



AN ECONOMIC ANALYSIS OF THE IT-ITES SECTOR IN INDIA WITH A SPECIAL EMPHASIS ON BUSINESS PROCESS OUTSOURCING (2003-2017)

Dr. Monisankar Sarbaidya

Dept. of Economics, Vidyasagar College, Kolkata, India

ABSTRACT

Clark – Fisher thesis stated that the contribution of agricultural sector to the GDP continuously declines and that rises in favor of manufacturing sector then towards service sector when development takes place. But for Indian economy there was a dramatic change from agriculture to service sector. One of the important nature in Indian economy was service led growth. As a reason the expansion of IT-ITes industry played a significant role in that category. The aims of the paper is to show the growth of this IT-ITes industry in Indian economy and also identify the role of Business Process Outsourcing (BPO) behind this tremendous growth during 2003-2017. But the analysis shows that the growth of IT export revenue is too high compare to that of domestic IT growth. So to maintain the long run growth we should focus on the growth of domestic IT industry also.

KEYWORDS : It-ites, Bpo, Export Revenue, Growth

20 years ago the Indian economy was faced with the challenge of unemployment. There was no alternative source to provide for the mass upliftment of the educated youth. Gradually as the Indian economy opened up to the world market, we could see the awakening of a sleeping giant creating massive employment from overseas. This helped Indians not only acquiring foreign money but also won the trust of major MNCs who invested in India. The cheap labour with additional qualities and access to English as a global language brought about the much required alternative employment and source of income which we called 'Business Process Outsourcing' (BPO).

India is the second largest English speaking population in the world. This was the key factor to attract the foreign investor to invest in India for BPO jobs. Outsourcing to India started responding to the changing market requirements by increasing the scale of operations and capability to handle complex situation.

BPO in India has grown rapidly for software services as the advantages offered by the country were well known and applied in IT outsourcing. Besides the stable socio-political atmosphere of the country has also enhanced confidence among the investors. The advantages of India are:

- Skilled Human Resources
- Low cost advantage
- Abundant talent pool
- Social Environment
- Industry-Academic interface
- Policy initiatives [e.g.(24*7) hours working culture of the BPO industry]
- IT department focus
- English speaking power
- Growing urban population
- Appropriate time difference with the USA

BPO is delegation of an intensive business process to an outside provider who owns, administers and manages it according to defined set of matrix. BPO is generally for backend administrative function that are necessary to run a business but are not a part of the core business. India became a prominent destination for BPO in 1990s. so, globalization is the primary stimuli for BPO. In other words we can say that BPO is a product of globalization. We can split the global sourcing trend of IT sector into 3 parts:

- Pre 1995
 - 1995-2000
 - Post 2000
- Global sourcing in the Indian IT sector started after globalization (around 1990). But we can divide the evaluation of the BPO industry into two phases –

a) Pre-1998 Business process

During the pre 1998 era, the first processes to be outsourced were customer services. At that time activities involved only to handling customer calls and other backend administrative process.

Post -1998 business process

But there was some dramatic changes in telecom services and

networking technologies after 1998 these advancements enabled companies to reduce costs by allowing them to move activity offshore. But after some years the practice of outsourcing turned to comparative advantage strategy from cost advantage strategy.

IMPORTANCE OF THE PROPOSED STUDY:

Outsourcing is one of the most controversial topics of the day. The US economy's "jobless recovery" along with the extensive loss of manufacturing jobs to developing countries has heightened fears of domestic job losses. According to the estimation of Forrester Research 3.3 million US service sector jobs will flee to foreign countries with \$136 billion wages within 2020. But the American companies have moral responsibilities to hire American workers. There are many important aspects of the outsourcing debates:

*Jobless recovery is not the only reason for growing unemployment in USA, the outsourcing also exacerbates unemployment in USA economy.

*In the 1950s when manufacturing jobs were going overseas, that time Americans told that a good education would keep them employed at home, which did not happen. Because the outsourcing also threatens the educated workers.

*The consequences of outsourcing are more political and social rather than economic. So maybe there are some economic benefits but the social and political costs are large.

*However India enjoys the benefit from her time difference with USA but the Outsourcing is already being undertaken in other countries like China which becomes one of the largest English speaking population in the world.

