HOW ECONOMIES CHANGE? - A STUDY OF SPAIN AND INDIA

Guillermo Marin*, Pramod Pathak**, Saumya Singh***

Email: guillermomarin83@hotmail.com

ABSTRACT

Comparing economies is a tricky affair because though the parameters are the same yet, the conditionality differs. It is like a comparison of dissimilar attributes. How to juxtapose attributes of one economy vis-à-vis another when the two have entirely different histories, cultures, geographies and other socio political conditions is quite a task. However, the task before the authors of this paper was to do this very job—comparing economic development of Spain and India with the help of the evolution of industrialization. The present paper is based on the result of research done between July 2015 and January 2016 in the Department of Management Studies, IIT (ISM), Dhanbad, in the context of post-doctoral Fellowship from the European Union program Erasmus Mundus AREAS+.

The interesting aspect of this study is that despite all constraints Indian economy has grown commendably in comparison to the leading economies of the world, particularly the Western Europe. It may be recalled that the Industrial Revolution that was a game changer for Europe, gave certain inherent advantages to the European countries where it originated. But over the years Indian growth story has been a transformational one, despite a sluggish growth and disadvantaged history of exploitation and subjugation. Moreover, a large and rapidly growing population plagued by illiteracy and poverty has been a further stumbling block. But, the Indian economy has grown despite these difficulties and compares well with many developed economies. The paper details the evolution of Spanish and Indian economies.

Key Words: Economic Development, Growth engine, Spain, India

INTRODUCTION

Economic growth of nations depend on a large number of factors, though most important of them is industrialisation. However, this in no way discounts the importance of other factors because identifying contributions in a multi factor determined cumulative growth story is not easy. Thus, agriculture, services, human resources are all crucial in growth and development. In light of this an attempt has been made to study economic growth of two different types of economy represented by Spain and India. One economy, Spain, represents Europe, a developed region where industrial revolution began much earlier, while India, the other nation started as an underdeveloped economy with primarily large dependence on traditional agriculture. The objective is not confined to compare current status of two economies but to understand the growth trajectory and how different factors determine the course of development and development outcomes.

As things stand today, the Gross Domestic Product (GDP) in Spain was reported to be 1232.09 billion US dollars in the year 2016. The GDP value of Spain is thus 1.99 percent of the

In the same report, the Gross Domestic Product (GDP) of India was 2263.52 billion US dollars in 2016 and the value is 3.65 percent of the world economy. The mean value of GDP of India was 509.73 USD Billion during 1960 to 2016, assuming an all-time high of 2263.52 USD Billion in 2016 and a record low of 36.54 USD Billion in 1960. Against the above backdrop we may, therefore, conclude that the direction of growth has been comparable except that the figures in the case of India is a bit high.

SPAIN AND INDIA–THE PRESENT STATUS

In terms of nominal GDP, Spain is the fourteenth largest economy in the world. It is also among the largest by purchasing power parity. It is a member of European Union, Organisation for Economic Co-operation and Development, and the World Trade Organization. The economy of Spain is the fifth-largest in Europe which is behind Germany, United Kingdom, Italy and France. Spain stands at fourth-largest position in the Eurozone, based on nominal GDP statistics. Spain could place itself on the twelfth-largest exporter in the world and the sixteenth-largest importer in 2012.

In UN Human Development Index, Spain is ranked at 23 whereas it is thirtyeth in GDP (PPP) per capita by the World Bank. That makes it a high income economy which is among the countries of very high human development. According to The Economist, Spain has the world’s 10th highest quality of life. However, India is lower on these parameters of export and quality of life and higher on imports as compared to Spain.

The economy of India is the sixth-largest in the world measured by nominal GDP and the third-largest by Purchasing Power Parity (PPP). The country is classified as a newly industrialised country, and one of the G-20 major economies, with an average growth rate of approximately 7% over the last two decades. The Indian economy has the potential to become the world’s 3rd-largest economy by the next decade, and one of the two largest economies by mid-century. However, India is listed 131 in UN Human Development Index and has poor life expectancy when compared to Spain. There are similar discrepancies in other aspects also suggesting that economic development is not the sole criterion of development, particularly when it comes to all round growth.

