an ideal situation in which using the strengths of the company, we take advantage of the business opportunities arising in India.

The interaction matrix is presented below:

Table 4.6: Iteration Matrix for SO Strategy (Strengths / Opportunities)

		STRENGTHS								
		S1	S2	S3	S4	S5	S6	S7	S8	S9
OPPORTUNITIES	O1	++	+	+	0	0	+	0	0	0
	O2	+	+	+	0	+	+	0	0	0
	O3	0	+	+	0	0	++	0	0	0
	O4	+	+	+	0	0	+	0	+	0
	O5	0	0	0	0	0	0	0	0	0
	O6	0	0	0	0	0	0	0	0	0
	O7	0	+	+	0	+	+	0	0	0
	O8	0	0	0	0	0	0	0	0	0
	O9	0	+	+	0	+	+	0	+	0
	O10	0	0	0	0	0	0	0	0	0
	O11	+	++	+	0	+	+	0	0	0
	O12	0	0	0	0	0	0	0	0	0

Source: Self-analysis

Proposed Strategies:

1. Creation a subsidiary or branch (S1, S2, S5, S6, S8, O1, O2, O3, O4, O7, O9, O11)

The high growth in demand and all the opportunities provided by the external environment makes the creation of a subsidiary, either by itself or in conjunction with another company, is an opportunity to begin projects across the country.

Furthermore, there are a large number of global companies that have set up their own subsidiaries in India and are bidding directly for projects in India. Few such players are Samsung (Korea), Leighton (Australia), Bechtel Corporation (US), Uhde (Germany), Tecnimonte (Italy), Marti Group (Switzerland).

Large prominent names such as Dongfang Electric Corporation (China), Shanghai Electric Corporation (China), Harbin Power Electric Corporation (China), Doosan Group (Korea), Alstom (France), Siemens (Germany) etc., have set up their operations in India.

2. Buying a local Company (S3, S4, S5, S7, S9, O1, O3, O8, O12)

Taking advantage of the high demand for projects needed by the country and to reduce the necessary procedures for the implementation of a subsidiary, it is proposed to buy a large or medium-sized company.

Acquisitions have been perceived to be successful in global markets and hence, have been replicated in the Indian market as well. Acquisition of NAPC by a France-based group is a classic example in the Indian EPC sector.

3. Venture capital (S2, S3, S4, O1, O2, O3, O9)

The aim is to take temporary stakes in the capital of companies. The company should seek to take stakes in companies belonging to dynamic sectors of the economy, hoping to have higher growth than average. This venture capital operates valuing the business plan of projects presented by entrepreneurs, which should be properly analysed.

3.3.2.2 WO STRATEGIES (WEAKNESSES / OPPORTUNITIES)

These types of strategies are called "REORIENTATION".

For the Spanish construction companies to take advantage of the business opportunities offered by the Indian construction market, by changing some internal aspects of the companies.

The interaction matrix is presented below:

Table 4.7: Iteration Matrix for WO Strategy (Weaknesses / Opportunities)

		WEAKNESSES							
		W1	W2	W3	W4	W5	W6	W7	W8
OPPORTUNITIES	O1	++	++	+	+	0	0	0	0
	O2	+	+	+	+	0	0	0	0
	O3	+	+	0	+	0	0	0	0
	O4	++	+	+	++	0	0	0	0
	O5	+	0	+	+	++	+	+	0
	O6	0	0	0	0	0	0	0	0
	O7	0	0	0	++	0	0	0	0
	O8	0	0	0	0	0	0	0	0
	O9	+	+	+	+	0	0	0	0
	O10	0	+	0	0	0	0	0	0
	O11	+	0	+	+	0	0	0	0
	O12	0	0	0	0	+	+	+	+

Source: Self-Analysis

4. Availability of Spanish staff (W1, O11)

For the Spanish construction firms, it turns out to be a weakness opposite to the local construction firms non-being able to have Indian personnel. Their lower qualifications and fidelity obliges the Spanish construction should move Spanish technicians to India who, despite declining wages, will always be more expensive than the Indian technicians.

