India’s Pace of Moving towards Lewis Turning Point

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Abstract
This paper analyses the change in employment structure from unorganized to organized sector in the last two decades. It explores whether India is really moving towards Lewis Turning Point and the effect of GST and Demonetization on the Indian Job market. In this connection, the results clearly show that in recent years, the Indian economy is moving towards better jobs or formal organized jobs and Lewis process is at work in the country. However, we need to focus more on skills development and providing decent employment to the increasing youth of India.

Keywords: Informalisation, Probit, Employment, Non-farm, Lewis Turning Point, Formalisation

JEL Classification: J46, J2

Paper Classification: Research Paper

Introduction
Lewis (1954) defines the dual economy with surplus labour, which consists of two distinct segments- an organized (formal) sector and an unorganized (informal) sector. The unorganized sector holds a stock of surplus labour, on the other hand, organized sector employs a small proportion of the labour force, where employment conditions are much like those in developed countries, regular, full time, and wages paid (Ghose, 2016). These organized sector jobs have non-wage benefits and social security benefits where government regulation play an important role in determining wage and other benefits associated with jobs in the sector. The result is average income of the workers in organized sector is much higher and more secure than that of the workers in the unorganized sector. This is sustainable because the average output per worker is also much higher in the organized sector, where capital is an important input into production. In the unorganized sector, where majority of developing countries including India’s workers are employed, there is neither government intervention nor any kind of institutionalized social security benefits. Labour productivity is low as there is little capital in use in production activities and labour incomes are low. Self-employment and casual employment are dominant forms of employment in the sector. In India, out of total 472 million workers, organized sector accounted for only 17 per cent (80 million), but contributed almost 50 per cent to the national income (CII, 2014; Reddy et al. 2014). India has experienced a decent growth during the two decades, which is substantially higher than most of the developing countries around the world. The government has also initiated several positive policies and regulations for the improvement of labour market.
conditions. Hence, there is an on-going debate whether there is a change in dual employment structure or movement from unorganized to organized sector has changed in the last two-decades. However, there is lack of enough evidence to understand whether the growth and other policy initiatives have changed India’s employment structure, if any what are the responsible factors. In this context, the main objective of the paper is to explore how the employment structure has changed in India and what factors are responsible for the change.

**Theoretical Framework**

It is theoretically argued that changes in structure of employment are engendered by economic growth, which is led by the growth and employment generation in organized sector (Ghose, 2016). This induces movement of workers from employment in the unorganized sector to employment in organized sector. The share of the organized sector employment rises as a result. The labour productivity and wages are higher in organized sector; a rise in the proportion of organized sector workers indicates increase in labour productivity and labour incomes and consequently improvement in employment conditions. This also helps in increased labour productivity in the unorganized sector even when output growth in the unorganized sector remains unchanged. The rise in workers share in organized sector indicates lower growth of labour force in the unorganized sector, and rise in growth of labour productivity for any given rate of output growth. Because labour productivity in the unorganized sector indicates levels of labour incomes and underemployment, a rise in labour productivity indicates increased labour incomes and reduce underemployment and hence an improvement in employment conditions also in unorganized sector.

Arther Lewis (1954) argued that developing economies are characterised by the surplus labour. These surplus labourers are mainly involved in traditional sector or unorganised sector (low productivity or income) with a few employed in the modern or organised sector (high productivity or income). He said that as economy develops or grows at a higher rate the surplus labour moves from unorganised sector to organised sector. This sustained process of increase in the share of the organized sector is Lewis process of structural change and leads to what is known as the Lewis Turning Points, the point at which there is no more surplus labour left in the unorganized sector and all workers there have full time employment. Until this point is reached, movement of workers out of the unorganized sector reduces underemployment and leaves the amount of labour used in the sector unchanged so that output (and growth) remains unaffected. The Lewis process continues until the gap of labour productivity and labour incomes between two sectors have disappeared. At this point, dualism also disappears and a developed economy emerges. This framework is adopted to understand the changes in labour market dualism in India.

**Methodology**

In this paper, the definition of Organised/Unorganised sector and Formal/Informal workers is used from the National Commission for Enterprise in Unorganized Sector (NCEUS, 2007) definition of unorganized sector, which defines all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten workers as unorganized sector.

