STATE OF WORKING INDIA 2019

What do Household Surveys Reveal about Employment in India since 2016?

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Anand Shrivastava, Rosa Abraham, and Amit Basole
Centre for Sustainable Employment, Azim Premji University, Bangalore

We thank Janaki Shibu for assistance with data.
A shorter version of this paper appeared here: https://factchecker.in/100-million-jobs-created-bjp-minister-data-show-job-losses/

Executive Summary

1. India's labour statistics system is in transition. The five-yearly employment-unemployment surveys conducted by the National Sample Survey Office (NSS-EUS), the last of which was in 2011-12, have been discontinued. The annual surveys conducted by the Labour Bureau (LB-EUS) have also been discontinued. The last available survey in this series is from 2015.

2. The government has not released the results of the new high frequency Periodic Labour Force Survey (PLFS) conducted by the NSSO.

3. In the absence of official survey data, we use data from the Consumer Pyramids Survey of the Centre for Monitoring the Indian Economy (CMIE-CPHS) to understand the employment situation between 2016 and 2018.

4. CMIE-CPHS is a nationally representative survey that covers about 160,000 households and 522,000 individuals and is conducted in three ‘waves’, each spanning four months, beginning from January of every year. An employment-unemployment module was added to this survey in 2016.

5. We find that the CMIE-CPHS estimates of the labour force participation rate (LFPR) and the workforce participation rate (WPR) for men are comparable to those from the LB-EUS survey, as well as the NSS-EUS. For women, these rates differ substantially across surveys.

6. Our analysis of CMIE-CPHS reveals that:
   a. Five million men lost their jobs between 2016 and 2018, the beginning of the decline in jobs coinciding with demonetisation in November 2016, although no direct causal relationship can be established based only on these trends.
   b. Unemployment, in general, has risen steadily post 2011. Both the PLFS and the CMIE-CPHS report the overall unemployment rate to be around 6 per cent in 2018, double of what it was in the decade from 2000 to 2011.
   c. India's unemployed are mostly the higher educated and the young. Among urban women, graduates are 10 per cent of the working age population but 34 per cent of the unemployed. The age group 20-24 years is hugely over-represented among the unemployed. Among urban men, for example, this age group accounts for 13.5 per cent of the working age population but 60 per cent of the unemployed.
   d. In addition to rising open unemployment among the higher educated, the less educated (and likely, informal) workers have also seen job losses and reduced work opportunities since 2016.
   e. In general, women are much worse affected than men. They have higher unemployment rates as well as lower labour force participation rates.
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1 / Introduction

India’s labour statistics system has been under a cloud of uncertainty as it transitions from the quinquennial Employment-Unemployment Surveys (EUS) conducted by the National Sample Survey Organisation (NSSO) (the last of which was in 2011-12) to higher frequency, quarterly and annual Periodic Labour Force Surveys (PLFS). The move has been in the works since 2010. A pilot PLFS was conducted in 2012-13. The first full survey was carried out in 2017-18. In the meantime, the Labour Bureau (an entity under the Ministry of Labour and Employment, and distinct from the NSSO) conducted annual household surveys from 2009-10 to 2016-17. The most recent published results of the Labour Bureau Employment Unemployment Survey (LB-EUS) are for 2015-16.

The current government has not released the results of the last Labour Bureau survey (2016-17), nor the results of the PLFS, both of which have been cleared by the concerned authorities for public release. Thus we do not have official employment numbers based on nationally representative household surveys after 2015-16. The State of Working India 2018 also reports numbers only till that year.

Ordinarily, a two-year gap in such statistics would not matter much. After all, until 2011 these numbers were available only every five years. But this time, there has been a tremendous amount of media attention given to this issue. What has changed? We have argued elsewhere that the Indian labour market has been undergoing rapid changes over the last decade. This, together with major policy changes such as demonetisation and the introduction of the Goods and Services Tax (GST), have greatly increased the importance of jobs numbers for the 2016-2018 period.

