

2. OUTPUT AND EMPLOYMENT

Annual real GDP growth rose by 4.4% in the second quarter of 2024, following a 7.6% increase in the previous quarter. Growth was mainly driven by net exports, as the contribution of domestic demand, while still positive, was smaller. When adjusting for imports, exports remained the main driver of GDP growth.

Sectoral data show that the expansion in output was primarily driven by the services sector. GVA also rose slightly in the manufacturing and construction sectors. Growth in the GDP deflator moderated, mostly reflecting a year-on-year decline in unit profits, albeit from a high level.

During the second quarter of 2024, developments in the labour market remained positive. The unemployment rate remained low and well below that in the euro area.

The labour market remained tight. The number of job vacancies increased by slightly less than 14% when compared to the second quarter of 2023. Meanwhile, the job vacancy rate and the labour tightness indicator, which is the ratio of the job vacancy rate to the unemployment rate, declined slightly but remained high in relation to recent outcomes.

Potential output and Business Conditions Index

Potential output grows at a slower rate

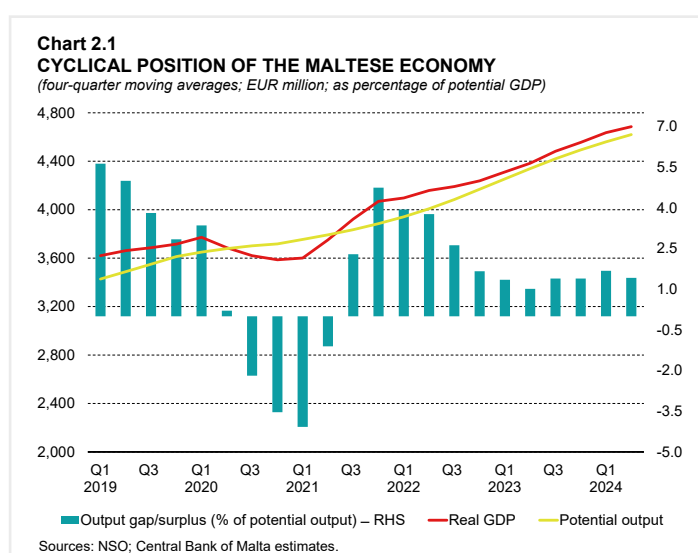
The Bank estimates that potential output growth stood at 5.4% in the second quarter of 2024, below that of 6.1% estimated for the first quarter of 2024.

On a four-quarter moving average basis, the level increase in potential output relative to the previous quarter was stronger than that in GDP, resulting into a slightly smaller positive output gap. The latter is estimated at 1.4%, down from 1.7% in the first quarter of 2024 (see Chart 2.1).

This implies a slight easing in the degree of over-utilisation of the economy's productive capacity.

BCI suggests growth is reverting to historical average

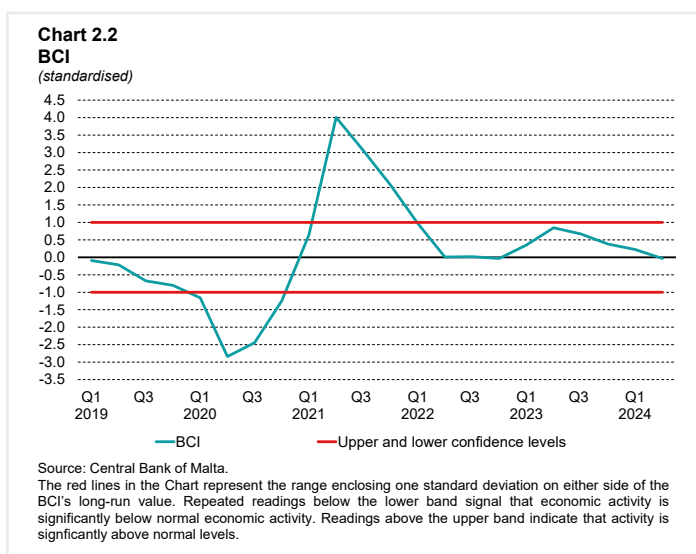
The Bank's BCI continued to edge down in the second quarter of 2024 and is in line with its historical average (see Chart 2.2).¹ This partly reflects GDP



¹ The BCI is a synthetic indicator, which includes information from a number of economic variables such as the term structure of interest rates, industrial production, an indicator for the services sector, economic sentiment, tax revenues and private sector credit. By construction, it has an average value of zero over the estimation period since 2000. A full time series can be found at [In-House Economic Indicators section on the website](#). For further details on the methodology underlying the BCI, see Ellul, R., (2016), "A real-time measure of business conditions in Malta," Working Paper 04/2016, Central Bank of Malta.

growth which was broadly in line with its long run average.

During the quarter under review, the BCI was affected by below-average growth in several sub-components, particularly by year-on-year declines in the issuance of development permits for residential buildings and in the ESI. Additionally, although there has been a strong year-on-year increase in inbound tourism, this was lower than that observed in the last two years which featured a recovery from the COVID-19 pandemic. These developments were partly offset by above-average growth in credit, in tax receipts, and industrial production. The contrasting developments of these indicators brought the BCI around its long-term average.



GDP and industrial production

Real GDP growth largely driven by net exports

Real GDP rose by 4.4% on an annual basis, following a 7.6% increase in the previous quarter.² This mainly reflects a, a smaller contribution from domestic demand, although that of net exports also decreased (see Table 2.1).

Domestic demand growth moderated compared with its performance in the first quarter of the year. It rose by an annual 2.5% in the second quarter of 2024, following an increase of 5.8% in the previous quarter. The increase in domestic demand was largely driven by private consumption, and to a lesser extent gross fixed capital formation (GFCF). By contrast, the contribution of government consumption turned negative. Overall, domestic demand added 2.1 percentage points to GDP growth in the quarter under review.

Private consumption expenditure increased by an annual 4.1% in the second quarter of 2024, following a 6.4% increase in the previous quarter. Despite the recent slowdown, private consumption remained the key driver of domestic demand, adding 1.8 percentage points to real GDP growth in the quarter under review.

Data on the Classification of Individual Consumption by Purpose (COICOP) show that the strongest increase in absolute terms was recorded in spending on restaurants and accommodation services. This was followed by higher spending on insurance and financial services, information and communication, and transport. Most other COICOP categories of spending also show increases. On the other hand, spending on housing and utilities as well as spending on furnishings, household equipment and routine household maintenance declined.

² The analysis of GDP in this chapter of the *Quarterly Review* is based on NSO *News Release* 159/2024, which was published on 28 August 2024.

Table 2.1
GDP⁽¹⁾

	2023			2024	
	Q2	Q3	Q4	Q1	Q2
<i>Annual percentage changes</i>					
Private final consumption expenditure	11.0	10.6	11.4	6.4	4.1
Government final consumption expenditure	-1.2	4.7	7.2	2.2	-1.6
GFCF	-15.5	-22.3	-22.4	7.8	2.1
Domestic demand	1.1	0.2	0.2	5.8	2.5
Exports of goods and services	4.6	2.4	4.5	8.5	5.2
Imports of goods and services	0.0	-4.6	-0.7	7.3	3.9
GDP	6.9	8.9	6.7	7.6	4.4
<i>Percentage point contributions</i>					
Private final consumption expenditure	4.8	4.8	5.0	2.9	1.8
Government final consumption expenditure	-0.2	0.8	1.3	0.4	-0.3
GFCF	-3.7	-5.3	-6.1	1.4	0.4
Changes in inventories	0.1	-0.1	0.0	0.0	0.1
Domestic demand	1.0	0.2	0.2	4.8	2.1
Exports of goods and services	5.9	3.1	5.7	10.5	6.4
Imports of goods and services	0.0	5.6	0.8	-7.6	-4.1
Net exports	5.9	8.7	6.5	2.9	2.3
GDP	6.9	8.9	6.7	7.6	4.4

Sources: NSO; Central Bank of Malta calculations.

