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A photograph of the interior of the Central Bank of Malta's vaults. The space is filled with rows of metal vault doors, illuminated by warm, golden light. The ceiling is high and features a large, colorful mural of a sunset or sunrise over a sea. The floor is polished and reflects the light. In the foreground, a long, curved counter or desk is visible. The overall atmosphere is one of security and historical significance.

# CENTRAL BANK OF MALTA POLICY NOTE



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## THE EXTENT OF LABOUR TURNOVER IN MALTA

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Policy Note

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## Abstract

Business surveys have consistently indicated that labour shortages are the main issue affecting Maltese firms. This despite that the labour supply has increased sharply during recent decades, particularly due to higher female participation and large inflows of migrant workers. Increasingly, these complaints do not focus on the gap between labour supply and demand, but rather reflect firms having to deal with increased turnover of staff. Using administrative data on engagements and terminations of employment, this note tries to quantify the extent of labour turnover in Malta. This reveals that in absolute terms, except for 2009 and 2020, labour turnover has indeed been rising, though in relative terms the trend may have slowed. Initially higher turnover reflected the fact that more women were joining the labour force, but since 2015 the main cause shifted to higher inflows of foreign workers. Turnover among the latter is around twice that among Maltese workers.

**JEL classification:** E24, J63, J61

**Keywords:** Job turnover, Labour demand, Foreign workers

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## Executive Summary

Despite labour supply rising sharply in recent decades, Maltese firms have consistently indicated that labour is a major constraining factor for their operations. While the focus has mostly been on the gap between labour supply and labour demand growth, it is increasingly evident that a major cause of these business complaints is, in fact, the significant growth and extent of labour turnover.

Quantifying labour turnover on an economy-wide basis is complicated. Employment data tend to be compiled using surveys with very small panel components. This makes it difficult to estimate how many individuals terminated their jobs and for what reason. However, in the case of Malta there is a potential administrative data source that can be exploited, namely the engagement and termination forms that every employer and self-employed needs to submit to the national employment agency, Jobsplus. That said, it is important to note that these administrative data may overstate the extent of labour turnover as they do not necessarily involve a move between different employers but are also submitted in respect of changes in employment status (such as a definite contract being converted into an indefinite one).

Yet, even with these caveats in mind, engagement and termination form data are a useful indicator of how labour turnover has changed over time in Malta. In absolute terms, the sum of engagement and termination forms in 2022 stood at an all-time record, 172% higher than it was in 2005. Labour turnover in absolute terms fell only in two years, 2009 and 2020.

If one expresses labour turnover as a percentage of employment, the upward trend is somewhat less pronounced, with the labour turnover rate rising from 53% in 2005 to 83% in 2022. This rate fell in 4 years (i.e., 2009, 2011, 2019, 2020), and is still below the all-time peak of 91% observed in 2018. Moreover, focusing just on terminations data, the proportion of employees who stayed with the same employer they had a year earlier appears to have been recovering in recent years. The rate for Malta, 69.2% in 2022, is not dissimilar to that reported for the UK, a country with a high dependence on migrant workers and with similar labour market regulation.

