

Labour scarcity and labour market policies: A comparative analysis

Labour shortages have become an increasingly pressing issue across various sectors and occupations since the COVID-19 pandemic, with significant economic implications. While Spain's regional public employment services are implementing various initiatives, a more coordinated and sector-specific approach is needed to effectively tackle labour shortages and enhance labour market efficiency.

Miguel Ángel Malo

Abstract: Labour shortages have become an increasingly pressing issue across various sectors and occupations since the COVID-19 pandemic, with significant economic implications. In 2023, unfilled vacancies in Spain rose by 44% compared to 2019, resulting in an estimated loss of €8.15 billion in GDP. These shortages stem from three main sources: temporary demand-driven spikes, long-term supply shifts due to demographic changes, and mismatches in skills and geography. The impact of these shortages is felt across all

levels of the workforce, from high-skilled ICT and health professionals to lower-skilled roles in hospitality, construction, and agriculture. Going forward, there is a need for targeted measures to improve skill matching and address long-term structural challenges, such as population ageing and the digital transition. While Spain's regional public employment services are implementing various initiatives, a more coordinated and sector-specific approach is needed to effectively tackle labour shortages and enhance labour market efficiency. [1]

In Spain, unfilled vacancies increased by 44% in 2023, with an estimated cost of 8.15 billion euros.

Foreword

The shortage of manpower in certain sectors and occupations is not a new phenomenon but, since the COVID-19 pandemic, it is one of growing concern, with more and more companies reporting difficulties in filling their vacancies (Causa *et al.*, 2022). Although the labour shortage issue is less acute in Spain than in other European countries, in 2023 unfilled vacancies increased by 44% with respect to 2019 with an estimated cost (in terms of lost GDP) of 8.15 billion euros (BBVA-IVIE, 2024).

In general, the labour shortages originate from one of three basic sources (Ernst and Feist, 2024; Green et al., 1998): demanddriven temporary shortages; supply-driven long-term shifts in the size and composition of the labour force; and shortages driven by ineffective labour market adjustments that result in skill or geographical mismatches. These sources are not mutually exclusive and can coexist or even feed off each other. The end of the pandemic generated a temporary, demand-driven shortage. In parallel, however, longer-term trends are also affecting the size and composition of the labour force. The developed economies' populations are ageing and that is altering the number of people available to work in certain sectors and occupations as more people retire. In turn, population ageing implies an increased need for labour in sectors and occupations related with health and care work. Inefficiencies in matching supply and demand are related with labour market dynamics and sector transformations whereby the job seekers that are available do not have the skills demanded by the businesses with unfilled vacancies. These mismatches can have a mobility angle to the extent that there may be a pool of individuals available to fill the existing vacancies and in possession of the required skills who are not located in the same place as the vacancies. On top of this, the pandemic

prompted some workers to change occupation or sector who do not want to return to work in their original sectors due to the working or pay conditions.

This new episode of labour shortages has brought the public measures and policies for tackling the issue into sharper focus. This paper attempts to succinctly describe those policies from a Spanish perspective. To that end we take a look at the current situation in the European Union (EU) in order to provide a useful comparison with the situation in Spain. While other authors have approached this issue by analysing the major items of expenditure on labour market policies in Spain (for example, Mato, 2023), in this paper we emphasise the measures implemented at both the national level and by the various public regional employment services. In the last section of the paper, we outline a few considerations based on the results of our comparative analysis. In particular, we discuss aspects to which, until now at least, little attention has been paid in designing measures to address the labour shortages, such as the institutional structure of the labour market. the overeducation phenomenon and the level of monopsony.

Labour policies for tackling labour shortages

International situation

At the international level, the emergence from the COVID-19 pandemic largely explains the labour shortages reported by firms (Ernst and Feist, 2024). Not only due to the sudden increase in demand once the lockdowns were lifted but also because some workers, who had been forced to look for work that did not require major social distancing, realised they could take up different positions with better working conditions. Hence the scarcity of workers in the tourism and especially the hospitality sectors (Eurofound, 2023). In

Long-term transformations like ageing, technological change, and globalisation are major concerns in the labour market.

parallel, the very shortage of labour gives workers greater bargaining power when negotiating with employers both individually and collectively in terms of weighing up whether to accept or reject a job offer (Zwysen, 2023).