REVIEW OF LITERATURE

Akinchan Buddhudev Sinha examines the role of human resource in making BPO hub in India. He also discusses the cooperative nature of the government including tax exemptions, policy concessions and removal of procedural hurdles to enable the growth of the BPO sector. The paper also throws light on the contribution of BPO industries on GDP, exports and new employment generation in India.

Jyotsna Bhatnagar (2007) in his paper tries to investigate talent management and its relationship to levels of employee engagement using a mixed method research design. In his paper author collects 272 samples of BPO/ITES employees, and investigate the attrition and the unique problems of employee engagement.

Purva Kansal (2006) in her article mentioned about the attempt of developing countries trying and influencing the rate of foreign private investment and their economy. Traditionally, companies used to outsource their requirement to independent supplier located in the nearest area of the outsourcing company for better coordination and to control the activities of the partner. But, after the development of e-commerce, distance becomes a relative term. They can exchange their

activities within a minute and look for independent suppliers in indifferent parts of the world.

A.T.Keaney (2004) explained that India's growing , presence in global BPO service is similarly based on its huge labour endowment ,varied skill sets and low cost but quality manpower coupled with a rapidly growing domestic IT industry. He also argued that the Indian BPO industry is projected to continue growing at double digit annual growth rates over the medium term, raising India's share of the global BPO business from the 2% in 2004 to 4.8% by 2008.

Sumitro Mukherjee (2007) explained that in the early stage through the transfer of technology off-shoring was restricted in manufacturing sector only. But due to huge comparative advantage and some other issues like job –lose, cultural differences and information security the outsourcing also enter in the service sector in India. With increased focus on information security the Indian outsourcing is growing fast with a huge investment in service sector.

Prof. Kumbhar Vijay (2009) in his paper explained that India is home to large and efficient talent pool. And according to this study the BPO sector is growing at over 50% and employ 1.1 million employment will generate between 2008.

S.Nagalakshmi in her paper attempted to analyze the role FDI in Indian BPO sector and its impact on BPO growth. And also shows the transformation of India's image from slow moving bureaucratic economy to a land innovative enterprises.

Mahapatra Swadesian and Jena Kalindi (2012) tries to discuss the growth opportunity of IT-ITes industry in India and its widespread impact on country. They also observed that the next 10 years are likely to be different from what we have experienced over the last decade.

OBJECTIVE OF THE PAPER

- a) To analyze the IT-ITES growth in India during 2003-04 to 2016-17.
- b) To study the role of BPO industry to develop the IT-ITES industry.

Research Methodology

The research is analytical in nature. Secondary data was collected from Nasscom Mckinsey report of different year, books and different journals. The paper is based on the time period of 2003-2017. By using simple graphs and simple econometric model we explain the status of Indian IT-ITes sector with a special emphasis on Indian BPO industry.

ANALYSIS

A trend of offshoring IT services to developing countries started way back in 1980s mainly with low end software work. In fact, the Indian ITes-BPO industry is growing at a rapid pace and is increasingly consolidating its position as one of the favorite outsourcing destinations in the world.

TABLE-1: INDIAN IT-ITes INDUSTRY REVENUE

YEAR	IT EXPORT REVENUE	IT DOMESTIC REVENUE	IT TOTAL REVENUE
2003-04	12.9	3.8	16.7
2004-05	17.7	4.8	22.5
2005-06	23.6	6.7	30.3
2006-07	31.1	8.2	39.3
2007-08	40.4	11.6	52
2008-09	47	12.6	59.6
2010-11	59.1	17.3	76.4
2011-12	68.8	19	87.8
2012-13	76.1	19.2	95.2
2013-14	87.3	19	106.3
2014-15	97.8	21	118.8
2015-16	107.8	21.7	129.5
2016-17	117	24	141

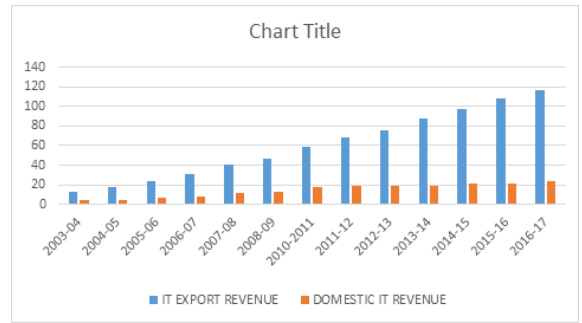
SOURCE: NASSCOM SR-2018

As shown in figure 1, IT-ITES industry revenue rises to 141.0 billion in 2016-17 from 16.7 billion in 2003-04 .Under which the IT export revenue rises significantly from 12.9 to 117 billion and domestic IT revenue from 3.8 to 24 billion during this period.

