

Exploring labour market tightness and its implications: a case study for Slovenia*



By Mojca Lindič, Bank of Slovenia

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This analysis studies the tightness of the Slovenian labour market from several perspectives; through various indicators of labour market tightness, and graphical and empirical estimation of the Beveridge curve. The results of the analysis show that there is a high degree of tightness in the Slovenian labour market and that the remaining labour market slack is not large enough to adequately alleviate the excess demand for workers. From the perspective of the remaining labour market slack, an analysis of labour market participation is also relevant. The latter shows that promoting labour market participation of the elderly would be particularly important, as it remains below the euro area average. This would be important also in the light of the estimated labour market trends, as the active population in Slovenia is expected to decline significantly in the coming decades.

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1. Introduction

Similarly to other European countries (European Commission, 2022a), the decline in employment in Slovenia during the pandemic was relatively smaller than the contraction in economic activity, and one of the reasons for this was the possibility of using job retention schemes. Accordingly, the increase in unemployment has remained below the historical GDP-to-unemployment ratio set by Okun's Law. Job retention schemes also enabled firms to set up production processes more quickly and efficiently at the end of the pandemic, saving them time that would otherwise have been spent on recruiting and training new employees. As economic activity recovered, so did the demand for workers, leading to employment in the third quarter of 2021 already surpassing the pre-pandemic peak of the third quarter of 2019. Despite the current moderation in economic activity, hiring expectations remain positive and the share of firms facing a shortage of suitable workers remains high.

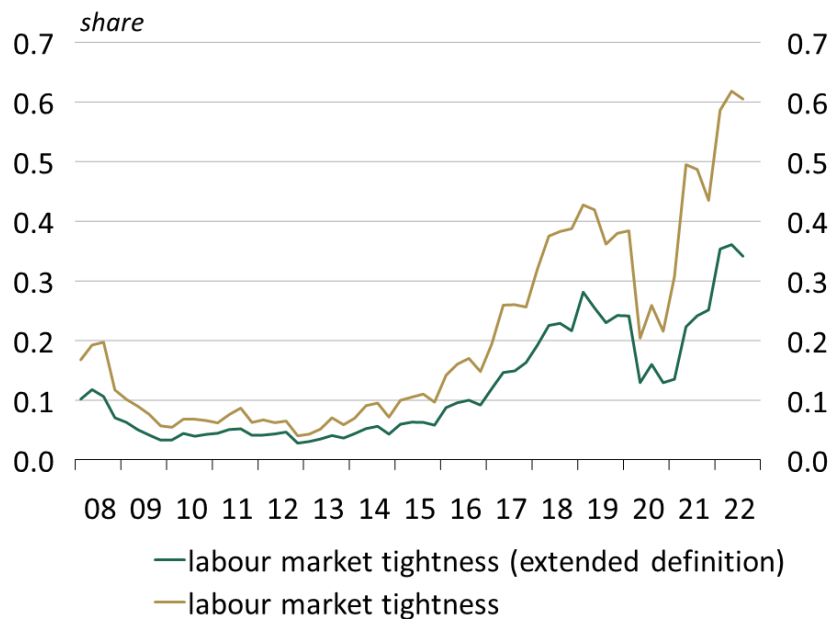
This publication analyses in more detail the tightness and presence of the labour market slack in the Slovenian labour market. The analysis is important as despite the high labour market tightness, the presence of a sufficient labour market slack could alleviate recruitment difficulties for firms, which could in turn have significant implications for labour market forecasts and policy measures; even more so in the light of projected demographic changes.

2. Slovenian labour market tightness is at historically high levels

2.1 The state of play

Labour market tightness is reflected in the relatively high number of job vacancies compared to the number of jobseekers. As a result, the matching efficiency of the labour supply and demand is reduced and the share of firms having difficulty recruiting increases. The tightness of the Slovenian labour market is reflected, among others, in the results of the Employment Service of Slovenia (ESS) survey, which shows that in the second half of 2022, the share of employers facing a shortage of suitable staff increased to 56.8%, with the problems being most pronounced in large firms, where 81.4% of them faced this problem.

The high tightness of the Slovenian labour market is confirmed also by the indicator of labour market tightness (Figure 1). The latter is calculated as the ratio of the number of job vacancies to the unemployment and thus reflects demand for labour relative to the available supply of labour. Furthermore, this study takes into account also an additional indicator, which uses labour market slack as the denominator. Both indicators show that tightness in the Slovenian labour market declined marginally in the third quarter of 2022, but remained at historically high levels. Given that both, unemployment and labour market slack, declined in the third quarter of last year compared to the previous quarter (Figure 3), the decline in the tightness indicator was due to a lower number of job vacancies.

