

Technological Displacement of Employees in Indian Banking Sector

Sunil S Assistant Professor

I. INTRODUCTION

Today, jobs are the prime concern across the globe for policy/decision makers, the business community, and the billions of men and women striving to provide for their families. Jobs are the cornerstone of economic and social development. Indeed, development happens through jobs. Economies grow as people get better at what they do, as they move from farm to firms, and as more productive jobs are created and less productive ones disappear. Societies flourish as jobs brings together people from different ethnic and social backgrounds and nature a sense of opportunity. Jobs are thus transformational. The world development report by the World Bank, 2013, states, "As the world struggles to emerge from the global crisis; some 200 million people – including 75 million under the age of 25 – are unemployed. Many million more, most of them women, find themselves shut out of the labour force altogether. Looking forward, over the next 15 years and additional 600 million new jobs will be needed to absorb burgeoning working-age population mainly in Asia and sub-Saharan Africa".

II. GLOBAL CONTEXT

Technological innovation is fast replacing human labour with machines in virtually all sectors and industry in the world economy. Already millions of workers have been permanently eliminated from the economic process, and whole work categories and job assignments have shrunk, been restructured, or disappeared. Global unemployment has now reached its highest level since the great depression of 1930s and 1980s. While technological advances and globalization have created new jobs for workers at the high end of the skill spectrum and largely spared the service jobs of workers at the low end, these forces have displaced many jobs involving routine tasks—traditionally the sphere of middle-skill workers. Moreover, these same forces have pushed up wages for high-skill workers disproportionately, contributing to increased wage inequality.

After the outbreak of the global financial crisis, global growth has decelerated and unemployment has started to increase again, leaving an accumulated total of some 197 million people without a job in 2012. Moreover, some 39 million people have dropped out of the labour market as job prospects proved unattainable, opening a 67 million global jobs gap since 2007. Despite a moderate pick-up in output growth expected for 2013–14, the unemployment rate is set to increase again and the number of unemployed

worldwide is projected to rise by 5.1 million in 2013, to more than 202 million in 2013 and by another 3 million in 2014. A quarter of the increase of 4 million in global unemployment in 2012 has been in the advanced economies, while three quarters has been in other regions, with marked effects in East Asia, South Asia and Sub-Saharan Africa. Those regions that have managed to prevent a further increase in unemployment often have experienced a worsening in job quality, as vulnerable employment and the number of workers living below or very near the poverty line increased (Global Employment Trends 2013, International Labour Organisation).

III. INDIAN CONTEXT

India, after independence, adopted the philosophy of welfare state. This resulted in enacting a series of labour legislations in order to provide protection and justice to the working class which was weak and defenceless. India is now reckoned among the fastest growing economies in the world. After the globalization of Indian economy there has been reduction in employment generation in organized sectors, especially in public sector. Only in private sector the rates of employment generation has been increased. The impact of globalization negatively affected on employment generation in Indian organized sector, particularly on public sector. Unemployment is major problem of Indian economy and it is the root cause of many problems like poverty, illness, illiteracy, high birth rate and high death rate.

India has entered high growth path with the initiation of economic reforms in the early 1990s with a policy shift towards free market economy. India's growth pattern shows that, the fantabulous growth performance is driven by high growth in the service sectors such as information technology, communication services, financial services, hotels and restaurants, and trade (distribution) services, which is facilitated by the advent and rapid diffusion of information technology (IT). It has been argued that rapid technological change is one of the contributing factors for the low absorption of employment in the fast growing sectors in India. It can also be inferred that the growth in the service sector is induced by rapid introduction of new technologies, which is also contributing factor for the low employment growth in the sector. To analyse the implications of technological change for the achievement of inclusive growth, this has been the prime focus of the economy. The important issues relating to are the impact of technological change on employment and whether the

adoption of new technology enables the process of inclusive growth?

IV. TECHNOLOGICAL DISPLACEMENT:

Technological displacement (or technological unemployment) is a term created by British economist John Maynard Keynes. He used the term to refer to “a situation where technology or automation destroys jobs at a pace that is faster than the pace at which jobs are being created. The result is a net loss of jobs due to technology”. While technological development results in productivity contributions, the loss of jobs and higher unemployment rate offset the productivity gains and lead to lower economic growth.