Instead of releasing household level data on employment, the government has resorted to various other sector-specific sources of data such as the Employee Provident Fund Organisation (EPFO) database and the MUDRA database. Such administrative databases have the advantage of being high frequency and free from respondent/surveyor bias (if recorded accurately). However, their biggest disadvantage is that they do not cover the entire labour force. The EPFO database, for example, only has a stock of around 65 million workers, while the entire workforce is an estimated 450 million. Thus, increases in jobs numbers as per these databases may be overwhelmed by decreases elsewhere. For an economy like India, which still employs the majority of its workers via informal contracts, the net picture may be completely different from what is visible in the administrative data.

In the absence of official numbers from the PLFS, the only other household survey available for us to take stock of the employment situation going into the 2019 general election, is the Consumer Pyramids Survey of the Centre for Monitoring the Indian Economy (CMIE-CPHS). This survey is an ongoing nationally representative panel survey of around 160,000 households, conducted every four months. An employment-unemployment module was added to this survey in 2016. We use this survey to present some recent trends in employment. Since the CMIE-CPHS survey questionnaire is different from NSS/LB/PLFS surveys we also examine the comparability of the numbers obtained from CMIE to the government surveys.

Table 1: A comparison of labour market estimates from the three surveys

<table>
<thead>
<tr>
<th></th>
<th>LFPR MALE</th>
<th>LFPR FEMALE</th>
<th>WPR MALE</th>
<th>WPR FEMALE</th>
<th>UR MALE</th>
<th>UR FEMALE</th>
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<tbody>
<tr>
<td>2016 CMIE</td>
<td>46.8</td>
<td>74.8</td>
<td>15.6</td>
<td>43</td>
<td>70.7</td>
<td>12.1</td>
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<tr>
<td>2017 CMIE</td>
<td>49.8</td>
<td>75.8</td>
<td>23.3</td>
<td>46.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2018 CMIE</td>
<td>42.9</td>
<td>71.8</td>
<td>11.9</td>
<td>41.9</td>
<td>70.1</td>
<td>10.6</td>
</tr>
</tbody>
</table>

Sources and notes: LFPR – Labour Force Participation Rate, WPR – Workforce Participation Rate, UR – Unemployment Rate. Figures for 2016-17 LB and 2017-18 PLFS compiled from news articles by Somesh Jha (in Business Standard) based on leaked reports. 2016 CMIE figures authors’ own calculations based on CMIE-CPHS. * Rural and urban rates given separately since a combined rate is not available. From news article by Jay Mazoomdaar (in The Indian Express) based on leaked 2017-18 PLFS report.
Table 1 presents the key ratios, the labour force participation rate (LFPR, percentage of working age people working or looking for work), the workforce participation rate (WPR, percentage of working age people working), and the unemployment rate (UR, percentage of those in the labour force who are looking for work) in the past two years as observed in the different surveys. Three points are worth noting:

1. Although the levels of WPR, LFPR and UR differ quite a bit between surveys, the trends are similar.
2. The levels match much better across surveys for men than for women.
3. LFPR and WPR are broadly similar across surveys, while there is greater variation in UR reported across surveys.

The principal point, that is robust to the choice of survey, is that there is a decline in the size of the labour force as well as the workforce, and a concomitant increase in the rate of unemployment, between 2016 and 2018. This is a matter of concern.

In the remainder of the article we ask three key questions:

1. How comparable are the CMIE numbers to the government numbers?
2. What have been the trends in employment and unemployment between 2016 and 2018?
3. Who are the unemployed in terms of demographic characters such as age, gender, education, and so on?

2 / How well do the three labour force surveys compare to each other?

The CMIE-CPHS covers about 160,000 households and 522,000 individuals. The survey is conducted in three ‘waves’ with each wave spanning four months, beginning from January. Each individual is surveyed in every wave, so that for every year, the employment and unemployment status is available for three points in the year for every individual. To generate a annual sample, we randomly select one of the three observations for each individual.