⁽¹⁾ Chain-linked volumes, reference year 2020.

COICOP data measure domestic consumption and thus, include the expenditure of non-residents in Malta while excluding the expenditure of Maltese residents abroad. Certain COICOP categories continued to be supported by a strong increase in non-residents expenditure in Malta. Nonetheless, the expenditure of Maltese residents in Malta also rose significantly. Meanwhile, the expenditure of Maltese residents abroad also increased on its year-ago level, partly reflecting an increase in trips over the same period.

Government consumption expenditure declined by 1.6% in annual terms, following an increase of 2.2% in the first quarter of 2024. While outlays on compensation of employees and to a lesser extent intermediate consumption increased, these were offset by a significant increase in revenue from sales, which is netted out of consumption expenditure. Furthermore, expenditure on social benefits in kind decreased.

Real GFCF increased by 2.1% in the second quarter of 2024, following an increase of 7.8% in the previous quarter. The latter increase mostly reflected higher outlays on intellectual property and growth in residential investment. In absolute terms, pending on non-residential construction and cultivated biological resources rose marginally while outlays on machinery and equipment decreased. GFCF contributed 0.4 percentage point to overall growth.

The contribution of changes in inventories in the second quarter of 2024 was marginally positive.

Table 2.2**IMPORT-ADJUSTED CONTRIBUTIONS TO GDP GROWTH⁽¹⁾**

	2023			2024	
	Q2	Q3	Q4	Q1	Q2
	<i>Percentage point contributions</i>				
Private final consumption expenditure	3.4	4.0	3.5	1.9	1.3
Government final consumption expenditure	-0.1	0.8	1.1	0.3	-0.2
GFCF	-1.1	-1.4	-2.0	0.7	0.2
Changes in inventories	-0.1	-0.2	-0.2	0.0	0.0
Domestic demand	2.1	3.1	2.5	2.9	1.3
Exports of goods and services	4.7	5.9	4.3	4.7	3.1
GDP	6.9	8.9	6.7	7.6	4.4

Source: Central Bank of Malta estimates.

⁽¹⁾ Chain-linked volumes, reference year 2020.

Imports grew by 3.9%, while exports increased by 5.2% on a year earlier. As a result, net exports increased, adding 2.3 percentage points to annual real GDP growth. The increase in net exports reflected a larger surplus from trade in services as the deficit from trade in goods widened.

The contributions shown in Table 2.1 are consistent with the approach normally followed in official databases and economic publications. However, they do not account for the variation in import content across different expenditure components and thus, fail to represent the true underlying relative contribution of domestic and external demand to economic growth.

Table 2.2 presents import-adjusted contributions, which address this limitation by apportioning imports to the respective demand components.³

As in the traditional approach, import-adjusted contributions continued to show that exports remained the main contributor to real GDP growth in the second quarter of 2024.

When adjusting for import content, both domestic demand and exports retained a positive contribution to GDP growth. However, the superior contribution of the external trade component relative to domestic demand is amplified in this approach. Private consumption remains the largest contributor to growth within domestic demand.

Services remain the main driver of economic growth⁴

Data based on the output approach show that in the second quarter of 2024, nominal GVA rose by 5.2% in annual terms, following a 10.3% increase in the previous quarter. It added 4.9 percentage points to GDP growth (see Table 2.3).⁵

Services remained the main driver behind the latest economic expansion, adding 4.7 percentage points to nominal GDP growth. The sectors behind most of this increase are those comprising professional, scientific, administrative and related activities and public administration and related

³ The process with which components are adjusted is currently being reviewed to consider the August 2024 benchmark revision to the national accounts.

⁴ This analysis is based on nominal GVA data, unlike in previous Quarterly Review publications where real data was used. The latter was unavailable by the statistical cut-off date.

⁵ The difference between GDP and GVA is made up of taxes on products, net of subsidies.

Table 2.3
CONTRIBUTION OF SECTORAL GVA TO NOMINAL GDP GROWTH

Percentage points

	2023			2024	
	Q2	Q3	Q4	Q1	Q2
Agriculture, forestry and fishing	-0.1	-0.1	0.1	0.0	-0.2
Mining and quarrying; utilities	1.5	0.4	0.9	0.2	0.2
Manufacturing	0.8	0.4	0.4	0.5	0.6
Construction	0.2	0.4	0.5	0.6	0.3
Services	12.2	10.8	9.7	8.9	4.7
<i>of which:</i>					
Wholesale and retail trade; repair of motor vehicles; transportation; accommodation and related activities	2.7	0.5	0.7	1.6	0.3
Information and communication	0.3	0.4	0.3	0.1	0.0
Financial and insurance activities	2.4	2.2	1.7	1.4	0.7
Real estate activities	2.4	2.8	2.5	1.6	1.0
Professional, scientific, administrative and related activities	3.2	2.7	2.9	2.4	1.2
Public administration and defence; education; health and related activities	0.7	1.1	1.2	1.2	1.1
Arts, entertainment; household repair and related services	0.5	1.0	0.4	0.4	0.5
GVA	13.8	11.6	11.1	9.6	4.9
Taxes less subsidies on products	-1.1	3.2	0.7	2.2	2.7
Annual nominal GDP growth (%)	12.7	14.8	11.8	11.8	7.6

Source: NSO.

activities, which contributed 1.2 and 1.1 percentage points, respectively. The sector comprising real estate activities added a further 1.0 percentage point, while the financial and insurance sector contributed 0.7 percentage point to nominal GDP growth. The remaining services sectors together added another 0.8 percentage point to growth.

The manufacturing sector added 0.6 percentage point to growth, while the construction sector added 0.3 percentage point.

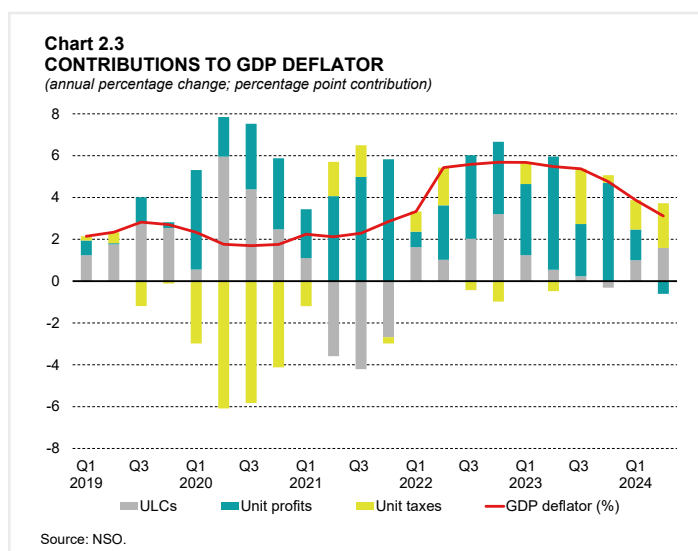
Net taxes on products increased on a year earlier.

Nominal GDP growth remains strong

Nominal GDP rose by 7.6% in annual terms in the second quarter of 2024, after increasing by 11.8% in the previous quarter. All components from the income side – compensation of employees, operating surplus and net taxes rose in annual terms. Nevertheless, the contributions of gross operating surplus moderated significantly. Although compensation of employees also slowed down, the decrease in its contribution was more limited. Hence, the slowdown in nominal GDP was mostly driven by weaker growth in operating surplus.

Chart 2.3 shows the main contributors to growth in the GDP deflator. Annual growth in the GDP deflator moderated. However, it remained elevated from a historical perspective. It stood at 3.1% in the second quarter of 2024, having decreased from the previous quarter's 3.9%.