Figure 1: Labour market tightness in Slovenia

Note: Labour market tightness indicator is calculated as the share of job vacancies in unemployment. Labour market tightness (extended definition) is calculated as the share of job vacancies in the labour market slack. Source: Eurostat, SORS, own calculations. Latest data: Q3 2022.

2.2 Untangling the relationship between unemployment and labour shortages

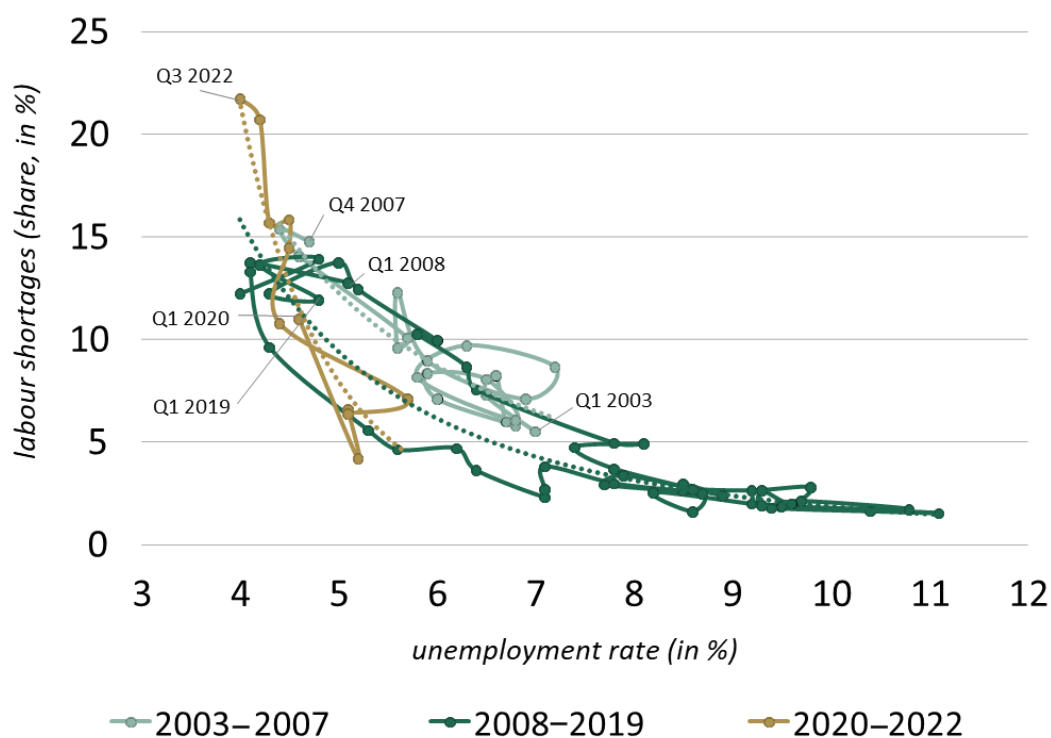
The state of the labour market is also reflected in the Beveridge curve, which shows a negative relationship between unemployment rate and labour shortages (European Commission, 2022a), or alternatively between unemployment rate and vacancy rate (IMF, 2022 and ECB, 2019). The relationship between these series is negative, as a lower number of posted vacancies reduces the likelihood that unemployed individuals will find a job, which in turn leads to a higher unemployment rate (European Commission, 2022a).

Shifts in the Beveridge curve and movements along the curve are usually associated with labour market efficiency and tightness (ECB, 2019). The latter is characterised by movements along the Beveridge curve that result from fluctuations in the business cycle. For example, during recessions, firms post fewer vacancies and disclose smaller difficulties in hiring, which in turn is associated with higher unemployment rates. Labour market tightness thus decreases in a recession, which is reflected in a downward movement along the curve (ECB, 2019). Historical business cycles show that the movement of the job vacancy series is the leading indicator of the business cycle, while unemployment moves with a lag. A negative shock to labour demand is thus reflected by a counter-clockwise movement of the Beveridge curve (European Commission, 2022a).