We have conducted a detailed study of the comparability of the CMIE-CPHS survey with the LB-EUS and the NSS-EUS. Here we report the main conclusions. The interested reader is referred to the working paper for further information (See box).

LB-EUS and NSS-EUS are similar to each other in the definitions of employment used. But the two surveys differ in important respects from the CMIE-CPHS. The CMIE-CPHS identifies an individual as employed if he/she ‘is engaged in any economic activity either on the day of the survey or on the day preceding the survey or is generally regularly engaged in an economic activity’. Individuals who were in some form of employment, but were not at work on that particular day of the survey due to various reasons such as illness, leave or holidays were still considered as employed when there was a reasonable surety of them going back to work. On the other hand the LB-EUS reports two definitions of employment. A person is identified as ‘employed’ under the Usual Principal Activity status if he/she spent a relatively long time either working or looking for work during the 365 days preceding the survey. If a person is not employed or looking for work for the majority of the year, but working for at least a month in the 365 day reference period (i.e. subsidiary status), then he/she is identified as employed as per Usual Principal and Subsidiary Activity status. The NSS-EUS adds to these, two more definitions known as the Current Weekly Status and the Current Daily Status. We do not discuss these here. See box (facing page) for details on differences in definitions of employment used across surveys.

Another, minor source of difference is that CMIE-CPHS begins in January 2016, while the last LB-EUS for which data are publicly available was conducted between April 2015 to December 2015. Thus, there is no overlap between the two surveys, but they are sufficiently close to each other to warrant comparison of the numbers.
How do the CMIE, NSS and LB differ in their methods in elucidating employment information?

The NSS-EUS schedule uses four different reference periods to arrive at four possible activity statuses - one year, one month, one week, and each day of the reference week. A person is identified as ‘employed’ under the Usual Principal Activity status if he/she spent a relatively long time either working or looking for work during the 365 days preceding the survey. If a person is not employed or looking for work for the majority of the year, but working for at least a month in the 365 day reference period (i.e. subsidiary status), then he/she is identified as employed as per Usual Principal and Subsidiary Activity status. Under Current Weekly Status, a person is identified as working if he/she worked for at least an hour during the 7 days preceding the survey. A person’s activity status on each day of the reference week determines the Current Daily Status, where he is considered as working a full day if engaged for 4 hours or more, or a half day if less than 4 hours. However, unlike the other definitions, the CDS definitions demarcates a particular day as being ‘working’ or ‘not working’, not an individual. Hence CDS measures person days of employment rather than persons.

The Labour Bureau collects information on only two activity statuses - Usual Principal Activity Status and Usual Principal Subsidiary Status. The NSS-EUS or LB-EUS therefore, broadly identifies a person as either (i) employed, or (ii) unemployed i.e. did not work but was seeking and/or available for work, or (iii) not in the labour force - did not work and not looking for work.

The CMIE-CPHS identifies an individual as employed if he/she “is engaged in any economic activity either on the day of the survey or on the day preceding the survey or is generally regularly engaged in an economic activity”. Individuals who were in some form of employment, but were not at work on that particular day of the survey due to various reasons such as illness, leave or holidays were still considered as employed when there was a reasonable surety of them going back to work.

At first glance, the CMIE-CPHS approach may seem closest to the NSS current daily status. But as mentioned earlier, under CDS, the unit of observation is a day, rather than an individual. The CMIE-CPHS measure, on the other hand, uses the individual as the unit of measurement, rather than the day. At the same time, by allowing for individuals who are ‘generally regularly employed’ to also be identified as employed, the CMIE-CPHS definition is similar to the NSS-EUS UPS/UPSS approach.

Therefore, there is no definition of employment across NSS-EUS and LB-EUS that are perfectly comparable. Given this, we wanted to see if and how these definitional differences in identifying employment translate into differences in the measurement of employment. We first estimate a model using CMIE-CPHS that predicts an individual’s employment status. Our hypothesis is that if the CMIE and NSS/LB-EUS definitions of employment are similar, then this model built using CMIE-CPHS should also (more or less) correctly predict the employment status in the NSS/LB data.