Further, technological displacement means eligible worker who has been permanently laid off, or has received a notice of layoff or termination from employment due to the firm's failure or closure. Workers dismissed because of unsatisfactory job performance are generally not considered displaced.

Technological displacement is a term used to describe the lack or loss of jobs due to technological change or innovations. This types of unemployment typically comes from workers either being replaced by machines or having their jobs made easier and require fewer workers to accomplish the same task. One of the greatest potential problems with technological unemployment is the somewhat recent trend seen in industrialized nations, referred to as jobless growth. It is the improvement of a nation's business and financial sectors, with increased profits and greater financial success but without the creation of jobs. This can often lead to noticeable financial recovery, but without any noticeable creation of new jobs to reduce the unemployment. Technological displacement is an umbrella term include- lack/loss of job due to technological development and technology oriented innovations, unemployment due to specialized human knowledge replaced by innovative machines helping for achieving competitive advantages and a new trend of jobless growth.

There are two broad arguments on the concept- technological displacement – optimistic and pessimistic.

The *optimists* view that innovation may be disruptive to jobs in the short term, yet hold that various compensation effects ensure there is never a long term negative impact on jobs.

On the contrary, the *pessimists* argued that at least in certain circumstances, new technology can lead to a lasting decline in the total number of workers in employment.

Technological change can cause short term job losses is widely accept. But a lasting increase in unemployment has no longer acceptable.

V. TECHNOLOGICAL DISPLACEMENT OF EMPLOYEES IN BANKING SECTOR

The Indian banking sector has been playing a vital role in country's economic progress. The banks have not only catalysed economic growth in various sectors, but also have displayed resilience and stability in difficult times. The Indian banking industry (a well-structured branch banking system) has made outstanding advancement in last few years, even during the times when the rest of the world was struggling with financial crisis. India's economic development and financial sector liberalization have led to a transformation of the Indian banking sector over the last decade.

Entry of technology in the Indian banking sector can be traced back to the Rangarajan Committee report, way back in the 1980s but during nineties, the banking sector witnessed various liberalization measures. New private sector and foreign banks emerged - equipped with the latest technology. These banks opted for a different model of having a single centralized database through a network infrastructure, instead of having multiple databases for all their branches. These changes were market driven, having the influence especially of globalization. The crux is Indian banks have no control over developments abroad but are subjected to their effects. Hence these changes were not the outcome of internal changes but of external changes. Deregulation has opened up new opportunities for banks to increase revenues by diversifying into investment banking, insurance, credit cards, mortgage financing, depository services, securitization, etc. Now all the banks have started with the concept of multi- channels, like ATMs, credit cards, debit cards, telephone/mobile banking, SMS banking, internet banking, call centres, etc. The role of banking is redefined from a mere financial intermediary to service provider of various financial services under one roof acting like a financial supermarket. Today Indian banking is at the crossroads of an invisible change. The sector has undergone significant developments and investments in the recent past.

The OECD jobs strategy, the report, “Technology, Productivity and Job Creation – Best Policy Practices” assesses innovation and technology diffusion policies, identifies “best policy practices” and makes country-specific recommendations. It presents evidence on the extent to which new technologies are transforming the structure of OECD economies and enhancing their ability to grow and create wealth and jobs. Economic activity is becoming increasingly knowledge-based: jobs are shifting from low to high-skilled workers; productivity and employment growth depend on the conditions for economy-wide diffusion of new products and processes.