ECONOMIC GROWTH OF SPAIN

A superficial analysis of Spanish economy during the nineteenth century could make us think of a true era of progress for this country. The population increased by 75 percent over the last hundred years, the national rail network was composed throughout that century and appeared to be at least sufficient. Cities grew very quickly and even assisted hatching of some industries such as textiles, steel and mining. However, the “relative stagnation” of nineteenth-century Spanish economy is a fact admitted by almost all historians (Nadal, 1978). Today it seems clear that, despite the apparent prosperity of these socio-economic indicators, Spain did not acquire the dimensions of progress experienced by other neighboring countries, particularly those that make up the northern and central Europe.

According to Gabriel Tortella, widely acclaimed by Spanish historiography, the preponderance of the North over the South in Europe was based on technological investment, and subsequent agricultural adaptation and development that lead to a change at the head of the European economic order - the strength of Mediterranean agriculture in antiquity and the Middle Ages gave way to the Modern (Tortella, 1994).

This situation favored immigration decrease from north to south and the progressive agricultural and commercial development around the Baltic and the North Sea. In the case of Spain, the agricultural stagnation has often been put forward as one of the root causes of slowdown in the modernizing mechanisms of the country.
To social, traditional, cultural, natural or geographical factors must be added others like the predominant forms of land ownership—high importance of the large estate, and the difficulties for the creation of an internal market capable of consuming the manufacturing supply and creation of human nuclei with potential for capital accumulation.

There was a slow development of the Spanish industry and the world of the business and corporations that resulted from industrialization. The process was slowed not only by internal economic factors, but also, driven by other characteristic elements of modernization, improvement of infrastructure and extension, slowly but steadily, of the railroad, transforming the social and political elites of the country, transition from an economic model of Old Regime, to another more adapted to the standards of the modern capitalism.

In 1914, the Spanish national income distribution was 38.4 percent from agriculture, 25.9 percent from industry, handicrafts and mining, and 35.6 percent from liberal professions, employees, trade, capital not invested in industry, etc. Shortly before the start of the First World War, the foundations of Spain remained agriculture. In this sense, the land confiscations failed to provide the basis for a revival of the agricultural and industrial sectors, perhaps because they were not implemented effectively (Rueda, 1997).

**THE INDIAN CASE**

The Indian story was rather different given the fact that it had a colonial economy and was not as vibrant as compared to Spain. Its base was largely agriculture with very little industrial base initially. The gradual development of industrial base was largely done by the British rulers to serve their colonial interests and hence the direction of the growth was not India centric. It was only after independence that the Indian economy started taking Indian orientation though centuries of subjugation had slowed down the pace of growth considerably (Datt and Mahajan, 2012). Thus, if we try to find out the real start of evolution of Indian economy 1947 can be considered to be the cut-off date. Even during that time the damage that had already been done by the British rule had created considerable damage to indigenous industry. So it took quite some time for India to comeback on the rails of development. In that case we can find India's growth story to be far speedier than that of the Spain which had the initial advantage of early start.

**THE GROWTH ENGINE**

The interesting feature, however, is that the initial growth of both Spain and India rested on foundations of three basic industries, ie, Textile, Coal and Iron & Steel Industry. The 19th century industrialization of both Spain and India rested on the foundations of textile, coal and Iron & steel industry. We have tried to take into account the early development of these industries mostly 19th Century.

**SPAIN**

**Textile Industry**

We refer here primarily to the cotton textile sector, which was preeminent in Spain during the nineteenth century against other subsectors such as textiles wool, the flax or hemp.

Catalonia, which came to have developed a very powerful handmade textiles during the eighteenth century was arguably the Spanish region where this new manufacturing industry, and industry is pre-eminently focused.

Normally we talk about manufacturing when incorporated into the production process machines of the industrial revolution (The Spinning Jenny is the best example). In the Spanish case the initiation of the process stood at the beginning of the nineteenth century, but the process was interrupted by the war of independence and the Napoleonic invasion (part of the productive infrastructure was destroyed).

This process oriented towards mechanization in the sector, a transition to modernization was that it was very fast and intensive. For example, in the field of spinning
Spain appreciated from 3.8% in 1835 to 90% in 1861. So it was a modernization of great intensity. Less pronounced, but also remarkable was the transition in the field of looms, where it went from 0.9% mechanization of 1835 to 44.6% in 1861.

