



► Spotlight on Work Statistics n°13

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The jobs gap: Measuring labour underutilisation beyond unemployment

Summary

An indicator recently developed by the ILO, the jobs gap, is shown to be an important complement to the unemployment rate. The indicator is particularly relevant to assess the difficulties that women face in finding a job. It also highlights job creation challenges in the developing world.

The latest jobs gap data at the country, regional and global level is available in [ILOSTAT](#).

Introduction

Unemployment is the best-known and most widely used measure of labour underutilisation, but it is also the most restrictive one. To be considered unemployed, jobless persons need to be available to take up employment at very short notice (typically a week) and to have been recently searching for a job. Whereas this metric is a critical measure for policy makers, a vast number of people do not fulfil these strict conditions, but nevertheless have an unmet need for a job.

The [19th International Conference of Labour Statisticians](#) (ICLS) recognised the importance of measuring labour underutilisation beyond unemployment. For those without a job, the resolution identified the “potential labour force” and “willing non-job seekers” as separate groups from the

unemployed that are also relevant to assess the degree of labour underutilization. The potential labour force includes those who have recently been searching for a job but are not available to work within a short reference period and those who have not searched recently but are available to work within a short reference period (i.e. they fail to satisfy only one of the criteria to be considered unemployed). A third category, willing non-job seekers, is composed of those who want employment but have not recently searched and are not available at short notice (i.e. they fail both criteria).

These three categories, unemployed, potential labour force, and willing non-job seekers represent different degrees of labour market attachment. The unemployed are very likely to have a higher probability of finding a job compared to the other two categories. Willing non-job seekers will tend to be at the other end of the spectrum, with the lowest probability of finding a job. Consequently, the distinction between these categories is highly relevant for economic analysis and policy making. Indeed, job-search and availability status are critical components of different policy objectives and strategies.

Nonetheless, the ability to job-search and the availability to take up employment at short notice is not evenly distributed across demographic groups, or level of national income. First, these criteria are less

likely to be met by women, for instance due to their disproportionate involvement in unpaid care work. These activities can leave little time for job search and one week is often too short to arrange alternative care. Second, in developing countries, both the job search and availability at short notice criteria can be highly restrictive due to informal work arrangements, temporary spells of agricultural work, and own-use services provision. These notions are not just theoretical, the results discussed below will show that the differences across gender and income group are salient and economically substantial.

For a comprehensive economic, social, and gender analysis of the unmet need for employment, it is critical to consider all persons wanting a job but not necessarily classified as unemployed. To this end, the ILO has developed a new indicator, the “jobs gap”, which leverages the ICLS concepts to capture all persons who want employment but do not have a job (including the unemployed, the potential labour force and willing non-job seekers). This indicator, together with unemployment and the potential labour force, provides a comprehensive view of labour market “slack” in the extensive margin, i.e. for those individuals that do not have a job.

Relationship to other commonly used labour underutilisation metrics

There are several labour underutilisation measures beyond the unemployment rate. They can be divided into two broad categories: measures that include employed persons (affected by insufficient working time) and measures that only include those not in employment. The first category includes underemployment on the intensive margin (lack of access to employment with sufficient working

hours), whereas the second type captures the extensive margin of underutilisation (lack of access to a job). The jobs gap is part of the latter category.

The following labour underutilisation measures exclusively cover the extensive margin:

- U-4 (as defined by the United States Bureau of Labour Statistics - BLS): adds to those unemployed those that have stopped search due to discouragement related to state of the job market.
- U-5 (as defined by BLS): additionally to U4, it includes those available for a job that are not currently searching but did at some point in the previous 12 months.
- LU3 (as defined by the 19th ICLS): adds to the unemployed those that are unavailable but are seeking work, and those available but not seeking.
- Jobs gap: includes every person that wants employment regardless of whether they are currently available or searching for a job. It can be thought of as the measure with the most relaxed definition of underutilization on the extensive margin.

Other widely used measures, such as LU2 and LU4 (from the 19th ICLS framework) or U6 (from BLS) include those who have a job but are affected by insufficient working time. Hence, they include underutilisation at the intensive margin.