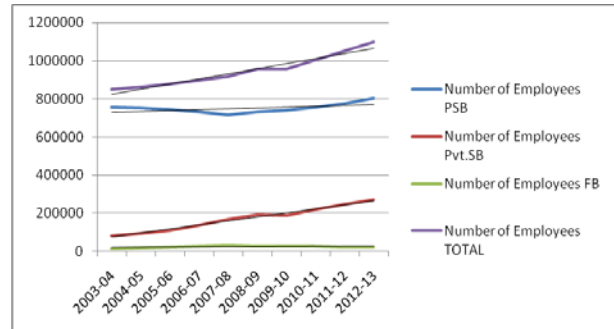
VI. THE PROBLEM

India is one of the fastest growing economies in the world. The rapid growth in the Gross Domestic Product in the last decade shows the transition of our economy from agriculture domination to manufacturing and tertiary sectors. Rapid growth is essential for expanding income and employment, but growth is not only the measure of development. The ultimate objective is to achieve broad based improvement in the living standards of our people. One of the indicators of this broad based improvement is to provide gainful employment opportunities to the working class population. Technological development has a huge impact on future generation of employment and on a country's economic growth. Globalization and technological advances in India have created new job for workers at the high-end of the skill spectrum and largely spared the job of workers at the low-end. These forces have displaced many jobs involving routine work, especially of the middle-skilled workers. There is growing concern that emerging technologies such as computers, robotics and artificial intelligence are displacing human jobs, creating an epidemic of technological unemployment/technological displacement of labour. When technology is introduced into the workplace employees are not expected to learn how to use it, but are instead expected to be replaced by it, i.e., technology-driven unemployment. At the same time modern banking sector in India has been going drastic change due to technological advancement and competition.

Technologically driven unemployment and technological displacement is major challenge in Indian banking sector, even Indian banking sector has been a major employment provider of the second largest populated country. It is the age of technological revolution to improve competitiveness to achieve growth and development. At present, RBI insists banking companies to open new branches in rural areas to achieve the objectives of financial inclusion and inclusive growth. But economic growth without employment or less/under employment is not at all an economic growth even if the country was a technologically high-ended one. So it is the responsibility of the policy makers to ensure that economic growth driven by technological advancement must be achieved with adequate employment opportunity. India is a country with largest educated young population among the world countries. Moreover, the unemployment rate among educated youth is higher in the country. The educated young population (graduates and post graduates) prefer employment opportunity in financial service sector, especially in public sector banks (BCG talent survey, Response to question "which sector will you most prefer to seek employment in?")

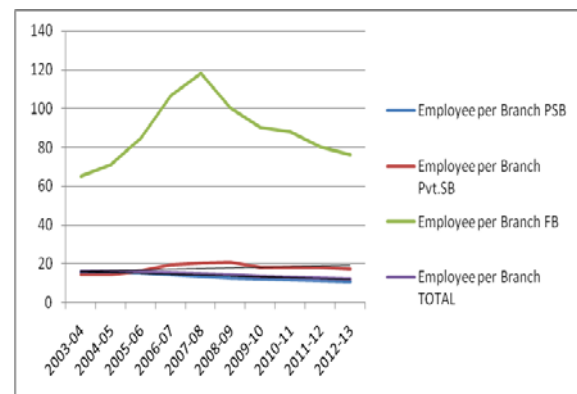
It is evident from the statistics of RBI since 2000 is that the number of employees per branch in both public and private sector banks decreases from year to year as against increase in branches/offices, as per the RBI branch

banking statistics the total number of employees is increasing at a linear rate of 26655 per annum for the last ten years. The sector-wise employment also shows increasing linear trends at the rate of 4378, 21137 and 1140 per annum for public sector banks, private sector banks and foreign banks respectively. But a close look into the number of employees per branch of all these sectors shows a decreasing trend, as shown in the following graphs and table.



Source: Branch Banking Statistics, RBI.

Figure: 1. Number of Employees



Source: Branch Banking Statistics, RBI.

Figure: 2 Employees per Branch

According to Labour Bureau's "Third Annual Employment & Unemployment Survey 2012-13" released on Thursday, November 29, 2013, unemployment rate amongst illiterate youth is lower than educated youth. A comparison with the earlier report by labour bureau shows that the unemployment level has increased during 2012-2013 over 2011-2012. While unemployment rate among illiterate youth is lowest with 3.7 per cent for the age group 15-29 years at all India level in 2012-2013, the unemployment rate in the same category was reported at 1.2 per cent in 2011-2012 report. Similarly, the unemployment amongst the graduate youth that happened to be at 19.4 per cent in 2011-2012 increased to 32 per cent during 2012-2013. As stated in the report, the unemployment rate amongst the educated youths reportedly increased with increase in their education level (Reetu Sharma: September 24, 2014). Technology effects will challenge society. But one of the most powerful is the possibility that economic expansion is steadily becoming decoupled from job growth. The core of

this argument is that technology advancements are displacing jobs at a growing speed.