Again the share of IT export revenue rises from 77.24% to 82.97%, whereas the domestic revenue rises from 22.76% to 17.03% during the

same period. Software and Services refers to IT Services, BPO, Engineering Services and R&D , software products.

FIGURE 1: REVENUE OF EXPORT AND DOMESTIC IT-ITes INDUSTRY



SOURCE-TABLE 1

From the above diagram it is clear that there is a huge improvement in the IT export sector, but the growth of domestic IT is not so hopeful. Now we will discuss about the different parts of IT-ITes sector with a special emphasis on BPO sector.

TABLE-2: SECTOR WISE COMPOSITION OF IT-ITes INDUSTRY

YEAR	IT SERVICE	BPO	ENG	TOTAL
2003-04	7.3	3.1	2.5	12.9
2004-05	10	4.6	3.1	17.7
2005-06	13.3	6.3	4	23.6
2006-07	17.8	8.4	4.9	31.1
2007-08	23.1	10.9	6.4	40.4
2008-09	26.9	12.8	7.3	47
2010-11	33.5	14.2	11.4	59.1
2011-12	39.9	15.9	13	68.8
2012-13	45.4	17.9	12.8	76.1
2013-14	49.2	20.4	17.7	87.3
2014-15	55.3	22.5	20	97.8
2015-16	61	24.4	22.4	107.8
2016-17	66	26	25	117

SOURCE: NASSCOM SR-2018

IT services is the fastest growing sector within the Indian IT-ITES sector. This sector contributes 7.3 billion to 66 billion within 2003-17.on the other hand the BPO industry grows from 3.1 billion to 26 billion and the Engineering R&D and Product Development generates 2.5 billion to 25 billion within the same period of time.

Now to analyze the role of BPO sector in IT Industry we may consider a linear regression model from Table 2. So we consider a linear relation between BPO EXPORT REVENUE and IT-ITes EXPORT REVENUE.

Let the equation is $Y=a+bX+U$, where Y= IT-ITes EXPORT REVENUE, X= BPO EXPORT REVENUE and U=STOCHASTIC TERM .Now we consider the

Null hypothesis, $b=0$
 against the Alternative hypothesis $b \neq 0$

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    . regress itexportrevenue bpo
    _____
    Source |      SS      df      MS              Number of obs =   13
          |_____|_____|_____|              F( 1, 11) = 1680.75
    Model | 14667.1182   1 14667.1182             Prob > F      = 0.0000
    Residual | 95.9915783  11  8.72650712             R-squared     = 0.9935
          |_____|_____|_____|             Adj R-squared = 0.9929
    Total | 14763.1098  12 1230.25915             Root MSE     = 2.9541

    _____
    itexportre-e   Coef.   Std. Err.   t    P>|t|   [95% Conf. Interval]
    -----+-----
    bpo            4.607638   .1123896   41.00  0.000    4.36027   4.855006
    _cons         -5.913178   1.815522   -3.26  0.008   -9.909116 -1.917241
    
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From the above analysis we can see that here the actual t-value is greater than t-table value at 12 degree of freedom. So Null hypothesis is rejected and there is a relation between these two variables. And the

$r^2 = 0.9935$ implies more than 99% explained variation. So there is a strong bonding between the two variables.

CONCLUSION

So from the above analysis it is clear that we cannot ignore the contribution of IT export in Indian service sector. Especially the role of BPO industry. But, there are lot of domestic and external barriers to India's services exports. The major domestic barriers are in the form of financial, regulatory, infrastructural, technical and standard related constraints. But the most significant barriers are immigration of labour and the labour market regulations, which reduce the ability of the Indian on-site services. Again, due to the domestic regulation by USA such as data privacy law also affects BPO in India.

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