The contribution of unit labour costs (ULCs) and unit taxes exhibited a larger positive increase. Meanwhile, the contribution of unit profits decreased, turning negative in the second quarter of 2024. Unit profits showed the first year-on-year decrease since 2018, although their level remains high from a historical perspective.



Industrial production increases following a contraction in previous quarter

Industrial production rose at an annual rate of 3.9% in the second quarter of 2024, following a contraction of 2.4% in the first quarter.⁶

Production in the manufacturing sector increased at an annual rate of 5.3%, after contracting by 1.8% in the preceding quarter. During the quarter under review production in the quarrying sector moderated. Annual growth stood at 1.2% in the second quarter of 2024 compared to 16.0% in the preceding quarter. Meanwhile, in the energy sector, production contracted at a faster pace. The rate of decline stood at 18.1% compared with 12.5% in the first quarter of 2024.⁷

In the manufacturing sector, output increased sharply among firms classified in 'other manufacturing' – which includes firms that produce medical and dental instruments – as well as among firms that manufacture furniture, rubber, plastic products and textiles. Significant increases were also recorded among firms involved in the production of machinery and equipment, wood products and paper products. Production of computer, electronic and optical products as well as food products also increased.

By contrast, output fell markedly among firms involved in the printing and reproduction of recorded media. Smaller declines were recorded in selected other sectors, including those that manufacture chemicals and basic pharmaceutical products.

⁶ Methodological differences may account for divergences between developments in GVA in the manufacturing sector and industrial production. GVA nets input costs from output to arrive at value added and is expressed in nominal terms. Industrial production is a measure of the volume of output and takes no account of input costs. The sectoral coverage between the two measures also differs since industrial production data also include the output of the energy and quarrying sectors.

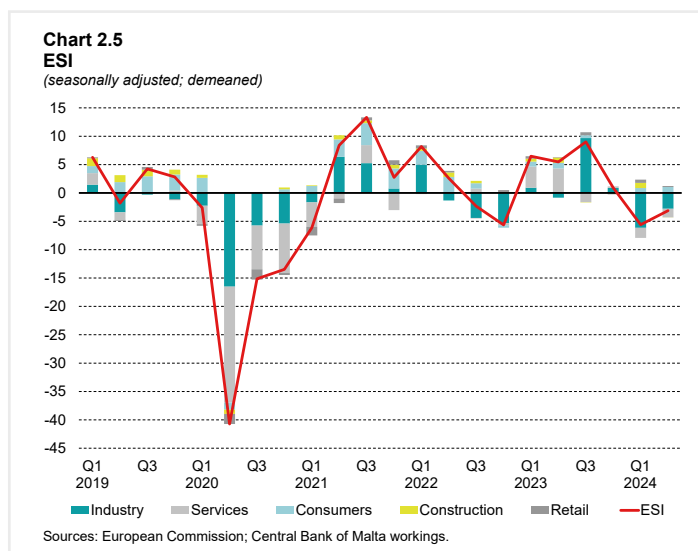
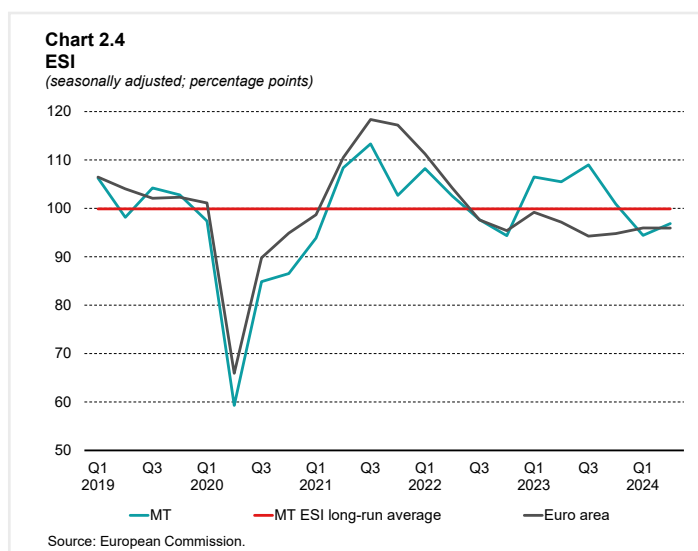
⁷ Industrial production in the energy sector excludes energy generated abroad and imported through the interconnector.

Business and consumer surveys

During the second quarter of 2024, the European Commission's ESI for Malta increased to 96.9, from 94.4 in the preceding quarter, thus remaining below its long-term average of around 100.0. However, the overall indicator stood slightly above that in the euro area, which averaged 95.9 (see Chart 2.4).^{8,9}

When compared with the first quarter of 2024, confidence improved in industry and to a lesser extent in the services sector and among consumers. By contrast, it deteriorated in the remaining sectors, most notably in construction.

When accounting for the weights assigned to each sector, and the time variation of the confidence indicator for each sector, the increase in the ESI relative to the first quarter of 2024 was mainly driven by industry.¹⁰ Industry and the services sector explain why the overall ESI stood below the long-term average (see Chart 2.5).



Industrial confidence remains below its long-term average¹¹

The industrial confidence indicator increased to -10.4, from an average of -20.8 in the previous three-month period but remained well below its long-term average of -4.2 (see Chart 2.6).

⁸ The ESI summarises developments in confidence in five surveyed sectors: industry; services; construction; retail; and consumers. Quarterly data are three-month averages.

⁹ Long-term averages are calculated over the entire period for which data are available. For the consumer and industrial confidence indicators, data for Malta became available in November 2002, while for services and construction data became available in May 2007 and May 2008, respectively. The long-term average of the retail confidence indicator is calculated as from May 2011, when it was first published. The long-term average of the ESI is computed from November 2002.

¹⁰ Weights are assigned as follows: industry 40%; services 30%; consumers 20%; construction 5%; and retail trade 5%.

¹¹ The industrial confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to a subset of survey questions relating to expectations about production over the subsequent three months, to current levels of order books and to stocks of finished goods.

The recent amelioration for this sector reflected improvements in all its components, notably a strong increase in the production expectations for the months ahead. This contrasts with a negative assessment in the previous quarter.

Additional survey data reveal that the share of respondents in industry anticipating higher selling prices turned positive.

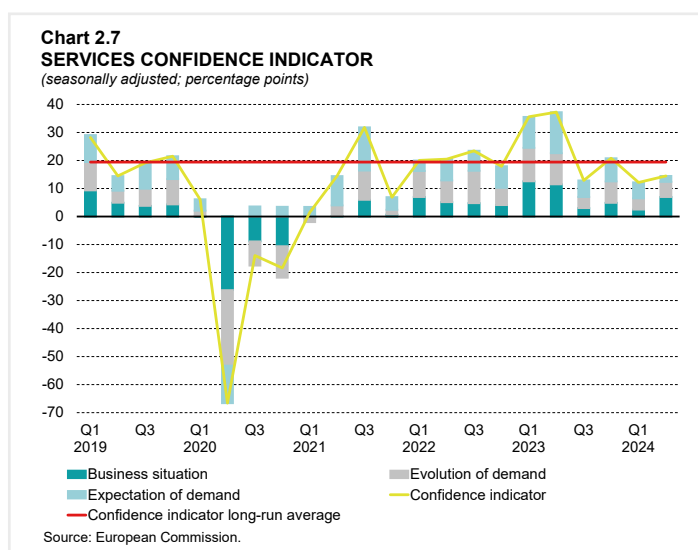
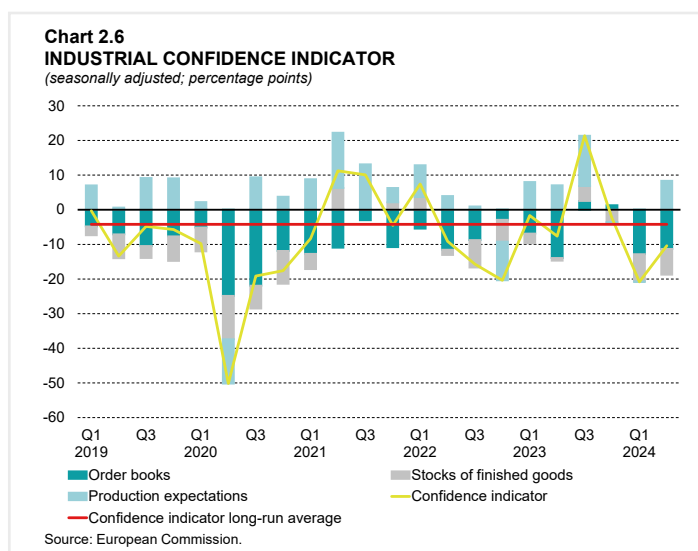
Confidence in the services sector improves¹²

