

2. OUTPUT AND EMPLOYMENT

Annual real GDP growth decelerated to 4.7% in the fourth quarter of 2022, following a 5.3% increase in the previous quarter, due to a more negative contribution from net exports.

Sectoral data show that the expansion in output was primarily driven by the services sector, especially the sector comprising wholesale and retail trade, transportation, accommodation and related activities. Gross value added (GVA) also rose in the manufacturing sector. By contrast, it declined in the construction sector.

During the fourth quarter of 2022, developments in the labour market remained positive, with employment levels and employment rates both rising in annual terms. The unemployment rate remained low from a historical perspective and stood well below that in the euro area. The number of registered unemployed persons declined in annual terms but rose slightly from very low levels when compared with the third quarter of 2022.

The job vacancy rate moderated slightly compared to the third quarter, while remaining marginally above its year-ago level. Another indicator of labour tightness, which is the ratio of the job vacancy rate to the unemployment rate, remained at levels that can be considered high.

Potential output and Business Conditions Index

Potential output grows at a higher rate

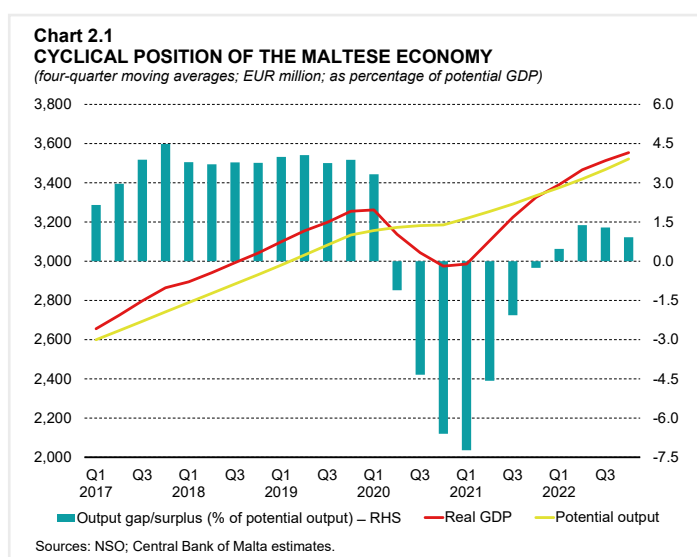
The Bank estimates that annual potential output growth stood at 6.3% in the fourth quarter of 2022, above the rate of 5.8% estimated for the previous quarter.

On a four-quarter moving average basis, the level increase in potential output relative to the third quarter was somewhat stronger than that in GDP, resulting in a smaller positive output gap. The latter is estimated at 0.9%, down from 1.3% in the third quarter of 2022 (see Chart 2.1).

This implies that the degree of over-utilisation of the economy's productive capacity has eased somewhat.

BCI signals normalisation in the pace of economic expansion

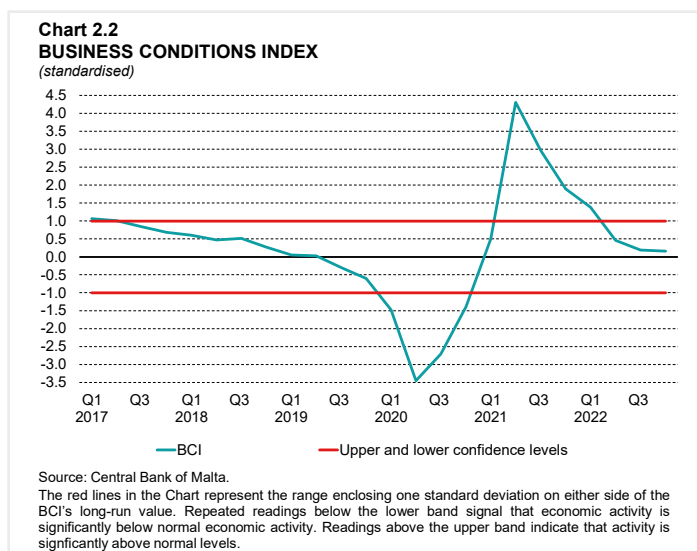
The Bank's BCI indicates that annual growth in business activity has normalised from its record highs registered in the first half of 2021, and was close to its historical average in the



last quarter of 2022 (see Chart 2.2).¹

During the quarter under review, the BCI was affected by strong annual increases in several sub-components, particularly in tourist arrivals. Strong annual growth in tourism, the index of industrial production and GDP, as well as low unemployment, contributed to the above average BCI level. On average, growth in building permits also stood above its long-term average, although these have declined in December, dragging

somewhat the overall index in the last month of the quarter. On the other hand, the economic sentiment indicator (ESI) stood below its long-term average, thus pushing down the BCI close to its long-term average.²



GDP and industrial production

Real GDP increases at a slower pace

The pace of economic expansion decelerated in the fourth quarter of 2022. Real GDP rose by 4.7% on an annual basis, following a 5.3% increase in the previous quarter.³ Slower growth was driven by a more negative contribution from net exports, which offset an increase in the contribution of domestic demand (see Table 2.1).

The annual growth rate of domestic demand increased to 13.1%, above the 12.8% registered in the previous quarter. Domestic demand added 11.1 percentage points to GDP growth in the quarter under review. Growth in this component was in turn underpinned by an increase in GFCF and private consumption, which offset a fall in government consumption.

Private consumption expenditure increased by an annual 6.5% in the fourth quarter of 2022, following an 8.3% increase in the previous quarter, adding 2.8 percentage points to real GDP growth.

Data on the Classification of Individual Consumption by Purpose (COICOP) show that the increase in consumption was broad based across most expenditure categories. The strongest increase in absolute terms was recorded in spending on restaurants and accommodation services. This was followed by higher spending on transport, as well as recreation and culture. Expenditure on these

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 <https://www.centralbankmalta.org/business-conditions-index>. 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 Additional information on the interpretation of the BCI is available in the [January 2020 edition of the Bank's Economic Update](#).

³ The analysis of GDP in this chapter of the *Quarterly Review* is based on data published in [NSO News Release 036/2023](#), which was published on 28 February 2023.

Table 2.1
GROSS DOMESTIC PRODUCT⁽¹⁾

	2021	2022			
	Q4	Q1	Q2	Q3	Q4
	<i>Annual percentage changes</i>				
Private final consumption expenditure	10.2	12.5	13.8	8.3	6.5
Government final consumption expenditure	4.7	-2.1	12.6	1.7	-1.6
GFCF	13.7	25.9	19.6	33.5	42.3
Domestic demand	9.9	11.1	14.9	12.8	13.1
Exports of goods and services	7.4	8.0	7.3	8.8	1.5
Imports of goods and services	5.0	9.5	10.1	13.3	5.9
GDP	13.4	8.2	9.4	5.3	4.7
	<i>Percentage point contributions</i>				
Private final consumption expenditure	4.5	5.1	5.8	3.6	2.8
Government final consumption expenditure	1.1	-0.5	2.5	0.3	-0.3
GFCF	2.8	5.0	4.4	6.5	8.6
Changes in inventories	0.3	-0.4	0.0	0.1	0.0
Domestic demand	8.6	9.2	12.6	10.5	11.1
Exports of goods and services	13.0	13.9	12.4	14.7	2.6
Imports of goods and services	-8.2	-14.9	-15.5	-19.9	-9.0
Net exports	4.8	-1.0	-3.1	-5.2	-6.4
GDP	13.4	8.2	9.4	5.3	4.7

Sources: NSO; Central Bank of Malta calculations.

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

items benefitted from the repeal of all restrictions on travel and mobility compared to the fourth quarter of 2021.

In the national accounts however, 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 significant increase in non-residents' expenditure in Malta. Nonetheless, the remaining part of domestic consumption – the expenditure of Maltese residents in Malta – also rose compared to the same period a year earlier. Meanwhile, the expenditure of Maltese residents abroad increased on its year-ago level, as trips abroad increased on its year-ago level.