5. Joint ventures or collaboration in a consortium (W1, W2, W3, W4, O1, O2, O3, O4, O7, O9, O11)

As the Spanish construction companies are not much familiar with the Indian "Market": Clients, access channels, suppliers, customs and local habits; so as to take advantage of the business opportunities in India, it is absolutely necessary to be in a consortium with local companies.

It involves collaboration between a Spanish company and one or more Indian companies with the aim of achieving mutual benefits, the duration is defined and delimited in advance, the financial commitment and the operating strategy is made.

Project-specific joint ventures have been formed by Middle East companies, particularly in the building construction segment in India. For example, the "World One" project in Mumbai, is being constructed by Simplex Infra in JV with a Middle-East-based construction giant.

6. Partial purchase of Local company (W1, W3, W4, W5, W6, W7, O1, O3, O5, O11)

Taking advantage of the market knowledge of local businesses, the strategy involves the partial purchase of a local company, providing its know-how from the directive and conduct market research for future investments.

Few global construction giants from France, Germany and the Middle East have entered the market through majority or controlled buy-outs of existing India companies. Like the strategic acquisition of a minority stake by a Middle East-based Group in IL&FS Engineering.

7. Franchising or Licensing (W1, W2, W3, W5, W6, W7, W8, O1, O2, O3, O7, O10, O11, O12)

Licensing or franchising essentially allow a company to use a brand in a given market. In the case of a company with international patents, they can use this figure to expand its product in other markets. These are generally intangible assets: trademarks, patents and production techniques. The licensee pays a fee in exchange for rights to use intangible property and technical assistance.

4.3.2.3. ST STRATEGIES (STRENGTHS / THREATS):

These types of strategies are called "defensive".

To overcome the threats that Spanish construction companies face wishing to work in India, should perform a series of strategies.

The interaction matrix is presented below:

Table 4.8: Iteration Matrix for ST Strategy (Strengths / Threats)

		STRENGTHS								
THREATS		S1	S2	S3	S4	S5	S6	S7	S8	S9
	T1	++	++	+	0	0	+	0	0	0
	T2	0	0	+	0	0	0	0	0	0
	T3	+	+	0	+	+	+	0	0	+
	T4	0	+	++	0	0	+	0	0	0
	T5	0	++	0	0	++	0	+	+	+
	T6	0	+	0	0	0	+	0	0	0
	T7	0	0	+	0	0	0	0	0	0
	T8	+	++	0	0	+	0	0	++	+
	T9	0	0	+	0	0	0	0	0	0
	T10	0	+	+	0	0	0	0	0	+
	T11	0	0	0	0	0	0	0	+	0
	T12	0	0	0	0	0	0	0	+	0

Source: Self-Analysis

8. Joint ventures with local companies (S1, S2, S5, S6, S8, S9, T1, T3, T4, T8)

Obviously, local clients tend to award the public works contract to local companies. In addition, local companies are well aware of the channels of contact with clients and local suppliers of materials and services. It is necessary to apply for contracts accompanying a local company through a consortium.

There are a large number of foreign companies who have formed joint ventures with Indian companies particularly in the Behavioral Targeting Group (BTG) segment. Few examples are L&T-Mitsubishi (Japan), BGR-Hitachi (Japan), Thermax-Babcock Wilcox (US), GB Engineering-Ansaldo (Italy), JSW Energy –Toshiba (Japan).

9. Having enough financial backup (S3, T2, T4, T9, T10)

As generally for public works the payment is done after the completion of the work or periodically, and the work is financed by the construction company. Therefore, spanish construction companies need to have financial backup from banks.

For works tendered by other agencies, the possibility of temporary non-payments also obliges construction companies to have a financial "cushion" that allows them to overcome the delays in payments.

