

2. OUTPUT AND EMPLOYMENT

Annual real GDP growth rose by 4.3% in the fourth quarter of 2023, following a 7.0% increase in the previous quarter. Growth in the last quarter was driven by net exports, as domestic demand contracted, largely due to lower GFCF which had been boosted by extraordinary investment in the aviation sector a year earlier. When adjusting for imports, exports remained the main driver, while domestic demand had a marginally positive impact on GDP growth.

Sectoral data show that the expansion in output was primarily driven by the services sector, especially the sector comprising professional, scientific, administrative, and related activities. gross value added (GVA) also rose slightly in the manufacturing sector, and in the construction sector.

During the fourth quarter of 2023, developments in the labour market remained positive, although with signs of a moderation in the pace of job creation. The unemployment rate remained low from a historical perspective and stood well below that in the euro area.

The number of job vacancies increased by almost a fifth when compared to the last quarter of 2022. Meanwhile, the job vacancy rate and the labour tightness indicator, which is the ratio of the job vacancy rate to the unemployment rate, remained at an elevated level.

Potential output and Business Conditions Index

Potential output grows at a slower rate

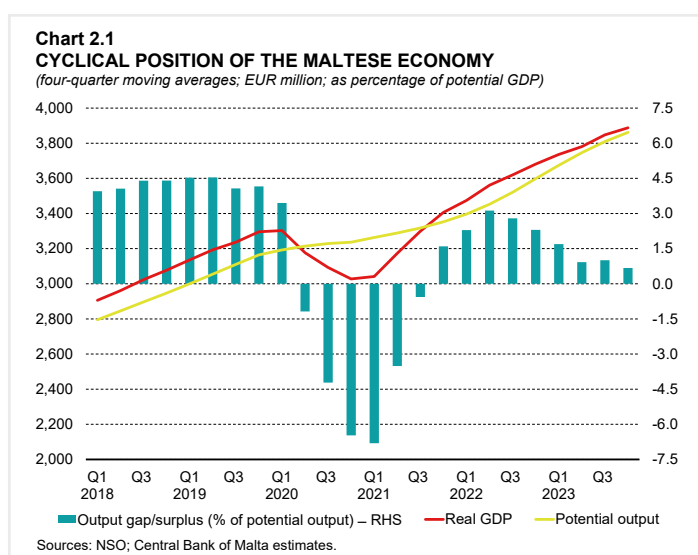
The Bank estimates that potential output growth stood at 5.7% in the fourth quarter of 2023, below that of 7.0% estimated for the previous quarter.

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 smaller positive output gap. The latter is estimated at 0.7%, down from 1.0% in the third quarter of 2023 (see Chart 2.1).

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

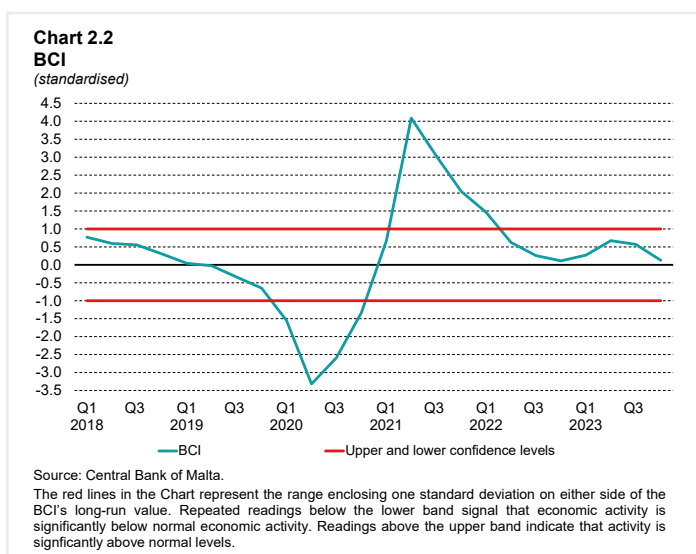
BCI suggests growth reverting to historical average

The Bank's BCI continued to edge down in the fourth quarter



but remained slightly above its historical average (see Chart 2.2).¹

During the quarter under review, the BCI was affected by an above-average performance in several sub-components, particularly in ESI and in industrial production. The historically low unemployment rate also contributed to a positive BCI level. On the other hand, inbound tourism contributed to a below-average BCI. Although tourist arrivals continued to increase at double-digit rates, their growth rate was marginally below its long-term average. Meanwhile, year-on-year declines in the issuance of development permits for residential buildings have also put downward pressure on the BCI level, bringing it close to its long-term average.



GDP and industrial production

Real GDP growth driven by net exports

Real GDP rose by 4.3% on an annual basis, following a 7.0% increase in the previous quarter.² The slowdown reflected a smaller positive contribution from trade, and a more negative contribution from domestic demand (see Table 2.1).

The latter contracted by 4.5%, following a 2.3% decrease in the previous quarter, largely driven by a sharper decline in GFCF. This, in turn, mostly reflected a correction in import-intensive investment in the aviation sector from its peak level recorded in the corresponding quarter of 2022. Slower growth in private consumption also contributed. Overall, domestic demand shed 4.0 percentage points from GDP growth in the quarter under review.

Private consumption expenditure increased by an annual 7.3% in the fourth quarter of 2023, following a 7.9% increase in the previous quarter, adding 3.1 percentage points to real GDP growth.

Data on the Classification of Individual Consumption by Purpose (COICOP) show that the strongest increase in absolute terms was recorded in spending on miscellaneous goods and services, which includes expenditure on personal care, insurance and financial services, among others.

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](#) is available. 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.

² The analysis of GDP in this chapter of the *Quarterly Review* is based on NSO *News Release* 039/2024, which was published on 28 February 2024.

Table 2.1
GDP⁽¹⁾

	2022		2023		
	Q4	Q1	Q2	Q3	Q4
	<i>Annual percentage changes</i>				
Private final consumption expenditure	6.9	8.4	7.1	7.9	7.3
Government final consumption expenditure	-1.0	0.8	-0.3	5.6	7.1
GFCF	44.5	-13.4	-17.3	-25.3	-30.4
Domestic demand	14.1	0.8	-1.4	-2.3	-4.5
Exports of goods and services	7.5	9.8	11.5	6.2	7.4
Imports of goods and services	11.6	7.1	8.5	0.9	2.4
GDP	7.0	6.3	4.9	7.0	4.3
	<i>Percentage point contributions</i>				
Private final consumption expenditure	2.9	3.5	3.0	3.4	3.1
Government final consumption expenditure	-0.2	0.1	-0.1	1.0	1.3
GFCF	9.1	-3.1	-4.2	-6.3	-8.4
Changes in inventories	0.1	0.1	0.1	-0.1	0.0
Domestic demand	11.8	0.7	-1.2	-2.0	-4.0
Exports of goods and services	12.2	16.7	18.8	10.4	12.0
Imports of goods and services	-17.0	-11.0	-12.8	-1.4	-3.7
Net exports	-4.8	5.7	6.0	9.0	8.3
GDP	7.0	6.3	4.9	7.0	4.3

Sources: NSO; Central Bank of Malta calculations.

⁽¹⁾ Chain-linked volumes, reference year 2015.

This was followed by higher spending on restaurants and hotels, recreation and culture, and transport. Expenditure on these items benefitted from the continued strong growth in tourism activity. On the other hand, spending on housing, water, electricity, gas, and other fuels registered a strong decrease. Smaller declines were also reported for spending on furnishings, household equipment and routine household maintenance, and on clothing and footwear.