It also defined informal/formal workers as “Informal workers consists of those working in the unorganized sector or households excluding regular workers with social security benefits provided by the employers and the worker in the organized sector without any employment and social security benefits provided by the employers”. The data and information is used from...

Discussion

Organized and Unorganized Sector

India’s labour market is dominated by unorganized sector employment with 83 per cent workers involved in unorganized sector for their livelihood. The unorganized sector employment has declined in the last decade, as a result organized sector employment rose from 9.8 per cent in 1999-00 to 11.8 per cent in 2004-05 and further to 17.4 per cent in 2011-12 (Figure 1). In number, the organized sector workers grew from 38.9 million from total 369.9 million in 1999-00 to 80.2 million from total 472 million in 2011-12. But the movement of workers from organized to unorganized sector is very slow. The proportion of organized sector in India is quite low as compared to the developed economy, where majority of the workers worked in organized sector.

![Figure 1: Organized-Unorganized Sector](image)

Source: Calculated from Various Rounds of National Sample Surveys

Formal-Informal Workers

The share of formal workers was stable during last decade from 7.4 per cent in 1999-00 to 7.5 per cent in 2011-12. Number of formal workers increased marginally from 29.3 million in 1999-00 to 35.6 million in 2011-12 (Figure 2). It is interesting to note that the organized sector employment increased sharply during the last decade; but similar trend is not observed in unorganized sector. This quality of employment or working conditions in labour market need to examine why the formal workers did not correspond with increase in unorganized sector.

![Figure 2: Formal-Informal Workers](image)

Source: Calculated from Various Rounds of National Sample Surveys
Formal-Informal Workers: Organised-Unorganised Sector

This phenomenon has been further examined by looking at formal-informal workers within organized sector. There is continuous increase observed in informal workers within organized sector (41.2 per cent in 2004-05 to 57 per cent in 2011-12), which is called as informalisation of jobs in organized sector (Figure 3). It is argued that the rise in informal workers in organised sector attributed to increase in regular workers in sales workers, auxiliary workers in health and education sector, which are low paid and contractual in nature (ILER, 2013). The emerging contractual, outsourcing and flexible labour practice adopted in selected services and industries also may have increased the number of informal workers within the organized sector (Mazumdar et al., 2017).

![Figure 3: Informal Workers in Organised Sector](source: Calculated from Various Rounds of National Sample Surveys)

The informalisation or contract jobs are really rising in the organised sector particularly in manufacturing sector. This can be seen from annual survey of organised sector data, the results show that the share of contract workers in organised manufacturing sector has continuously been rising over the years. The contract workers share has increased from just 13.5 per cent in 1991 and after economic reform or globalisation their share went upto 35.5 per cent in 2014-15 (Figure 4).

![Figure 4: Contract Workers in Organised Manufacturing Sector](source: Annual Survey of Industries, India.)

Concentration: Formal/Informal Workers – Organised/Unorganised

This can be seen from the Kernal Density Function that the informal workers in organised sector have almost similar characteristics of workers in un-organised sector (Figure 5). These two types of workers concentrated at low earning but differ at higher income or earnings in the earlier years, 1999-00 and 2004-05. But over the years, the KDF shows that these two types of workers have almost merged with one-other in 2011-12 at both lower and higher earnings reflecting concentration of similar nature of jobs. This reveals the emergence of new dichotomy in the Indian labour market.
Determinant of Organized Sector Formal Employment

In the organized sector, formal jobs is considered to be the most preferred job. Hence, the determinants of participating in organized regular formal jobs would be analysed by various supply side factors. Probit model is used to examine the same, and is expressed by: $Y = \alpha + \beta X + \epsilon$

Where scalar dependent variable $Y$ is a binary variable indicate, if $y_i=1$, probability to employ in regular formal jobs in organized sector and otherwise $y_i=0$. $X$ is the vector of explanatory variables that determine the participation in the regular formal jobs in organized sector. So the model would take the form of

$$P(Y_i=1) = \phi(\beta'X)$$

Source: Calculated from Various Rounds of National Sample Surveys
The probability of participation in the formal organized sector jobs is influenced by an individual’s age (proxy for experience) and educational status, the household attributes including social groups, average monthly per capita expenditure levels (proxy for household income) and household size. Moreover, an individual’s status in the household is also an important determinant because male member of the household and member from urban areas and non-farm sectors are highly likely to participate in the formal organized sector jobs.