To begin with, an individual’s economic activity status is typically dependent on their gender, age, educational level, the number of young children in the house and location (rural or urban). Within the CMIE-CPHS data, we estimate a model predicting an individual’s economic status conditional on the above factors. Using this model, we then predict the activity status of an individual in the LB-EUS data. For any given individual, the model will estimate the probability that that individual is (i) employed, (ii) unemployed, or (iii) not in the labour force. We take that probability which is the highest
as the predicted activity status of that individual. Then, we match this predicted activity with his actual activity status (as per LB). An observation may be Matched, Employment Overpredicted, Employment Underpredicted, LFP overpredicted, or LFP underpredicted.

An observation is identified as ‘Matched’ if the predicted employment status using the CMIE model is the same as the actual employment status in LB-EUS. It is identified as ‘Employment Overpredicted’ if LB identifies an individual as unemployed, but the CMIE model identifies him as Employed. An observation is ‘Employment Underpredicted’ if in the LB-EUS data he/she is employed, but the CMIE model categorises him/her into Unemployed. An observation is “LFP Overpredicted” if the individual is categorised as being in the labour force as per the model, while in the actual data he/she is out of the labour force. A similar reasoning follows for the category “LFP Underpredicted”.

The distribution of observations against these measures gives us an understanding as to what extent the predictions of the CMIE model overlap with actual observations, and where the source of differences lie – i.e., under-prediction or over-prediction. If the share of matched observations are high, this implies that similar factors determine activity status similarly, across LB and CMIE. This implies that definitional differences may not have a major impact on how an individual’s employment status is identified.

Further details on if and how the results differ when (i) alternative definitions of employment are used, (ii) when additional variables are included in the regression estimations, or (iii) when a model is estimated on LB and then run on CMIE-CPHS are available in Shrivastava and Abraham (2019).

A person’s employment status depends on their demographic characteristics such as age, gender, education, and rural or urban location. We would like to know the probability that a person with a certain set of characteristics, identified as employed or unemployed in CMIE-CPHS, would be similarly classified in the LB-EUS (even though that person does not exist in the latter). This is one way to find out how comparable the different surveys are. If the predicted employment status using parameters derived from CMIE-CPHS data is the same as the actual employment status in LB-EUS, we consider this a ‘match’. The higher the percentage of matches, the greater our confidence that the two surveys are attributing an employment status to an individual similarly (See Box for further details of methodology).

For 80 per cent of individuals in the LB-EUS data, their surveyed employment status is identical to that predicted on the basis of CMIE-CPHS derived parameters. Strikingly, this number is the same as using CMIE-CPHS derived parameters on itself. Further, this success rate does not change if we use a different definition of employment (such as principal and subsidiary status instead of principal status).

However, the results are different for men versus women. When we look those 20 per cent of individuals whose status does not match across surveys, women are over-represented. In particular, the CMIE-CPHS model tends to underpredict women’s labour force participation, i.e. it predicts women to be out of the labour force, when, in reality, they are either working or unemployed. Thus the model of labour supply does not work as well for women and both surveys miss some important factors that determine women’s labour force or workforce participation.

Another way to approach the question of comparability across surveys is to compare the state level estimates of various measures (LFPR, WPR), as obtained from the different surveys. We compare between CMIE-CPHS 2016 and LB-EUS 2015-16. We find that the LFPR and WPR estimates for men, from CMIE-CPHS and from LB-EUS matched pretty closely, but there were significant variations in the case of women’s WPR and LFPR.
Figure 1:
State-level comparisons of LFPR and WPR: CMIE-CPHS and LB-EUS estimates

1a / Overall LFPR

1b / Overall WPR

1c / Male LFPR
Sources and notes: Author’s calculations using unit-level data from CMIE-CPHS 2016, LB-EUS 2015. See Appendix for list of State codes.
As can be seen in Figures 1a and 1b, the overall LFPR and WPR measured in the two surveys are correlated with each other, but there are some significant outliers as well. Further, in general the LFPR as measured by LB-EUS is around 6 percentage points higher than that measured by CMIE-CPHS. The corresponding figure for the WPR is 10 percentage points. This is seen in the line-of-best-fit being displaced upwards compared to the 45 degree line.