COICOP data measure domestic consumption and thus, include the expenditure of non-residents in Malta while excluding the expenditure of Maltese residents abroad. Given that tourist arrivals exceeded last year's levels, certain COICOP categories of expenditure were affected by a strong increase in non-residents' expenditure in Malta. Nonetheless, the remaining part of domestic consumption – the expenditure of Maltese residents in Malta – also rose when compared to the same period a year earlier. Meanwhile, the expenditure of Maltese residents abroad increased significantly on its year-ago level, partly reflecting an increase in trips over the same period.

Government consumption expenditure grew by 7.1% in annual terms, following an increase of 5.6% in the third quarter of 2023. The increase in the fourth quarter mostly reflects an increase in intermediate consumption within the public administration, health, and residential care sectors, although higher expenditure on compensation of employees also contributed. Overall, government consumption added 1.3 percentage points to annual GDP growth.

Real GFCF declined by an annual 30.4% in the fourth quarter of the year, following a contraction of 25.3% in the previous quarter. The most significant decrease was recorded in expenditure on machinery and equipment, reflecting a decrease in registrations of aircraft from the peak level recorded a year earlier. Investment in dwellings also declined. On the other hand, investment in intellectual property and in non-residential buildings increased, while spending on cultivated biological resources remained broadly stable. GFCF shed 8.4 percentage points from real GDP growth.

The contribution of changes in inventories was broadly neutral in the last quarter of 2023.

Imports grew by 2.4%, while exports increased by 7.4% on a year earlier. As exports grew faster than imports, net exports increased, adding 8.3 percentage points to annual real GDP growth. This reflected a smaller trade deficit in goods (in volume terms), which in part reflected the aforementioned correction in aircraft imports, and a higher surplus from trade in services.

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. Overall, import-adjusted contributions show that exports remained the main contributor to real GDP growth in the fourth quarter of 2023, despite recording a much smaller positive contribution compared with the traditional approach. Meanwhile, GFCF recorded a much smaller negative contribution than the traditional approach indicates. As a result, and in contrast with that approach, domestic demand had a small positive contribution to growth in the quarter under review. Private consumption remains the main driver behind the growth in domestic demand when adjusting for imports.

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

	2022		2023		
	Q4	Q1	Q2	Q3	Q4
	<i>Percentage point contributions</i>				
Private final consumption expenditure	1.5	2.0	1.5	2.3	1.8
Government final consumption expenditure	-0.2	0.1	-0.1	0.8	1.1
GFCF	2.9	-1.0	-1.5	-1.8	-2.7
Changes in inventories	0.0	0.0	0.0	-0.2	0.0
Domestic demand	4.1	1.1	0.0	1.2	0.1
Exports of goods and services	2.9	5.2	4.9	5.8	4.1
GDP	7.0	6.3	4.9	7.0	4.3

Source: Central Bank of Malta estimates.

⁽¹⁾ Chain-linked volumes, reference year 2015.

Sectoral developments in GVA

GDP data based on the output approach show that in the fourth quarter of 2023, real GVA rose by 5.1% in annual terms, following a 4.4% increase in the previous three-month period. It added 4.7 percentage points to GDP growth (see Table 2.3).³

Services remained the main driver behind the latest economic expansion, adding 3.9 percentage points to real GDP growth. Most of the increase stemmed from the sector comprising professional, scientific, administrative, and related activities, which contributed 2.0 percentage points to GDP growth. The sector comprising public administration and defence, education, health and related activities added a further 0.8 percentage point to growth, while the financial and insurance sector added 0.5 percentage point. The remaining services sectors together added another 0.6 percentage point to growth.

The manufacturing sector added 0.1 percentage point to growth, while the construction sector recorded a broadly neutral contribution. Thus, for the first time since the final quarter of 2021, the construction sector does not contribute negatively to GDP growth. Meanwhile, the contribution of net taxes on products turned marginally negative.

Table 2.3
CONTRIBUTION OF SECTORAL GVA TO REAL GDP GROWTH

Percentage points

	2022		2023		
	Q4	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	0.0	0.0	-0.1	-0.2	0.1
Mining and quarrying; utilities	0.1	0.5	0.8	0.0	0.6
Manufacturing	1.2	0.6	0.4	0.1	0.1
Construction	-0.4	-0.7	-0.5	-0.2	0.0
Services	7.3	6.0	5.3	4.5	3.9
<i>of which:</i>					
Wholesale and retail trade; repair of motor vehicles; transportation; accommodation and related activities	3.9	1.4	1.9	-0.2	-0.2
Information and communication	0.8	0.9	0.4	0.5	0.2
Financial and insurance activities	0.2	0.8	1.1	1.2	0.5
Real estate activities	0.0	0.2	0.1	0.2	0.3
Professional, scientific, administrative and related activities	1.1	1.3	1.7	1.4	2.0
Public administration and defence; education; health and related activities	0.9	0.7	-0.3	0.7	0.8
Arts, entertainment; household repair and related services	0.4	0.7	0.4	0.8	0.3
GVA	8.2	6.3	6.0	4.2	4.7
Taxes less subsidies on products	-1.2	0.0	-1.2	2.8	-0.4
Annual real GDP growth (%)	7.0	6.3	4.9	7.0	4.3

Source: NSO.

³ The difference between GDP and GVA is made up of taxes on products, net of subsidies.

Nominal GDP growth remains strong

Nominal GDP rose by 9.3% in annual terms in the fourth quarter of 2023, after increasing by 12.8% in the previous quarter. All components from the income side - compensation of employees, operating surplus, and net taxes – contributed positively to nominal GDP growth. Gross operating surplus remained the main contributor to growth. Moreover, it rose at a faster rate in the last quarter, in contrast to the wage bill, which rose at a slower pace.

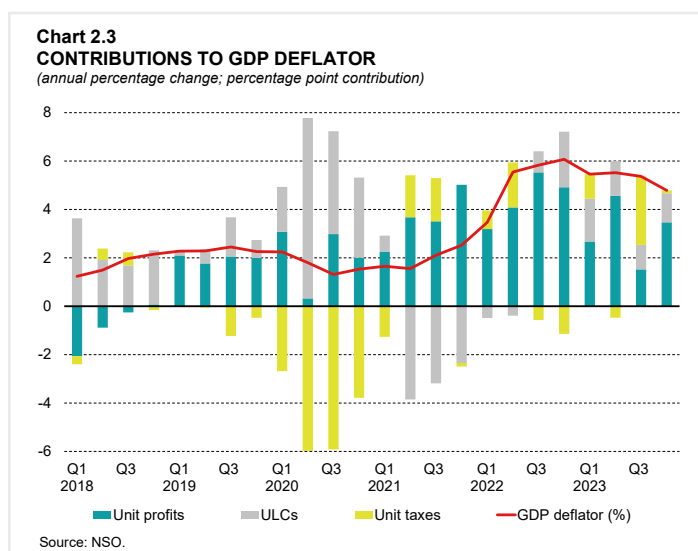


Chart 2.3 shows that annual growth in the GDP deflator moderated but remained elevated from a historical perspective. It stood at 4.8% in the fourth quarter of 2023, below the 5.4% recorded in the previous three-month period.