Government consumption expenditure contracted by 1.6% in annual terms, after increasing by 1.7% in the previous quarter. The latest decline reflects a significant decline in intermediate consumption that in part, reflected lower outlays within the public administration, health and residential care sectors. This offset a marginal increase in compensation of employees. Overall, government consumption shed 0.3 percentage point from annual GDP growth.

Real GFCF increased by an annual 42.3% in the fourth quarter of the year, after increasing by around a third in the previous quarter. The latest increase in real GFCF reflects a substantial increase in expenditure on transport equipment, in part brought about by registrations of aircraft. Investment on intellectual property properties also increased, though the increase was much smaller. On the other hand, investment in dwellings and non-residential buildings declined. GFCF added 8.6 percentage points to real GDP growth.

The contribution of changes in inventories was broadly neutral in the fourth quarter of 2022.

Meanwhile, exports rose by 1.5% and imports increased by 5.9% on a year earlier. As imports grew faster than exports, net exports contracted, shedding 6.4 percentage points from annual real GDP growth. This mainly reflected a widening in the goods deficit, which was affected by the aforementioned increase in investment in aviation, while the surplus on services was broadly unchanged from that recorded in the last quarter of 2021.

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. In the quarter under review, most of the import-adjusted contributions were smaller than those based on the traditional approach, reflecting the increase in imports (see Table 2.1). This is particularly the case for GFCF, where the adjusted contribution was only a third of its unadjusted counterpart.

Nevertheless, even after adjusting for imports, domestic demand remained the main driver of growth in the last quarter of 2022. Moreover, the main driver behind the growth in domestic demand is still GFCF.

GDP data based on the output approach show that in the last quarter of 2022, real GVA rose by 6.1% in annual terms, following a 7.7% increase in the preceding quarter. It added 5.5 percentage points to GDP growth (see Table 2.3).⁴

Services remained the main driver behind the rise in economic activity, adding 4.5 percentage points to real GDP growth. Most of the increase stemmed from the sector comprising wholesale and retail trade, transportation, accommodation and related activities, which contributed 2.2 percentage points to GDP growth. This was followed by the sector comprising professional, scientific, administrative and related activities, which added a further 1.2 percentage points. At the same

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

	2021		2022		
	Q4	Q1	Q2	Q3	Q4
	<i>Percentage point contributions</i>				
Private final consumption expenditure	3.2	2.8	3.1	1.6	1.6
Government final consumption expenditure	1.0	-0.4	2.0	0.2	-0.3
GFCF	1.4	1.6	1.3	1.7	2.8
Changes in inventories	-0.2	-0.2	0.0	0.1	-0.2
Domestic demand	5.3	3.9	6.4	3.6	3.9
Exports of goods and services	8.1	4.4	3.1	1.8	0.8
GDP	13.4	8.2	9.4	5.3	4.7

Source: Central Bank of Malta estimates.

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

⁴ The difference between GDP and GVA is made up of taxes on products, net of subsidies.

Table 2.3
CONTRIBUTION OF SECTORAL GVA TO REAL GDP GROWTH

Percentage points

	2021		2022		
	Q4	Q1	Q2	Q3	Q4
Agriculture, forestry and fishing	0.0	0.0	0.3	-0.1	0.0
Mining and quarrying; utilities	0.2	0.2	-0.1	0.1	0.2
Manufacturing	-0.4	-0.2	0.4	0.8	1.2
Construction	0.0	-0.2	-0.2	-0.4	-0.3
Services	13.7	8.2	8.8	6.6	4.5
<i>of which:</i>					
Wholesale and retail trade; repair of motor vehicles; transportation; accommodation and related activities	7.2	3.8	4.8	2.4	2.2
Information and communication	2.0	1.1	0.6	0.5	0.3
Financial and insurance activities	0.6	0.7	0.3	0.2	0.0
Real estate activities	0.4	0.4	0.2	0.3	-0.1
Professional, scientific, administrative and related activities	1.4	1.0	1.3	2.2	1.2
Public administration and defence; education; health and related activities	0.5	0.1	0.9	0.5	0.7
Arts, entertainment; household repair and related services	1.6	1.1	0.7	0.4	0.2
GVA	13.5	7.9	9.1	7.1	5.5
Taxes less subsidies on products	-0.1	0.3	0.3	-1.8	-0.8
Annual real GDP growth (%)	13.4	8.2	9.4	5.3	4.7

Source: NSO.

time, the sector comprising public administration and defence, education, health and related activities, the information and communication sector, and the sector including arts, entertainment, household repair and related activities, also contributed positively to growth, jointly adding another 1.2 percentage points. The remaining services sectors jointly shed 0.1 percentage point from growth. The manufacturing sector added 1.2 percentage points to growth, while construction lowered growth by 0.3 point.

The contribution of services to GDP growth moderated compared to the third quarter, mostly reflecting slower growth in the sector comprising professional, scientific, administrative and related activities. The contribution of construction stood marginally less negative relative to the third quarter. By contrast, the manufacturing sector had a more positive contribution to GDP growth in the fourth quarter of 2022.

Net taxes on products decreased in annual terms.

Nominal GDP growth remains strong

Nominal GDP rose by 11.0% in annual terms in the fourth quarter of 2022, after increasing by 11.7% in the previous quarter. Growth remained strong, reflecting robust contributions from both compensation of employees and operating surplus (see Chart 2.3).

Compensation of employees grew by an annual 12.1% in the fourth quarter of the year, compared with 8.7% in the previous quarter. Its contribution to nominal GDP growth edged up to 5.4 percentage points.

Compensation of employees increased in all sectors, with the one comprising wholesale and retail trade, together with repair of motor vehicles and motorcycles registering the largest increase

in absolute terms. Other significant increases were recorded in the sector comprising professional, scientific and technical activities. Compensation of employees in the sectors comprising financial and insurance activities, and information and communication, also increased but by a lower extent.

In the quarter under review, gross operating surplus grew at annual rate of 13.1%, adding 6.5 percentage points to nominal GDP growth. In absolute terms, most of the increase in

operating surplus in the fourth quarter of 2022 was driven by the transportation and storage, and manufacturing sectors. This was followed by the wholesale and retail trade sector, and the sector comprising administrative and support service activities.

Subsidies on production and imports increased sharply compared to the same quarter last year, reflecting the heavy subsidisation of energy costs. Taxes on production and imports also rose, but the increase was smaller than that of subsidies. As a result, net taxes on production and imports fell by 15.9% compared with the fourth quarter of 2021.

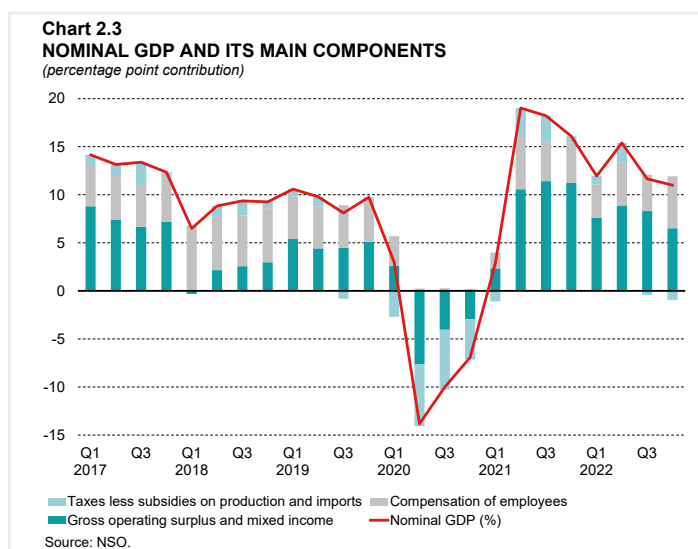
Overall, when assessed from the income distribution side, the moderation of GDP growth compared to the third quarter was driven by slower growth in operating surplus. This in turn mostly reflected slower growth in the operating surplus of the sector comprising accommodation and food service activities.

Industrial production increases at a faster rate

Industrial production increased at an annual rate of 11.0% in the fourth quarter of 2022, after a rise of 9.7% in the previous quarter (see Table 2.4).⁵

The increase in output reflects developments in the manufacturing and energy sector.⁶ On the other hand, the mining and quarrying sector contracted.