10. Having support from local lawyers (S3, T1, T2, T7, T9, T10)

To get tenders and to overcome the many disputes that arise during contract, it is absolutely necessary that the Spanish construction companies rely on in its teams with local lawyers who have close contacts with clients.

11. Employee representative (S2, S4, S5, T3, T6)

The strategy is to take advantage of growing demand and free participation of foreign companies, send a representative to conduct market research and get contractual business with companies

currently working in the country, with smaller contracts where the risk is minimal (material supplies, equipment, construction and directives) methodologies.

12. Plan a teaching method to teach the way of working of the company to local staff (S1, S2, S5, S7, S8, S9, T5, T8)

For this it is necessary to know more about the culture of the country. According to the level of staff training, prepare a model, to facilitate the incorporation of this new staff, to the company.

13. Conduct a market survey to choose the operations center (S2, S6, S8, S9, T3, T5, T6, T7, T10, T11, T12)

Poor communication between the different departments, municipalities and provinces, makes the choice of a place of easy access vital, which is why it is necessary to study the different communication systems (land, air) to minimize the time required to move (operation central, workshops, storage, etc.)

4.3.2.4 WT STRATEGIES (WEAKNESSES / THREATS)

These types of strategies are called "Survival".

Spanish construction companies which wish to go to India should carry out a series of strategies to face the threats presented by Indian market considering the internal weaknesses they have in the company.

The interaction matrix is presented below:

Table 4.9: Iteration Matrix for WT Strategy (Weaknesses / Threats)

		WEAKNESSES							
		W1	W2	W3	W4	W5	W6	W7	W8
THREATS	T1	++	++	+	+	+	+	+	0
	T2	0	0	0	0	0	0	0	0
	T3	+	+	+	+	0	0	+	+
	T4	+	0	0	+	+	0	0	0
	T5	0	0	0	0	0	0	0	0
	T6	0	0	0	++	0	0	0	0
	T7	+	+	0	0	0	0	+	+
	T8	0	0	0	0	0	0	0	0
	T9	+	+	0	+	0	0	0	0
	T10	+	+	0	+	0	0	0	0
	T11	0	0	0	0	0	0	0	0
	T12	0	0	0	0	0	0	0	0

Source: Self-Analysis

14. Into consortium with local firms (W1, W2, W3, W4, W5, W6, T1, T3, T4, T6)

Bribery and corruption remain a major challenge in India. The 2012 Transparency International Corruption Perceptions and Bribe Payers Indices rank India 94 (out of 176). Only by performing partnerships with local companies, they can win contracts in such corrupt as the Indian market.

15. Commission agent (W1, W2, W4, W7, W8, T1, T3, T7, T9, T10)

This strategy is defensive, it is done to prevent lesser degree of information and transparency, which added to the lack of formality in the sector, can put at great risk the internationalization of the company. Thus, the strategy is to hire one or more persons in charge of market research, the main points of the study are as follows:

The Staff study the structure and functioning of the administrative units, making a control model of the same, facilitating the monitoring, this will also help to avoid problems of corruption.

The absence of a specific legal framework, creates some uncertainty in the construction companies when bidding projects, so it is necessary to make a thorough study of the general rules in the country, structuring and project managers. Another important point is the study of different Contracting Documents Bases of the different entities that bid.

The lack of timely information when bidding projects makes companies have very little time to present their proposals, it is therefore necessary to monitor the functioning of the same, its programs Annual Operations, controlling their schedules.

It is necessary to classify professionalism and qualification of companies, suppliers and all staff that is intended to work. It is therefore important to make a study of the market, companies in the sector and their degree of formalism in them, so will diminish the risk when working with them.

16. Purchase in advance, the most influential(cost) material in the work (W2, W4, T3, T6, T7)

It is necessary to evaluate the market, analysing the possible increase in material prices, inflation in the area; that's why in some cases it is necessary to purchase certain materials in advance, thus minimizing the risk of a possible increase in the future.