Compared with the third quarter of the year, unit profits, and to a limited extent ULCs exhibited a larger positive contribution.⁴ By contrast, the contribution of unit taxes decreased sharply, while remaining marginally positive.

Industrial production increases at a faster pace

Industrial production increased at an annual rate of 4.6% in the fourth quarter of 2023, following a rise of 2.5% in the previous quarter.⁵

Production in the manufacturing sector rose at a faster pace of 3.5%, from 2.1% in the third quarter. Production in the quarrying sector increased at a fast rate on a year-on-year basis, following a contraction in the third quarter. However, in the energy sector, production contracted at a faster pace when compared to the third quarter of 2023.⁶

In the manufacturing sector, firms that produce computer, electronic and optical products recorded the strongest year-on-year increase. Production also rose strongly among firms involved in the manufacture of wood and wood products, furniture, rubber and plastic products, as well as those involved in 'other manufacturing' – which includes medical and dental instruments. In all these sectors, production increased at double-digit rates. Smaller increases were recorded among firms that manufacture food, beverages, and pharmaceutical products.

⁴ The analysis of ULCs in this section is not comparable to that in the prices and competitiveness section, as the latter is based on four-quarter moving averages.

⁵ 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.

⁶ Industrial production in the energy sector excludes energy generated abroad and imported through the interconnector.

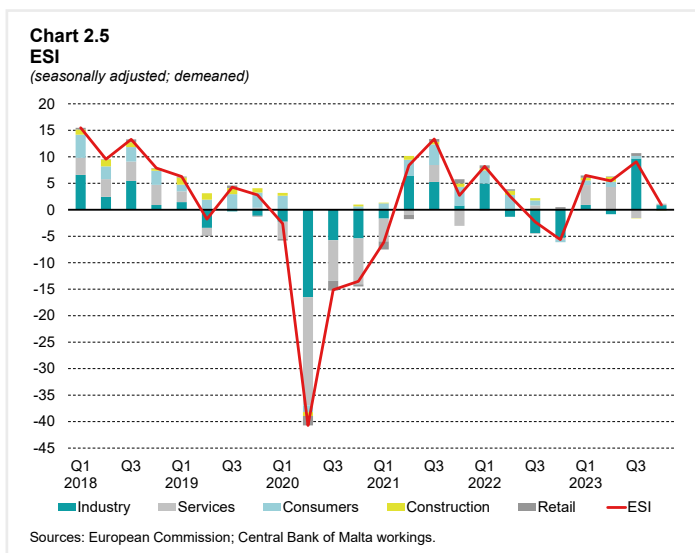
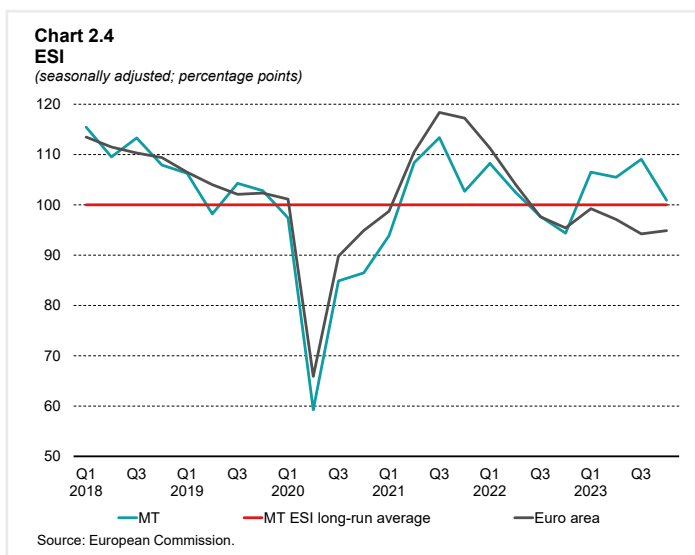
By contrast, output contracted among firms that produce motor vehicles, trailers and semi-trailers, and electrical equipment. Smaller reductions were recorded by firms producing paper products, those producing certain non-metallic mineral products, and electrical equipment as well as firms involved in the printing and reproduction of recorded media.

Business and consumer surveys

During the fourth quarter of 2023, the European Commission’s ESI for Malta fell to 100.9, from 109.1 in the preceding quarter, thus standing marginally above its long-term average of around 100.0. However, the overall indicator remained above that in the euro area, which averaged 94.9 (see Chart 2.4).^{7,8}

When compared with the third quarter of the year, confidence deteriorated across all sectors, bar the services sector. The strongest decline was recorded in industry and among retailers.

When accounting for the weights assigned to each sector, and the time variation of each sector, the decrease in the ESI relative to third quarter of 2023 was almost entirely driven by developments in industry.⁹ Nevertheless, as sentiment in this sector was still above its long-term average, it kept the overall ESI marginally above the long-term average in the quarter under review (see Chart 2.5).



⁷ The ESI summarises developments in confidence in five surveyed sectors: industry; services; construction; retail; and consumers. Quarterly data are three-month averages.

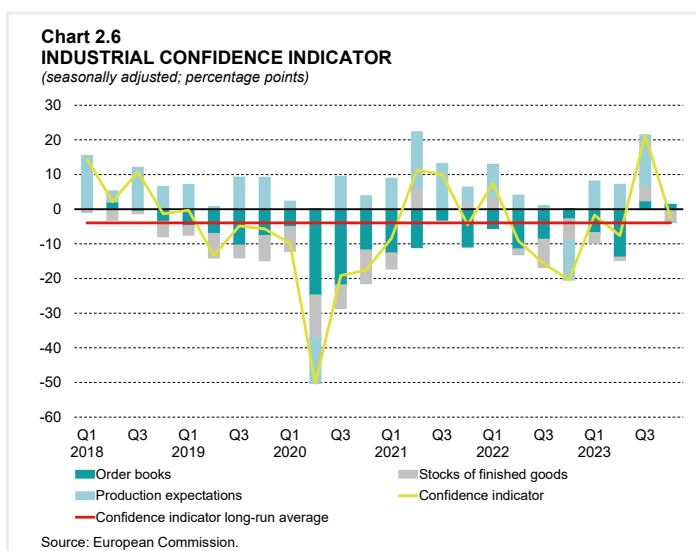
⁸ Long-term averages are calculated over the entire period for which data are available. For the consumer and industrial confidence indicators, data for Malta became available in November 2002, while for services and construction data became available in May 2007 and May 2008, respectively. The long-term 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.

⁹ Weights are assigned as follows: industry 40%; services 30%; consumers 20%; construction 5%; and retail trade 5%.

Industrial confidence turns negative¹⁰

The industrial confidence indicator decreased to -2.4, from 21.4 in the previous 3-month period, but remained above its long-term average of -3.9 (see Chart 2.6). Weaker sentiment reflected a deterioration in all its components, but notably in firms' production expectations, which fell to a broadly neutral level after being strongly positive in the previous quarter.