In the manufacturing sector, production rose by 11.0%, after rising by 10.2% in the third quarter. Several sub-sectors in the manufacturing industry contributed to the latest rise. Firms that manufacture pharmaceutical goods, computer, electronic and optical products as well as wearing apparel recorded the strongest year-on-year increases in output. Production also rose strongly among firms in the sector comprising of motor vehicles, trailers and semi-trailers as well as



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.

Table 2.4
INDUSTRIAL PRODUCTION⁽¹⁾
Annual percentage changes

	2021		2022		
	Q4	Q1	Q2	Q3	Q4
Industrial production	-5.3	-2.4	-5.9	9.7	11.0
Manufacturing	-9.0	-3.2	-4.1	10.2	11.0
<i>of which:</i>					
Food products	-13.1	5.9	14.1	33.6	1.5
"Other" manufacturing	-22.8	-27.1	-9.4	10.0	-14.2
Repair and installation of machinery and equipment	24.5	23.0	20.3	16.0	8.5
Basic pharmaceutical products and pharmaceutical preparations	-22.2	3.1	-14.2	37.8	74.3
Printing and reproduction of recorded media	-15.2	-14.9	-35.6	-6.0	31.1
Beverages	43.4	29.5	13.7	9.0	4.5
Rubber and plastic products	-13.6	-1.5	-2.8	-12.7	-9.4
Computer, electronic and optical products	-0.8	3.4	25.6	50.5	46.4
Energy⁽²⁾	16.8	11.2	-10.4	3.5	8.8
Mining and quarrying	61.5	-42.0	-29.8	-21.9	-44.6

Sources: NSO; Eurostat.

⁽¹⁾ The annual growth rates of the industrial production index are averages for the quarter based on working-day adjusted data. The annual growth rates of the components are based on unadjusted data.

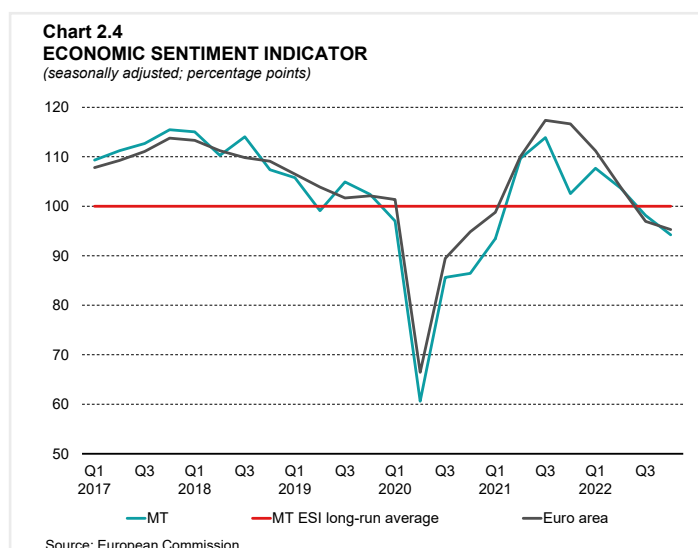
⁽²⁾ In this section, energy includes water, collection, treatment and supply. Therefore overall industrial production and energy data in this Table are not comparable with NSO News Release 058/2023, which was published after the cut-off date for this chapter and which excludes water-related activities.

among firms that print and reproduce recorded media. Smaller increases were recorded among firms that repair and install machinery and equipment, together with those that manufacture food and beverages.

On the other hand, lower output was registered notably among firms that produce non-metallic mineral products, textiles and 'other manufacturing' goods – which includes medical and dental instruments, toys and related products.

Business and consumer surveys

During the fourth quarter of 2022, the European Commission's Economic Sentiment Indicator (ESI) for Malta fell further below its long-term average of around 100.0. It stood at 94.2, down from 98.1 in the preceding quarter. Following this decrease, the overall indicator was below that in the euro area, which averaged 95.3 (see Chart 2.4).^{7,8}



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.

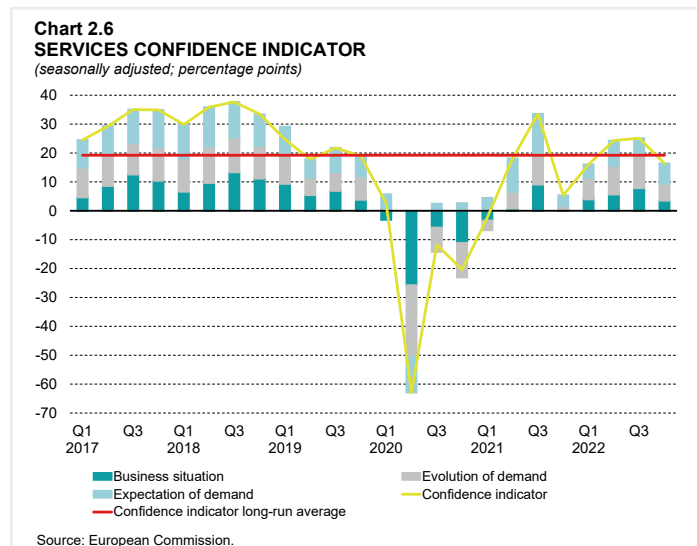
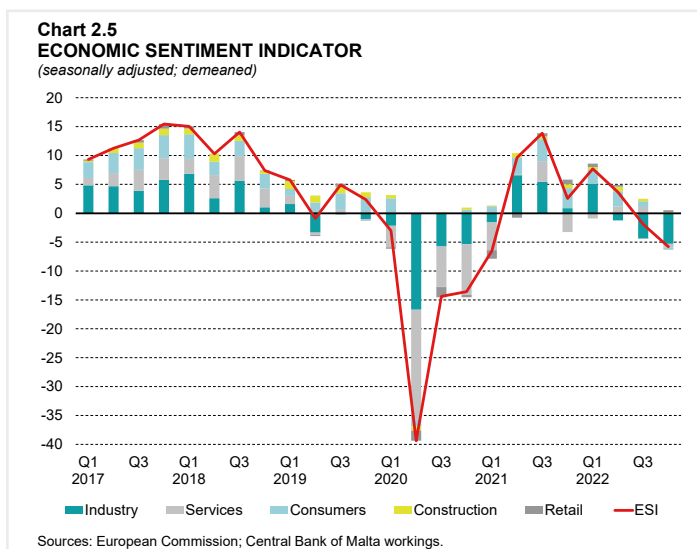
When compared with the third quarter of 2022, confidence decreased in all sectors, except the retail sector. The strongest declines were recorded in the services sector and construction, with smaller decreases recorded among consumers and in industry. By contrast, sentiment in the retail sector turned positive.

When accounting for the variation in the weights assigned to each sector in the overall index, the fall in the ESI relative to the third quarter of 2022 was notably driven by the services sector and consumers.^{9,10} The confidence indicator for industry largely explains why the overall ESI stood below the long-term average in the quarter under review (see Chart 2.5).

Confidence in the services sector weakens but remains positive¹¹

The confidence indicator in the services sector edged down to 16.4 in the fourth quarter of 2022, from 25.1 in the previous quarter. Following this decrease, sentiment stood below its long-term average of 19.2 (see Chart 2.6). Respondents' assessment of demand and of the business situation over the three-month period preceding the survey deteriorated when compared with the third quarter, but remained positive. By contrast, demand expectations for the next three months improved.

Supplementary survey data indicate that participants' price expectations remained elevated from a historical perspective, at around 39%.