Source: Brach banking statistics RBI

Statement of Employees, Branches, and Employee per Branch													
Descrip tion	Bank Grou p	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Number of Employees	PSB	756625	757249	752633	748732	744328	729164	714784	731524	739646	755102	774329	801659
	Pvt.S B	69020	69469	82103	93713	110511	138144	166336	193578	188332	217953	248284	269941
	FB	10233	11501	14167	17247	22127	27840	33124	29582	28012	28041	25905	25384
	TOTAL	835878	838219	848903	859692	876966	895148	914244	954684	955990	1001096	1048518	1096984
Number of Branches	PSB	47596	47923	48242	48971	49792	51356	54232	57979	62080	65800	70969	75779
	Pvt.S B	5147	5373	5771	6485	6777	7104	8257	9288	10516	12097	13970	16001
	FB	184	203	218	243	261	261	280	295	310	318	323	334
	TOTAL	52927	53499	54231	55699	56830	58721	62769	67562	72906	78215	85262	92114
Employee per Branch	PSB	15.89682	15.80137	15.6012	15.28929	14.94875	14.19822	13.18012	12.61705	11.9144	11.47571	10.91081	10.57891
	Pvt.S B	13.40975	12.92928	14.22682	14.45073	16.30677	19.44595	20.14485	20.84173	17.90909	18.01711	17.77266	16.87026
	FB	55.61413	56.65517	64.98624	70.97531	84.77778	106.6667	118.3	100.278	90.36129	88.17925	80.20124	76
	TOTAL	15.79304	15.66794	15.65346	15.4346	15.43139	15.24409	14.56522	14.13049	13.11264	12.79928	12.2976	11.90898

VII. CONCLUSION

In a like situation discussed, the technological displacement and its impact on economic development of emerging economies is a challenging phenomenon before policy makers. Innovation is very essential for inclusive growth and economic and social development. Innovation and technological advancement is obligatory for human cultural development. While the rising unemployment level among the youth in India is a worry, but a much bigger cause of concern is that with the rising level of education, the rate of unemployment has progressively increased. If you are illiterate and don't have a degree, you are more likely to get a job in India.

REFERENCE:

[1] ILO Report (2010): *Global Employment Trends for Youth*, ILO, Geneva.
 [2] Quarterly Report on Changes in Employment in Selected Sectors (Oct, 2014 to Dec, 2014) Government of India Ministry of Labour & Employment Labour Bureau Chandigarh April, 2015
 [3] Nippin Anand , 2011, New Technologies, Work, Skills and Identity The Case of Maritime Industry

[4] Global employment trends 2013: Recovering from a second jobs dip / International Labour Office. Geneva: ILO, 2013
 [5] International Journal of Management and Strategy (IJMS) 2011, Vol. No.II, Issue II, January-June 2011 Vivarelli, M. *Innovation and Employment: A Survey*. IZA Discussion Paper No. 2621, February 2007.
 [6] Feldmann, H. "Technological unemployment in industrial countries." *Journal of Evolutionary Economics* 23:5 (2013): 1099–1126.
 [7] Lachenmaier, S., and H. Rottmann. "Effects of innovation on employment: A dynamic panel analysis." *International Journal of Industrial Organization* 29:2 (2011): 210–220.
 [8] A Profile of Banks 2005 - RBI
 [9] A Profile of Banks 2006-2007 – RBI
 [10] A Profile of Banks 2007-2008 – RBI
 [11] A Profile of Banks 2012-2013 - RBI
 [12] Annual Report 2013-2014
 [13] RESERVE BANK OF INDIA ANNUAL REPORT 2014-15
 [14] Branch Banking Statistics 2009 – RBI
 [15] <http://archive.unu.edu/unupress/unupbooks/uu37we/uu37we0i.htm>
 [16] <http://www.bain.com/publications/articles/digital-challenge-to-retail-banks.aspx>

- [17] file:///C:/Users/user/Downloads/ep2q99-2-pdf%20(2).pdf
- [18] http://planningcommission.nic.in/reports/genrep/bkpap2020/32_bg2020.pdf
- [19] <http://www.canadianbusiness.com/innovation/opportunities-2015-banking-technology/>