There is significant difference between organised and unorganised sector (Table 3). This difference is mainly due to regular formal workers. But there is not much difference between regular informal workers and casual in organised and unorganised sector. The estimate reveals that older or experienced, higher skilled or educated individuals, people from urban areas, male, people belonging to higher income groups, higher social groups, and in the non-farm sector are more likely to participate in formal organized sector compared to other groups.

Table 3: Probit Result

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Marginal Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>(0.018)** (513.6)</td>
</tr>
<tr>
<td>Age2</td>
<td>(0.000)** (136.8)</td>
</tr>
<tr>
<td>HH Size</td>
<td>(0.005)** (215.3)</td>
</tr>
<tr>
<td>Urban</td>
<td>(0.040)** (375.7)</td>
</tr>
<tr>
<td>Rural</td>
<td>-</td>
</tr>
<tr>
<td>Male</td>
<td>(0.001)** (10.0)</td>
</tr>
<tr>
<td>Non-Farm</td>
<td>(0.024)** (83.8)</td>
</tr>
<tr>
<td>Farm</td>
<td>-</td>
</tr>
<tr>
<td>Qt1(Lowest Income)</td>
<td>-</td>
</tr>
<tr>
<td>Qt2</td>
<td>(0.080)** (469.6)</td>
</tr>
<tr>
<td>Qt3</td>
<td>(0.119)** (690.4)</td>
</tr>
<tr>
<td>Qt4</td>
<td>(0.186)** (1044.2)</td>
</tr>
<tr>
<td>Qt5(Highest income)</td>
<td>(0.271)** (1378.7)</td>
</tr>
<tr>
<td>SC/ST</td>
<td>-</td>
</tr>
<tr>
<td>OBC</td>
<td>(0.061)** (469.3)</td>
</tr>
<tr>
<td>OTH</td>
<td>(0.069)** (522.2)</td>
</tr>
<tr>
<td>Year of Schooling</td>
<td>(0.032)** (2586.6)</td>
</tr>
</tbody>
</table>

Model Statistics

| Number of OBS | 72811753 |
| LR chi-squared(25) | 24280000 |
| Prob> chi squared   | 0.0000 |
| Pseudo R squared    | 0.2520 |

Overall, the other factors are equally important but the most important one is experienced with better qualification or skilled persons have higher probability to participate in the organized formal sector. The Likelihood Ratio (LR) test is significant for the models, as shown by the P-value indicating the goodness of fit of the models.
Recent Development

Most of the ongoing debates on job-creation are predominantly revolved around the reigning Modi government. This debate fuelled after two independent experts, who got access to Employees’ Provident Fund’s data and released their report on the payroll data of around 80 million workers earlier this year. They estimated in the report that seven million jobs will be added in 2017-18. However, the report has been widely criticised on various grounds such as duplication of payroll member’s accounts, inactive accounts and payrolls added due to companies moving above threshed of more than 20 employees. The government should conduct a national survey-based employment-underemployment data than relying on fragmented data to determine critical economic indicator. Further, the Ministry of Labour has also released six monthly payroll additions for September, 2017 and February, 2018, saying that 3.1 million new jobs were created during the period.

The government has claimed that revised data has removed duplicates by linking the accounts with Aadhar and deleted inactive accounts but threshold issue remains the same. So, the debate is once again alive - whether these new additions to payrolls are a reflection of formalisation of jobs which may have already existed or a creation of new jobs. This needs to be comprehended by analysing the historical prospective from the obtainable facts and figures.