4.4 Proposal of Strategies:

The compacted SWOT matrix is presented below compiling previous strategies proposed and the information gathered in other chapters.

Table 4.10: Compacted SWOT Matrix

SWOT ANALYSIS	STRENGTHS	WEAKNESSES
		S1 International Exposure S2 Experience of Spanish companies and technicians S3 Access to finance S4 Brand name among costumers S5 Diversified Expertise S6 Exports of construction products and services S7 Innovation, competitiveness and technology transfer S8 Better qualification, efficiency, hard work and responsibility S9 Better organization/Project Management of Spanish construction companies	W1 Corruption & Lack of knowledge of access channels W2 Lack of knowledge of suppliers W3 Language difference W4 Absence of own machinery in India W5 High wage levels of Spanish employees W6 Unwillingness to travel to India W7 Superiority complex W8 Laidback attitude
OPPORTUNITIES	SO Strategy (STRENGTHS/OPPORTUNITIES)	WO Strategy (WEAKNESSES/OPPORTUNITIES)
O1 Robust economic development O2 Infrastructure growth O3 Fewer restrictions on foreign direct investment (FDI) for infrastructure projects O4 Opening up of the infrastructure sector through PPPs (Public private partnership) O5 Cheap Labour O6 Low prices of materials O7 Need of construction equipment and machinery O8 Financial stability O9 Continuous urban housing O10 Sufficient availability of raw material and natural resources O11 Need of advance technology in India O12 Demographics	<ol style="list-style-type: none"> 1. Creation a subsidiary or branch 2. Buying a local Company 3. Venture capital 	<ol style="list-style-type: none"> 4. Availability of Spanish staff. 5. Joint ventures or collaboration in a consortium 6. Establish a subsidiary (partial purchase of a local company) 7. Franchising or Licensing



THREATS	ST Strategy (STRENGTHS/THREATS)	WT Strategy (WEAKNESSES/THREATS)
T1 Award of contracts to local companies T2 Excessive legal documentation to be submitted to tender T3 Competition with Indian construction companies T4 High tax rates T5 Preference of unskilled labour T6 Variability in OEM (original equipment manufacturer) T7 Lack of execution discipline and government support T8 Lack of skilled and trained manpower for ECE T9 Land acquisition delays T10 Delay in regulatory and environmental clearance T11 Extreme environmental or natural condition T12 Religious Tension	8. Joint Venture with local companies 9. Having enough financial backup 10. Having support from local lawyers 11. Employee representative. 12. Plan a teaching method to teach the way of working of the company to local staff. 13. Conduct a market survey to choose the operations center	14. Into consortium with local firms 15. Commission agent 16. Purchase in advance, the most influential(cost) material in the work.

Source: Self-analysis

4.5 Five Most Important Strategies:

After analysing all the strategies, 5 most important strategies have been selected which must be implemented by the companies that want to move to India.

1. Commission agent
2. Joint venture with local companies
3. Creation a subsidiary or branch
4. Having enough financial backup
5. Plan a teaching method to teach the way of working of the company to local staff

Chapter 5: SPANISH CONSTRUCTION COMPANIES IN INDIA

In the past few years, number of Spanish companies have considerably increased in India, going from 60 in 2007 to more than 250 today. The Indian market sectors with greater weight of investor by Spanish companies are consumer goods, tourism, construction and the retail trade and especially the infrastructure and renewable energy. These companies have focused on India as a destination with potential due to its enormous size and its usefulness as a basis for the introduction in other Asian markets. The India market, consisting of a growing number of middle-class consumers, is by itself attractive.

Spain has not been able to create its own brand own Indian consumers in spite of certain factors of added value as is the presence of flourishing Spanish companies operating since years ago in India. For example, the largest European infrastructure operator in the country is Spanish, 80% of the air space and the expansion of the New Delhi metro exist thanks to the Spanish technology, and Spanish companies are that oversee the most innovative renewable energy projects.