When we examine the two ratio separately for men and women, we find that the agreement between the two surveys is much better for the former. Figures 1c and 1d show the state-level variation for male LFPR and WPR respectively. Note that the scale is much narrower indicating smaller variation across states in this ratio. Also, significantly, the line of best fit and the 45 degree line lie on top of each other for male LFPR, and they are very close in the case of WPR (LB-EUS estimates are higher by about 0.9 percentage points). This shows that the two surveys are very close to each other in estimating these ratios for men.

The picture looks very different for women. Figures 1e and 1f show the state-level variation for female LFPR and WPR respectively. First, note the difference in scale compared to the earlier graphs. Second, it is clear that the scatter is much larger, with the two surveys differing from each other by as much as 25 percentage points on average in the case of the LFPR and 44 percentage points in case of the WPR.

Taken together, both the econometric analysis and analysis of state-level variations indicate that measures of women’s participation in the labour force are particularly sensitive to the way questions are asked in surveys, and predictions of women’s LFPR based on standard labour supply variables are much less reliable than those for men.

One last point to be noted is that, even though the LB-EUS, NSS-EUS, and CMIE-CPHS surveys are reasonably matched at the individual level (at least for men), and the trends in key parameters are similar (Table 1), they differ greatly when it comes to the absolute level of the unemployment rate. This is because the variations in the LFPR and the WPR are compounded in the calculation of the unemployment rate.

Keeping these caveats in mind, here we focus on male LFPR and WPR numbers estimated in CMIE-CPHS.

3 / What has happened to employment since 2016?

Being the only comprehensive household-level labour survey since 2015-16, a central question that can be answered with the help of the CMIE-CPHS data is how the employment situation has changed since early 2016. We now present the trends in the male labour force and workforce participation rates in rural and urban areas (Figure 2).
In Figure 2a, we see the trends in LFPR and WPR for men over a period of three years starting from the first wave of 2016 (Jan to Apr 2016). The nine time periods on the horizontal axis correspond to the nine waves - three in each year. It shows that the labour force participation started to decline suddenly from the third wave of 2016 (September to December 2016) for both urban and rural men. The rate of decline slowed down by the second wave of 2017, but the general trend has continued and there has been no recovery. The timing of the start of the decline coincides with the demonetisation of high value currency notes in November 2016, although we cannot ascribe any causal link based only on these trends. The WPR follows a similar trend, though the rate of decline is not as sharp as for LFPR.

Between the third wave of 2016 and the third wave of 2018, the urban male workforce participation rate (WPR) fell by 3.6 percentage points from 69.1 per cent to 65.5 per cent. For the same period, the rural male WPR fell by 3.2 percentage points from 71.8 per cent to 68.6 per cent. All India (rural and urban) male WPR fell by 3.3 percentage points in this period.

What does a 3.3 percentage point decline in the WPR mean in terms of jobs lost? We can answer this question by drawing on the population estimates provided by the UN Department of Economics and Social Affairs. As per these data, the male working age population in India increased by 16.1 million between 2016 and 2018. Accounting for the increase in working age population, the decline in the WPR amounts to a net loss of 5 million jobs during this period. Recall that this analysis applies to men only. When we take women into account, the number of jobs lost will be higher.

Broadly, these trends can be interpreted as saying that the proportion of working age men who are in employment continues to go down. This is the opposite of what one would expect with the ‘demographic dividend’ where the ratio of the working age group to the rest of the population increases, thus spurring higher growth. Whether or not this decline was caused by demonetisation, it is definitely a cause for concern and calls for urgent policy intervention.