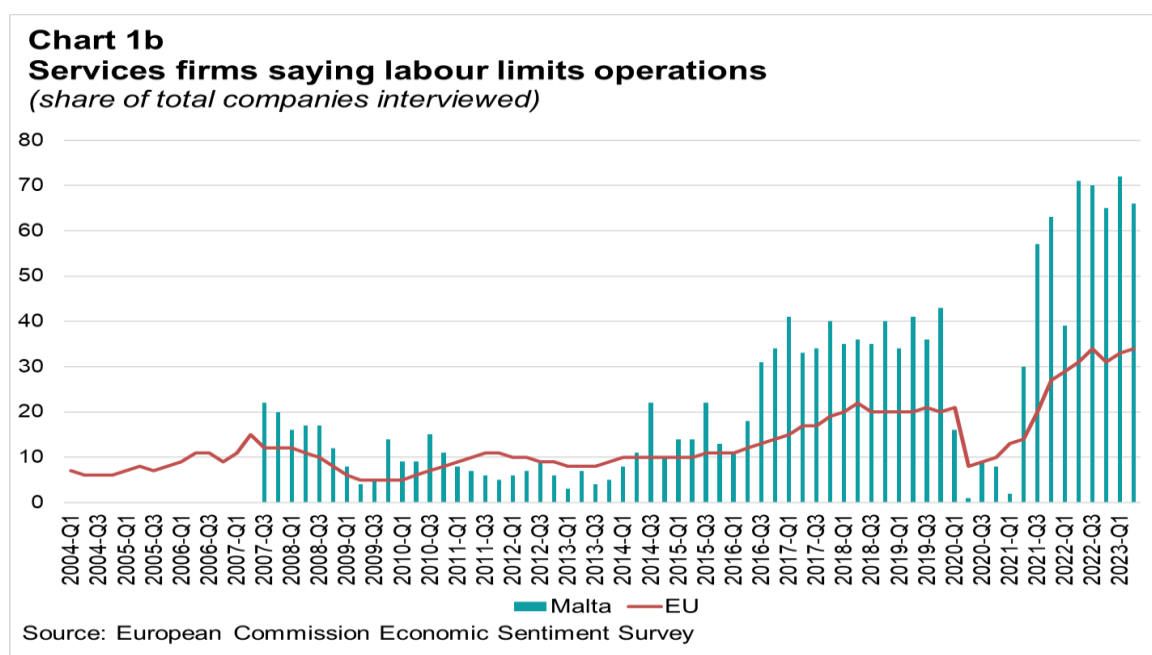
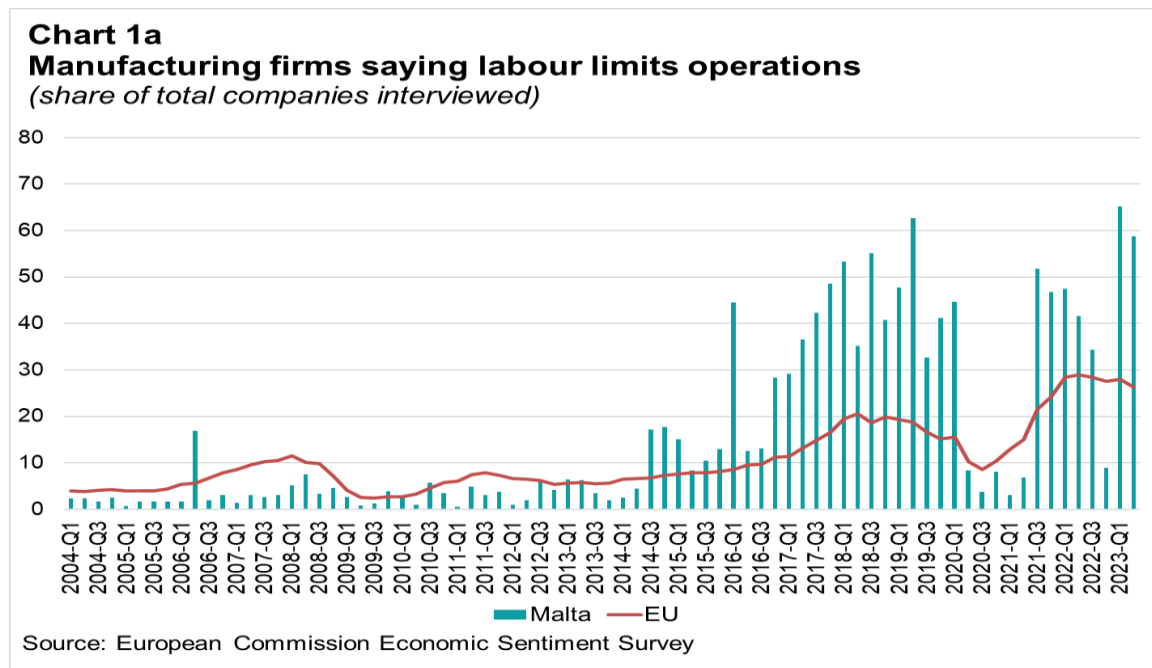
Administrative data suggest that in relative terms Maltese workers are half as likely to be the subject of termination forms than foreign workers. They also indicate that initially EU workers were very transient with nearly half of them being subject to a termination notice within six months of being engaged. By 2022 this had halved, but over the same period, the length of stay of non-EU workers moved in the opposite direction and converged to that of EU workers. Since reliance on non-EU workers rose substantially over time, this was the main cause of recent developments in labour turnover.

That said, in the period before 2015, the rise in labour turnover appears to have been driven by the surge in female participation. At that time, women's labour turnover was much higher than that for men, though by 2022 it appears to have largely converged.

Other factors that contributed towards the development of labour turnover over recent decades were the changing age structure of the workforce and the increased importance of service activity. A younger workforce led to more transience, while growth in sectors such as administrative support and transport have also boosted turnover.

## 1. What is labour turnover and how is it measured?

Since Malta acceded to the European Union (EU), its labour supply increased from under 158,000 individuals to nearly 292,000 in 2022, an annual average growth rate of 3.5% which was nine times the EU average. Yet, on a regular basis, surveys indicate that labour is the most pressing problem facing Maltese firms.<sup>2</sup> Chart 1a and 1b show how across sectors, labour is seen as a factor limiting operations to a much larger extent in Malta than in the rest of the EU.



<sup>2</sup> See for instance Zerafa (2023).