In the infrastructure sector, India needs to fill large gaps. According to the estimates, there is a considerable investment of approximately 1.3 trillion U.S. dollars needed in the next 10 years, mainly in transport, logistics and energy. Spain and India are mutually supportive in this sector, given that Spain has many excellent infrastructure companies of international prestige which can collaborate in the construction of roads, seaports, airports, etc., in the Asian country.

Many large and SMEs Spanish companies have the knowledge, the experience and the high quality equipment necessary to respond to this challenge. For example, more than 15 Spanish construction companies are among the world's 200 leading companies in this sector. Over the past two decades, these Spanish companies have developed a conscious effort of internationalization of its approach to geographical business, beginning with Latin America in the majority of cases, but increasingly seeking opportunities in other regions of the world, such as the Gulf or Asia. Some of the most competitive companies are already present in India.

- In 2007, the Spanish infrastructure company **FCC** was one of the pioneers in this field, to be selected by the Delhi Metro Rail Corporation to make the connection to the Indira Gandhi International Airport.
- More recently, **Isolux Corsan** was awarded the contract for the expansion and improvement of 88 km of highways in the state of Odisha and it also directs the construction of 700 km of a four-lane highway. At the local level, Isolux Corsan has been awarded three contracts for the improvement and construction of new facilities in the New Delhi Metro. It will also work with Sadbhav Engineering Ltd. India in the construction of two viaducts and seven elevated stations, as well as the realization of architectural finish in bus stops and urban parks for the corporation Delhi Metro Rail. Finally, it has been awarded two new contracts for distribution and transmission of energy in the State of Madhya Pradesh, as well as the contract for

installation of 1,600 km of transmission lines of electrical energy that the company is building and managing in the State of Uttar Pradesh. It is important to emphasize that in just few years this company has been awarded with important contracts in different regions of the country.

- Grupo San Jose has been awarded a contract recently in 2016 to build 133km of national highway NH-232. The development of this infrastructure is essential for the region and has a strategic importance. It is located in the southern part of Uttar Pradesh, the most populous state in India with a population of over 200 million inhabitants. It connects Uttar Pradesh and Madhya Pradesh, situated in the Centre of the country. (GrupoSanjose Website, 2016)
- Another important Spanish company that is working on projects in India, since 2007, is **Indra**. Among the major technological projects that it has implemented in the country, are the solutions of air traffic management. Its technology is used to control 80% of Indian airspace, as well as the systems used in the management and security of what will be the longest tunnel in country: The Chennai-Nashri tunnel. Indra's innovative solutions are already implemented in Mumbai, Kolkata and Delhi metro systems and three highways from different Indian States.
- At commercial level, the Spanish multinational company Indra and the Indian Confederation of industries (CII) signed a memorandum of understanding in order to promoting collaboration to design a series of solutions and common technologies in development of Smart cities in 2015. The agreement lays the Foundation so that Indra created consortia in order to participate in future bids related to the Indian Government's plans.
- More recently, Spanish company Eptisa, with more than 60 years of experience and present in India since 2011, has been awarded two technical assistance contracts by the government of Rajasthan for the execution and implementation of projects of Smart cities in the cities of Jaipur and Udaipur, amounting to a total of EUR 7 million. Both cities are destination of millions of tourists every year. Eptisa will develop different actions to modernize the infrastructure of the historic centre of both locations with sustainable environmental solutions.
- The Spanish OHL Group entered the Indian market in 2010 through an alliance signed with the Spanish company, TCB (Terminal de Contenidors de Barcelona), the Indian construction company, Lanco Infratech and the local infrastructures investor, Eredene Capital. This consortium was awarded the commissioning and subsequent management of the container terminal at Ennore Port, one of the largest in the Asian country, for a period of thirty years.
- India is planning 1,800 km high-speed line to alleviate its saturated freight train network, as well as to strengthen the country's industrial development. **The Spanish construction companies OHL, ACS, San José, Isolux, Sacyr, Aldesa and Assignia have all signed several alliances in India in order to bid** on this contract. The Asian giant is planning a high-speed line which will join the cities of Delhi, Bombay and Calcutta. "Four Spanish groups have entered the bid on the first line section between Bhaupur and Khurja, covering a route of