The confidence indicator in the services sector increased to 14.5, from 12.2 in the previous quarter. Sentiment in this sector remained below its long-term average of 19.4 (see Chart 2.7). Firms' assessment of the business situation and of demand over the past three months, stood more positive than in the previous quarter. By contrast, their expectations of demand for the next three months declined, though they remained positive.

Supplementary survey data indicate that the net share of respondents with positive price expectations increased marginally compared to the first quarter of 2024, standing at just under 20%. However, selling price expectations remained below their recent peak.

Consumer confidence improves but remains negative¹³

The consumer confidence indicator averaged -7.3 during the second quarter of 2024, above the -8.0 recorded in the previous quarter, and its long-run average of -10.2 (see Chart 2.8). The



¹² The services confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to survey questions relating to the business climate, the evolution of demand in the previous three months, and demand expectations in the subsequent three months.

¹³ The consumer confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to a subset of survey questions relating to households' assessment and expectations of their financial situation, their expectations about the general economic situation, and their intention to make major purchases over the subsequent 12 months. The computation of this indicator was changed as reflected in the [January 2019 release](#) of the European Commission.

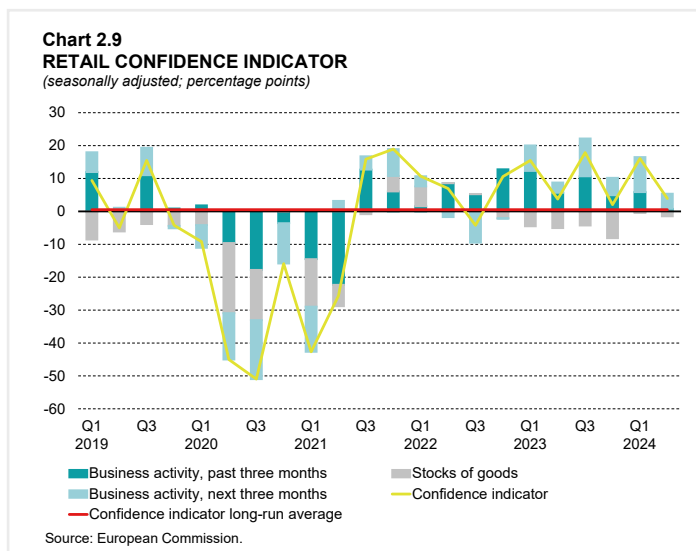
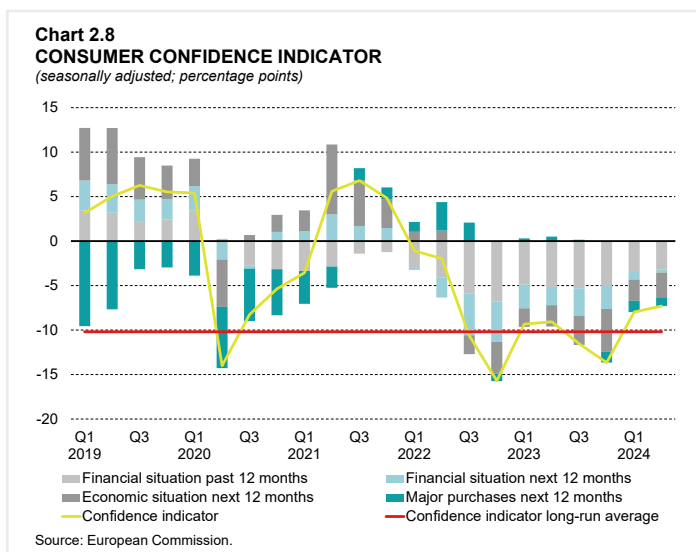
improvement in consumer sentiment reflected a less negative assessment and outlook of their finances. Expectations of major purchases were also less negative than in the last quarter. On the other hand, consumers' expectations of the general economic situation over the next 12 months became more negative.

Supplementary survey data show that a larger share of respondents expects unemployment to increase in the next twelve months. At the same time, the share of respondents expecting prices to rise, decreased to around 18% from 20% in the previous quarter.

Sentiment among retailers declined but remained above its long-term average¹⁴

The indicator of sentiment in the retail sector stood at 3.9 in the second quarter of 2024, down from 16.1 in the previous quarter, but still above its long-term average of 0.5. All components of the indicator contributed to the latest decrease in sentiment. However, the recent fall in sentiment was largely driven by a significant deterioration in the assessment of business activity over the previous three months and the near-term business outlook (see Chart 2.9).¹⁵

Supplementary survey data indicate that, in contrast to the previous quarter, short-term orders expectations stood negative. Meanwhile, the share of respondents anticipating prices to increase over the coming months, decreased to around 13%.



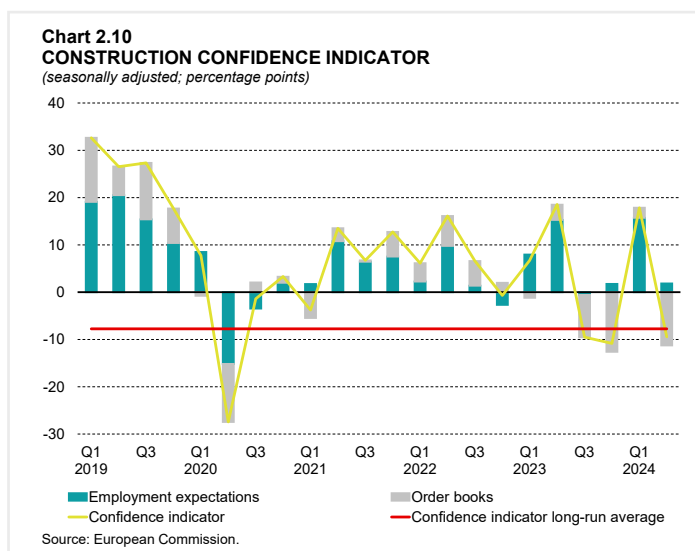
¹⁴ The retail confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to survey questions relating to the present and future business situation and stock levels.

¹⁵ Above-normal stock levels indicate lower turnover and affect the overall indicator in a negative way.

Confidence in construction turns negative¹⁶

In the second quarter of 2024, the indicator measuring confidence in the construction sector stood below its long-term average of -7.8. It averaged -9.4, down from 17.8 in the previous three-month period (see Chart 2.10).

Both order books and employment expectations declined significantly compared with the previous quarter, with the former turning negative.