Borg (2023) details trends in a number of indicators of labour and skills shortages for Malta, and concludes that while these have risen greatly over time, they do not appear to have been exacerbated by the pandemic. He argues that the main determinant of these shortages is the fact that labour demand is increasingly exceeding the supply of locally-born workers, and that reliance on foreign workers leads to time lags due to the processing of work permits. Moreover earlier research by the same author (Borg 2019) had indicated that migrant workers are quite transient and therefore the increasing reliance on foreign workers could be exacerbating the labour turnover issue faced by firms.

That said, discussions on labour availability issues in Malta have tended to be limited by the fact that they have focused on net changes in labour aggregates.<sup>3</sup> OECD (1996), on the other hand, emphasises that this may misconstrue the challenge faced by employers, and to demonstrate this it distinguishes between two indicators: job turnover and labour turnover. Job (or employment) turnover is “the net change in employment between two points in time – the total number of jobs created less the number of jobs which have disappeared” expressed as a percentage of total employment. On the other hand, labour turnover “is concerned with the movements of individuals into jobs and out of jobs over a particular period”, again expressed as a percentage of the initial amount of employment.

Consider an economy with 100,000 jobs. Assume that in a particular year one had 20,000 persons moving into jobs and 10,000 moving out of jobs. The job turnover rate would be 10%, as the net increase in jobs was 10,000. By contrast the labour turnover rate would be 30%, or three times more, as the net increase of 10,000 involved 30,000 moves in the labour market. If job tenure, or the length of time people work in a particular job, is declining, one could have a rising labour turnover rate even in the context of a declining job turnover rate. If one has a high job turnover rate combined with declining job tenure, finding employees becomes an even bigger issue for employers.

To compute the job turnover rate is fairly easy as either administrative or survey data on employment are readily available in terms of stock positions. On the other hand, the estimation of the labour turnover rate is more data intensive, as one requires data on labour market flows. This restricts the potential use of employment surveys unless they have considerable longitudinal components, while in many countries one does not find comprehensive employment administrative registers that could enable the estimation of these flows.

In some countries, such as the US, government agencies carry out specific surveys to arrive at labour turnover measures.<sup>4</sup> These reveal very pronounced differences between the job turnover rate and the labour turnover rate. If one delves down by sectors the differences are even more pronounced, with some sectors – notably hospitality and construction – having labour turnover rates that are more than twice the national average and about four times those observed for public employment (the sector which tends to have the lowest labour turnover rates).<sup>5</sup> OECD estimates indicate that labour turnover rates tend to be quite high. For instance in France in the second half of the 1980s while the job turnover rate was 0.9%, the labour turnover rate was 24.4%, or nearly twenty seven times higher. ONS (2019)

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<sup>3</sup> A notable exception is Ellul (2018).

<sup>4</sup> See Bureau of Labour Statistics (2015).

<sup>5</sup> See Congressional Research Service (2022).

indicates that in the UK in 2018, only 65% of employees had remained with the same employer they had a year earlier, while only 78% had remained in a job in the same industry. Thus, that year in the UK the job turnover rate was 1.5%, whereas the labour turnover rate was 71.5%. This statistic differs greatly from Eurostat's experimental statistic known as the job-to-job transition rate (Eurostat 2023), which suggests that just 7% of those in employment in the UK moved jobs during 2018. However Eurostat make it clear that since this statistic is based on the Labour Force Survey, which is not designed as a panel survey, attrition between periods is relatively high and moreover that in countries with large population changes the method utilised can affect results significantly.<sup>6</sup>

## 2. Has labour turnover in Malta risen in recent years?

While experimental Eurostat data exist for Malta on job-to-job transitions, these are available just till 2018, and even for other countries the latest data are for 2020. At 8%, the job-to-job transition rate in Malta was like that in Italy and the UK, but much smaller than that for Scandinavian countries. That said, given the high population growth observed in Malta, the use of this indicator may not be that reliable.

A more promising data source are administrative data compiled by the national employment agency, Jobsplus. National legislation, in fact, stipulates that in every new case of employment, including self-employment, an engagement form needs to be submitted to Jobsplus. When a contract of employment is terminated, a self-employed person ceases to be self-employed or the status of an employee is changed (e.g., from part-time to full-time, or from definite to indefinite) a termination form needs to be filled in. The sum of these forms therefore may overstate labour movements as an employee may still be working for the same employer but still need a termination and an engagement form due to change in employment status. Moreover, the timing of termination forms may be less accurate than that of engagement forms, as employers face less incentives to send these immediately.

Chart 2 shows the overall amount of engagement and terminations forms that have been submitted between 2005 and 2022. The number of engagement and termination forms are very closely related.<sup>7</sup> On average during this period, terminations averaged 80.7% of engagements in the same year. The gap between the two does vary over time, with the smallest gap being in 2020, when the number of terminations was 91.1% that of engagements. The second lowest gap was in 2009, when terminations amounted to 86.9% of engagements. This is not surprising as both were years during which Malta's GDP contracted. That said, while there is a strong correlation between the gap between engagements and terminations (henceforth called net engagements) and the annual change in employment, in absolute terms net engagements differ greatly from the absolute change in employment.<sup>8</sup> This partly reflects the fact that many engagement and termination forms reflect changes in employment status.