350km, and valued at around €900mn. OHL already complies with the short-listing requirements, allied to the Indian construction company Punjlloyd, one of the 100 international biggest contractors in public works in 2011. (The Corner, 2017)

- Ferrovial Agroman subsidiary Cadagua, which specializes in the design, construction and operation of water treatment plants obtained its first contract worth 37.6 million euro in India in 2010. Just months after opening a commercial office in New Delhi, the company obtained a contract to design, build, operate and maintain a drinking water treatment plant for 60 years with a daily capacity of 170,000 cubic meters. The facility will be located in Hogenakkal (Tamil Nadu), in southern India. The Japan Bank for International Cooperation (JBIC) will help fund the project. (Ferrovial website, 2010)
- In the framework of the expansion of Ayesa in the international market, it started its adventure in India in 2008, now at present with 250 employees and revenue of 7 million euros with a forecast of revenue of 14.5 million euros with more than 300 people at the end of 2017. In March 2015, it has been awarded another outstanding contract: "supervision of the construction works of the fast track Agra-Lucknow", the most important of India, with more than 300 km in length, 3 lanes in each direction and singular structures such as the Ganga Bridge and Yamuna. Expected completion date is February 2021.

Ayesa has become a "national" company with a large portfolio of contracts, a thorough understanding of its idiosyncrasy and extensive experience in the Indo-Spanish human resources management that ensure a competitive bid with a quality product.

All these examples highlight a common dynamic in which Spanish infrastructure companies with an international vocation have been able to introduce in the Indian market and, over a relatively short period of time, thanks to their experience and high level of capacity and competitiveness, have been able to begin to expand its business opportunities to different regions of the country. There is still space for the business, both for the aforementioned companies and others joining the list.

Strategies adopted by already established Spanish Construction Companies in India:

As we can see from the above-mentioned data the strategies adopted by the Spanish Construction companies:

- One of the pioneers in the Infrastructure field, FCC created **subsidiary** in 2007 and won a contract by the Delhi Metro Rail Corporation to make the connection to the Indira Gandhi International Airport.

- Isolux Corson won the bid to construct two viaducts and seven elevated stations, as well as the realization of architectural finish in bus stops and urban parks for the corporation Delhi Metro Rail **in Consortium** with Sadbhav Engineering Ltd
- At commercial level, the Spanish multinational company Indra and the Indian Confederation of industries (CII) signed a **memorandum of understanding** in order to promoting collaboration to design a series of solutions and common technologies in development of Smart cities in 2015.
- The Spanish OHL Group entered the Indian market in 2010 through an **alliance** signed with the Spanish company, TCB (Terminal de Contenidors de Barcelona), the Indian construction company, Lanco Infratech and the local infrastructures investor, Eredene Capital. This consortium was awarded the commissioning and subsequent management of the container terminal at Ennore Port, one of the largest in the Asian country, for a period of thirty years.
- The Spanish construction companies OHL, ACS, San José, Isolux, Sacyr, Aldesa and Assignia have all signed **several alliances** in India in order to bid for contract for 1,800 km high-speed train network.
- Ferroviaria Agroman **subsidiary** Cadagua, which specializes in the design, construction and operation of water treatment plants obtained its first contract worth 37.6 million euro in India in 2010. . The Japan Bank for International Cooperation (JBIC) will help **fund** the project.
- Before planning to make a leap to India, the Construction company Ayesa decided to know the giant potential of Indian construction market, given the enormous need in this country with issues relating to land transport and hydraulic infrastructures.
So, the personal from Ayesa made numerous trips to India to explore the interesting opportunities available that Ayesa could be competitive showing all its arsenal engineering.