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

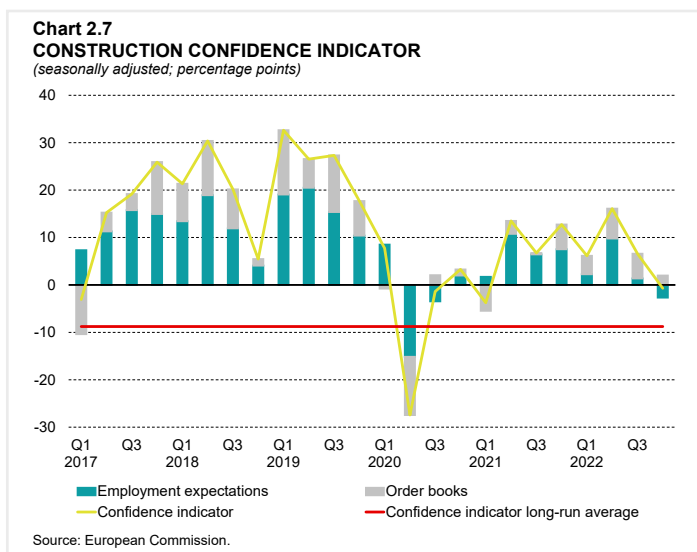
¹⁰ In January 2021, data were revised for previous periods following the annual updating of country weights and the inclusion of 2020 in the standardisation sample.

¹¹ 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.

Confidence in construction turns negative¹²

In the fourth quarter of 2022, the indicator measuring confidence in the construction sector fell to -0.7, from 6.6 in the previous quarter, but remained well above its long-term average of -8.8 (see Chart 2.7).

Employment expectations turned negative in the fourth quarter of the year. At the same time, a smaller share of respondents assessed order books to be above normal levels compared with the third quarter of 2022.

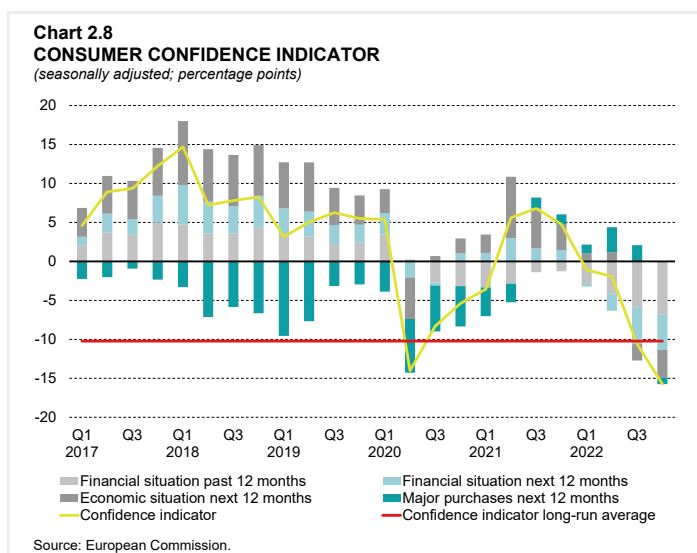


Meanwhile the net share of respondents expecting price increases over the next three months, edged down slightly to around 29%.

Sentiment among consumers falls further into negative territory¹³

The consumer confidence indicator averaged -15.7 during the fourth quarter of 2022, down from -10.6 recorded in the previous quarter, and stood below its long-run average of -10.2 (see Chart 2.8).

This decrease mostly reflected a deterioration in consumers' expectations about major purchases. In contrast to the previous quarter, on balance consumers anticipated that they would make fewer major purchases during the 12 months ahead. At the same time, respondents' expectations of the general economic situation in the coming months, as well as their assessment of their financial situation in past 12 months became more negative. By contrast, consumers' expectations of their future financial situation stood marginally less negative than in the third quarter.



¹² 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.

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.

Supplementary survey data show a higher share of respondents expecting unemployment to increase, compared with the third quarter. Furthermore, the net share of respondents expecting price increases rose to around 32% during the quarter.

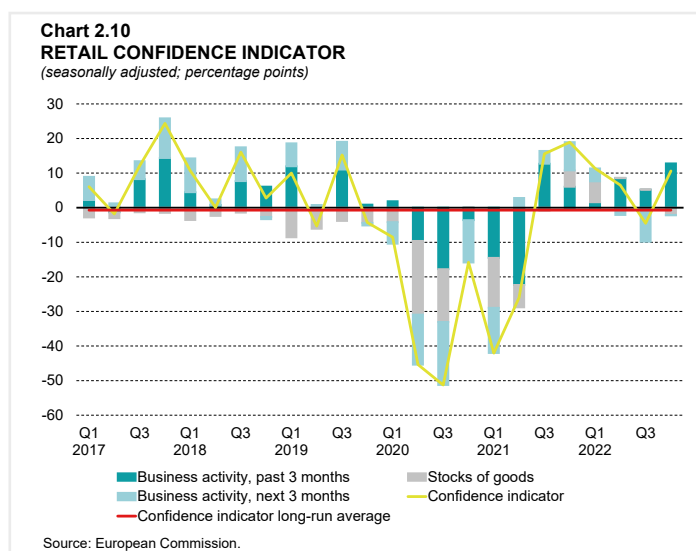
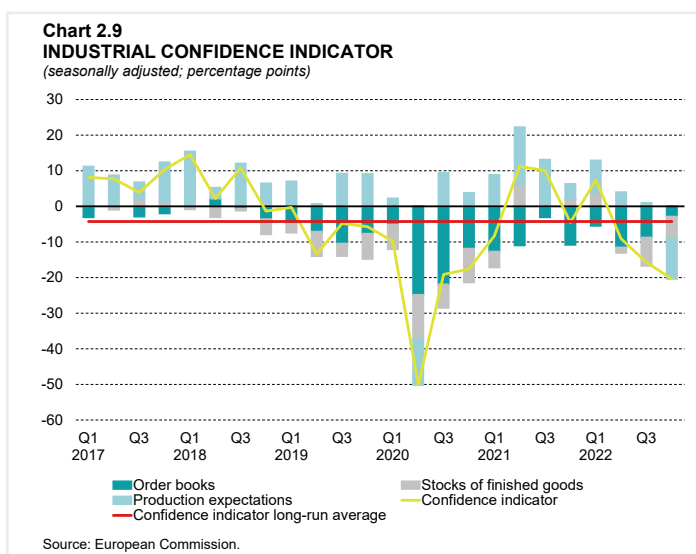
Industrial confidence remains strongly negative¹⁴

The industrial confidence indicator decreased to -20.4, from -15.7 in the previous three-month period, standing well below its long-term average of -4.3 (see Chart 2.9). The latest decrease was almost entirely driven by a sharp decline in production expectations, which fell in negative territory during the fourth quarter of the year. These developments offset a decline in the share of participants assessing order book levels to be below normal, and in the share of respondents assessing stocks of finished goods to exceed normal levels.¹⁵

Additional survey data reveal a higher share of respondents foreseeing an increase in selling prices in the months ahead. However, this notably reflects a significant increase in expectations (around the 76% mark) in November. By December, the share of respondents expecting selling price increases retreated to below 25%.

Sentiment among retailers turns positive¹⁶

The indicator representing sentiment in the retail sector increased to 10.6 in the last quarter of 2022, from -4.5 in the previous quarter, rising further above its long-term average of -0.7. The recent amelioration in sentiment was largely driven by a sharp increase in retailers' short-term expectations of business activity, from negative to a broadly neutral level. Retailers'



¹⁴ 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.

¹⁵ Above-normal stock levels indicate lower turnover and affect the overall indicator in a negative way. Such levels are thus represented by negative bars in Chart 2.9.

¹⁶ 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.

assessment of sales over the past three months also improved. These developments offset an increase in the share of participants reporting stocks of finished goods to be above normal, which contrasts with the previous quarter's assessment of broadly normal stock levels (see Chart 2.10).

Supplementary survey data indicate that, on balance, orders expectations improved strongly when compared to the third quarter of 2022. Meanwhile, price expectations edged down, but remained elevated at around 77%.