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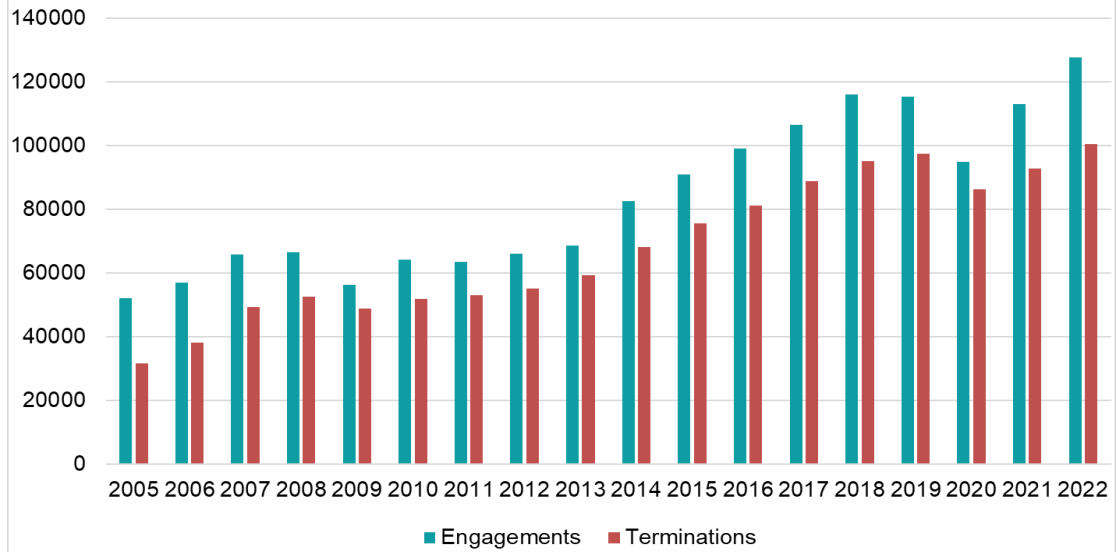
<sup>6</sup> In fact, Ellul (2018) quotes very different results for the UK based on other sources. Eurostat data suggest large heterogeneity across countries, ranging from 2% in Bulgaria and 18% in Sweden in 2020.

<sup>7</sup> The two series exhibit a correlation coefficient of 0.98, while that observed between their year-on-year changes stands at 0.91.

<sup>8</sup> The correlation coefficient stands at 0.76, but the cumulative sum of net engagements over the period is twice that of the absolute change in employment.

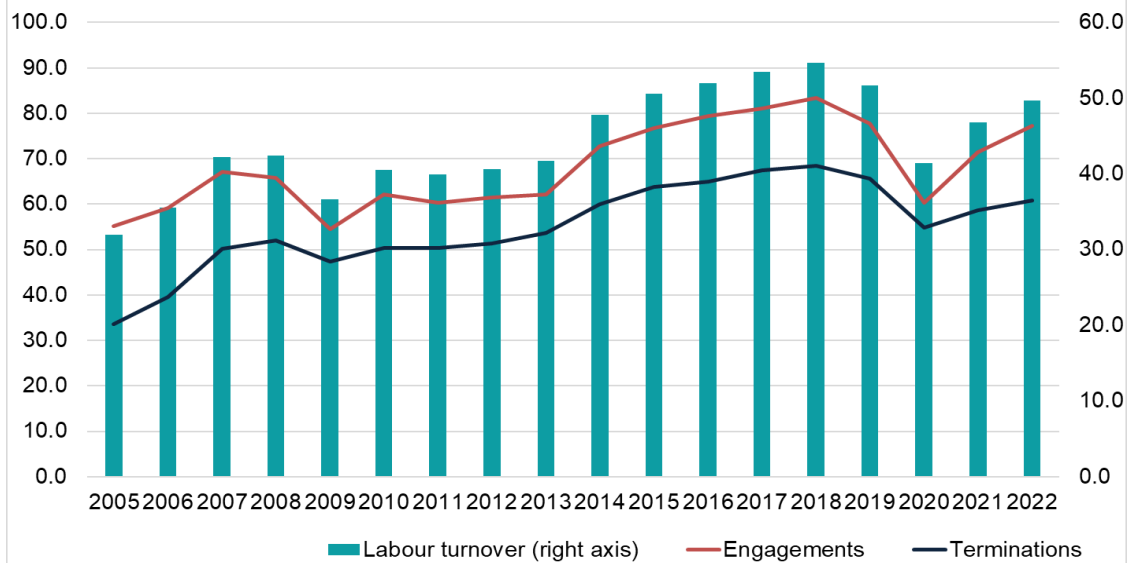


**Chart 2**  
**Engagements and terminations**



Source: Jobsplus

**Chart 3**  
**Labour turnover**  
*(% of employed persons)*



Source: Author's calculations using Jobsplus data

In absolute terms, engagements and terminations have soared over time. In 2005 the total number of engagement and termination forms stood at 83,808. By 2008, it had risen to 119,206, an increase of 42%. After falling in 2009, the total of forms remained below the 2008 level till 2012. In subsequent years, both engagements and terminations embarked on very rapid upward paths, such that by 2019

their total stood at 212,681. The pandemic brought the total back to its 2016 level, but by 2022 the sum of engagement and termination forms had reached a new record level of 227,955, or 7% higher than the pre-pandemic record and nearly double the amount observed a decade earlier.