Chapter 6: CONCLUSION

The objective of this work is to propose a series of strategies to Spanish construction companies that wish to implement in India.

First the current situation of Construction sector in Spain has been done. Using the information provided by SEOPAN as a basis, it is shown that the economic crisis has plunged the sector of construction in Spain. The sector has fallen from representing 10.45% of GDP in 2006 to 5.07 in 2015. The turnover of the broad construction sector in 2013 amounted to EUR 155.3 billion, 65% lower than in 2008 (EUR 441.1 billion).

The number of people employed in the broad construction sector has been declining since 2008, reaching 1.6 million in 2013, 50.4% lower than in 2008. The overall unemployment rate in Spain reached 24.4% in 2014, being one of the highest in the EU-28. It has been on the increase since 2007 (at 8.2%) and peaked in 2013, with 26.1% of the labour force being unemployed.

The economic crisis has affected the ability of Spain's construction sector to access loans and other sources of finance. The total volume of loans to construction sector in Spain has been drastically decreasing, reaching EUR 54.3 billion in 2014, 64.9% less than in 2008. This indicates difficulties for construction industry (and for most SMEs in the Spanish economy) to obtain credit and access the financial market.

This crisis further fuelled the Spanish construction companies to work abroad. And as the only source of livelihood.

Spanish construction companies, which already had a long experience of internationalization, since 2004 were increasing its turnover in the exterior.

At the moment, the big Spanish construction companies are billing more than 70-80% abroad and only around 20% in Spain.

In the last decade, the Spanish foreign direct investment is focused on UE-15 member states (61.5%), Latin America (14%), North America (11.5%), EU-12 countries (7.2%), other European countries (3.5%) and, to a lesser extent, China (0.72%), Australia (0.35%), India (0.1%) and Morocco (0.46%).

Thus, we can see that India is yet to attract enough investment from Spanish construction companies. The present condition of economy and construction industry of India has been discussed.

India, which is the world's third-largest economy based on its Gross Domestic Product (GDP) in purchasing power parity (PPP) terms, is expected to lead the world and emerging countries in terms of its growth this year and the next year as well. According to the International Monetary Fund (IMF), at a time when global growth is projected at 3.4% in 2016 and 3.6% in 2017, India is projected to grow at 7.5% in both these years, up from 7.3% in 2015 and 2016.

According to industry estimates, the Indian construction industry was worth \$161.22 billion in FY2016-17. The Twelfth Five-year Plan envisions investment of approximately US \$1 trillion in Indian infrastructure between 2012 and 2017. This, in turn, is expected to offer significant opportunities for EPC players across various sectors¹⁷. During the period, the construction opportunity in the infrastructure sector is estimated to be around US \$474.24 billion.

Later the SWOT analysis has been done to analyze the main internal characteristics of Spanish Construction companies (their strengths and weaknesses) and the external situation presented by the Indian Construction market (presented Opportunities and Threats). The summary of the SWOT analysis is shown below:

The internal Strength of Spanish Construction Companies:

- S1 International Exposure
- S2 Experience of Spanish companies and technicians
- S3 Access to finance
- S4 Brand name among costumers
- S5 Diversified Expertise
- S6 Exports of construction products and services
- S7 Innovation, competitiveness and technology transfer
- S8 Better qualification, efficiency, hard work and responsibility
- S9 Better organization/Project Management of Spanish construction companies

The internal Weaknesses of Spanish Construction companies:

- W1 Corruption & Lack of knowledge of access channels
- W2 Lack of knowledge of suppliers
- W3 Language difference
- W4 Absence of own machinery in India
- W5 No brand value in India
- W6 High wage levels of Spanish employees
- W7 Unwillingness to travel to India
- W8 Superiority complex
- W9 Laidback attitude