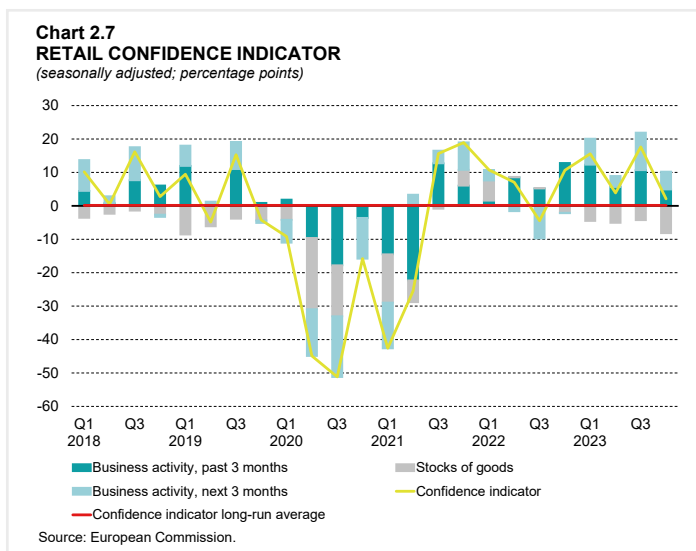
Additional survey data reveal that the share of respondents anticipating higher selling prices edged down slightly.



Sentiment among retailers decreases¹¹

The indicator of sentiment in the retail sector stood at 2.1 in the fourth quarter of 2023, down from 17.6 in the previous quarter, but remained above its long-term average of 0.1. The recent fall in sentiment was largely driven by a deterioration in respondents' assessment of sales over the past three months, and in their expectations of business activity over the next three months. At the same time, the net share of participants reporting stocks of finished goods to be above normal levels, almost doubled compared with the previous quarter (see Chart 2.7).¹²

Supplementary survey data indicate that, in contrast to the previous quarter, short-term orders expectations decreased significantly, but remained positive. Meanwhile, a larger share of respondents anticipated prices to increase over the coming months.



¹⁰ 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.

¹¹ 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.

¹² Above-normal stock levels indicate lower turnover and affect the overall indicator in a negative way.

Consumer confidence falls further below its long-term average¹³

The consumer confidence indicator averaged -13.6 during the fourth quarter of 2023, below the -11.5 recorded in the previous quarter and its long-run average of -10.3 (see Chart 2.8).

The deterioration in consumer sentiment largely reflected a more negative outlook of the general economic situation over the next 12 months. Furthermore, expectations of major purchases fell in negative territory. These developments were partly offset by a less negative perspective of household finances in recent months, and in expectations for the next 12 months.

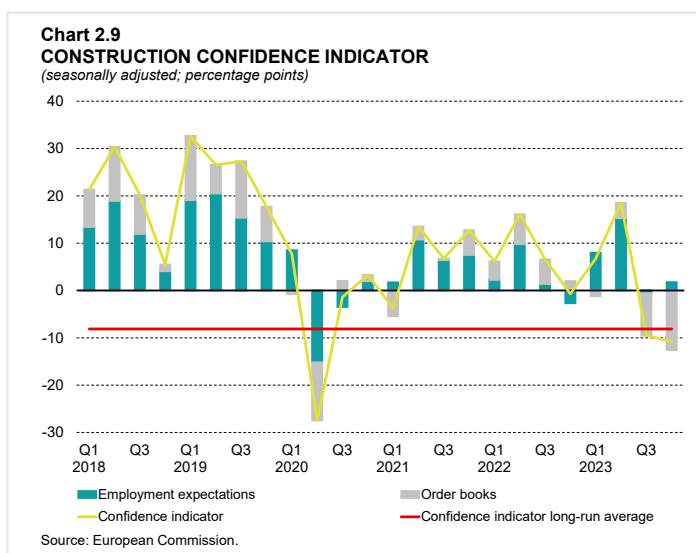
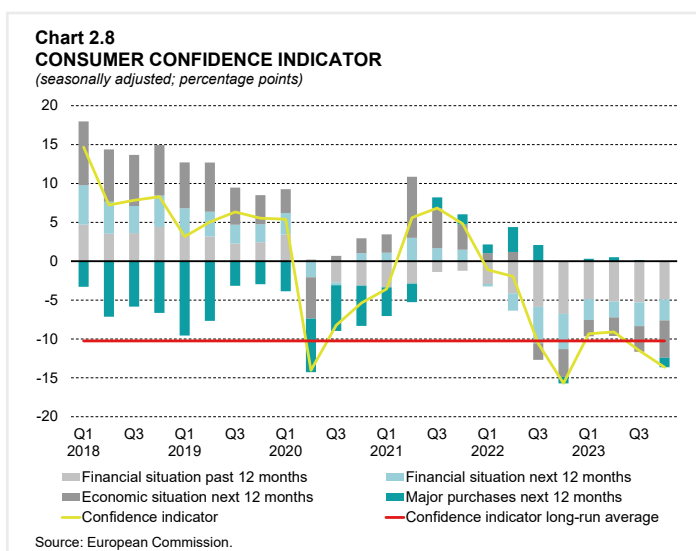
Supplementary survey data show that a larger share of respondents expects unemployment to increase in the next twelve months. At the same time, the share of respondents expecting prices to rise, increased substantially, and reached around 35%.

Confidence in construction remained negative¹⁴

In the last quarter of 2023, the indicator measuring confidence in the construction sector remained below its long-term average of -8.1. It averaged -10.8, down from -9.5 in the previous three-month period (see Chart 2.9).

Weaker sentiment was driven by an increase in the share of respondents' reporting orders to be below normal. Contrary to the third quarter of 2023, employment expectations turned slightly positive.

Meanwhile, the net share of respondents expecting price increases over the next three months declined sharply.

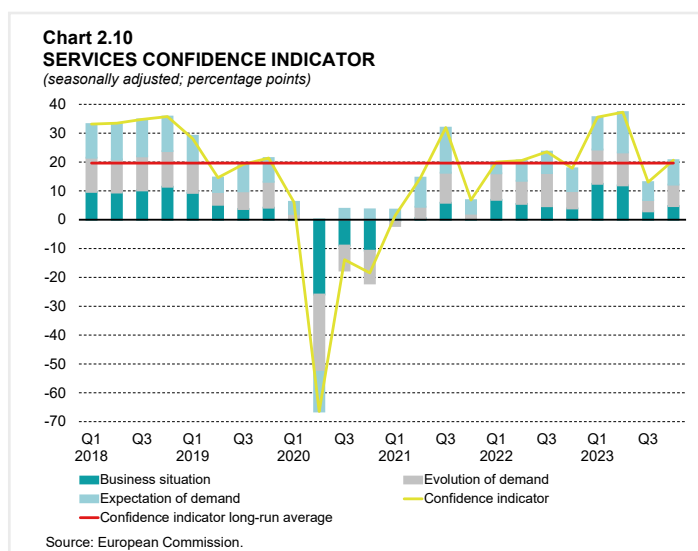


¹³ The consumer confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to a subset of survey questions relating to households' assessment and expectations of their financial situation, their expectations about the general economic situation, 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.

¹⁴ 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.

Confidence in the services sector increases¹⁵

The confidence indicator in the services sector increased to 20.6, from 13.0 in the previous quarter. Following this increase, sentiment in this sector returned above its long-term average of 19.6 (see Chart 2.10). All components of the indicator contributed to the latest increase in sentiment, with the most significant improvement visible in firms' assessment of demand in the last three months.