To understand better the implications of these trends, Chart 3 represents the absolute number of engagement and termination forms as a percentage of the overall number of employed in the country. This indicates that the amount of engagement forms was equivalent to 33.1% of the total number of employed in 2005, while the amount of termination forms represented 20.1% of the total employed. By 2018 engagements had risen to 50.0% of the total number of employed while terminations were up to 41.0%. Using the OECD definition of labour turnover, this would imply that turnover had risen from 53.3% in 2005 to 91.0% in 2018, or by some 71%.

In 2019, relative to the size of the overall workforce, turnover decreased to 86.0%, and then in 2020 to 69.1%, a ratio previously seen in 2013. By 2022 the labour turnover ratio was back to 82.8%, or close to the levels observed between 2014 and 2015.

So one can have two different readings of the situation. On the one hand, in absolute numbers 2022 was a record year in terms of overall engagements and terminations, while on the other hand, when seen in relation to the size of the overall workforce, turnover in 2022 was still below the record seen in pre-pandemic years. Also while in absolute terms there was a drop in turnover in two years (2009 and 2020), in relative terms there was a drop in four years (2009, 2011, 2019 and 2020).

**Table 1: Terminations due to changes within the same organisation or transfer of business**

	2010	2015	2019	2022
Total terminations	51,849	75,630	97,346	100,406
<i>Of which due to:</i>				
Changes within organisation or transfer of business	3,961	8,549	13,523	12,366
% of total terminations	7.6%	11.3%	13.9%	12.3%

Source: Author estimates using Jobplus data.

Given that a lot of the engagement and termination forms reflect changes in employment status rather than actual movements of persons between employers, one needs to interpret these numbers with care. Active employment numbers are based on single individuals, while engagement/termination forms may involve the same individual more than once. Table 1 presents data on terminations that were due to changes within the same organisation or transfer of business. This includes changes from definite to indefinite employment, or from part-time to full-time contracts and viceversa. These changes have more than tripled since 2010, and accounted for one-eighth of all terminations in 2022. If one excludes these

terminations, the labour turnover rate was 61.7% in 2010, rising to 72.0% in 2015, before falling to 70.8% in 2019 and to 68.7% in 2022.

Using this more restricted definition of terminations, the labour turnover rate remains high, but is much smaller. The trend in the labour turnover rate is somewhat different, though using either definition, in recent years they both show a decline. If one looks at labour turnover in absolute terms, using either definition the number of overall engagements and terminations in 2022 was higher than in 2019. Taking a different perspective, using this definition of terminations, the proportion of employees who stayed with the same employer they had a year earlier moved from 72.4% in 2010 to 69.2% by 2022, as shown in Table 2. The rates for Malta are not dissimilar to those reported for the UK, a country with a high dependence on migrant workers and with similar labour market regulation.

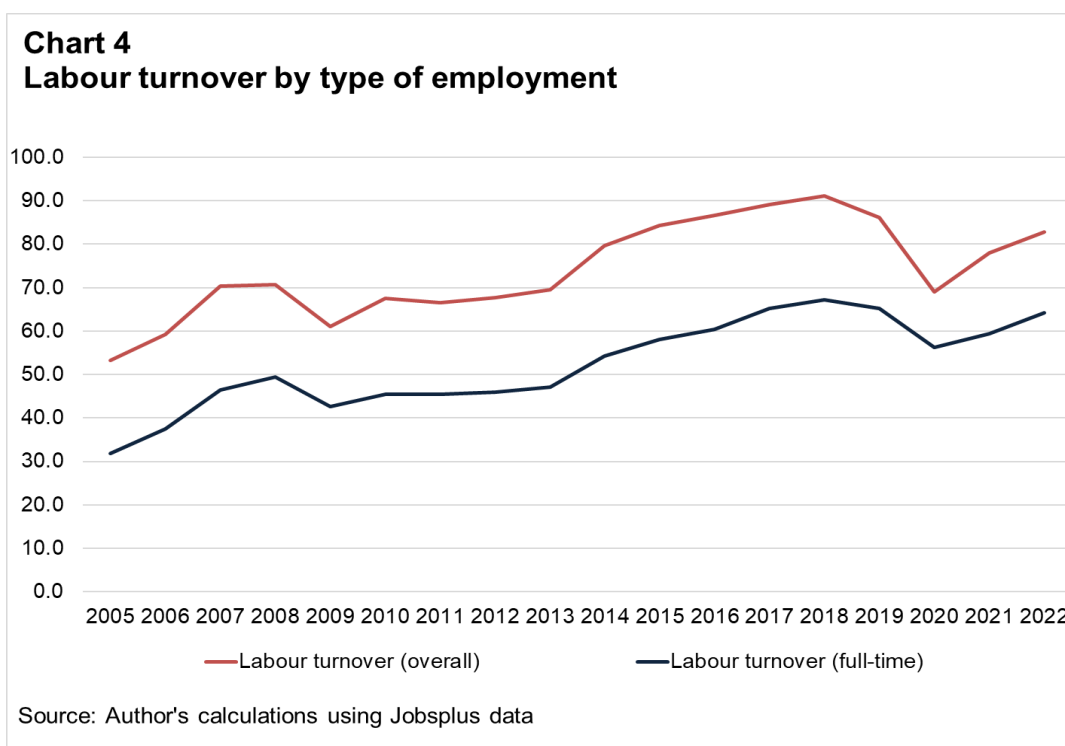
**Table 2: Employees staying with the same employer they had a year earlier**