However, it is the long-term transformations (ageing, technological change, the energy transition and globalisation), coupled with skills mismatches, that are of greatest concern (Brunello and Wruuck, 2021). In the EU in particular, the shortage of labour related with the lack of the right skills, is a phenomenon that would appear to be affecting the entire productive spectrum, including small and medium-sized enterprises (SMEs). Indeed, three quarters of European SMEs report encountering skills shortages for at least one job role at their firm. [2]

The current labour shortage phenomenon is a global problem which is affecting developed and developing markets alike. Its impact is also being felt in countries that still have an abundance of labour, as indicated by high unemployment or informal employment (Ernst and Feist, 2024). However, countries are affected differently depending on their sector and occupation structures. Within the EU, it is possible to distinguish between three major groups of countries (Eurofound, 2023):

- The first encompasses the countries in which the incidence of labour scarcity has increased significantly over the past decade and in which unfilled vacancies are currently running at over 4%. This group includes Germany.
- The second group includes the countries in which the vacancy rate is running at between 2% and 3% (as of the third quarter of 2023), in line with the European average. Italy and France fall into this category.

■ The third group includes countries that have reported slight growth in vacancy rates in the last decade coupled with high levels of unemployment and of shadow economy employment. In these countries, the labour issues are not related so much to the existence of high vacancy levels as to mismatches between the existing supply of labour and unfilled vacancies. Spain belongs to this group.

These idiosyncrasies may explain certain differences between countries in the design of labour policies to address labour shortages, but there is a fundamental difference between the short- and long-term causes underlying the scarcity. In general, firms can develop a range of workforce management strategies for addressing transitory labour shortages (Fang, 2009) but are hard pressed to tackle the shortages that originate from long-term factors, which is therefore where public intervention makes more sense. As a result, strategies for alleviating labour shortages need to focus more on medium- and longterm factors (such as the digital and green transitions and population ageing) than drivers related with short-term shocks. As for the types of measures, the countries and regions with more problems related with mismatches between job seekers and existing vacancies need to place greater emphasis on general measures for improving labour intermediation (public and private) and facilitating geographical mobility, etc. Wherever labour shortages are more related with mismatched skills, the measures need to be medium- and long-term in nature, as adapting the skills of job seekers for the vacancies that are available is not usually a quick process. Upskilling and reskilling measures require time and resources.

As an example of the policies implemented in the EU in this area, Eurofound (2023) analysed a universe of 40 previously evaluated Spain is facing a growing deficit of professionals in sectors like health, education, and care work.

measures related with labour shortages in place in 22 European countries. They do not constitute a representative snapshot of the measures in place in these countries because the analysis only selected measures that had been evaluated; however, it does offer an interesting sample of measures by showing that all countries are aiming at similar targets: integration and activation of underutilised labour; attraction of workers (national and foreign); and enhanced use of existing labour (upskilling in specific sectors). These lines of initiative are implemented through programmes in specific sectors of the economy but in theory are applicable in all sectors.

Spain: A high-level perspective

Turning our attention to Spain and using SEPE data (2023), among the vacancies that require a high skill level, the dearth of skills in the information and communication technologies, particularly in STEM professions, and in renewable energy is noteworthy.

Elsewhere, the health sector is facing difficulties on account of a shortage of professionals, which is partly attributable to the phenomenon of young professionals moving abroad where working conditions are better. Moreover, Spain is experiencing a growing deficit of teachers and care givers.

In parallel, it is getting harder to hire in less skilled professions in certain sectors, notably including the hospitality, construction, transportation, agriculture and fishing sectors. Here the main issue is the lack of interest among the newer generations and harsher working conditions (pay, working hours, need to move around, work-life balance).