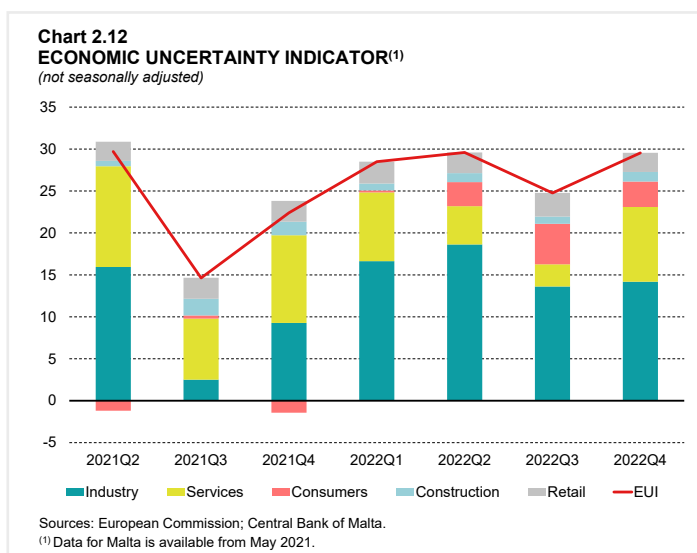
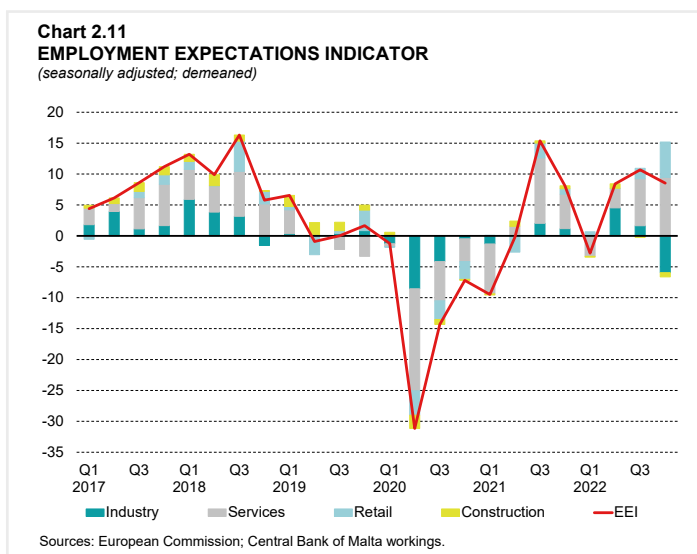
Employment Expectations Indicator (EEI) eases marginally but remains above long-run average

The EEI – which is a composite indicator of employment expectations in industry, services, retail trade and construction – edged down, but remained above its long-term average of around 100.0. It stood at 109.8, marginally below the 110.8 recorded in the preceding quarter. Notwithstanding this decrease, the index exceeded the euro area average of 106.5.¹⁷

When accounting for the variation in the weights assigned to each sector in the overall index, the decrease relative to the third quarter largely reflected developments in industry (see Chart 2.11). At the same time, the contribution of the construction sector was slightly more negative in the quarter under review. By contrast, the already positive contributions of retailers and services firms edged up.

Economic Uncertainty Indicator (EUI) decreases

The European Commission's EUI is a composite indicator of how difficult it is for sectors to make predictions about their future financial or business situation. In Malta, this indicator



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](#).

reached 29.5 in the fourth quarter of 2022, up from 24.8 in the previous three-month period (see Chart 2.12). Following the latest increase, the indicator stood above that in the euro area, where the index averaged 28.8.^{18,19}

The recent rise in uncertainty in Malta was driven by the services sector, which had seen a sharp fall to low levels in the previous quarter. The uncertainty indicator also increased in the construction sector and in industry when compared with the third quarter of 2022, but to a smaller extent. These developments offset lower uncertainty among retailers and consumers.

The highest uncertainty scores were recorded in the retail sector and in industry, with the latter contributing the most to Malta's EUI, when considering each sector's weight.

The labour market²⁰

Labour force increases at a faster pace

Labour Force Survey (LFS) data show that in the fourth quarter of 2022, the labour force grew by 15,437 persons, or 5.4% on an annual basis, faster than the 4.6% increase registered in the previous quarter (see Table 2.5).²¹

	2021 Q4	2022 Q4	Annual change %
Labour force	284,290	299,727	5.4
Employed	275,727	290,995	5.5
<i>By type of employment:</i>			
Full-time	242,173	254,780	5.2
Part-time	33,554	36,215	7.9
Unemployed	8,563	8,732	2.0
Activity rate (%)	79.8	80.9	
Male	86.6	86.7	
Female	71.9	74.3	
Employment rate (%)	77.4	78.6	
Male	83.8	84.0	
Female	70.1	72.3	
Unemployment rate (%)	3.0	2.9	
Actual hours worked (per week)	33.6	33.8	

Source: NSO.

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.

The activity rate stood at 80.9% in the quarter under review, higher than the 79.8% registered a year earlier.²² This was mostly driven by an increase in the female participation rate, which rose by 2.4 percentage points to 74.3%. The male activity rate increased by a marginal 0.1 percentage point to 86.7%. Both rates exceeded the corresponding rates for the euro area.

Employment increases further

In the quarter under review, employment rose by 5.5% in annual terms, following a rise of 5.1% in the previous quarter.

Both full-time employment as well as part-time jobs increased strongly in annual terms. The number of persons in full-time jobs rose by 12,607, or 5.2% in annual terms (see Table 2.5). This increase was mainly coming from the information and communication sector, followed by the sectors comprising of accommodation and food services as well as education.

The number of part-time employees – which also includes those employed full-time on reduced hours – rose by 2,661 persons, or 7.9% on a year earlier. This increase was largely driven by the wholesale and retail sector, as well as the sectors of public administration and education.

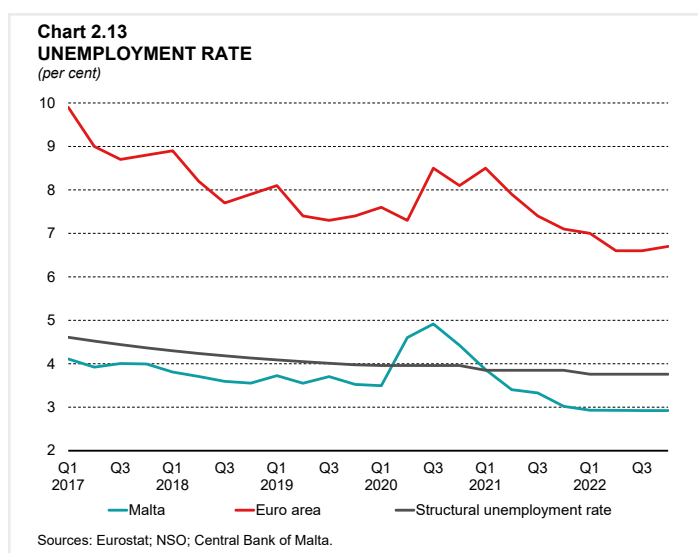
The overall employment rate rose by 1.1 percentage points on the same period of 2021, to reach 78.6%.²³ This primarily reflected a rise in the female employment rate, which rose by 2.2 percentage points to 72.3%. Higher employment rates were registered in the 15 to 24 and in the 55 to 64 age brackets. The male employment rate rose by 0.2 percentage point to 84.0%, which was entirely driven by the 55 to 64 age bracket, as those outside this bracket in the aggregate registered a decline.

During the quarter, average weekly hours worked derived from the LFS rose to 33.8 from 33.6 a year earlier (see Table 2.5).²⁴

This reflected an increase in both full-time and part-time working hours.

The unemployment rate remains low

The unemployment rate based on the LFS stood at 2.9% in the fourth quarter of 2022, unchanged from the previous quarter (see Table 2.5). However, it stood marginally below the 3.0% recorded a year earlier.²⁵ The historically low jobless rate in Malta continues to reflect resilient domestic



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.

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. 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.

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.