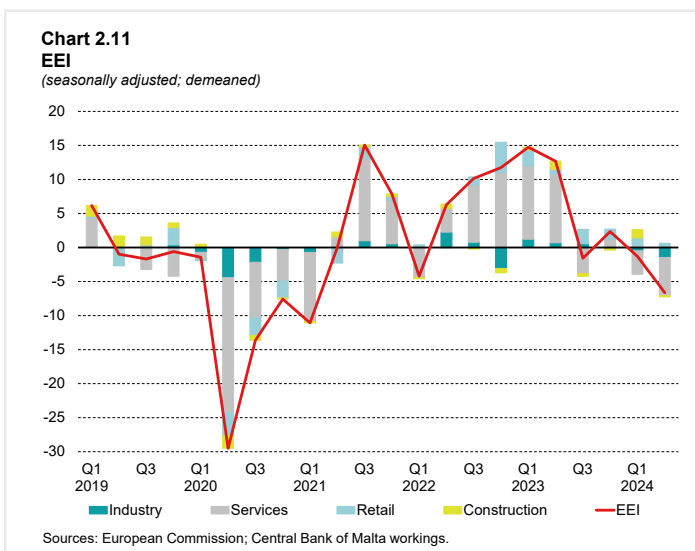
Meanwhile, the net share of respondents expecting price increases over the next three months decreased significantly, to 12% from 43% in the first quarter of the year.

Employment Expectations Indicator (EEI) decreases further below its long-run average

The EEI – which is a composite indicator of employment expectations in industry, services, retail trade and construction – edged down in the second quarter of 2024. During the quarter, it averaged 93.3, below 99.2 in the preceding quarter, standing below its long-term average of around 100.0. The index also remained below the euro area average of 100.8.¹⁷

During the quarter under review, employment expectations were positive across all productive sectors, except in industry. The most positive reading was recorded in the retail sector.

Demeaned data suggest that the decrease relative to the preceding quarter was broad-based across sectors, yet mostly driven by the services and construction sectors (see Chart 2.11). The services sector



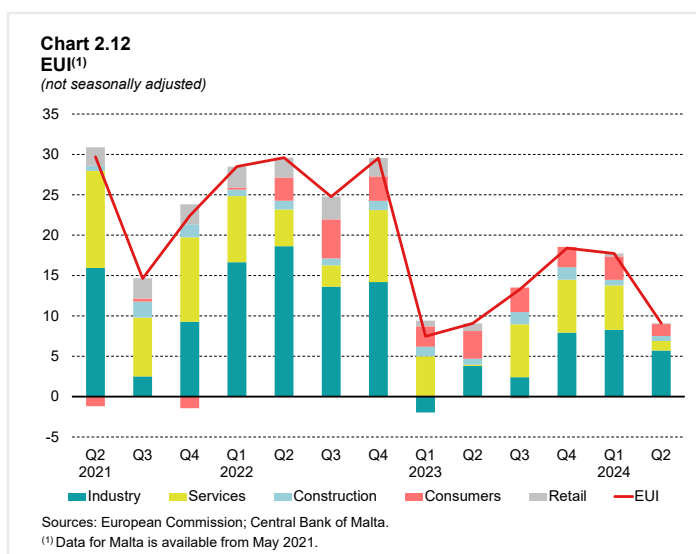
¹⁶ The construction confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to two survey questions, namely those relating to order books and to employment expectations over the subsequent three months.

¹⁷ The EEI is based on question 7 of the industry survey, question 5 of the services and retail trade surveys and question 4 of the construction survey, which gauge the respondent firms' expectations as regards changes in their total employment over the next three months. Before being summarised in one composite indicator, each balance series is weighted on the basis of the respective sector's importance in overall employment. The weights are applied to the four-balance series expressed in standardised form. Further information on the compilation of the EEI is available in European Commission (2020). *The Joint Harmonised EU Programme of Business and Consumer Surveys User Guide*.

largely explains why the overall EUI stood below its long-term average.

Economic Uncertainty Indicator (EUI) decreases further

The European Commission's EUI is a composite indicator which measures how difficult it is for sectors to make predictions about their future financial or business situation. In Malta, this indicator decreased to 9.1 in the second quarter of the year, from 17.7 in the preceding quarter (see Chart 2.12). The indicator also remained below that in the euro area, which averaged 18.4.^{18,19}



Lower uncertainty was recorded across all domestic sectors. The strongest fall, though, was recorded in the services sector.

When considering each sector's weight and past volatility, industry and consumers had the highest contributions to uncertainty during the quarter under review, while uncertainty was least widespread among retailers.

The labour market²⁰

Labour force increases at a faster pace and activity rate increases at a slower pace

Labour Force Survey (LFS) data show that in the second quarter of 2024, the labour force grew by 17,268 persons, or 5.6% on an annual basis, faster than the 4.1% increase recorded in the previous quarter (see Table 2.4).²¹

The activity rate stood at 81.1% in the quarter under review, higher than the 79.8% registered a year earlier.²² This was due to increases in both the female participation rate, and that of males. The male participation rate increased by 1.1 percentage points to 87.5%, while that of females

¹⁸ The EUI is made up of five balances (in percentage points) which summarise managers'/consumers' answers to a question asking them to indicate how difficult it is to make predictions about their future business/financial situation. The series are not seasonally adjusted. The five-balance series are summarised in one composite indicator using the same weights used to construct the ESI. The questions asked correspond to Q51 of the industry survey, Q31 of the services survey, Q41 of the retail trade and construction surveys and Q21 of the consumer survey.

¹⁹ Data on consumer uncertainty became available in October 2020, while data for industry, services, retail, and construction became available in May 2021.

²⁰ This section draws mainly on labour market statistics from two sources: the LFS, which is a household survey conducted by the NSO based on definitions set by the International Labour Organization (ILO) and Eurostat; and administrative records compiled by Jobsplus according to definitions established by domestic legislation on employment and social security benefits.

²¹ The LFS defines the labour force as all persons aged 15 and over who are active in the labour market. This includes those in employment, whether full-time or part-time, and the unemployed, defined as those persons without work but who were actively seeking a job during the previous four weeks and available for work within two weeks of the reference period.

²² The activity rate measures the number of persons in the labour force aged between 15 and 64 as a proportion of the working age population, which is defined as all those aged 15 to 64 years.

Table 2.4
LABOUR MARKET INDICATORS BASED ON THE LFS

Persons; annual percentage changes

	2023	2024	Annual change
	Q2	Q2	%
Labour force	308,786	326,054	5.6
Employed	297,128	315,545	6.2
<i>By type of employment:</i>			
Full-time	262,397	279,819	6.6
Part-time	34,731	35,726	2.9
Unemployed	11,658	10,509	-9.9
Activity rate (%)	79.8	81.1	
Male	86.4	87.5	
Female	71.9	73.2	
Employment rate (%)	76.8	78.4	
Male	83.0	84.5	
Female	69.3	71.0	
Unemployment rate (%)	3.8	3.2	
Actual hours worked (per week)	35.3	34.9	

Source: NSO.

increased by 1.3 percentage points to 73.2%. Both rates exceeded the corresponding rates for the euro area.

Employment increases at a faster pace

Employment rose by 6.2% in annual terms, following a rise of 4.6% in the previous quarter. Most of the increase in absolute terms was driven by full-time employment, as this rose by 17,422 persons, or 6.6% on a year earlier. This increase was mainly coming from the sector comprising human health, accommodation and food service activities, followed by industry and construction.

The number of persons in part-time jobs – which also includes those employed full-time on reduced hours – rose by 995, or 2.9% in annual terms. This increase was mostly driven by the sectors comprising education, financial and insurance activities, and the sector comprising administrative and support service activities.