On the other hand, shifts in the Beveridge curve are associated with labour market efficiency, which reflects the efficiency of the process of allocating unemployed persons to vacant jobs. Labour market efficiency decreases as the Beveridge curve moves away from the origin (ECB, 2019), which suggests that job vacancies are becoming increasingly difficult to fill with labour available in the labour market (OECD, 2022a).

Figure 2 illustrates the Beveridge curve for Slovenia from the perspective of labour shortages, whereby the developments are similar when the vacancy rate is used as the vertical axis. The figure shows that the demand for workers in Slovenia recovered relatively quickly after the end of the pandemic. As the supply of workers could not keep pace with the rising demand, the rate of decline in the unemployment rate was lower than the rate of increase in the demand for labour. As a result, there has been a pronounced upward movement along the curve and its slope has become steeper. This has led to greater labour market tightness. One reason for these developments could be the fiscal stimuluses, which helped to preserve firms, jobs, and purchasing power during the pandemic and facilitated economic recovery after the pandemic ended (OECD, 2022a). Similar trends in Beveridge curves are also observed in other countries (European Commission, 2022a and OECD, 2022a).

Figure 2: The Beveridge curve for Slovenia



Notes: Labour shortages show the sum of the shares of firms in services, construction and manufacturing reporting shortages of workers. The sum is weighted by the share in value added. The dotted lines show the trend lines over each period, the tick marks show the beginning and the end of the period.

Source: Eurostat, SORS, own calculations. Latest data: Q3 2022.

The movement of the Beveridge curve (Figure 2) also shows the difference in the nature of the last two economic crises; the global financial crisis and the pandemic. At the onset of the financial crisis, there was a decrease in labour market tightness (downward movement along the curve), then a decrease in labour market efficiency (shift of the curve away from the origin), and after the recovery of economic activity, a renewed increase in labour market tightness (upward movement along the curve). Compared to the pandemic, the recovery of labour demand after the end of the financial crisis has been much slower and, consequently, the increase in labour shortages has been less pronounced. This could be due to the aforementioned job retention schemes, which maintained the links between employers and workers during the pandemic (OECD, 2022a).

The graphical representation presented above has been confirmed by the empirical estimation of the Beveridge curve, which also confirms the change in the slope of the Beveridge curve over the three periods considered, underlining the increase in labour market tightness.

2.3 How are firms coping with a tight labour market?

Despite persistent high labour market imbalances, survey data from SORS and ESS point to further employment growth in the first half of this year, with the most in-demand occupations being those for which firms are already having difficulty recruiting. The ESS survey shows that more than half of the occupations included in the survey will face a shortage of staff in 2023. Another survey, conducted by the ESS last autumn, shows that more than half of employers are facing shortages of suitable staff, with these being most pronounced in large firms. More than two thirds of firms cite the lack of staff on the domestic labour market as the reason for recruitment problems, which has led firms to prolong recruitment procedures and to look abroad for workers, while in business processes, staff shortages have most often been solved by overtime work.

Against the backdrop of increased labour shortages in the domestic labour market, recruitment of foreign nationals has picked up again in 2022. They have contributed more than three-quarters of the year-on-year growth in the number of persons in employment since last September, and their share of the labour force exceeded 14% in December 2022. Data from the ESS on work permits issued for the employment of foreign nationals show that the most important employment sectors for foreigners last year were manufacturing, construction, and transport and storage. The majority of them came from Bosnia and Herzegovina and Serbia, with the former accounting for 85.8% and the latter for 14.1% last year. Moreover, their educational structure suggests that they were mainly employed in occupations with a relatively lower level of skills required. In Bosnia and Herzegovina, which is the source of most foreign workers, the average gross salary is about twice as low as in Slovenia (BHAS, 2022), which could continue to maintain incentives for these workers to come to Slovenia in the future. On the other hand, according to the latest available data, the 2021 ILO unemployment rate in Bosnia and Herzegovina was at a record low (World Bank, 2023), suggesting that the pool of available workers is emptying there as well.