As for the hiring issues originating from an across-the-board shortage of skills among the candidates, this problem affects both more and less skilled professions. The skills currently in greatest demand include languages, computer skills, communication skills, soft skills, and knowledge about workplace safety. One of the biggest problems at present is the scarcity of professionals with mid-level skills (higher-level vocational training), coupled with unemployment among workers with low levels of education (SEPE, 2023).

Spain: Snapshot of the regional situation

Given the decentralisation of the public employment services in Spain, we reviewed the various regional public employment service websites and their respective employment observatories in order to try and identify patterns in the policies being deployed to address skills shortages and labour mobility. [3] Next we summarise the key takeaways from that information-gathering effort from an aggregate perspective, without focusing on any region in particular.

According to the information gleaned from the various Spanish regional employment observatories, the main issues encountered in filling vacancies are a shortage of specific skills in certain sectors and occupations, as well as working conditions. Some sectors (including the tourism, transportation and construction

One of the biggest problems at present is the scarcity of professionals with mid-level skills (higher-level vocational training), coupled with unemployment among workers with low levels of education.

As regards Spain's regional employment, the main issues encountered in filling vacancies are a shortage of specific skills in certain sectors and occupations as well as working conditions.

sectors) often feature as sectors in which the working conditions are behind the lack of candidates, while the employers highlight that the candidates available lack the right skills, including soft skills in the case of occupations that require constant customer interaction.

Long-term trends that are not related with the end of the pandemic crisis are also putting pressure on Spain's regions. The green transition is not usually explicitly referred to in the analysis undertaken by the regional governments, but it could be lurking behind the hiring problems facing certain sectors that are being affected by the energy transition. The lack of digital skills does feature explicitly in both the assessments and several of the training programmes ongoing in a number of regions.

Population ageing is another relevant factor in the shortage of labour in Spain, with some of the regions expressly citing labour force ageing as the reason for the shortage of candidates in some sectors and occupations where the new generations are not taking up the slack. Here, working conditions appear to be the main reasons for workers not wanting to fill the open positions or move into these occupations and sectors. Some regions also mention that the shortage of candidates for positions in the health sector and as long-term care givers. is related with burgeoning demand being generated by population ageing.

It is encouraging that in all regions of Spain, the assessments of the labour and skills shortages are fairly detailed and in-depth. That being said, the programmes in place are largely generic in nature and the measures deployed to address labour shortages are appended to more general programmes. The latter is a worry because, according to the Eurofound (2023) study about programmes for reducing labour shortages in the EU, it is clear that the most successful interventions at the international level are those designed specifically to address labour shortages.

The situation revealed by the analysis of the regional information shows that the labour shortage in Spain has two origins: (i) a lack of candidates (low number of applicants and rejection of the working conditions on offer); and (ii) a lack of specific skills and/or qualifications. This situation is replicated, albeit with nuances, at the international level. In Germany, for example, the most pressing issue is the shortage of personnel, which implies the need to prioritise immigration and immigrant training programmes in order to address the deficits and skills mismatches relative to the jobs on offer. Given its demographic trends, it is likely that Spain will face a similar situation in the medium-term.

The programmes in place are largely generic in nature and the measures deployed to address labour shortages are appended to more general programmes, which is worrisome because the most successful international interventions are those designed specifically to address labour shortages.

so that the German experience will prove useful. The idea, therefore, is to adapt and make more room for measures that are not always considered part of the policies devised to address vacancies in the context of labour shortages in multiple sectors and occupations. These include measures to attract talent from other countries such as hiring at source, certification of foreign qualifications and more flexible access to nationality for workers with the required skills. The catalogue of hard-to-fill occupations falls into this category of measures. Many regions have programmes that facilitate the return of talent that emigrated from their home regions. It would be good to assess the effectiveness of those programmes and the nature of the positions these returnees can aspire to fill.