This intense development led to other changes. The first was the change of industrial location, moving factories to the banks of rivers-and thus harness the energy hydraulically, or to the Mediterranean coast—looking for the arrival of English coal as a source of energy. The Catalan textile industry in its infancy followed the British model, based on the use of coal for steam pressure required in moving pulleys, spinning wheels and looms. Also by buying or imitating British machinery and technology, the factory model reproduced and adopted their business strategies. From 1860, at the high cost of coal (due to the import of this material), the exploitation of the waterfalls of river currents were sought to drive turbines. So many industrial colonies were created in the middle basins of the Ter and Llobregat rivers. In this industrial location it helped that the colonies facilitated the isolation and control of workers, when beginning to organize the first labor movements.

Around Barcelona were those who experienced a sharper development. In them, the factories of the Catalan businessmen Bonaplata, FabraGuell, Muntadas and others introduced modern manufacturing processes.

The moment of greatest expansion began between 1840 and 1860. In 1847 there were 4,583 textile and cotton factories with 97,346 workers. In 1860 it had operated the phenomenon of concentration: the number of factories was 3,600 with the highest number of workers: 125,000. If we study the evolution of the sector, taking into account production during the nineteenth century, Spain saw a steady increase in production throughout the century.

Coal Industry

Speaking of the Spanish coal mining, it is essential to speak of Asturias. This region had provided for more than two centuries (from the mid-eighteenth century to mid-twentieth century), between 50 and 70% of all domestic production of coal. The history of mining in Asturias dates back to the late eighteenth century when Enlightenment fostered the extraction time to advance the country economically. The Admiralty in turn, decreed in 1767 the use of coal for smelting cannons and military arsenals of El Ferrol (La Coruna) and La Cavada (Santander).

In the central area of Asturias, coal mines workers used traditional methods on reefs that surfaced at ground level in the fields of the villages Siero and Langreo. By 1800 production reached about 4,100 tons. Nalon river’s floods made the ascent of the barges out by hand, causing the Royal Coal Mine Langreo huge losses. The real development of the Asturian mining came from the hand of the Royal Order of 1829 that tried to promote the exploitation of hard coal. In these years many foreign companies made major investments to raise money for extraction industries and metallurgy in Asturias. In 1833, the Lesoinne (from Belgium) and Joaquin Ferrer and Felipe Riera (Catalan), family founded the Real Company Asturiana de Minas. It is the first major undertaking that starts in Asturias.

In 1841 mining concession granted to Duverger, Chaviteau&Compagnie and London 1842 constitutes the Asturian Coal & Iron Company in 1844. Langreo railway Gijon opened in August 1853 and could carry 103 tons per year. In 1870 it rose upto 360 tonnes and 620 in 1890.

The Spanish Coal had a great competitor in the English coal. Not only economically but also in terms of quality. The actual average price was more expensive because the Spanish Coal had eight times more carbon than English coal requiring washing of the Asturian coal.

Iron and Steel Industry

The Spanish steel industry developed in Andalusia, through factories like La Constancia, based in Malaga, in 1826. This Andalusian hegemony held for 30 years, but the problem was the high production costs due to the use of charcoal, which had to export northern Spain. So
in the 1840’s Asturian industry appeared, with iron mines and coal mines in its territory, with significantly reduced production. The first example of this was the Asturian steel Mieres Factory, founded by the Asturian Mining Company which was created in London in 1844. From the late 1870s this production hegemony moved to Biscay, in the Basque region, because there were high-purity iron mines, and English coke (higher combustion quality coal) came easily by sea from English ports of Portsmouth and Plymouth. The demand for iron of Biscay by England, originated in a fluid sea trade between the two areas.

The invention of the Bessemer converted in 1868, removing impurities by oxidation do also made a substantial technological modernization of the sector. In 1882, a leading bourgeois families of Bilbao, the Ibarra, created Altos Hornos Society and iron and steel mills of Bilbao. Considering the steel production, the jump in the last decades of Eighteenth century was spectacular.

The presence of steel industry in Spain since the second half of the nineteenth century has been significant and it expanded during 1960s and the early 1970s with production increasing from 1.9 million tons in 1960 to 11.1 million tons in 1975. It has made Spain the fifth largest steel producer in Europe and the thirteenth largest in the world. However, after late 1970s the global glut in steel and the domestic slump led to severe crisis.