Jobs gaps and unemployment – differences and similarities

The cyclical behaviour of unemployment is perhaps one of its most well-known features in the context of stabilisation policies.¹ The countercyclicality of the jobs gap (-57 per cent correlation with GDP) is very similar to the unemployment one (-54 per cent)² (see Table 1), and the two have a correlation coefficient of 82 per cent. To a certain extent, this is not

¹ For monetary policy see for instance: Jordi Galí, Chapter 10 - Monetary Policy and Unemployment, Editor(s): Benjamin M. Friedman, Michael Woodford, Handbook of Monetary Economics, Elsevier, Volume 3, 2010. For fiscal policy, see for instance: Blanchard, Olivier J., and Daniel Leigh. “Growth Forecast Errors and Fiscal Multipliers.” *The American Economic Review* 103, no. 3 (2013): 117–20.

² The correlation of unemployment with GDP is highly variable across countries, with an average close to -50 per cent and a standard deviation of 39 percentage points.

surprising, as unemployment is included in the jobs gap. Nonetheless, it is important to highlight that unemployment is the most countercyclical component of the jobs gap, with the potential labour force being sizeably less reactive to the business cycle and willing non-job seekers being essentially acyclical.

The evidence indicates that the behaviour of the jobs gap at cyclical frequencies is not only similar to unemployment, but in fact it is driven by it. It then follows that the rest of the labour underutilisation measures included in the jobs gap play a minor role in the cyclical behaviour of the variable. This conclusion also translates into the observed relationship between inflation and the jobs gap. The negative correlation between unemployment and inflation – usually labelled the Phillips Curve – also holds for the jobs gap. For the potential labour force and willing non-jobseekers, the correlations are lower.³ Thus, the policy implications of measuring labour market slack with the jobs gap,

alongside unemployment, are not sizeable if one is interested solely in cyclical changes.

A qualifier to this conclusion concerns the countercyclicality of unemployment in the developing world. Table 1 shows the cyclicity of labour underutilisation measures by splitting the sample, considering high-income countries and the rest of the world. Whereas the same broad messages remain, in high-income countries unemployment accentuates its countercyclical behaviour. In contrast, in low- and middle-income countries the negative correlation of the jobs gap with GDP is sizeably larger than that of unemployment. Moreover, the potential labour force becomes the most countercyclical of all the labour components of the jobs gap. Nonetheless, it remains the case that the short-run behaviour of the jobs gap is highly correlated with unemployment, even in low- and middle-income countries (with a correlation coefficient of 78 per cent).

► **Table 1 – Cyclicity of labour underutilisation**

Cyclical correlation with GDP	Global sample	High-income countries	Low- and middle-income countries
Jobs gap	-57%	-61%	-50%
<i>Components:</i>			
Unemployment	-54%	-63%	-36%
Potential labour force	-35%	-31%	-43%
Willing non-job seekers	-13%	-18%	-4%

Source: Authors’ computations based on ILOSTAT for labour statistics and IMF and WB data for national accounts. Available observations: 771, including 226 from low- and middle-income countries and 545 from high-income countries. The cyclical correlation is assessed for GDP growth and percentage point differences in the relevant labour underutilisation measure (in rates). Samples are matched exactly, only results from country-years with all the variables available are considered.

³ The correlation (based on 729 observations) of the rate of change of inflation and the growth in p.p. of labour underutilisation metrics is: -

17% for the jobs gap, -22% for unemployment, -8% for potential labour force and +2% for willing non-job seekers.

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In contrast, the cross-sectional correlation between labour underutilisation and GDP per capita shows markedly different results for the jobs gap compared to unemployment. Unemployment is orthogonal to GDP per capita (+1 per cent correlation). Meanwhile, the jobs gap is negatively correlated with it (-36 per cent). The potential labour force has the most negative correlation (-47 per cent) whereas the correlation with willing non-job seekers is smaller (-32 per cent).