The overall employment rate rose by 1.6 percentage points on the same period of 2023, to reach 78.4%.²³ The increase was broad-based across age brackets but was more significant among individuals aged up to 54 years. The female employment rate rose by 1.8 percentage points to 71.0%, and that of males rose by 1.4 percentage points to 84.5%.

During the quarter under review, average weekly hours worked derived from the LFS declined to 34.9, from 35.3 a year earlier (see Table 2.4).²⁴ This reflected a decrease in average hours worked reported by both full-time and part-time employees.

²³ The employment rate measures the number of persons aged between 15 and 64 employed on a full-time or part-time basis as a proportion of the working-age population.

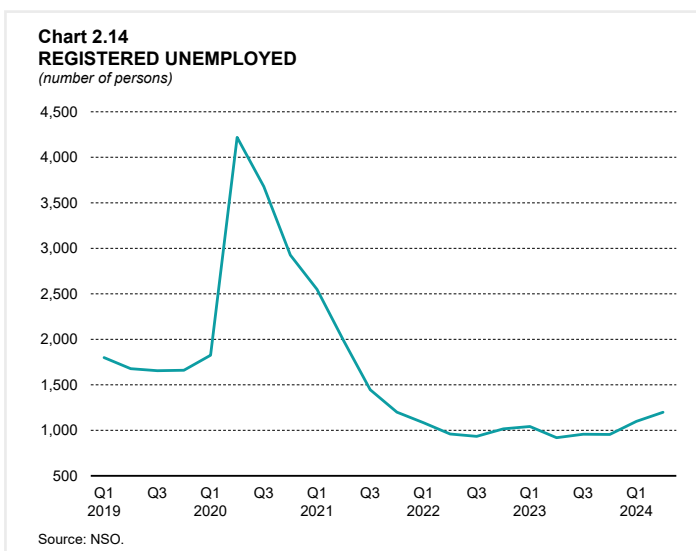
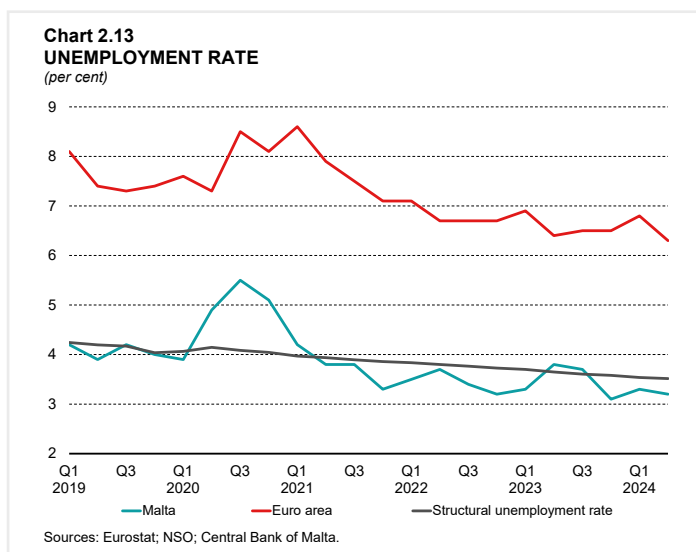
²⁴ Actual hours refer to the number of hours actually spent at the place of work during the reference week for LFS. A person may work extra hours (e.g. overtime, variable hours) or work less hours than usual (e.g. vacation leave, education, sick leave or slack work) due to various reasons. Owing to increased flexibility at workplaces coupled with technology, the place of work may also include one's home. In this regard, actual hours worked also include the hours of work conducted by persons who telework.

The unemployment rate remains low

The unemployment rate based on the LFS fell to 3.2%, from 3.8% a year earlier (see Table 2.4). This reflects continued strong demand for labour.²⁵ Labour market conditions remained more favourable than those in the euro area, where the unemployment rate on average stood at 6.3% (see Chart 2.13).

During the quarter under review, the unemployment rate also stood below the Bank's structural measure of 3.5%.²⁶ This indicates a degree of labour market tightness, which is also confirmed by the Bank's *Business Dialogue* publication and other indicators (see below).

Jobsplus data show that the number of persons on the unemployment register increased, both on a quarterly basis and in annual terms. During the second quarter of 2024, the average number of persons on the unemployment register stood at 1,198, compared with 919 a year earlier, and 1,099 in the first quarter of 2024 (see Chart 2.14).



The vacancy rate declined but remained elevated

In absolute terms the number of vacancies increased from 7,117 in the second quarter of 2023 to 8,092 in the same quarter of 2024, that is, a 13.7% increase. Eurostat's job vacancy rate for industry, construction and services increased in year-on-year terms, but decreased in quarterly terms,

²⁵ According to the LFS, the unemployed comprise persons aged between 15 and 74 years who are without work, available for work and who have actively sought work during the four weeks preceding the Survey. In contrast, the number of unemployed on the basis of the Jobsplus definition includes only those persons registering for work under Part 1 and Part 2 of the unemployment register.

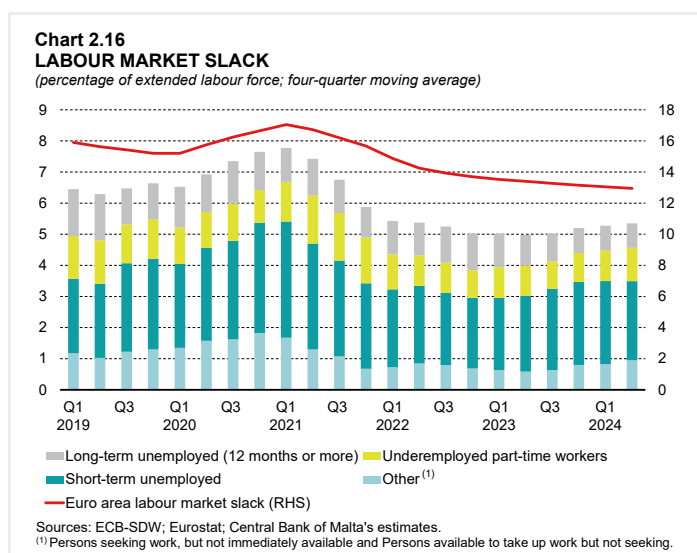
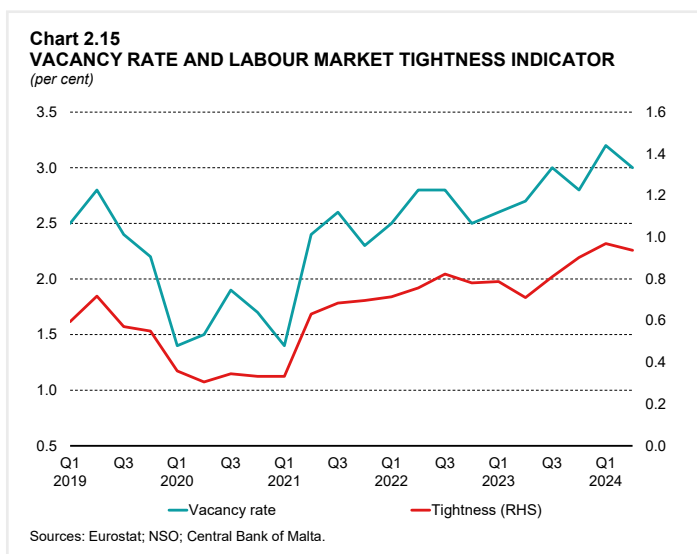
²⁶ The structural unemployment rate in this chapter refers to the non-accelerating inflation rate of unemployment (NAIRU), that is, the unemployment rate that is consistent with stable inflation. This measure of the unemployment rate is based on an unobserved components model (UCMPF). For further details, see Borg, I. (2023). "Box 1: Latest Estimates of the NAIRU" *Outlook for the Maltese Economy* 2023:1, pp.7-9 and Ellul, R. (2019). "Box 1: An Unobserved Components Model for potential output in Malta", *Quarterly Review* 2019:2, pp. 17-21.

reaching 3.0% in the quarter under review (see Chart 2.15).²⁷ The highest vacancy rates were recorded in the information and communication sector (6.0%), the water supply; sewerage, waste management and remediation activities sector (4.6%), the other service activities sector (4.5%), and the administrative and support service activities sector (4.1%).