3. What is the remaining labour market slack in the Slovenian labour market?

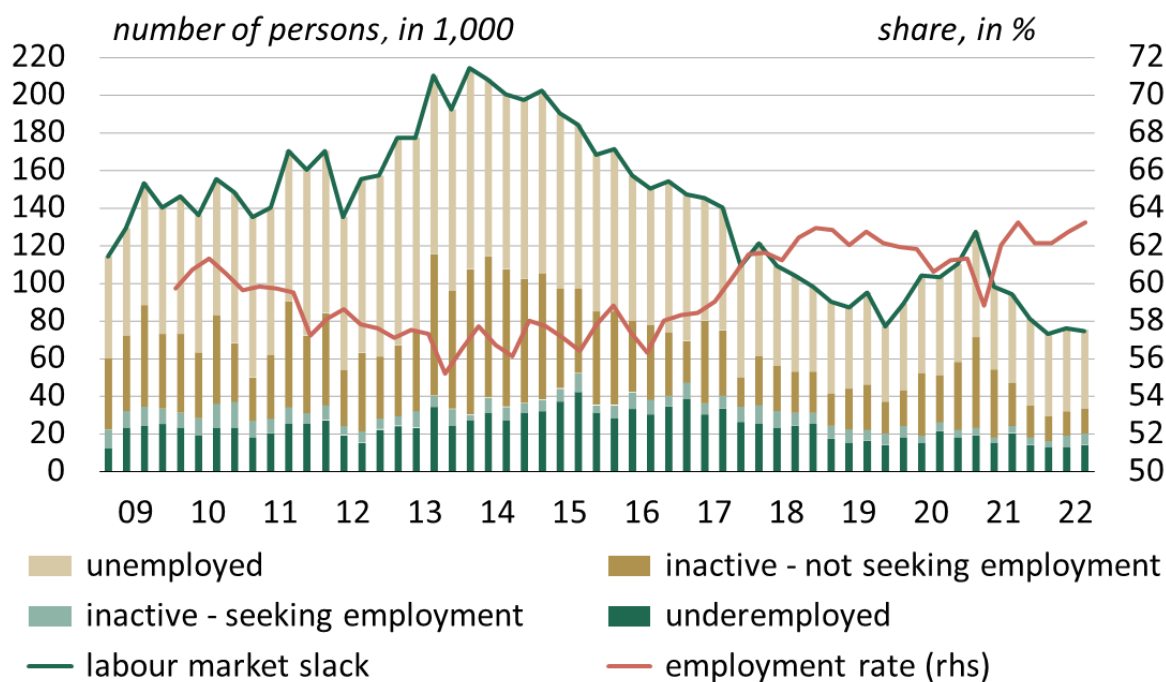
Current analyses suggest that while labour market tightness may be high, a high labour market slack may also coincide (IMF, 2022 and European Commission, 2022b). The coexistence of labour market tightness and labour market slack could be the result of lower labour market efficiency, changed occupational preferences of workers, and increased barriers to returning to work. The latter have been particularly pronounced for the elderly, the medically vulnerable, and those employed in contact-intensive activities in the post-pandemic recovery (IMF, 2022). Sufficient labour market slack in the Slovenian labour market could therefore mitigate the structural mismatch in the labour market. Finally, monitoring the labour market slack is important also because the majority of people relocate into the labour force from inactivity rather than unemployment (UMAR, 2023).

The definition of labour market slack covers different categories of persons in and outside the labour force. The former consist of the unemployed and part-time workers, where only part-time workers who would like to work more hours and would be willing to take more work immediately are included in the definition. They are designated underemployed persons. Finally, labour market slack includes two groups of persons outside the labour force: those who are seeking work but are not immediately available, and those who are available to work but are currently not seeking it.

The labour market slack in Slovenia has increased when the pandemic started, but to a lesser extent than during the global financial crisis (Figure 3). During the pandemic, the labour market slack peaked in the first quarter of 2021 at 127 thousand persons, or 8% of the population aged 15–74. The main contributors to the increase were inactive individuals who want to work but are not looking for work. In comparison, the peak during the global financial crisis was reached in the first quarter of 2014, when it amounted to 215 thousand persons, or 14% of the population.

In the third quarter of 2022, the level of labour market slack fell to 74 thousand persons, one of the lowest levels in history (Figure 3). More than half of them were unemployed (56%), followed by underemployed persons working part-time (19%), while persons outside the labour force accounted for the remainder, with persons available to work but not seeking it presenting 17% and persons seeking work but not immediately available 8%. In the same period, more than 25,400 jobs were advertised, and the vacancy rate, at 3.1%, was one of the highest in history. The number of advertised vacancies was thus much lower than the estimated labour market slack. Nevertheless, in the third quarter of 2022, the share of labour market slack presented only 4.7% of the population aged 15–74, where, as abovementioned, a good half of this share was made up of unemployed persons. Among them, the structure of unemployment with high shares of elderly and the long-term unemployed, has led to a relatively low share of employable persons. Based on the above, one can conclude that the labour market slack in the Slovenian labour market is not large enough to mitigate the excess labour demand by firms.