This suggests that different economic structures – related to economic development – influence the behaviour of those wanting a job and alter the relative importance of unemployment in overall labour underutilisation. The effect is large, with the

average difference between the jobs gap and unemployment reaching 13 percentage points (p.p.) for the countries with the lowest GDP per capita in our sample, and an average of 4 p.p. at the higher end of national income. Moreover, the difference is statistically significant at all usual confidence levels. Hence, a lack of jobs – at the extensive margin⁴ – is sizeably more acute at the low end of the income distribution, in contrast to what unemployment figures would suggest. This implies that when analysing levels of labour underutilisation, complementing the unemployment rate with the jobs gap indicator is of critical importance in the developing world.

► **Table 2 – Labour underutilisation and economic growth in the long-run, cross-sectional variation**

	Cross-sectional correlation with GDP per capita
Jobs gap	-36%
<i>Components:</i>	
Unemployment rate	1%
Potential labour force rate	-47%
Willing non-job seekers rate	-32%

Source: Authors' computations based on ILOSTAT for labour statistics and IMF and WB data for national accounts. Available observations: 104 country averages (derived from 2,699 annual observations). To compute the cross-sectional correlation, both the natural log of GDP per capita and the relevant labour underutilisation measure (in rates) are averaged across countries. Samples are matched exactly, only results from country-years with all the variables available are considered.

Finally, gender differences are considered. As discussed in the introduction, the definition of unemployment can be disproportionately restrictive for women. The existing evidence heavily supports this hypothesis. Whereas the average unemployment rate across countries is somewhat higher for women than men (2 p.p.), the jobs gap

average is 7 p.p. higher for women. This is driven by larger gender gaps both in the potential labour force (5 p.p.) and willing non-job seekers (3 p.p.). The relative dispersion of results increases as the degree of labour market attachment decreases, highlighting the greater country heterogeneity in the latter measures. These findings suggest that

⁴ Abstracting from other likely decent work deficits such as underemployment and job quality.

focusing solely on unemployment will tend to underestimate the difficulties that women face in finding a job and that the degree of

underestimation is highly variable according to national circumstances.

► **Table 3 – Labour underutilisation and gender, cross-sectional variation**

Average rates	Women	Men
Jobs gap rate	21% (13.3)	14% (7.9)
<i>Components:</i>		
Unemployment rate	10% (7.5)	8% (5.1)
Potential labour force rate	10% (10.8)	5% (4.9)
Willing non-job seekers rate	6% (7.4)	3% (3.9)

Source: Authors' computations based on ILOSTAT data. Available observations: 104 country averages (derived from 2,699 annual observations) for each demographic group. The first row in each cell presents the average rate, in the second row in parenthesis the standard deviation is expressed. Note: the three average components do not linearly add to the jobs gap average as covariance terms affect the jobs gap. Moreover, even at the individual country level, linear addition will not match the jobs gap due to the denominator of each rate being different, following (LU level)/(Employment+LU level).