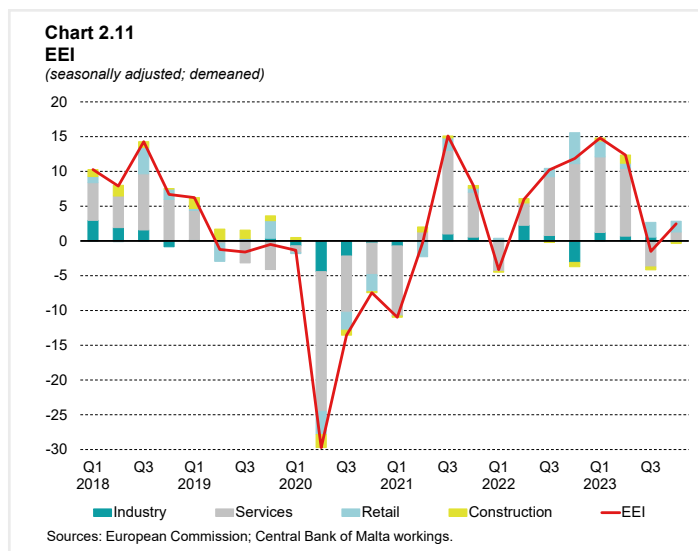
Supplementary survey data indicate that the net share of participants with positive price expectations decreased compared to the third quarter of 2023, standing at around 29%.

Employment Expectations Indicator (EEI) increases above its long-run average

The EEI – which is a composite indicator of employment expectations in industry, services, retail trade and construction – edged up in the fourth quarter of 2023. It averaged 102.5, compared with 99.7 in the preceding quarter, standing above its long-term average of around 100.0. Notwithstanding the latest increase, the index remained slightly below the euro area average of 103.1.¹⁶

During the quarter under review, employment expectations were positive across all sectors. The most positive readings were recorded in the services and retail sectors.

Demeaned data suggest that the increase relative to the preceding quarter was in large part driven by developments in the services sector (see Chart 2.11). The retail and services



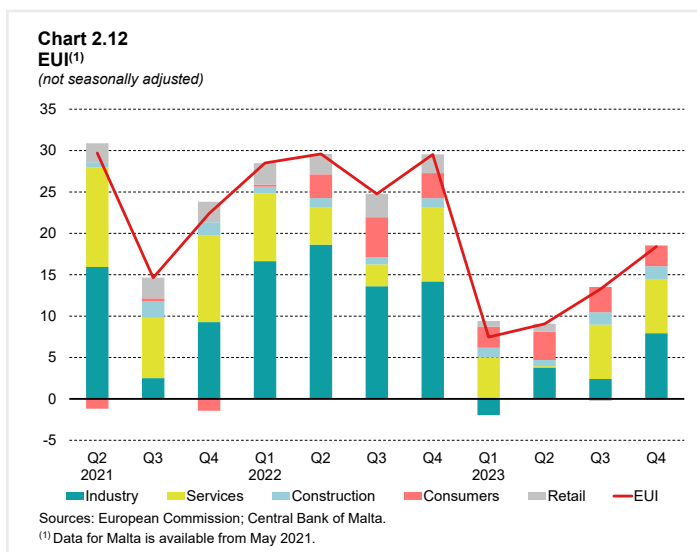
¹⁵ The services confidence indicator is the arithmetic average of the seasonally adjusted balances (in percentage points) of replies to survey questions relating to the business climate, the evolution of demand in the previous three months, and demand expectations in the subsequent three months.

¹⁶ 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*.

sectors largely explain why the overall EEI stood above its long-term average in the quarter under review.

Economic Uncertainty Indicator (EUI) increases

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 increased to 18.4 in the fourth quarter of the year, from 13.3 in the preceding quarter (see Chart 2.12). However, the indicator stood below that in the euro area, which averaged 21.9.^{17,18}



The strongest rise in the uncertainty indicator for Malta was recorded in industry. Higher uncertainty was also recorded in the retail and construction sectors, albeit to a lesser extent. By contrast, uncertainty among consumers, and to smaller degree, in the services sector, decreased when compared with the previous quarter.

Developments in industry contributed the most to the increase in Malta's EUI, when considering each sector's weight and past volatility. Industry and services also had the highest contributions to uncertainty. Although the share of respondents reporting uncertainty was highest in construction, the contribution of this sector to overall uncertainty was limited, reflecting the small weight of this sector.

The labour market¹⁹

Labour force and activity rate increase at a slower pace

Labour Force Survey (LFS) data show that in the fourth quarter of 2023, the labour force grew by 9,005 persons, or 3.0% on an annual basis, slower than the 4.5% increase registered in the previous quarter (see Table 2.4).²⁰

¹⁷ 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.

¹⁸ Data on consumer uncertainty became available in October 2020, while data for industry, services, retail, and construction became available in May 2021.

¹⁹ 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.

²⁰ 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.

Table 2.4
LABOUR MARKET INDICATORS BASED ON THE LFS

Persons; annual percentage changes

	2022 Q4	2023 Q4	Annual change %
Labour force	305,141	314,146	3.0
Employed	295,321	305,218	3.4
<i>By type of employment:</i>			
Full-time	260,062	268,640	3.3
Part-time	35,259	36,578	3.7
Unemployed	9,820	8,928	-9.1
Activity rate (%)	80.7	81.4	
Male	86.8	88.1	
Female	73.6	73.5	
Employment rate (%)	78.1	79.0	
Male	83.8	85.5	
Female	71.4	71.4	
Unemployment rate (%)	3.2	2.9	
Actual hours worked (per week)	33.9	32.7	

Source: NSO.

The activity rate stood at 81.4% in the quarter under review, higher than the 80.7% registered a year earlier.²¹ This was due to an increase in the male participation rate. The female participation rate decreased slightly by 0.1 percentage point to 73.5%, while that of males increased by 1.3 percentage points to 88.1%. Both rates exceeded the corresponding rates for the euro area.

Employment increases at a slower pace

In the quarter under review, employment rose by 3.4% in annual terms, following a rise of 4.9% in the previous quarter. Most of the increase in absolute terms was driven by full-time employment, as the number of people in part-time jobs rose by less. The number of persons in full-time employment rose by 8,578 persons, or 3.3% on a year earlier. This increase was mainly coming from sector comprising wholesale and retail trade, accommodation, and food service activities, as well as industry.

The number of persons in part-time jobs – which also includes those employed full-time on reduced hours – rose by 1,319, or 3.7% in annual terms. This increase was mostly driven by the sectors comprising financial and insurance activities, information and communication, and the administrative and support service activities.

The overall employment rate rose by 0.9 percentage point on the same period of 2022, to reach 79.0%.²² This can be attributed to an increase in rates among individuals aged 55 to 64, as the employment rate for both the 15 to 24 and 25 to 54 age cohorts declined. The male employment rate rose by 1.6 percentage points to 85.5%, while that of females remained unchanged at 71.4%.

²¹ 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.

²² 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.