Finally, we note that the recent decline in LFPR and WPR has affected men with different educational backgrounds differently. In Figures 3a and 3b, we show the disaggregated trends by education levels. While detailed data on the education level of surveyed individuals is available, here we group them into two broad categories for simplicity. The ‘high education’ group consists of men with a diploma or degree beyond Class 12.

The graphs show that the decline in LFPR and WPR is largely driven by men with lower education levels, for both rural and urban areas. For example, at the beginning of the period under analysis, the WPR for both groups of men in urban areas was similar at around 68 per cent. By the end, the WPR for higher educated men had increased to 71.9 per cent while that for less educated men had fallen to 63.7 per cent.
Clearly, there is a large differential impact by level of education. This is consistent with the idea that the informal sector, where we can expect the share of less educated men to be higher, was hit hardest by demonetisation as well as the introduction of GST. One question that may arise is, how can informal workers afford to remain out of the labour force? The answer may lie in the fact that a lower WPR does not necessarily mean a given person is fully out of work. Rather, it can be a result of the fact that work has become less regularly available, leading to a lower probability that the individual will be counted as part of the workforce in a survey.

As far as the educated are concerned, we can see that the gap between the LFPR and WPR is much higher for them than for the less educated. This indicates, as expected, that the levels of open unemployment are higher for this section of the population. We analyse the composition of the openly unemployed in the next section. But the foregoing analysis shows that, in the current scenario, joblessness is not only a problem limited to the educated sections of the labour force. While open unemployment may still be low among the less educated, there has been a marked tendency to drop out of the labour force for this section, presumably due to loss of work opportunities. Any policy intervention that addressed the employment issue must address the needs of this less educated section of the labour force.

The point bears repeating: much of the current debate over jobs has focused on unemployment among the higher educated. While this is indeed a problem, we must also be aware of the fact that the last two years have not been good for the less educated sections of the labour force as well. And in absolute terms, this is a much larger number of people in the more vulnerable sections of society.
4 / Who are the unemployed?

The recently leaked PLFS data as well as several other anecdotal pieces of evidence suggest that open unemployment has been increasing in India. This is particularly true of the educated youth. Table 2 shows the long-run trend in the unemployment rate since 1999-00 for the entire labour force as well as for the higher educated.

Table 2: Unemployment rate, overall and among highly educated for the past two decades

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<tbody>
<tr>
<td>Overall</td>
<td>2.7</td>
<td>3.1</td>
<td>2.7</td>
<td>3.8</td>
<td>5.0</td>
<td>8.2</td>
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<td>Male</td>
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<td>5.5</td>
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<tr>
<td>Female</td>
<td>2.4</td>
<td>4.2</td>
<td>3.7</td>
<td>6.9</td>
<td>8.7</td>
<td>22.4</td>
<td>14.2</td>
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<table>
<thead>
<tr>
<th>Unemployment Rate among Educated (Degree/Diploma beyond Class 12)</th>
<th>Overall</th>
<th>Male</th>
<th>Female</th>
</tr>
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<tbody>
<tr>
<td>Overall</td>
<td>10.3</td>
<td>8.4</td>
<td>21.1</td>
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<tr>
<td>Male</td>
<td>10.7</td>
<td>7.5</td>
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<tr>
<td>Female</td>
<td>10.3</td>
<td>8.4</td>
<td>21.3</td>
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</table>

Sources and notes: Author’s calculation based on NSS EUS various rounds, LB-EUS various rounds, CMIE-CPHS. Unemployment Rate for Educated Unemployed for LB 2011 is for Graduates only since unit-level data is not available.

The overall unemployment is likely to be driven by what is happening to the educated section of the labour force. This is because it is this section which tends to aspire to a regular, formal sector job and who can ‘afford’ the luxury of being unemployed. Therefore, they are more likely to report as unemployed and looking for work rather than working at any available job in the informal sector. This is made clear in Table 2. During the entire time that the overall unemployment rate was around 3 per cent, the unemployment rate among the educated was 10 per cent. It has increased since 2011 to around 15-16 per cent.