Global Trends

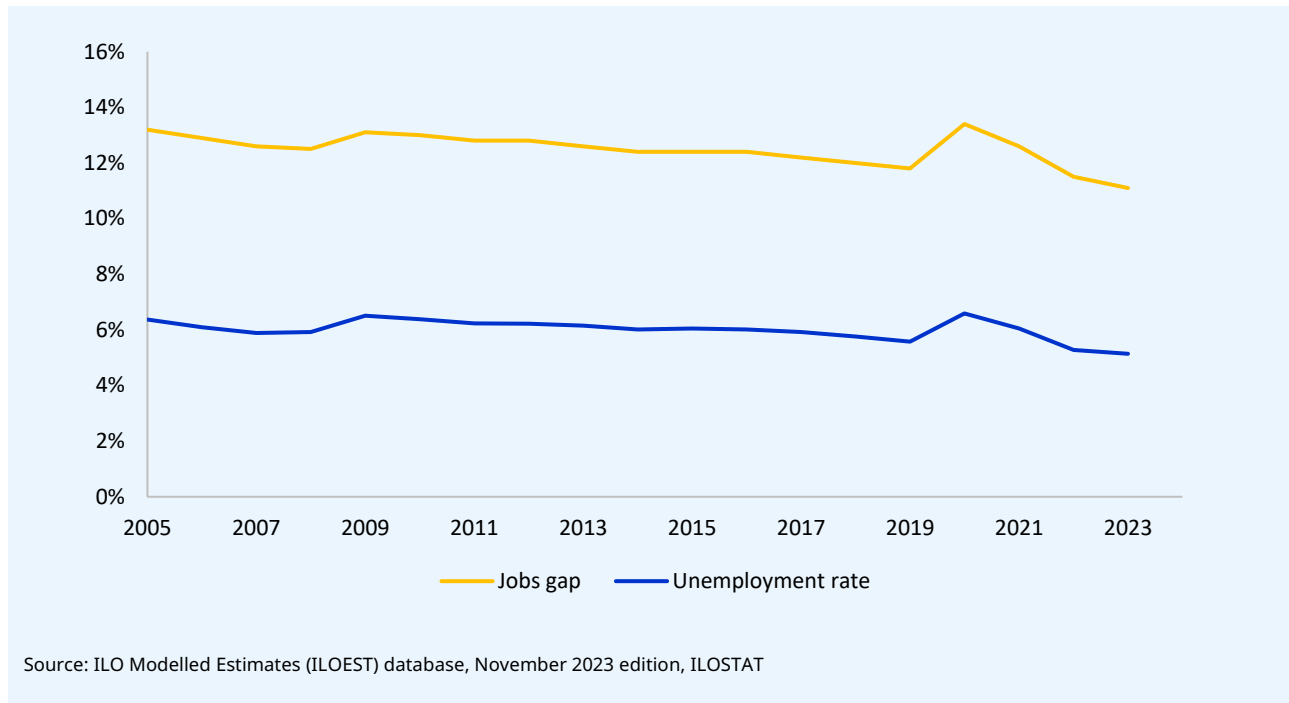
The ILO estimates that the jobs gap stands at 11.1 per cent in 2023, accounting for 435 million people – more than double the unemployment count. This represents a substantial revision with respect to the latest estimates for 2023 (11.7 per cent) published in the [11th ILO Monitor](#). The revision reflects the incorporation of new observations, which suggest a larger than expected decline, broadly shared across regions.⁵ Figure 1 presents the global trends of both

unemployment and the jobs gap during the last two decades. The increases experienced during the COVID-19 pandemic have been fully reversed, and labour underutilisation according to either metric is now below the 2019 level, which was then the lowest level registered since 2005. Nonetheless, even these historically low levels indicate substantial joblessness, with 189 million unemployed and an additional 246 million people facing an unmet need for employment.

⁵ It should be noted that global and regional estimates of any indicator are subject to substantial uncertainty. Moreover, the uncertainty is larger for a newly developed indicator such as the jobs gap given that data

availability is more limited than in the case, for instance, of unemployment.

► Figure 1 – Unemployment rate and jobs gap, global trends 2005-2023



Disaggregating the global rate reveals highly unequal incidences, consistent with the results above. Figure 2 presents a comparison of unemployment rates and the jobs gap indicator by gender and country income group. The smallest jobs gaps are found in high-income countries, where men register a rate of 7.2 per cent and women 9.5 per cent. However, as national income decreases, the jobs gap increases, as do gender differences. In low-income countries, the jobs gap reaches 24.3 per cent for women, while men register a rate of 17.4 per cent. This pattern is in stark contrast with the unemployment rate, readings of which lie in a

narrow band between 4.3 and 5.7 per cent. Overall, the estimates point to severe difficulties faced by women in finding a job, particularly in the least developed countries, and also for men in low-income countries. Taken together, the available data suggest that the jobs gap indicator represents an important complementary indicator to the unemployment rate – one that could help provide a more nuanced and policy-relevant understanding of the relationship between macroeconomic policy and labour market outcomes for different types of countries and different segments of the labour market.

► Figure 2 - Unemployment rate and jobs gap, 2023, by gender and country income group