	<b>2010</b>	<b>2015</b>	<b>2019</b>	<b>2022</b>
% staying with same employer	72.4%	66.9%	67.1%	69.2%

Source: Author estimates using Jobplus data.

Another way to try to arrive at a better understanding of labour turnover, is to focus on engagement and termination forms submitted just for those in full-time employment, as many part-time contracts tend to be limited in duration. In this vein, Chart 4 compares the labour turnover rate using all engagements and terminations with that computed for those in full-time employment. The latter is consistently smaller, though it is gradually converging. From 31.8% in 2005, it rose to 49.4% in 2008, falling in 2009 and remaining below the 2008-level till 2014 when it reached 54.3%. By 2018 the labour turnover rate among full-time workers had risen to 67.2%, but then it fell to 56.2% by 2020 and stood at 64.2% in 2022, just below the 2017 level. Similar to overall engagements, the data for full-time engagements and terminations suggest that in absolute numbers 2022 was a record, but in relation to the overall amount of employed, labour turnover was below the peak year.

Thus the picture that emerges is similar. There has been an increase in turnover over time, but rates are not at their pre-pandemic peak. In terms of absolute numbers, the situation is different in that the churn in employment is now higher. That said the effectiveness of the labour market to match employment demand and supply appears to be improving. While in 2015 the number of engagement and termination forms per net increase in employment stood at 17, this had fallen to 14 by 2019 and to 11 by 2022. The job turnover and labour turnover rate are, in fact, getting closer to each other.



### 3. What has driven labour turnover over the years?

The development in labour turnover over recent decades of course reflects the large underlying changes experienced in the Maltese labour market during this period. In this section, an attempt will be made to ascertain the impact of four particular changes, namely the larger presence of foreign workers, higher female participation, the age structure of the workforce and the increased share of service activities.

The number of foreign workers has risen from 5,231 in 2005 to 96,970 in 2022. The bulk of the increase was among third-country nationals (TCNs).<sup>9</sup> Table 3 shows that labour turnover among foreign workers is much more pronounced than amongst Maltese ones. In 2022, the sum of engagements and terminations of TCNs was one and a half times the amount of TCNs employed the previous year, more than double the rate seen for Maltese nationals.

**Table 3: Labour turnover rate by nationality**

Nationality	2005	2010	2015	2019	2022
Maltese	52%	62%	71%	67%	63%
EU citizens	135%	196%	190%	132%	114%
TCNs	85%	84%	108%	167%	149%

Source: Author estimates using Jobplus data.

<sup>9</sup> As from 2020 UK citizens started to be classified as TCNs. In 2022 there were 5,167 such individuals.

**Table 4: Terminations by duration of previous employment as % of total employment - TCNs**

<b>Duration</b>	<b>2010</b>	<b>2015</b>	<b>2019</b>	<b>2022</b>
0-3 months	9%	7%	14%	15%
4-6 months	6%	6%	10%	9%
7-9 months	2%	4%	8%	5%
10-12 months	7%	15%	17%	7%
1–2 years	9%	7%	9%	7%
2-3 years	4%	3%	2%	5%
3-4 years	3%	1%	1%	3%
4-5 years	1%	1%	1%	1%
5-10 years	1%	1%	1%	1%
10 years & over	0%	0%	0%	0%