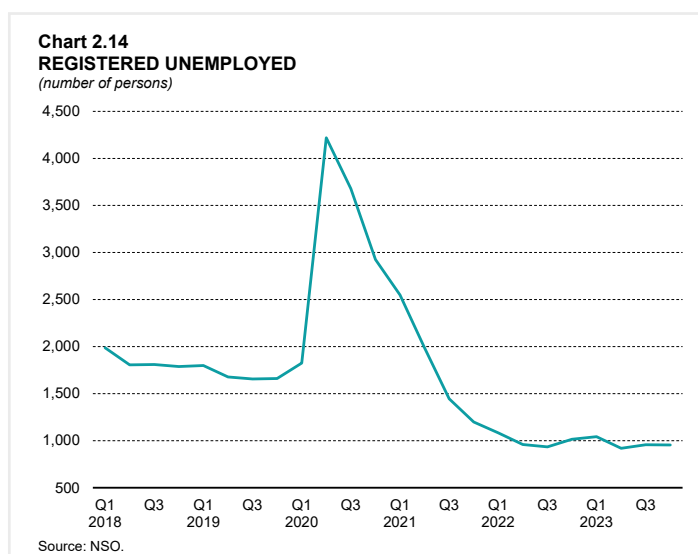
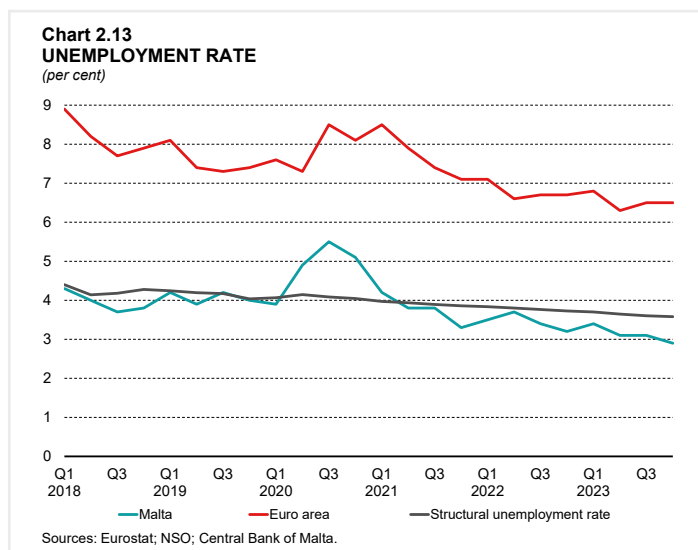
During the quarter under review, average weekly hours worked derived from the LFS declined to 32.7, from 33.9 a year earlier (see Table 2.4).²³ This reflected a decrease in both average hours worked by full-time and part-time employees.

The unemployment rate remains low

The unemployment rate based on the LFS fell to a historic low of 2.9%, from 3.2% a year earlier, reflecting continued strong demand for labour (see Table 2.4).²⁴ Labour market conditions remained more favourable than those in the euro area, where the unemployment rate on average stood at 6.5% (see Chart 2.13).

During the quarter under review, the unemployment rate also stood below the Bank's structural measure of 3.6%.²⁵ This indicates a degree of labour market tightness, which is also confirmed by the Bank's *Business Dialogue* publication.

Jobsplus data show that the number of persons on the unemployment register fell both on a quarterly basis, and in annual terms. During the fourth quarter of 2023, the average number of persons on the unemployment register stood at 955, compared with 1,016 a year earlier and 957 in the third quarter of 2023 (see Chart 2.14).



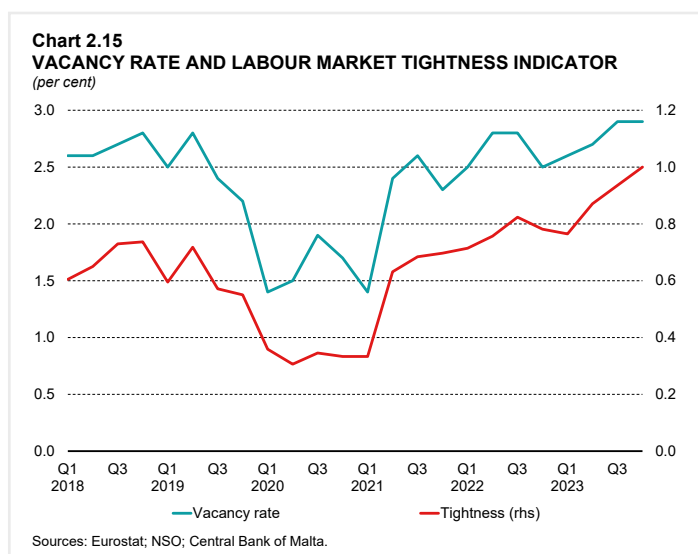
²³ Actual hours refer to the number of hours actually spent at the place of work during the reference week for LFS. However, owing to increased flexibility at workplaces coupled with technology, the place of work may also include one's home. In this regard, actual hours worked also include the hours of work conducted by persons who telework.

²⁴ 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.

²⁵ 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.

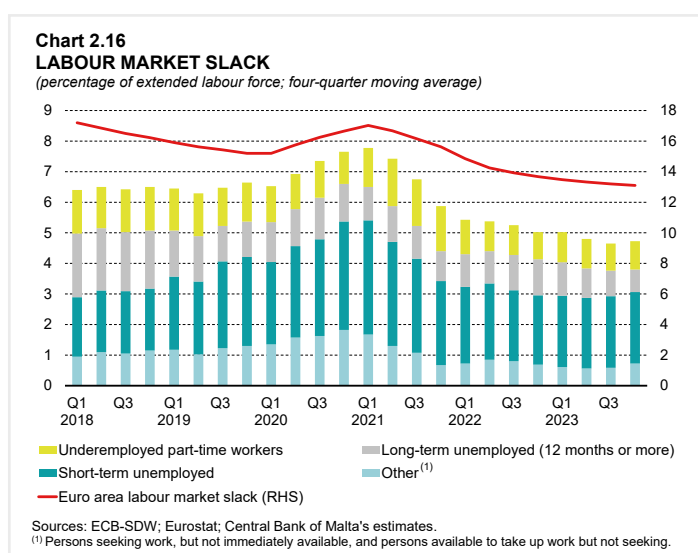
The vacancy rate remained elevated

In absolute terms the number of vacancies increased from 6,407 in the last quarter of 2022 to 7,656 in the same quarter of 2023, that is, a 19.5% increase. Eurostat's job vacancy rate for industry, construction and services remained constant compared to the previous quarter, standing at the elevated level of 2.9% (see Chart 2.15). This rate was also above that of 2.5% recorded in the same quarter of 2022.²⁶ The highest vacancy rates in Malta were recorded in the mining and quarrying sector (13.4%), the information and communication sector (5.0%), the accommodation and food service activities (4.4%), and the arts, entertainment, and recreation 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 1.0, slightly higher than the previous quarter and the ratio of 0.8 registered a year earlier. The job vacancy rate thus remained at elevated levels.

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 4.7% of the extended labour force in the fourth quarter of the year (see Chart 2.16).²⁷ This is 0.3 percentage point lower than the 5.0% registered a year earlier, and is well below



²⁶ 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.

²⁷ 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.

this measure's average of around 8.1% estimated since 2010. It is also significantly lower than the 13.1% recorded for the euro area.

The gap between the broader measure of labour market slack and the unemployment rate has been declining since the second quarter of 2021, indicating a reduction in the share of underutilised labour.

In the fourth quarter of 2023, around 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, contributed the most to labour underutilisation, and accounted for nearly one fifth of labour market slack.

BOX 2: BEYOND THE IMPACT ON EMPLOYMENT: THE FISCAL IMPLICATIONS OF MALTA'S TAPERING OF BENEFITS SCHEME¹

This box provides a brief overview of a 2023 Working Paper which assessed the impact of Malta's Tapering of Benefits (TOB) scheme on employment.² The study employed survival analysis and cox proportional hazard models, based on high-quality anonymised national data on the whole population of beneficiaries and their employment history in Malta. This box expands on the original study by also analysing the fiscal implications of the scheme, focusing on the period 2014-2019.