The ratio of the job vacancy rate to the unemployment rate is an indicator of the imbalance between labour demand and supply and, therefore, of labour

tightness. During the quarter under review, this ratio stood at 0.9, slightly lower than in the previous quarter, but above the ratio of 0.7 recorded a year earlier. Market conditions thus remained very tight compared to recent outturns. This contrasts with the euro area average, where the tightness indicator declined to around 0.4. Labour market conditions in the euro area continue to be significantly less tight compared to those in Malta.

To measure better labour market slack (unemployed and underutilised labour), one can consider an extended labour force definition, which in addition to the unemployed, also includes persons available to take up work but not seeking it, persons seeking work but not immediately available, and underemployed part-time workers. By this measure, on a four-quarter moving average basis, labour market slack was equivalent to 5.4% of the extended labour force in the second quarter of the year (see Chart 2.16).²⁸ This rate appears to have stabilised in recent quarters, to a level which is well below its average of around 8.0% estimated since 2010. It is also significantly lower than the 13.0% recorded for the euro area.



²⁷ The job vacancy rate measures the number of job vacancies as a percentage of total jobs (occupied and vacant). Data for Malta are available since 2017.

²⁸ For further details on the methodology underlying the measure of labour market slack, see Ellul, R. (2019). "Labour Market Slack," *Quarterly Review* 2019:1, pp. 37-41, Central Bank of Malta. Given that this methodology partly relies on internal estimation, the slack indicator reported in this *Review* may differ slightly from that published by Eurostat.

The gap between the broader measure of labour market slack and the unemployment rate declined considerably since the second quarter of 2021, indicating a reduction in the share of underutilised labour. However, this gap registered a slight uptick during the last three quarters.

In the second quarter of 2024, almost two-thirds of the labour market slack stemmed from unemployment (primarily from short-term unemployment). Underemployed part-time workers, i.e., those working part-time but willing and able to work additional hours, accounted for slightly more than half of the underutilised component of labour market slack.

BOX 2: THE IMPACT OF MITIGATING CLIMATE CHANGE ON MALTESE FIRMS' EMPLOYMENT PLANS¹

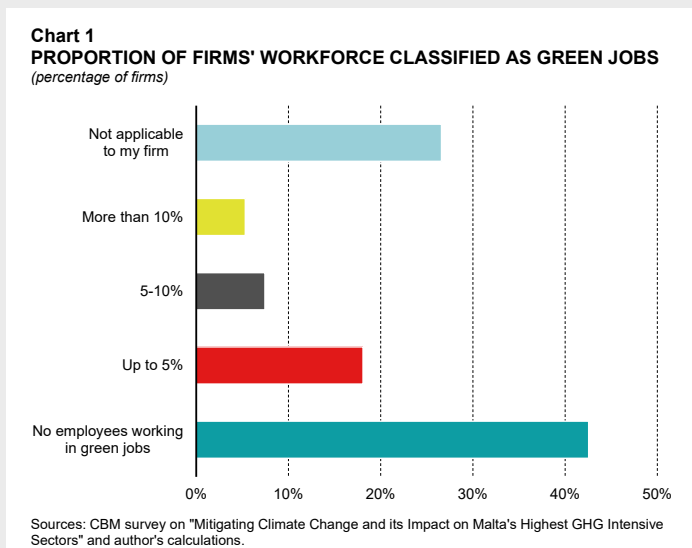
As the global community intensifies its efforts to mitigate the impact of climate change, businesses worldwide, including those in Malta, face increasing pressure to adapt their operations and workforce to align with a carbon-neutral future. The transition towards a green economy requires more than just investment in new technologies and infrastructure. It also necessitates a fundamental reshaping of the workforce to meet the demands of sustainability.

Building on a recent survey by the Central Bank of Malta, this box delves deeper into how local firms plan to adapt their employment practices in response to climate change. This survey, which used a quota sampling framework, specifically targeted firms which employ at least ten employees. Sectors were classified into high, mid, and low greenhouse gas (GHG) emissions intensity by scaling each sector's GHG emissions against its gross value added (GVA). Only companies in sectors with high and mid-level GHG emissions intensity were targeted.²

Employment shifts in response to climate change

Green jobs refer to any role that contributes to preserving or restoring the environment. This includes jobs that directly reduce the carbon footprint, promote energy efficiency, utilize renewable energy sources, reduce waste and pollution, or support sustainability practices.³ Green jobs are integral to the transition towards a low-carbon economy and involve the development, implementation, and maintenance of strategies that mitigate the impact of climate change.

According to the survey, while a substantial 43% of firms reported having no employees classified as working in green jobs, there is a notable minority making progress in this area (see Chart 1). About 7% of firms have 5-10% of their workforce engaged in green jobs, and 5% have more than 10% of their workforce in such roles. This was more prominent amongst



¹ Prepared by Mr Warren Deguara, Principal Economist within the Economic Projections and Conjunctural Analysis Office. The views expressed are those of the author and do not necessarily reflect the views of the Central Bank of Malta. Any remaining errors are the sole responsibility of the author.

² For further details see [The impact of mitigating climate change on Maltese firms](#), Deguara, et al. (2024).

³ See [Green jobs, green economy, just transition and related concepts: A review of definitions developed through intergovernmental processes and international organizations](#), Castillo (2023).

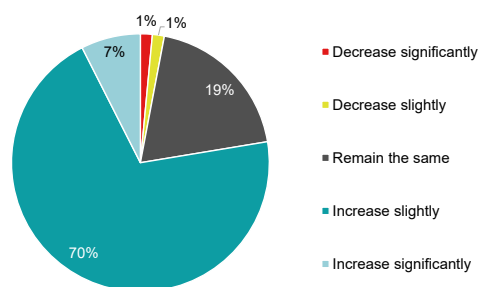
firms operating in mid-GHG intensive emitting sectors and in the construction sector. The remaining 18% have up to 5% of their workforce engaged in these roles.

These figures indicate a growing recognition among some Maltese firms of the importance of green jobs in driving sustainable business practices. Nonetheless, such figures are likely to be less than those reported in the ninth report on economic, social and territorial cohesion where an estimated 20% of total employment in Malta were classified as green jobs in 2020.⁴ Another interesting finding from this survey is that 63% of firms disagree that climate change or adaptation to it will cause the company to relocate some of its staff.

When it comes to future employment plans, most firms (70%) who consider green jobs to be relevant for their operations expect their green workforce only to increase slightly in the coming years, and this was common across emissions intensity levels and across sectors. A further 7% anticipate a significant increase in green employment (see Chart 2). Nonetheless, almost a fifth of surveyed firms expect their level of green workforce to remain the same in the coming years.

This cautious approach may reflect the broader challenges firms face in adapting to climate change, particularly in the context of financing and skill development. It could also hint at the tightness of the Maltese labour market whereby several skills shortages have been reported by firms interviewed in the Central Bank of Malta's Business Dialogue over the past few years.

Chart 2
EXPECTED CHANGE IN GREEN WORKFORCE OVER THE COMING YEARS
(percentage of firms)



Sources: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.
Note: Replies conditional on the respondents' answer to whether green occupations are relevant to their operations i.e. conditional on the results in Chart 1.