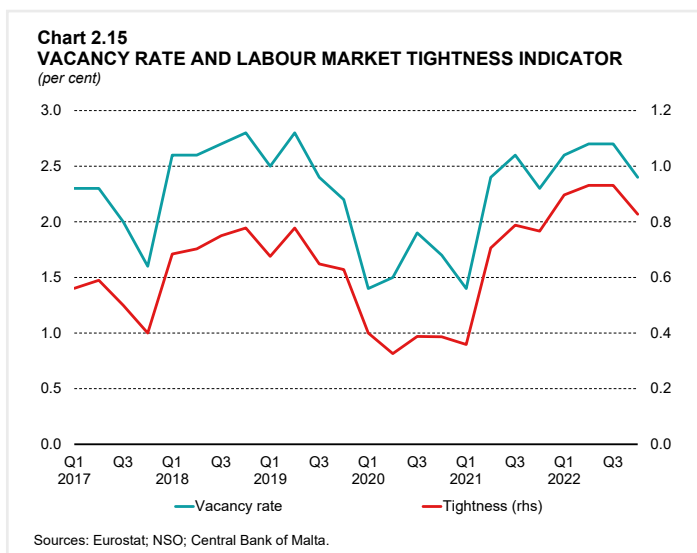
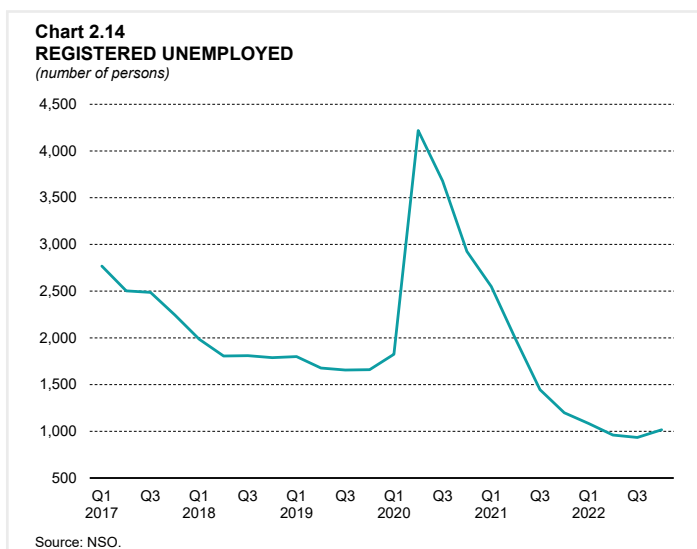
demand. Labour market conditions remain more favourable than those in the euro area, where the unemployment rate stood at 6.7%, on average (see Chart 2.13).

During the quarter under review, the unemployment rate also stood below the Bank’s structural measure of 3.8%.²⁶ This indicates a degree of labour market tightness, which is also confirmed by surveys.

Jobsplus data show that the number of persons on the unemployment register rose slightly on a quarterly basis, however it fell in annual terms. During the fourth quarter of 2022, the average number of persons on the unemployment rose by 82 persons to 1,016, although it remained lower than the 1,199 registered in the previous year (see Chart 2.14).

In fact, Eurostat’s job vacancy rate for industry, construction and services stood slightly lower in the fourth quarter compared to the previous quarter, however it remained at elevated levels (see Chart 2.15). It amounted to 2.4%, 0.1 percentage point higher than that recorded in the same quarter of 2021.²⁷ The vacancy rate was highest in the information and communication sector (6.2%), followed by the ‘other services’ sector (4.5%), and the accommodation and food services sector (4.4%).

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 0.8, higher than the ratio registered in the same quarter a year



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 a multivariate filter as described in Micallef, B., (2014). “A Multivariate filter to estimate potential output and NAIRU for the Maltese economy,” Central Bank of Malta [Working Paper 05/2014](#).

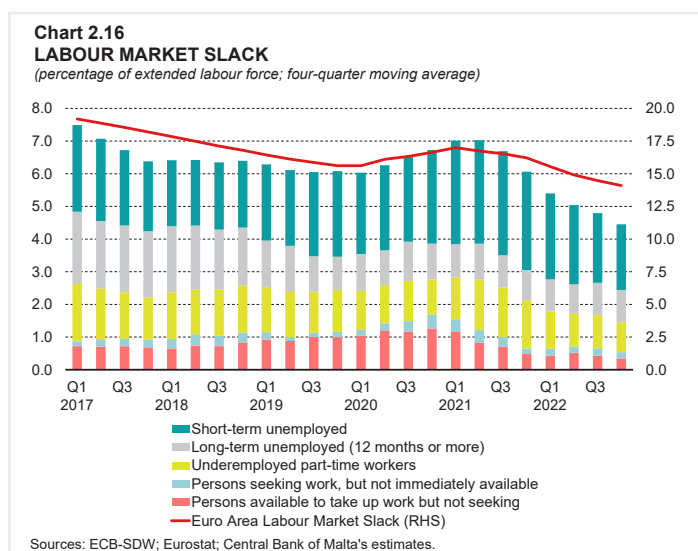
²⁷ The job vacancy rate measures the number of job vacancies as a percentage of total jobs (occupied and vacant). Data for Malta are available since 2017.

earlier, but lower than the rate registered in the previous quarter. The year-on-year increase was mostly driven by the rise in the vacancy rate. This indicator remains at elevated levels from a historical perspective.

To measure better labour market slack, 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 labour market slack (unemployed and underutilised labour) was equivalent to 4.5% of the extended labour force in the fourth quarter of the year (see Chart 2.16).²⁸ This is much lower than the 6.1% registered a year earlier and is well below this measure's average of around 8% estimated since 2010. It is also significantly lower than the 14.1% recorded for the euro area.

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

Around two-thirds of labour market slack in the quarter under review stemmed from unemployment (primarily from short-term unemployed). Underemployed part-time workers, i.e., those working part-time but willing and able to work additional hours, contributed the most to labour underutilisation.



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.

BOX 1: DOES COVID-19 NECESSITATE A REASSESSMENT OF THE ECONOMIC IMPACT OF THE RISING PENSION AGE IN MALTA?¹

The Maltese Government had enacted a reform in 2006 that as from 2013 raised the pension age gradually from 61 for men and 60 for women to 65 for both genders. Individuals are still able to receive a pension as from age 61 if they have a full contribution record, but if they do so, they are precluded from working till they reach their statutory pension age. If someone with a full contributory record opts to work beyond 61, their pension is boosted by a maximum of 23% if they work till 65.

Since older cohorts were more vulnerable to COVID-19, the pandemic was expected to be an age-specific shock to the labour market, undoing the lengthening of working lives of previous decades. In the case of Malta, the existence of the early exit age of 61 enhanced these fears, as older workers could withdraw more easily from the labour market and draw a more generous benefit than the COVID-19 wage supplement. This box discusses the main findings in Grech (2022), which uses administrative data to assess whether COVID-19 impacted significantly early exit from the labour force, and whether the estimates of economic impact of the rising pension age made in Grech (2016) need to be reassessed.^{2,3}

The latter study had utilised Jobsplus' employment register data to study the retirement behaviour of those affected by the pension age changes, but it only had information on the behaviour of those born in 1952, and the early exit behaviour of those born in 1953. This covered just the first change which moved the pension age from 61 for men to 62, and from 60 for women to 62. Administrative data now fully covers the period to 2021, which means that the labour market behaviour of all those born till 1958 is now known, while the early exit behaviour of all those born up to 1960 is also available. This means that the projections made in Grech (2016) can be compared with actual outcomes for an additional six to seven single-birth year cohorts.

The last cohort where both the statutory pension age and the early exit age was 61 was for those that were born in 1951. Labour market data show that of those born in that year who were still working at age 60, only 36% were still working at age 61. Full-time labour market participation of this cohort continued to decline with each year, falling to 22% for men and to 25% for women by age 65, as can be seen in Table 1.

The first rise in the pension age affected those born in 1952. The rate of drop-out from full-time employment immediately declined significantly, such that 63% of men who had been working at age 60 were still working at age 61, an effective improvement of about two-fifths in the drop-out rate. For women, the impact was much stronger, as the improvement was of about four-fifths. For men, the impact was limited to age 61, whereas for women there was a distinct improvement also for those who continued to work full-time to age 62.

¹ Prepared by Dr Aaron G. Grech, Chief Officer of the Economics Division 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 For a fuller version of this study, see Grech, A.G. (2022), "[The impact of COVID-19 on longer careers – An initial assessment for Malta](#)", Central Bank of Malta, *Policy Note*.