Conclusions

Our assessment of the general situation in Spain largely mirrors the labour shortage snapshot across the EU. The current shortage is related with short-term factors (bottlenecks in the aftermath of the pandemic) as well as longer-term drivers (major transformational trends in the labour markets). The occupations in which there is a shortfall of available workers. and a mismatch of skills are similar across all of Europe, albeit with small differences in the relative weight of the factors underlying the shortage of labour. Not underestimating the importance of the short-term causes, it makes more sense for public measures to focus on the longterm trends, such as the energy transition, technological progress, and population ageing. The assessments compiled by the various regional employment observatories stress the importance of all these underlying causes of labour shortages. Nevertheless, the measures in place are often, especially in

relation to the energy transition, articulated in a manner that is not entirely focused on addressing the shortage of labour, whereas the Eurofound (2023) analysis finds that the measures that thrive are those designed specifically to mitigate such shortages.

Aside from the problems of insufficient personnel and mismatched skills, it is important to recall that another crucial reason for not being able to fill a vacancy that crops up time and time again is rejection by the applicants, a clear signal of poor working conditions and low pay. Spain is an example of this situation in the wake of the pandemic, but it is not alone in this in Europe (Eurofound, 2022, 2023). The issue can be tackled via the establishment of new standards by the authorities and monitoring of the existing standards, by means of workplace inspections, for example. In general, however, collective bargaining at the sector level has an active role to play in raising standards in the affected occupations (Zwysen, 2023). Given that there is little incentive to improve standards in agreements negotiated at the firm level (as better working conditions could lead to higher costs and competitive disadvantages), this matter is better addressed at the sector bargaining level. Elsewhere, tripartite social dialogue is the best avenue for hammering out major stable agreements around measures that could be controversial, such as the incorporation in the near future of foreign workers with the skills required for existing unfilled vacancies.

By way of observation with regards to skillsrelated issues, the matter of overeducation is not being factored into the labour shortage policies in Spain or in other EU countries. This is a problem because this educational misalignment affects young Spaniards in

Countries which, like Spain, have been reporting a high prevalence of overeducation among young university graduates for quite some time may suffer, in addition to a skills mismatch, relatively scant accumulation of new skills.

particular and has a relatively greater impact on people on permanent contracts (Ortiz, 2010), as young people have opted for secure jobs over jobs aligned with their level of education. Given that the likely outcome of the overeducation phenomenon is that the skills mismatches will prove long-lasting (Cedefop, 2018), it would be sensible to include specific measures for closing this educational gap in the training programmes designed to tackle labour shortages as a result of skills mismatches. It is also important to remember that the educational gap may interact with the accumulation of skills on the job and, thereby, impede or favour the reduction of labour shortages as a result of mismatched skills (Cedefop, 2018). Workers who start their job presenting a qualifications or skills gap tend to take up jobs with more complex tasks and benefit more from informal onthe-job learning. In contrast, overqualified or overeducated employees usually start out in jobs with relatively less complex tasks, hence curtailing their subsequent skills development. As overeducated workers accumulate less new skills on the job, they are then worse off if they lose their jobs and need to find new employment. Countries which, like Spain, have been reporting a high prevalence of overeducation among young university graduates for quite some time (Barone and Ortiz, 2011) may suffer, in addition to a skills mismatch to start with, relatively scant accumulation of new skills.

Another factor contributing to the issue of scant training after completing formal education is the prevalence of temporary work, as it has been established that workers on temporary contracts have lower chances of receiving training at their firms (Albert et al., 2005). The Spanish labour reforms of 2021, restricting the use of temporary contracts and ultimately diminishing employment churn, may have given Spanish firms more incentives to invest in their workers via specific training. Indeed, the experience in Italy has shown this to be the case when firms have more incentives to use indefinite instead of temporary contracts (Bratti et al., 2011). The labour market institutions, contract regulations, collective bargaining (Zwysen,

2023) and the minimum wage (Astrov and Leiner, 2021) can all impact training needs and, in the process, the scarcity of skills for occupations being transformed by the major long-term trends shaping labour markets.