**INDIA Textile Industry**

In case of India the nineteenth century did not have a considerable growth story. It was twentieth century that was significant. However, coal and steel were slowly developing in the eighteenth century. Indian textile sector is one of the oldest industries dating back to several centuries. The Indian textile Industry has a long and checkered growth history. The World Wars I and II and the Swadeshi movement stimulated the Indian textile industry. From 1922 to 1937 the industry was in bad shape and witnessed slowdown with many of the Bombay mills changing hands. The textile industry developed with indigenous entrepreneurship and capital. In present times also it is a major contributor to India’s exports with around 15 per cent of total exports. The industry is labour intensive and a large direct employer comprising two broad segments. The handloom, handicrafts and sericulture, which are operated on a small scale through traditional tools and methods are in the unorganized sector. The organised sector consists of spinning, apparel and garments segment that employ modern machinery and techniques.

**Coal Industry**

Commercial exploitation started in 1774 with East India Company setting up operations in the Raniganj Coalfield presently in West Bengal. Owing to a lack of demand growth was slow till 1853 and only after introduction of steam locomotives to the fast-expanding rail system it started growing. Upto 1895, large quantities of coal were imported from Britain, but with domestic production increasing and found fit for locomotives and ships, demand for coal imports declined. India’s export of coal started growing particularly to Burma, Ceylon, and the Malay states.

1900 saw rise in production to an annual average of 1 million tonne (mt) and in a couple of years India was producing 6.12 mts per year reaching 18 mts per year by 1920. Temporary wartime demand (1914-1918) was followed by a slump in the 1930s. The production reached a level of 29 mts. by 1942 and 30 mts. by 1946.

After independence the new government emphasised rapid growth of heavy industry and National Coal Development Corporation (NCDC) was founded in 1956 as a Government of India undertaking. This was a major step in the development of an indigenous Indian coal sector, particularly the large Dhanbad coal-mining complex.

**Iron and Steel Industry**

Steel industry, one of the core industries of Indian economy, started its journey quite early. India has a long heritage of steel making. Although steel production started much earlier modern
steel production technology started functioning only at the beginning of the 19th century. In fact the growth of steel industry in India has been considerable after independence. The first successful attempt was in 1875 when in iron and steel works at Barakar in West Bengal started by Bengal Iron and Steel Company. This was taken over by Bengal Iron Company in 1889. This marked the beginning of production of pig iron in India through modern methods. But the real beginning was in the year 1907 after the establishment of Tata Iron and Steel Company (TISCO) at Sakchi, Jamshedpur. TISCO was the first large scale industrial unit in producing iron and steel by using latest scientific methods in India. This was followed by setting up of Indian Iron and Steel Company Ltd. in the year 1918 at Burnpur in West Bengal. The Steel Corporation of Bengal Ltd. was set up in 1937 in association with Indian Iron and Steel Company for manufacturing steel. Before independence iron and steel industry in India consisted of four units viz. the Tata Iron and Steel Company, the Indian Iron and Steel Company, the Steel Corporation of Bengal and the Mysore Iron and Steel Works. Out of these four units, only one unit namely Mysore Iron and Steel Works was a state-owned unit, the remaining three were in the private sector.

After independence special emphasis was laid on the development of iron and steel industry and a series of plans and proposals were made for the setting up of new steel plants. Gradually, in subsequent plans impetus was given on the steel sector and today there are many players in the steel business both large and small in private and public sector.

CONCLUSION

We have thus seen that the two economies that is Spain and India had a somewhat similar trajectory to their industrial growth and have gradually developed during the 18th and 19th century. The Spanish economy being a part of the European continent had the initial advantage of the industrial revolution but subsequently the Indian economy overcame those disadvantages to become a bigger economy than Spain. The growth then had better pace. But when it comes to the outcomes in terms of dividends to the people Spain has better records. Be it quality of life or other developmental indices concerned with the people. This indicates that governance is a better determinant of developmental outcomes rather than economic growth per say. The study suggests that there is a need to ensure better distribution of fruits of economic growth as far as India is concerned. May be, India needs to separate its outcomes from economic goals following a two pronged strategy. The trickledown theory is not working. What is needed is that efforts to enhance the economic growth may be taken as different from development which involves more interventionist attempts. GDP growth and per capita income may not be the sole indicator of prosperity.

NOTE: The authors are grateful to the anonymous referees of the journal for their suggestions to improve the overall quality of the paper. Usual disclaimers are applicable.

REFERENCES

- Datt G & Mahajan A (2012), Datt & Sundharam’s Indian Economy, S Chand Publishing, New Delhi
- Nadal, J., El fracaso de la revolución industrial en España, Ariel, Madrid 1978
- Rueda, G., La desamortización en España: un balance, Arco Libros, Madrid 1997
- https://tradingeconomics.com/spain/gdp