As discussed earlier, whether Lewis process is at work in India, this can be visualized from last decade data from 1999-00 and 2011-12, which showed that employment in the formal sector increased much faster than total employment. The number of employees in the formal sector increased at a rate of 5.4 per cent annually much faster compared to 1.5 per cent per annum of the total number of workers in the economy. If, formal sector workers (in million) are only considered for working age 15-59 years (main status workers). The share of formal sector in the economy also increased from 11 per cent in 1999-00 to over 17 per cent in 2011-12. There was clear net movement of workers from jobs in the informal sector to jobs in the formal sector. It can be said that about 25 million workers moved from jobs in the informal sector to formal sector during the period. The employment conditions have improved during the period and Lewis Process was very much at work as formal sector grew impressively along with casual daily employment to regular, labour income grew in real terms, and underemployment declined and labour productivity rose. These factors were instrumental to maintain decent growth in the last decade.

Further, the trend of regular formal jobs (regular workers having social security benefits and excluded casual jobs) in the formal sectors have been derived (India Employment Report, 2016) from national sample survey data (2004-05, 2011-12) and projected for 2015-16 by using employment elasticities (ratios of employment growth to output growth) and UN population projection data. Regular formal jobs are considered quality jobs, while the other jobs in the formal sector are casual or low paid daily jobs, which have almost similar characteristics of informal sector jobs. Therefore it has been tried to understand whether formalisation has improved the employment conditions or not. The estimated regular formal jobs within formal sector reproduced (Figure 6: Regular Formal Jobs ) shows that the formal workers having social security benefits were 28.2 million in 2004-05, 34 million in 2011-12, 36.9 million in 2015-16, and considering active members of EPFO payroll database went up by about 46.9 million in March, 2018. This trend shows that the number of regular formal workers is growing continuously but with slow pace in the past, and the rapid jump in regular formal workers by considering the EPFO data in recent years does not correspond with the past.
Annual net addition in formal workers or net additions to regular formal jobs was 0.97 million (9.7 lakhs) annually during 2004/5-2011/12, 0.73 million (7.3 lakhs) annually during 2011/12-15/16, while five million (50 lakhs) annually during 2015/16-17/18 (Figure 2). Accepting the limitations of EPFO data, the net annual addition of regular formal jobs between 2015/16 to 2017/18 seems to be unrealistic even if discounted 20 per cent considering the above-mentioned limitations and is far higher than the past trend. Hence, this is necessarily formalisation of jobs, with an increase in the number of people who are signing up for relatively more secure and regular formal jobs.

This be an outcome of governments several recent initiatives to promote formalization of the economy such as GST, demonetisation and regulations on compulsory joining of EPFO. These initiatives have benefited the economy and promoted formalization of jobs, which has been a long pending agenda of the government and must be accelerated. Hence instead of looking at these numbers with skepticism, it should be taken as positive step towards higher productivity and growth of Indian economy in the long run. Overall, the recent trend of movement of workers from informal to formal sector also confirms the swift pace of Lewis structural process, which was not witnessed in a long time. This movement in some way or the other is a good news with formalizing of informal jobs for workforce as well as for the country’s economy. This has also been substantiated earlier by Arvind Subramanian led team in Economic Survey which elicits similar evidences of greater pace of formalization in the recent times. The new Economic Survey written by the team of Finance Ministry economists led by Subramanian provides compelling evidence of how the Indian economy is becoming more formalised. The reason for this shift is important as it is not just because of the possibility of higher tax revenues for the government to spend; it is also about a profoundly different social contract between citizens and the state. There are four key shifts that are mentioned in different parts of the Economic Survey.

- First, the introduction of the goods and services tax (GST) has brought more firms into the tax net. The number of enterprises paying indirect taxes has gone up by 3.4 million, an increase of 50 per cent. The bulk of the new entrants are enterprises that are in the business-to-business or export sectors, or what economists would call the production of intermediates.

- Second, only around a quarter of the 240 million Indian working outside farms file their income tax returns. The controversial demonetisation decision taken in November 2016 seems to have led to a statistically significant increase in the number of new income tax filers, after controlling for obvious problems such as the previous trend as well as seasonal patterns of change.

- Third, the Indian workforce is more formalised than most people believed till recently. Nearly a third of the non-farm Indian workforce of 240 million has some social security coverage. And more than half of the non-farm workforce is employed in firms that now pay taxes.
• Fourth, the demonetisation shock is one reason—and perhaps not the only reason—why Indians are putting a greater proportion of their savings in the formal financial sector. Bank deposits swelled after November 2016, though the booming stock market has also made financial savings through mutual funds more attractive compared to gold or real estate.