Lastly, if a labour market is relatively monopsonistic, a labour shortage may imply that salaries are too low to attract workers to the unfilled vacancies. In this situation, the salary being offered for the vacancies available is insufficient to increase the supply of labour. If this is the case, measures designed to increase or improve skills will be scantly effective when they are not accompanied by improved working conditions for the available vacancies, particularly in a "tight" labour market such as the current one.

Notes

- [1] The author would like to thank Candela Paniagua Mariño for her help gathering the underlying information about the measures in place across the various regions of Spain.
- [2] Data taken from the Eurobarometer (https://europa.eu/eurobarometer/surveys/detail/2994).
- [3] The information corresponds to that available on their websites during the first quarter of 2024.

References

Albert, C., García-Serrano, C., and Hernanz, V. (2005). Firm-provided training and temporary contracts. *Spanish Economic Review*, 7, 67–88.

ASTROV, V., and LEITNER, S. (coords.) (2021). "How do economies in EU-CEE cope with labour shortages?" *Research Report*, No. 452. Vienna Institute for International Economic Studies. Vienna.

BARONE, C., and ORTIZ, L. (2011). Over-education among European University Graduates: A comparative analysis of its incidence and the importance of higher education differentiation. *Higher Education*, 61(3), 325-337.

BBVA-IVIE (2004). Capital humano y vacantes de empleo [Human capital and job vacancies] Essentials, 03/2024. https://www.fbbva.es/wpcontent/uploads/2024/06/esenciales_03-2024-vacantes-espana.pdf

Bratti, M., Conti, M., and Sulis, G. (2011). Employment protection and firm-provided training in dual labour markets. *Labour Economics*, 69, 101972.

Brunello, G. and Wruuck, P. (2021). Skill shortages and skill mismatch: a review of the literature. *Journal of Economic Surveys*, 35, 1145–1167.

Causa, O., Abendschein, M., Luu, N., Soldani, E., and Soriolo, C. (2022). The post-COVID-19 rise in labour shortages. *OECD Economics Department Working Papers*, No 1721.

CEDEFOP. (2018). Insights into skill shortages and skill mismatch: Learning from Cedefop's European skills and jobs survey. Cedefop reference series, No 106. Luxembourg: Publications Office of the European Union.

ERNST, E., and FEIST, L. (2024). Tomorrow at Work: The Age of Shortages. *Intereconomics*, 59(3), 125-131.

EUROFOUND. (2022). Working conditions in the time of COVID-19: Implications for the future. *European Working Conditions Telephone Survey 2021 series*. Luxembourg: Publications Office of the European Union.

EUROFOUND. (2023). Measures to tackle labour shortages: Lessons for future policy. Luxembourg: Publications Office of the European Union.

GREEN, F., MACHIN, S., and WILKINSON, D. (1998). The meaning and determinants of skills shortages. Oxford Bulletin of Economics and Statistics, 60(2), 165-187.

MATO, F. J. (2023). ¿Se necesita personal? Políticas de empleo para un mercado de trabajo con vacantes [A shortfall of personnel? Employment policies for a labour market with vacancies]. *Panorama Social*, 37, 81-96.

ORTIZ, L. (2010). Not the right job, but a secure one: over-education and temporary employment in France, Italy and Spain. *Work, Employment & Society*, 24(1), 47-64.

SEPE. (2023). Tendencias del Mercado de Trabajo en España [Labour Market Trends in Spain]. Spain's Public Employment Services' Occupations Observatory Retrievable from: https://www.sepe. es/SiteSepe/contenidos/observatorio/Que-esel-Observatorio/2023_Tendencias_Mercado_ Trabajo.pdf

ZWYSEN, W. (2023). Labour shortages. Turning away from bad jobs. *ETUI Policy Brief*, 2023.03, Brussels.

Miguel Ángel Malo. University of Salamanca