The Opportunities presented by Indian Construction market:

- O1 Robust economic development
- O2 Infrastructure growth (Lot of tenders)
- O3 Fewer restrictions on foreign direct investment (FDI) for infrastructure projects
- O4 Opening up of the infrastructure sector through PPPs (Public private partnership)
- O5 Cheap Labour
- O6 Low prices of materials
- O7 Need of construction equipment and machinery
- O8 Financial stability
- O9 Continuous urban housing

- O10 Sufficient availability of raw material and natural resources
- O11 Need of advance technology in India
- O12 Demographics

The Threats presented by Indian Construction industry:

- T1 Award of contracts to local companies
- T2 Excessive legal documentation to be submitted to tender
- T3 Competition with Indian construction companies
- T4 High tax rates
- T5 Preference of unskilled labour
- T6 Variability in OEM (original equipment manufacturer)
- T7 Lack of execution discipline and government support
- T8 Lack of skilled and trained manpower for ECE
- T9 Land acquisition delays
- T10 Delay in regulatory and environmental clearance
- T11 Extreme environmental or natural condition
- T12 Religious Tension

By analysing the combination of these factor, the following strategies have been proposed for the implementation of Spanish Construction companies in India:

SO Strategy

1. Creation a subsidiary or branch
2. Buying a local Company
3. Venture capital

WO Strategy

4. Availability of Spanish staff
5. Joint ventures or collaboration in a consortium
6. Establish a subsidiary (partial purchase of a local company)
7. Franchising or Licensing

ST Strategy

8. Joint venture with local companies
9. Having enough financial backup
10. Having support from local lawyers
11. Employee representative
12. Plan a teaching method to teach the way of working of the company to local staff
13. Conduct a market survey to choose the operations centre

WT Strategy

14. Into consortium with local firms
15. Commission agent
16. Purchase in advance, the most influential(cost) material in the work

In the end five of the most important strategies are selected. Also, the Present situation of presence of Spanish Construction companies in India has been done with the strategies adopted by them at the time of their entering in the Indian Construction Market. In the past few years, number of Spanish companies have considerably increased in India, going from 60 in 2007 to more than 250 today. The Indian market sectors with greater weight of investor by Spanish companies are consumer goods, tourism, construction and the retail trade and especially the infrastructure and renewable energy.

Spanish infrastructure companies with an international vocation have been able to begin to expand its business opportunities to different regions of the country, over a relatively short period of time, thanks to their experience and high level of capacity and competitiveness. There is still space for the business, both for the aforementioned companies and others joining the list.

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ABBREVIATIONS

ATA. Federación Nacional de Asociaciones de Trabajadores Autónomos (National Federation of Associations of self-employed Workers)

CAD. Current Account Deficit

CCI. Construction Cost Index

CPI. Consumer Price index

DESA. Department of Economic and Social Affairs

DR. Depository Receipts

ECB. External commercial borrowing

ENR. Engineering News-Record

EPC. Engineering, Procurement and Construction

FCCB. Foreign Currency Convertible Bonds

FDI. Foreign Direct Investment

FLC. Fundación Laboral de la Construcción (Labour foundation of the Construction)

FRBM. Fiscal responsibility and budget management

FVCI. Foreign Venture Capital Investors

FY. Financial Year

GDP. Gross Domestic Product

GVA. Gross Value Added

ICEX. Instituto Español de Comercio Exterior (Spanish Institute for Foreign Trade)

ICT. Information and Communication technologies

IMF. International Monetary Fund

IWT. Inland Water Transport

JV. Joint Venture

LLP. Limited liability Partnership

MoUD. Ministry of Urban Development

OECD. Organisation for Economic Co-operation and Development

PPP. Public Private Partnership

RFPI. Registered Foreign Portfolio Investors

SWOT. Strength Weakness Opportunity Threat

VET. Vocational Education Training