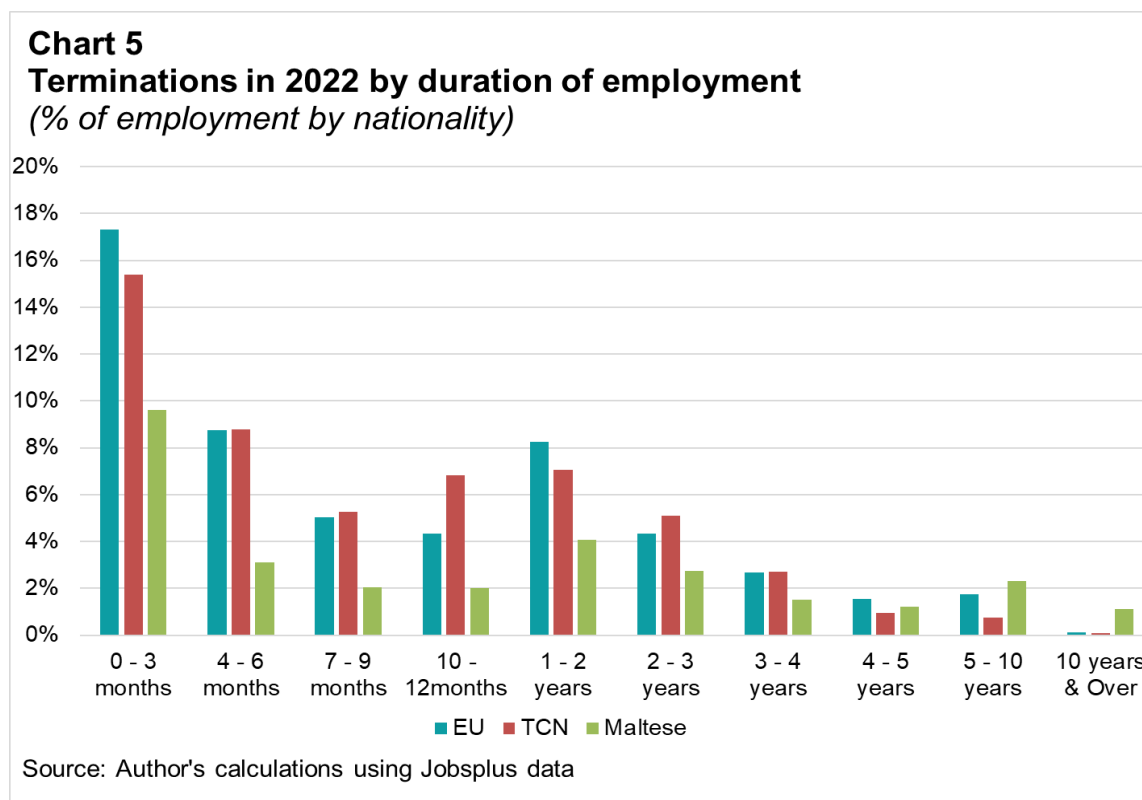
Source: Author estimates using Jobplus data.

Jobplus data suggest that about 70% of termination forms submitted for TCNs are for persons who have been employed for less than 12 months. In fact, 29% of all terminations are for TCNs who have been in that employment for less than 3 months. Back in 2015 this proportion stood at just 15%, with the bulk of terminations clustering near the 12-month period. Table 4 expresses the number of terminations as a proportion of overall employment of TCNs. This indicates that whereas in 2005 9% of all TCNs were terminated within 3 months, now this proportion has risen to 15%.

As a result of this trend, by 2022 the length of time by when TCNs' employment is terminated has broadly converged to that of EU citizens, as can be seen in Chart 5. Among Maltese workers, terminations are much less prevalent, though interestingly the equivalent of 10% of all Maltese workers are subject to a termination notice within 3 months of them being first engaged. The proportion then drops much strongly, and in relative terms TCNs are twice as likely as a Maltese worker to face a termination notice within a year of being employed. While in 2022 the equivalent of about 30% of all employed Maltese either changed their jobs or experienced a change in their employment status, the proportion for foreign workers was above 50%.

Maltese workers accounted for about a third of the rise in labour turnover in absolute terms between 2005 and 2022. That said, the total of engagements and terminations of Maltese workers in 2022 stood at its 2015 level and was 6% lower than its 2016 peak. Maltese persons accounted for 55% of all terminations and engagements in 2022, down from 94% in 2005. By contrast TCNs now account for 25.8% of all labour turnover, up from 2.2% in 2005. Increased dependence on foreign workers appears to have been the main driver behind the rise in labour turnover. Initially this reflected very high dependence on flows of very transient EU citizens, with nearly half of them being subject to a termination notice within six months of being engaged. In recent years EU citizens working in Malta appear to be

lengthening somewhat their stays.<sup>10</sup> While EU nationals in Malta are still increasing in absolute numbers, in recent years their increase is being surpassed greatly by that observed in TCNs, who in turn, appear to be more transient than they used to be. As a result of the fact that both TCNs and EU nationals are much less likely than Maltese citizens to stay with the same employer for more than a year, the greater reliance on foreign workers is leading to higher labour turnover.