Another important point to note is that both overall unemployment as well as unemployment among the educated tends to be much higher for women compared to men. This is true across all surveys (NSS-EUS, LB-EUS, PLFS, and CMIE-CPHS) and hence is likely to be a stable feature of the labour market, not driven by choice of survey questions or method.

We would like to know the demographic composition of the pool of unemployed workers, in particular, with respect to education and age. The rate of unemployment, as we noted earlier, is subject to a compounding of errors especially in the case of women, leading to large variations and loss of comparability across surveys. Instead of using the unemployment rate, we analyse the share of various demographic groups in the total pool of unemployed workers in 2018. For the purposes of this analysis, those who report being willing to work and are looking for work, are counted as being unemployed.4

Figures 4 and 5 depict the share of various groups of workers disaggregated by education level and age in the pool of the unemployed relative to their share in the working age population. The ratio of these two shares (which we call the Representation Index) gives us a measure of over- or under-representation of that group in the unemployed. We do the analysis separately for rural and urban, male and female workers.
Figure 4: Share of various education groups in the unemployed vis-a-vis their share in the working age population, 2018

4a / Rural Men

4b / Urban Men

4c / Rural Women

4d / Urban Women

Sources and notes: Author's calculations using CMIE-CPHS 2018 unit level data.
Across all four slices (rural-urban, men-women), those who are educated beyond Class 10, and graduates in particular, are over-represented among the unemployed (Figures 4a to 4d). For example, among rural men, graduates are around 7 per cent of the working age population but over 20 per cent of the unemployed, giving a representation index of 3.3. Among urban women, graduates are 10 per cent of the working age population but 34 per cent of the unemployed, giving a representation index of 3.4. Among rural women, graduates form only a small 3.2 per cent of the working age population, but they make up 24 per cent of the unemployed (representation index = 7.4).

Similarly, across age groups, the age group 20-24 years is hugely over-represented (Figures 5a to 5d). Among urban men, for example, this age group accounts for 13.5 per cent of the working age population but a whopping 60 per cent of the unemployed. In fact the representation index for this group exceeds 4 for all the slices (rural and urban, men and women). Beyond this age group, particularly for women, the 25-34 years group is also over-represented among the unemployed.

Thus broadly speaking, open unemployment in India today is largely a concern for those under 35 years of age and those who are educated beyond Class 10, and particularly beyond Class 12.
5 / Conclusion

The last three years have been one of great turmoil in the Indian labour market as well as in the system of labour statistics. While we await the official data from the 2017-18 PLFS, the CMIE-CPHS remains the only source of household employment data for this period. Here we have used this data to present a picture of the employment situation in India. Four big lessons stand out:

1. Unemployment, in general, has risen steadily post 2011, whichever household survey we examine (LB-EUS, PLFS, or CMIE-CPHS).
2. The higher educated and the young are vastly over-represented among the unemployed.
3. In addition to open unemployment among the educated, the less educated (and likely informal) have seen job losses and reduced work opportunities over this time period.
4. Women are worse off than men with respect to levels of unemployment as well as reduced labour force participation.

The numbers clearly demonstrate why unemployment has emerged as the primary economic issue in the general election of 2019.

Endnotes

1. The NSSO did release annual numbers from the “thin” rounds which had a sample size of around 30,000 households (as opposed to over 100,000 for “thick” rounds). But these were not used very frequently.

2. https://www.theindiaforum.in/article/employment-question-india

3. India’s working age population (15+ years) increased from 950.8 million in 2016 to 983.1 million in 2018. Assuming a 50:50 male to female ratio in the working age population, we can arrive at estimated number of working age men. Applying the WPR to this number gives the size of the workforce for a given year. Source: United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision, custom data acquired via website.

4. The NSS/LB survey identifies those who ‘did not work but was seeking and/or available for work’ as the unemployed. The CMIE, on the other hand, have two types of unemployed workers. There are those who are unemployed, willing and looking for a job, and those who were unemployed, willing but not looking for a job.
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