³ Grech, A.G. (2016), "[The possible impact of pension age changes on Malta's potential output](#)", Central Bank of Malta, *Policy Note*.

Table 1
PROPORTION OF THOSE BORN IN A PARTICULAR YEAR WHO WERE
WORKING FULL-TIME AT AGE 60 AND WHO WERE STILL WORKING FULL-TIME
BY SINGLE YEAR OF AGE

(a) Male; per cent

Birth year	61	62	63	64	65
1951	36	28	26	24	22
1952	63	30	26	24	21
1953	68	31	28	26	24
1954	71	36	32	31	28
1955	72	40	36	34	29
1956	74	65	45	37	30
1957	75	67	44	38	
1958	78	68	49		
1959	75	66			
1960	78				

(b) Female; per cent

Birth year	61	62	63	64	65
1951	42	33	29	27	25
1952	91	42	31	27	24
1953	89	41	31	29	27
1954	90	44	37	34	32
1955	92	53	42	40	35
1956	90	86	58	44	36
1957	90	82	55	48	
1958	88	85	60		
1959	86	80			
1960	90				

Source: Author's estimates using Jobsplus data.

With each subsequent birth year cohort, the tendency to stay in employment post age 60 strengthened. Of men born in 1960 who had been working full-time at age 60, 78% were still working at age 61, whereas 90% of women continued to work full-time. Looking, for instance, at the cohort of men born in 1957, their labour market participation at age 64 was better than that at age 61 of those born in 1951. In simple terms, 64 was the new 61 even for those whose retirement age was still 63.

The initial reaction to the second pension age increase, that from 62 to 63, ended up being quite like the first pension age increase. The proportion of men who stayed in full-time employment went up to 65%, which was just above the increase that had occurred in the first year after the retirement age had risen from 60 to 61. Among women, the impact of the second pension age rise was a bit less pronounced than the first one, but in relative terms the impact of the second pension age on female labour participation remained much stronger than that for men.

One thing that is quite evident from Table 1 is that while there was a significant improvement over time in the proportion of men who remained in full-time employment at age 61, this proportion has remained below 80%. This contrasts with Grech (2016) which had

assumed that post-61 labour market behaviour of men would converge to that of women. While there was some convergence, this appears to have stalled somewhat.

On the other hand, Table 1 indicates that successive cohorts are ending up working for longer after the statutory pension age. For instance, 24% of men born in 1952, who faced for the first time the new pension age of 62 were still working at age 65. This was the same proportion as that for men born in 1952, who faced a retirement age of 61. By contrast, 29% of men born in 1955 were still working at age 65, even though they faced the same retirement ages as men born in 1952. This pattern is evident for all cohorts. This diverges from the projections made in Grech (2016) where the bulk of the change in behaviour was related to changes in the pension age, while data now show that a growing proportion of those who stayed to work till the statutory pension age opt to continue working even beyond it.

It is relevant to note that the pension deferral scheme applies for ages up to 65 and offers quite significant top-ups at ages 63 and 64. One cannot exclude that this financial incentive is leading to a growing proportion of individuals to continue working up to the age when the deferral scheme offers its maximum return. In 2021, the proportion of men still working full-time at age 64 was higher than that of men who were working full-time age 61 just six years earlier. The same result is observed for women.

Turning specifically to what appears to have happened in 2021, the drop-out rates out of full-time employment (displayed in the bottom diagonal in the Table 1) do not appear to have deteriorated. In fact, for all ages bar 62, the proportion of those who had been working full-time in 2020 and who remained in full-time employment in 2021 was a historical high. For example, 49% of men born in 1958 who had been working before they reached the early exit age, were still working in 2021 even though they were 63 by then. For those born a year earlier, the proportion was just 44%. The only age where there appears to have been a significant negative impact in 2021 was for those who were aged 62. For this age bracket, there was a decline in full-time employment rates, especially among women.

Jobplus data therefore suggest that the pandemic did not exert any long-lasting impact on the lengthening of careers. There may have been an initial dip in employment of older workers, but this was quite temporary and labour market behaviour returned to pre-pandemic levels quickly. Despite the possibility to retire early and access their pension, the bulk of workers remained in full-time employment, and the trend to work beyond the statutory pension age continued unabated.

Grech (2016) had estimated the labour market impact of pension age changes by assuming that had the latter not been enacted, employment drop-out rates would remain unchanged after 2012. This no-policy change benchmark had been contrasted with the actual labour market outcomes between 2012 and 2014, together with forecasts made for the period 2015 to 2026 based on the assumption of continued improvement in drop-out rates as a result of subsequent rises in the pension age. The same approach was undertaken again utilising updated labour market data up to 2021, with forecasts made to 2026 based on the insights on employment drop-out rates that have been described above.

The new estimates are presented in Table 2 and contrasted with those made in Grech (2016). This indicates that in 2026 the potential labour supply should be some 3% higher than it would have been otherwise, and Malta's potential output should be some 1.7% higher than if the pension age had remained unchanged. This is somewhat lower than the Grech (2016) projections, but this reflects mostly a base effect as the Maltese economy and workforce grew much more sharply than had been expected, and therefore the base against which the pension age-induced improvements are being compared is much higher.

The fact that thousands more persons are remaining in full-time employment instead of drawing a two-thirds pension, of course, also has a strong positive impact on public finances. Assuming those in full-time employment would have drawn the average two-thirds pension, the annual saving in spending for Government grew nearly tenfold, from €5.8 million in 2013 to €52.4 million in 2021. If one makes a conservative projection of annual rises in pension rates, till 2026, the saving will nearly double. At the same time, the induced increase in GDP had a very positive impact on government revenue, estimated at €7.1 million in 2013, and reaching €65.5 million in 2021. Assuming the tax-to-GDP ratio remains stable at its 2021 level, by 2026 this positive impact should also nearly double. Taken together these two impacts imply that had labour market behaviour post age 61 remained frozen in its 2012 pattern, government would have needed to borrow an additional 9.1% of GDP between 2013 and 2026. This is higher than the estimate made in Grech (2016). This reflects two facts: namely that since that study was conducted, the Maltese Government

Table 2
NEW ESTIMATE OF THE IMPACT OF PENSION AGE CHANGES (2013 TO 2026)

Per cent

	Potential labour supply	Potential output	Public debt ratio (% of GDP)
2013	0.4 (-0.2)	0.2 (-0.4)	0.2 (0.0)
2014	0.6 (-0.1)	0.3 (-0.1)	0.4 (0.0)
2015	0.7 (0.0)	0.4 (0.0)	0.7 (0.0)
2016	0.8 (-0.1)	0.4 (-0.1)	1.0 (0.0)
2017	0.9 (-0.3)	0.5 (-0.2)	1.4 (0.0)
2018	1.4 (-0.2)	0.8 (-0.1)	1.9 (0.1)
2019	1.7 (-0.1)	1.0 (0.0)	2.5 (0.1)
2020	1.8 (-0.1)	1.1 (0.0)	3.2 (0.3)
2021	2.1 (-0.1)	1.2 (0.0)	4.0 (0.4)
2022	2.3 (-0.2)	1.4 (0.0)	4.9 (0.6)
2023	2.6 (-0.2)	1.5 (-0.1)	5.9 (0.8)
2024	2.6 (-0.3)	1.5 (-0.2)	6.9 (1.0)
2025	2.8 (-0.4)	1.6 (-0.3)	8.0 (1.3)
2026	3.0 (-0.6)	1.7 (-0.4)	9.1 (1.4)

Source: Author's calculations.

Note: The figure in brackets compares the new estimate with the estimate made in Grech (2016).

consistently awarded higher than projected annual pension increases, and also that the tax-to-GDP ratio did not fall as much as had been expected.

In conclusion, the pandemic does not appear to have led to any substantive revisiting of the economic impact of the pension age changes. The labour market behaviour changes induced by the pension age changes have been resilient in the face of what initially appeared would be quite an age-specific shock. The strong and quick economic recovery, combined with the pension deferral scheme, undoubtedly played a role in this respect.