Another major change in the Maltese labour market was the rise in female participation. The number of women working in 2022 was 223% that in 2005, while that of men was 165%. Women still constitute less than half of total employment, but their share has grown from less than 34% of total employment in 2005 to close to 41% in 2022. Before the sharp acceleration in foreign labour flows from 2015 onwards, in absolute terms the increase in employment was mostly of women. This had an impact on labour turnover rates, as administrative data indicate that women tend to be more subject to engagement and termination forms than men. Table 5 shows that over time the gender difference in turnover has narrowed very rapidly. Initially most women joining the labour force tended to be from younger cohorts, and as can be seen from Table 6 younger individuals tend to be more prone to move jobs.

<sup>10</sup> In 2015 the equivalent of 83% of all EU citizens working in Malta were subject of a termination notice, while in 2022 this has fallen to 54%.

**Table 5: Labour turnover rate by gender**

<b>Gender</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2019</b>	<b>2022</b>
Men	45%	59%	77%	82%	82%
Women	69%	79%	95%	92%	84%

Source: Author estimates using Jobplus data.

Before the introduction of free childcare in 2014, many women tended to drop out from the labour force to take care of their children. This tended to raise labour turnover. Women also tended to mostly work part-time, and contracts in this type of employment tend to be of shorter duration than full-time ones. The expansion of make work pay labour policies also meant that many relatively unskilled women joined the labour market, many for the first time or after long career breaks. This was also bound to raise labour turnover rates. Table 5 shows that the peak was reached in 2015, and subsequently labour turnover rates for women declined to those observed for men. The latter's turnover rates were probably boosted by the larger share of foreign men working in Malta, discussed previously.

**Table 6: Labour turnover rate by age**

<b>Age bracket</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2019</b>	<b>2022</b>
20-24	107%	142%	180%	176%	181%
25-34	45%	67%	95%	102%	101%
35-44	32%	46%	60%	67%	66%
45-54	22%	36%	45%	49%	48%
55-59	14%	24%	33%	35%	33%
60-64	29%	39%	44%	41%	39%
65 & over	23%	22%	24%	24%	22%

Source: Author estimates using Jobplus data.

The age structure is another important determinant of labour turnover. Older workers tend to stay longer in jobs and are less likely to be fired. This emerges very clearly in Table 6, which shows that while engagements and terminations of those aged 25 to 34 in 2022 were equivalent to the entire workforce of that age, those for those aged 65 and over were less than 22% of that cohort of workers. An ageing workforce should therefore lead to a more stable workforce. In the case of Malta, this may have been the case between 2005 and 2010, but subsequently thanks to the combination of foreign worker inflows and the surge in female participation, the workforce actually became younger. In light of the much larger

labour turnover rates observed among younger workers, this inevitably led to higher overall labour turnover. Moreover, in many age brackets, there appears to have been an increase in labour turnover rates, especially between 2005 and 2015. In more recent years, with the exception of the 25 to 54 cohorts (possibly due to higher shares of foreign workers), there have been some declines in labour turnover.

Changes in economic sector shares also lead to changes in labour turnover. Certain services sectors, as discussed previously, are well known to be characterised by more labour churn. Table 7, in fact, shows that the accommodation and food services sector in Malta faces labour turnover rates that are nearly three times those of the public sector dominated sectors of administration, health and education. That said, accommodation and food services do not explain the trend in labour turnover observed in Malta. The rise in the total of engagements and terminations in this sector between 2005 and 2022 accounted for less than 6% of the overall increase in labour turnover. The largest contributor was the administrative support sector, which accounted for a fifth of the entire increase in turnover. Wholesale and retail, transport and construction together accounted for another quarter of the increase, while on the other end of the value-added spectrum, arts & recreation and professional services contributed another quarter of the rise.

Labour turnover rates appear to have risen in all sectors compared to 2005, but they fell after the pandemic, except for transport and administrative support. The latter two sectors are, in turn, increasingly dominated by TNCs with a much shorter length of stay than in previous years.

The declining relative importance of manufacturing and public services also explains the rise in turnover, as employees in these sectors tend to have longer job tenure.

**Table 7: Labour turnover rate by economic sector (selected)**

<b>Sector</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2019</b>	<b>2022</b>
Agriculture & fisheries	21%	25%	27%	38%	34%
Manufacturing	41%	58%	60%	62%	57%
Construction	43%	48%	60%	82%	69%
Wholesale & retail	49%	57%	77%	83%	79%
Transport & storage	26%	37%	90%	78%	89%
Accommodation & food	151%	142%	159%	145%	144%
Financial services	23%	51%	64%	69%	66%
Professional services	124%	105%	125%	109%	86%
Administrative support	123%	149%	149%	134%	141%
Arts & recreation	95%	139%	141%	121%	116%
Pub admin/health/educ	29%	42%	52%	53%	52%

Source: Author estimates using Jobplus data.



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