Labour and skill requirements

Maltese companies identified several key skills and roles needed for their transition to a green economy, reflecting both the nature of their operations and their environmental impact. A clear takeaway from company replies is the need for their workforce to develop the necessary green skills to aid in the transition. The Inter-Agency Working Group on Work-based Learning defines skills for the green transition as 'skills and competences but also knowledge, abilities, values and attitudes needed to live, work and act in resource-efficient and sustainable economies and societies'.⁵

⁴ See [Ninth Report on Economic, Social and Territorial Cohesion](#), European Commission (2024). This report utilises NUTS2 regional data for 56 NACE sectors and hence results might differ from survey data.

⁵ See [Work-based learning and the green transition](#), Inter-Agency Working Group on Work-based Learning (2022).

In the manufacturing sector, companies in high-GHG intensive emitting sectors consistently emphasized the need for enhanced engineering skills, particularly in energy efficiency, sustainability, and compliance. These companies highlighted the importance of upskilling their existing workforce, especially in areas such as engineering and environmental management, to integrate green practices into their operations. For instance, traditional roles like chemists and engineers are expected to incorporate sustainability into their daily tasks. Meanwhile, companies in mid-GHG intensive emitting sectors also point out the need for environmental engineers, energy auditors, and specialists in logistics and product design. There is a clear demand for both technical expertise and a shift in operations to meet green economy goals. These findings are very much in line with other local studies and with the most in demand green jobs in 2023 as reported by the European Labour Authority.⁶

In the wholesale and retail sector, high-GHG intensive emitting sector companies exhibited a wider range of needs, including consultancy services to guide employees, expertise in ecosystem management, clean energy, and ESG (Environmental, Social, and Governance) practices. These firms also noted the importance of transitioning to electric vehicles and managing carbon footprints. Mid-GHG intensive emitting companies focused on more practical skills, such as the need for trained installers for renewable energy technologies like photovoltaic systems and electric vehicle chargers. Additionally, there was a call for greater awareness and training among staff to adapt to green economy requirements.

The services sector presented varying needs depending on the GHG intensity. High-GHG intensive emitting sector companies stressed the importance of sustainability managers, engineers with green technology expertise, and personnel knowledgeable in EU Taxonomy and environmental certifications. These companies are looking for individuals who can bring a green mindset into their operations and help integrate sustainability into existing structures. On the other hand, mid-GHG intensive emitting firms highlighted the need for renewable energy advisors, data collection specialists, and experts in waste management. They also emphasized the need for training programs to change employee mindsets and improve understanding of new technologies.

Respondents from the construction and real estate sector, who mostly operated in mid-GHG intensive emitting companies, highlighted waste and sustainability management, along with the need for general education on environmentally friendly practices. These firms are particularly focused on adopting new technologies and machinery, and ensuring their workforce is trained in sustainable practices.

Challenges in developing a green workforce

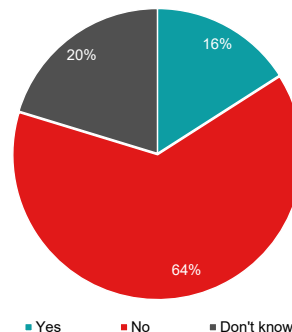
One of the most significant findings from the survey is the perceived inadequacy of the current Maltese labour force to support the transition to carbon neutrality. A striking 64% of firms believe that the local labour force is not adequately equipped to help achieve this goal, with only 16% expressing confidence in the labour force's readiness (see Chart 3). These views are practically identical across emissions intensity levels and economic sectors. This is in

⁶ Based on a representative survey amongst Maltese companies, employers, training providers and/or agencies, in a 2022 Intercept Project study about green jobs in Malta, Dr Vincent Marmara found that the most needed occupations are Solar (82.9%) and Wind (66.9%) Energy Engineers. See also [In-demand green jobs in 2023](#), European Labour Authority (2023).

line with findings from the 2022 Intercept Project study about green jobs in Malta which shows that across different skills levels (low, medium and high), most Maltese companies report that there will be a need of both new skills and upgrading of existing skills. Moreover, the report finds that motivation, creativity, communication, and critical thinking are among the top four soft skills considered by the respondents as most important for green jobs. As such, training opportunities for upskilling are essential for employment in green jobs. This sentiment underscores a critical gap in the current skills landscape, which could impede Malta's progress towards its climate goals.

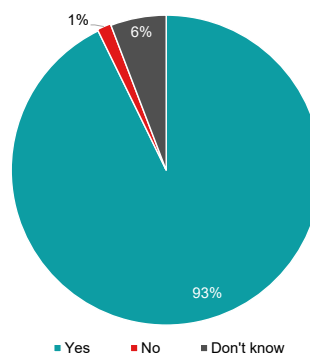
On a positive note, local firms have a strong willingness to invest in training their employees to gain green skills. In fact, 93% of companies that consider green jobs to be relevant for their operations are willing to train their workforce in green skills, highlighting their commitment to improve operations, become more sustainable, and achieve their climate goals (see Chart 4). On the other hand, a small proportion (1% of firms) is unwilling to do so, and a further 6% are uncertain. This reluctance or indecision could stem from the perceived costs and logistical challenges associated with training, further complicating efforts to build a green economy. In fact, the survey reveals that financing the transition to a green economy remains a significant challenge for Maltese firms. While the survey indicates that many companies are making changes in response to climate change, the financial burden of these investments is a recurring theme. The cost of upgrading infrastructure, adopting new technologies, and training employees can be prohibitive, particularly for smaller firms with limited resources.

Chart 3
MALTESE LABOUR FORCE ADEQUACY TO AID IN ACHIEVING CARBON NEUTRALITY
(percentage of firms)



Sources: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.
Note: Replies conditional on the respondents' answer to whether green occupations are relevant to their operations i.e. conditional on the results in Chart 1.

Chart 4
WILLINGNESS TO TRAIN EMPLOYEES IN DEVELOPING GREEN SKILLS
(percentage of firms)



Sources: CBM survey on "Mitigating Climate Change and its Impact on Malta's Highest GHG Intensive Sectors" and author's calculations.
Note: Replies conditional on the respondents' answer to whether green occupations are relevant to their operations i.e. conditional on the results in Chart 1.

This financial burden is worsened by the lack of awareness of available funding opportunities, especially from national sources. Without knowing about these support options, firms may struggle to get the resources they need for a sustainable transition, thus slowing their progress.

Main conclusions

Considering the challenges identified in the survey, it is essential for Maltese firms to adopt a more strategic approach to workforce development for a successful transition to a green economy. This requires not only ensuring the existing workforce is adequately trained for a carbon-neutral future but also attracting talent capable of contributing to the shift towards sustainability.

Investment in education and training must be prioritized. Firms should focus on upskilling employees, particularly in critical areas such as renewable energy, sustainability management, and green technologies. By doing so, they can build a workforce that not only supports current operations but also drives innovation and growth in the green economy. Collaboration with educational institutions, government bodies, and industry associations will be key in bridging the existing skills gap. Together, these stakeholders can develop targeted training programs that align with the specific needs of Maltese firms, ensuring the labour force is prepared for the challenges of climate change.

The survey highlights both progress and ongoing challenges in adapting to the demands of a green economy. While there is increasing recognition of the importance of green jobs and skills, significant gaps remain in workforce readiness, environmental awareness, and access to financing. To address these gaps, firms must take a proactive stance on workforce development, focusing on building technical skills in areas like engineering, sustainability, and environmental management. Upskilling initiatives, whether through formal training or hiring experts in green technologies, are recognized across sectors as essential.

The transition to a green economy is not only a technical challenge but also one requiring a shift in mindset and operational practices. Greater awareness and utilization of available funding and support mechanisms will be critical to easing the financial burden of this transition. By addressing these issues, Maltese firms can ensure a sustainable future for both their businesses and the wider community.