The impact of the scheme on employment

Since its independence, Malta has relied on a passive social welfare system, while developing a robust safety net. Following the European Commission's Europe 2020 goals,³ the Maltese government committed to a paradigm shift and announced a number of Active Labour Market Policies (ALMPs) in 2014 aimed at 'Making Work Pay'. ALMPs are government initiatives aimed at assisting individuals find gainful employment, retain employment, enhance productivity and/or earnings, or improve the general functioning of the labour market. Their goal is to bring jobseekers closer to the labour market by eliminating or diluting the poverty trap, as well as helping individuals find stable employment in the longer term.

Example of such ALMPs introduced in Malta in recent years include free childcare for working parents, the creation of Breakfast Clubs, tax incentives to take up work and the TOB scheme. In line with the Employment Policy, and following Ireland's Back To Work Allowance (BTWA) scheme, the TOB scheme was targeted at unemployment assistance (UA), social assistance (SA) and SA for single unmarried parents (SUP) beneficiaries, that is, individuals judged to be considerably prone to fall into a poverty trap.

Support under the Maltese TOB scheme is granted for three years. Initially, in addition to the salary in their newly found job, individuals received 65% of their benefit in the first year, 45% of their benefits in the second year, and 25% of their benefit in the third year.⁴ In the absence of such a scheme, individuals would have lost all their benefits upon finding a job. Hence, the TOB scheme works by increasing the opportunity cost of inactivity, making employment more enticing.

Shortly following the introduction of ALMPs, the number of UA, SA and SUP beneficiaries declined considerably (see Chart 1). However, these reforms coincided with a period of buoyant economic growth, an increasing labour force, and higher participation rates (driven by increases in female participation rate and inward migration). This confluence of factors makes it challenging to isolate the effect of the scheme.

¹ Prepared by Kurt Sant, Senior Economist within the Economic Analysis Department of the Bank. The views expressed in this article represent those of the author and should not be interpreted to reflect those of the Bank. Any errors are the author's own.

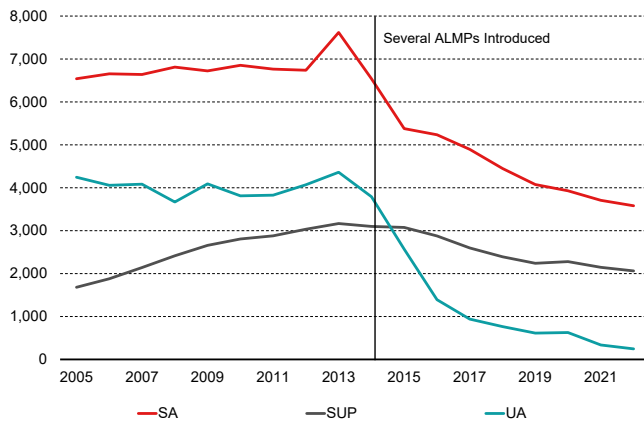
² Sant, K. (2023) "The Impact of Malta's Tapering of Benefits Scheme on Employment", [Working Paper 07/2023](#), Central Bank of Malta.

³ The European Commission Europe 2020 goals include that the employment rate of the population aged 20-64 should increase from the current 69% to at least 75%, including through the greater involvement of women, older workers and that the number of Europeans living below the national poverty lines should be reduced by 25%, lifting over 20 million people out of poverty.

⁴ The scheme was later improved by a ten-percentage point increase in the benefit due each year. The impact of this improvement is not studied in this box, as it was introduced in the Budget for 2023, while this box focuses on the period up to 2019.

A summary of the original Working Paper results can be found in Table 1. Results represent hazard ratios and should be interpreted as the risk of the event occurring when compared to the baseline category, keeping other variables constant. Deviations from the numeraire (1) represent changes in percentage probabilities of the events occurring.

Chart 1
SA, SUP AND UA BENEFICIARIES IN MALTA
(number of beneficiaries)



Source: Ministry for Social Policy and Children's Rights.

The first results show that the TOB doubles the job-finding probability, with SUP beneficiaries enjoying the scheme the most and SA beneficiaries experiencing it the least. The impact declines with age and has no gender effect. Meanwhile, in the second set of results, the negative (lower than one) estimated coefficient of the Qualification Dummy shows that those who qualify for the scheme have a lower probability of experiencing a return to unemployment. When assessing the difference between the TOB Effect and Qualification Dummy hazard ratios, the TOB scheme shows a powerful effect in terms of reducing the chance of the event occurring for those individuals who are eligible and able to benefit from the scheme. In fact, the chance of job termination drops by 11.8 percentage points for those individuals falling within the TOB regime.

Table 1
SUMMARY OF WORKING PAPER RESULTS

Hazard rates

	Hazard rate ⁽¹⁾	Standard error ⁽²⁾
TOB impact on the job-finding rate of UA, SA and SUP beneficiaries		
TOB effect (full sample)	1.996***	(0.065)
TOB effect (UA sample)	1.951***	(0.096)
TOB effect (SA sample)	1.673***	(0.139)
TOB Effect (SUP sample)	2.316***	(0.216)
TOB impact on retaining employment once an individual finds a job		
TOB effect	0.673***	(0.048)
Qualification dummy	0.791***	(0.036)
TOB long-term dummy	1.195	(0.212)

Source: Ministry for Social Policy and Children's Rights.

⁽¹⁾ Baseline (Hazard ratio = 1): No TOB in place.

⁽²⁾ Standard errors in parentheses (* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

The “TOB Long-Term Dummy” hazard rate is statistically insignificant. This is a very reassuring finding, as it shows that once the scheme eligibility ends after 36 months, job-terminations of previously eligible individuals do not increase significantly. Thus, the scheme appears to be successful in not only helping individuals finding employment, but also to re-integrate them into the labour force in the longer term – even after benefit payments end.

Tapering of benefits disbursements

Table 2 displays the total and average benefits tapering payments for each category from 2014 to 2019, offering insights into the efficacy and reach of this scheme. Across the three-year period during which individuals enjoy tapered benefit payments in addition to their employment income, an average individual receives €6,821.9 in tapered benefits. This means that over this three-year period, individuals on average earn up to 26% in additional income when compared to a situation without the TOB scheme.

Beneficiaries which enjoy the largest average TOB payments are aged 36 years and older. This is since individuals in these age categories are more likely to have additional dependents in their household, meaning that their original benefit is higher. On the other hand,

Table 2
TOTAL AND AVERAGE TOB PAYMENTS

EUR

	Total TOB payment	Average TOB payment
Total	38,455,242.4	6,821.9
Age group		
Under 26	5,703,224.8	5,575.0
Age 26-35	11,920,045.9	6,585.7
Age 36-45	11,594,275.6	7,305.8
Age 46-55	7,400,039.6	7,636.8
Age 56+	1,837,656.5	7,409.9
Previous benefit		
SA	12,649,870.9	7,110.7
SUP	13,878,987.1	6,008.2
UA	11,904,700.3	7,710.3
Origin		
Foreign	381,660.5	5,696.4
Gozitan	1,423,702.3	6,911.2
Maltese	36,649,879.7	6,832.6
Gender		
Female	26,713,253.0	6,455.6
Male	11,741,989.4	7,833.2
TOB year		
Tapered benefit year 1	15,967,637.3	3,086.1
Tapered benefit year 2	13,151,379.4	2,150.3
Tapered benefit year 3	9,336,225.8	1,553.4

Source: Ministry for Social Policy and Children's Rights.

beneficiaries with age categories of less than 36 years have the lowest average TOB payment, even though they are responsible for the largest absolute TOB payments.