These four shifts — more firms paying indirect taxes, more individual filing income tax returns, a big increase in the proportion of formal jobs and the increase in savings in the formal financial sector — can have profound effects on the Indian economy if they are sustained. It is quite likely that these claims will be the source of heated debate in the coming weeks.

Economists Tadit Kundu and Pramit Bhattacharya in a recent paper have written that India has a tax-to-GDP ratio that is broadly similar to what other countries had at a similar stage of development. The question is whether that ratio can be increased as India gets richer, which is difficult unless more economic activity moves into the formal sectors. This new job data offers the same hope in the future with higher tax revenue help to fund more social and infrastructural development in India.

Way Forward

It is essential to improve the condition of workers and enterprises in informal segment. It is known fact that those who work in informal employment are almost unlikely to enjoy worker benefits and social protection than those who work in formal employment. So, concerted action is required to improve the income, productivity and working conditions of the very large and growing number of workers involved in informal sector. In spite of the fact that not much has been done in providing social security cover to the rural poor and the unorganized labour force, the country has made some beginning in that direction. Both the central and state governments have formulated certain specific schemes to support unorganized workers which fail in meeting with the real needs and requirements of the unorganized sector labour force.

The informal sector is commonly thought of as a site of low-skilled or unskilled work. By looking at the low level of education, some vocational training is important, which will help in the transfer and development of skills and has a direct impact on productivity and therefore income. The government national skill development mission has been doing the task of providing training and vocational education to unskilled population, but the training is considered as a single intervention approach that does not require any complementary inputs.

However, the lack of institutional support and credit often comes in the way and makes training skill unusable. It is therefore of utmost importance that training should not be designed in isolation from the other necessary inputs. Training complemented with accessibility to credit at low interest rates through a decentralized system of loan delivery and collection, will make a real difference to income in the informal sector. The trend of informalization would see a reversal with an improvement in skill level of the workforce that match the requirement of the job market and at the same time improve the bargaining power of the workforce to settle for decent wages, social security and job security.

There should be linkage between training and skill development with jobs in the industry or other sector because most of the time gap between training and employment is so long that the skill training becomes obsolete. Creating an ambience that would encourage even micro and small enterprises to register and realize that this cost of formalisation is coming with benefits of access to finance, better infrastructure, market information, government incentives, a platform for formal association, prove legal framework, effort to overcome uncertainty in financial returns and safety
nets for them as well as their workers. This to a large extent will help to overcome challenge to informalization not only in unorganized sector but also arrest growth of informal employment in organized enterprises.

Lastly, the general perception is that the informal sector often competes with formal sector, as the former helps in cost minimization in production as it has lower wages. However, some studies showed that the informal enterprises have strong backward and forward linkages with formal sector enterprises. These linkages are beneficial for both formal and informal sector, because when informal enterprises grow they can also help the production process in formal enterprises by transforming inputs provided by formal enterprises into products and sending it back to formal sector. So informal sector not only provides jobs to millions of unemployed people, but it has complementary relation with formal sector.

Finally, the unregistered units in the informal sector face problem of access to credit market and other government subsidies. These units should be encouraged for registration by adopting proper process, so they can grow by accessing credit from formal financial institutions and also take advantage of other subsidies and create more employment for the unemployed youth.

Finally, is the country really moving towards Lewis Turning Point at a swifter pace? That is surely an intriguing matter. But, it will inexorably take the nation towards the next round of evolvement as a developed nation sooner or later.

References

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Author’s Profile

Balwant Singh Mehta is currently working as ‘Fellow’ at Institute for Human Development, New Delhi, India. His areas of interest are employment, unemployment, children well-being, poverty, inequality, Gender and ICT4D. He has published several books, reports and articles in reputed national and international journals on these topics. He has visited and presented his work in several countries around the world and worked as a consultant in various international organisations such as ADB, SDC and others. He has received national and international recognitions for his work as ‘Amy Mahan International Fellow’ from UPF, Spain; Research Fellowship from SIRCA, Singapore; Emerging Researcher from IDRC, Canada and Post-Doctoral Fellowship from ICSSR, New Delhi, India. He also writes in magazines, blogs and newspapers on contemporary issues.