Figure 3: Slovenia's labour market slack and its components



Notes: The series cover persons in the age range 15-74 years. Inactive persons seeking employment would not like to take up work immediately, while inactive persons not seeking employment would like to have work. Underemployed are those who are in employment, work less than full-time, but would like to work more hours.

Source: Eurostat, own calculations. Latest data: Q3 2022.

From the perspective of the (potentially) available labour force on the Slovenian labour market, an analysis of the labour market participation is also important. The employment rate, calculated as the share of persons in employment among the working-age population, was 73.9% in the 15–64 age group in the third quarter of 2022, which was 4 percentage points above the euro area average, while in the 15–74 age group, presented in the Figure 3, it amounted to 63.2%. In terms of gender, the employment rate in Slovenia was above the euro area average for both, men and women, where the gap with the euro area average was more pronounced for the latter. On the other hand, the employment rate for the 50–64 age group was 66.9% and 2.3 percentage points below the euro area average. Although the employment rate of the elderly has increased over the last period, it remains especially low in the 55+ age group. Therefore, in terms of reducing labour market tightness, it would be important to encourage labour force participation of the elderly. In line with the relatively low labour force participation of the elderly, Slovenia has one of the lowest average ages of exit from the labour market among OECD countries. In addition, around one fifth of people enter retirement from unemployment (OECD, 2022b).

The importance of promoting labour force participation of the elderly is even more important in the light of medium-term population projections. According to the latest available EUROPOP2019 population projections, which foresee higher migration, the population aged 15–64 is projected to decrease by 1.6% and the population aged 14 and under by 10.3% in Slovenia until 2030, while the population aged 65 and over is projected to increase by 13.0%. In 2100, compared to 2023, the population aged 15–64 is projected to be 14.5% smaller, the population aged under 14 is projected to be 9.9% smaller and the population aged 65+ is projected to be 40.1% larger.

Population projections for Slovenia therefore foresee a significant decline in the population aged 15–64, which will have a major impact on the labour market, as there will be fewer and fewer working-age population available. Therefore, in addition to promoting the labour force participation of the elderly, there will be an increasing need in the future to support their education and familiarisation with new technologies (OECD, 2020).

4. Conclusion and policy implications

This study analyses the labour market tightness and labour market slack in Slovenia. The results show that, despite the moderation of economic activity and the decline in labour demand, tightness in the Slovenian labour market remains high. The latter is confirmed also by the graphical and empirical estimation of the Beveridge curve, characterised by an upward movement along the curve in the recent period. Nevertheless, the excess demand for workers on the Slovenian labour market could be alleviated in the presence of a sufficient labour market slack. The latter includes unemployed and underemployed persons, inactive persons available to work but not seeking, and inactive persons who are seeking work but are not immediately available. Mainly due to the structure of unemployment, with relatively few employable persons, the labour market slack in the Slovenian labour market is not large enough to adequately alleviate the excess demand for workers.

The conclusions of the analysis are among others relevant when estimating labour market projections, both in the short and medium term. Given the high tightness of the domestic labour market, one can expect that, in the event of a significant cooling of economic activity, firms will prioritise the use of available job retention schemes and, consequently, make fewer redundancies. In addition, one can also estimate that firms will continue to fill jobs by recruiting foreign nationals. Finally, the conclusions of the analysis are also relevant in terms of medium-term labour market developments. Structural imbalances in the labour market could widen further in the future, with augmented and altered labour demand due to digitalisation and the green transition (European Commission, 2022c), and projected demographic changes. Population projections predict a significant decline in the working population in Slovenia, which will make it even more important in the future to promote the labour market participation of the elderly and lifelong learning. ■

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About the author

Mojca Lindič is a researcher at the Analysis and research department at the Banka Slovenije (Bank of Slovenia). There, her main research interest is in labour market topics. She received her MSc in Economics from the Tilburg University and her PhD in Economics from the School of Economics and Business, University of Ljubljana. Her work has been published in several domestic and international journals.

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SUERF Secretariat
c/o OeNB
Otto-Wagner-Platz 3
A-1090 Vienna, Austria
Phone: +43-1-40420-7206
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