The monetary boost which the TOB scheme provides towards females is evident. In fact, when analysing payments according to the previous benefit, the largest amount of TOB payments is disbursed towards the single parent category, which almost wholly consists of females. Furthermore, the gender analysis shows that 70% of all TOB payments were disbursed towards females.

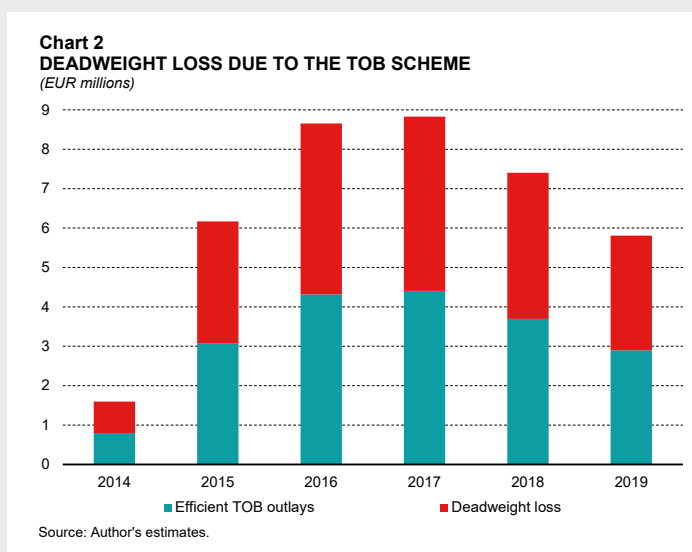
However, the average TOB payment towards SUP and female beneficiaries was lower than those for UA, SA and male beneficiaries, respectively. This is also due to the fact that the tapered amount is linked to the previous benefit levels.

The fiscal implications of the Tapering of Benefits Scheme

ALMPs have the potential to be extremely costly, especially if not designed and implemented correctly.

The costliest aspect in the TOB scheme is by far the deadweight loss which is inherently created through its design. This deadweight loss arises since any individuals who would have moved into employment even in absence of the TOB scheme, will still enjoy the monetary gains from the scheme. Using the probability results obtained in the Working Paper, the TOB scheme gives rise to €19.4 million in deadweight losses in the period between 2014 and 2019, i.e. in the period preceding the outbreak of COVID-19 (see red bar in Chart 2). Such deadweight loss peaks at €4.4 million in 2017. The remaining outlays reflect the cost of the benefit working as intended. The bar labelled 'efficient TOB outlays' in Chart 2 represents those tapered benefits transferred to individuals who would not have moved into employment in absence of the TOB scheme.

At the same time, Government made savings on expenditure on other social benefits. TOB beneficiaries would have continued to rely on UA, SA or SUP benefits should the scheme had not been in place. To estimate savings made in this counterfactual scenario, the above-mentioned probabilities are once again used. Furthermore, it is assumed that individuals would still be eligible for benefits under the same



criteria as before – without any additional family members, changes in dependency (such as children reaching 18), or variations in means-tested conditions. In this scenario, the benefits are inclusive of the cost-of-living adjustment (COLA) increments that would have been disbursed to recipients.

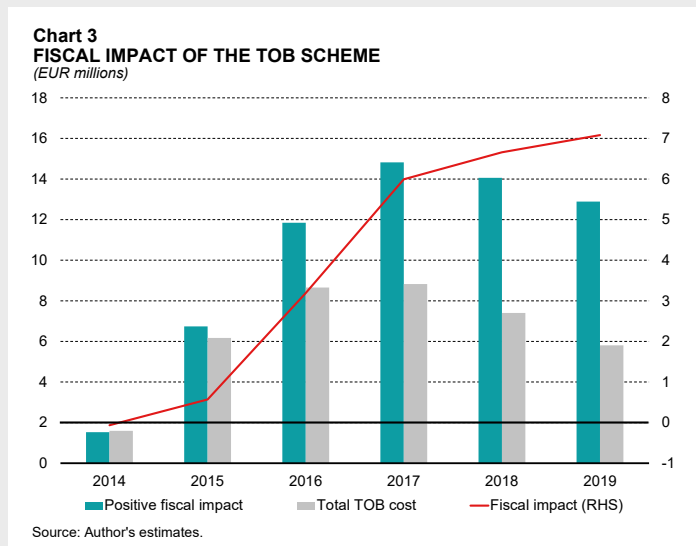
On the basis of these assumptions, it is estimated that the TOB scheme enabled the Government to save approximately €46.1 million, equivalent to around 0.3% of GDP, that would have otherwise been disbursed as UA, SA, or SUP benefits.

Government also earned additional tax revenue from the entry of TOB beneficiaries into the labour market. Even if one assumes that all individuals who entered employment earned a minimum wage, thereby making them ineligible for income tax, they would still pay social contributions. Between 2014 and 2019, Government is estimated to have earned at least €15.0 million (around 0.1% of GDP) in additional revenue from social contributions.

When comparing the complete TOB cost (not solely the deadweight loss) with the cost savings and additional tax revenue, the scheme appeared to exhibit a negligible negative fiscal impact during the first year of operation (see Chart 3). However, over the next five years, the scheme makes a positive contribution to the budget balance. The cumulative estimated impact amounts to around €7.0 million by 2019.

Overall, the TOB scheme added around 5,600 persons in employment, and is estimated to have raised the country’s labour supply by 1.3%. The cumulative impact on the potential level of economic activity amounts to around 0.9%.⁵

The estimates presented in Chart 3 only take into account the direct, first-round fiscal impact of having more people in employment. The full fiscal impact of this scheme is gauged in a counterfactual scenario in which the TOB scheme was not implemented, and the above mentioned 5,600 persons remained among the ranks of long-term unemployed. In turn, this lowered the potential output of the economy. If one were to exclude the positive impact of this policy on potential output, on average the structural



⁵ Grech (2022) estimated the impact of an additional 5,500 workers in 2021 to boost potential output by 1.2% (see Grech, A.G. (2022), The impact of COVID-19 longer careers – an initial assessment for Malta, Central Bank of Malta *Policy Paper*). In this study, the impact on potential output is somewhat smaller, and likely reflects revisions to the labour force dataset.

fiscal balance would have worsened by around 0.3% of GDP each year between 2014 and 2019.⁶

Conclusion

This analysis shows that the TOB scheme has been an effective instrument to address the poverty trap. It has also shown that the scheme's positive fiscal impact extends well beyond the immediate savings, suggesting that it holds considerable promise for fiscal sustainability over time.

However, recent inflation surges have dampened real wage growth and reduced disposable income, posing new challenges for those at risk of poverty. This intensifies the need for policymakers to adequately complement existing schemes to ensure that such individuals do not relapse into benefit dependency once the tapering period ends. Additional government measures, beyond the scope of the TOB scheme, were thus necessary to protect the more vulnerable in society. To this end, in recent years Government increased a number of social benefits and introduced new schemes, notably the additional COLA payment which varies according to the size and income level of households.

⁶ The structural government balance shows the underlying fiscal stance after correcting for the impact of the economic cycle and net of temporary government measures. The impact of the cycle is estimated by the output gap, i.e. the difference between the potential and actual level of output.