BOX 2: THE IMPACT OF THE COVID-19 PANDEMIC ON HOUSEHOLDS' FINANCES IN MALTA¹

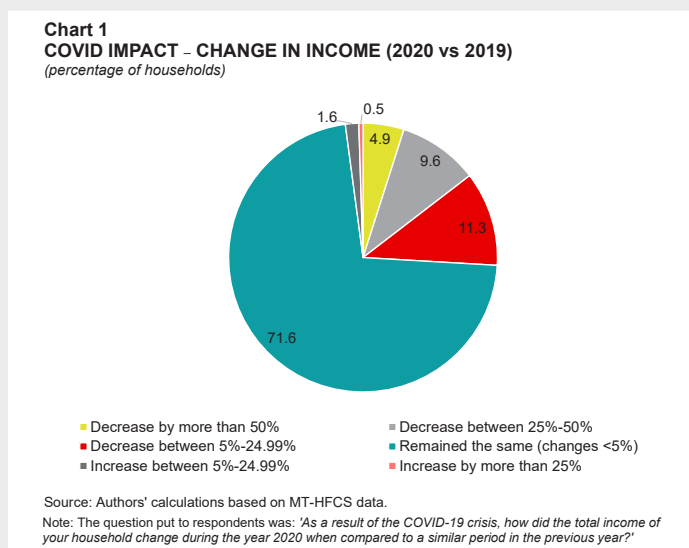
This box summarises the findings on the impact of the COVID-19 pandemic for Maltese households as reported in the fourth wave of the Household Finance and Consumption Survey (HFCS) for Malta.

The HFCS is part of a co-ordinated research project led by the ECB and involves national central banks of all euro area countries and selected non-euro area EU member states. The Survey is conducted every three to four years. In Malta, the fieldwork for this wave was carried out between November 2020 and February 2021, with the reference period for income related variables being 2020.²

Given the exceptional circumstances caused by the COVID-19 pandemic during the latest wave of the Survey, the Household Finance and Consumption Network (HFCN) decided to include an ad-hoc module to assess the impact of the pandemic on households' finances.

Households were asked to compare their 2020 income with that of 2019 to identify whether the pandemic or the associated restrictions which were in place had any impact on their income levels. Almost three-fourths of Maltese households (71.6%) stated that their income was not impacted significantly by the pandemic (see Chart 1). These findings are broadly consistent with what was reported through the statistics on income and living conditions (SILC). Meanwhile, almost 26% of households reported a lower income, most of which replied that the income lost was between 5% and 25%. Additionally, only 2.1% of households stated to have a higher income in 2020 when compared to a year earlier.

The Survey includes a panel component, which allows one to measure the change in income for this subset of households between the past two waves.³ Results from the Survey show that households in the panel component whose labour status have been negatively impacted by the



¹ Prepared by Aleandra Muscat, Dr Valentina Antonaroli and Warren Deguara, Economist and Principal economists, respectively within the Economic Projections and Conjunctural Analysis Office. The views expressed are those of the authors and do not necessarily reflect the views of the Central Bank of Malta. Any remaining errors are the sole responsibility of the authors.

² More [information, data and studies on the HFCS in Malta](#).

³ The panel component for 2020, that is households who also participated in the 2017 wave, made up 33% of interviewed households.

pandemic have nonetheless reported an increase of 30.3% in their median income in 2020 with respect to 2017. These results could reflect the overall wage growth between the third and fourth wave and suggest that the changes brought about by the pandemic impacted households only during the months in which the containment measures were in place.

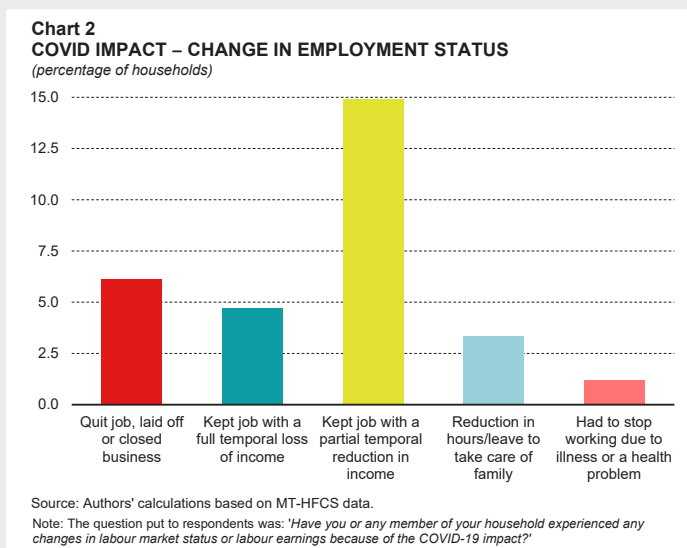
Respondents were also asked to comment how COVID-19 affected their employment situation. The share of households who completely lost their job was relatively low, as only 6.1% reported to have either quit their job, closed their business, or had been laid off (see Chart 2).⁴ Additionally, 4.7% of all respondents were able to keep their job but had a full reduction in wages or earnings, probably due to the temporary mitigation measures in place that restricted the operation of non-essential services. Almost half of those whose labour status was impacted were able to keep their job but had a partial reduction in wages or earnings.

Around 3.3% of households were forced to ask for a reduction in working hours or leave. This might reflect health-related concerns during the pandemic, as well as the need for parents with young children to care for their dependants during the shift to online schooling. Moreover, 1.2% of respondents were forced to stop working due to sickness or other health problems.⁵

The high proportion of households that were able to keep their job (over 70%) likely reflects the effectiveness of state support such as the wage supplement scheme, which was specifically intended to safeguard employment of those who were mostly impacted by lockdowns or pandemic-related containment measures.

Looking at those households who were negatively affected by the pandemic, the share who lost their job or closed their business due to the COVID-19 pandemic was similar across all education levels and age groups (see Chart 3a).

As expected, a full wage loss while remaining in employment was mostly experienced by self-employed respondents (19.6%), while another 52.8% of these self-employed respondents experienced only a partial wage loss. Such partial loss in earnings was mostly observed for males, those with a tertiary level education, and



⁴ Official statistics show that the unemployment rate in 2020 also grew slightly in comparison to 2019.

⁵ It is important to note that respondents were allowed to select more than one option.

respondents aged 35 and under. The impact on wages was relatively similar for males and females, as 6.1% of both genders reported losing their job, and 5.3% and 4.0% respectively experienced a full earnings loss but managed to retain their job.

The share of respondents who lost their job was relatively low across all income and wealth quintiles (see Chart 3b). The highest share was reported by households in the fifth income quintile (9.9%) as well as the third wealth quintile (7.4%).

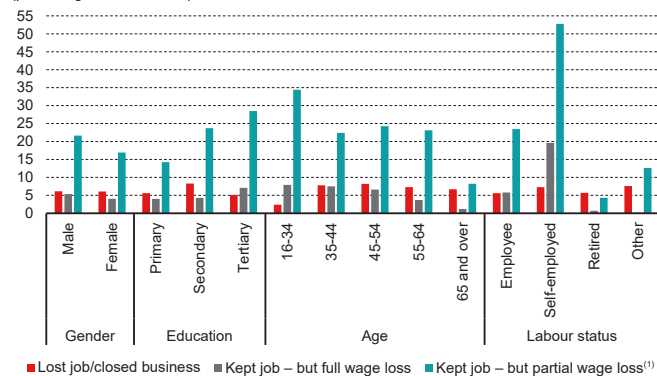
On the other hand, respondents who suffered a partial loss in wages was higher among the highest income quintiles. Households in the third income quintile registered the largest share in this regard (27.0%),

followed very closely by the fifth quintile (26.9%). With regards to wealth quintiles, households in the highest wealth quintile (24.7%) reported the largest share of partial income losses, but this was followed by the second and first wealth quintile.

Generally, the share of employees who were impacted by the pandemic was higher for those in the private sector than for those working in the public sector. In the private sector, households employed in the wholesale and retail, and transport and storage sectors were more likely to state that they were negatively affected by the pandemic.

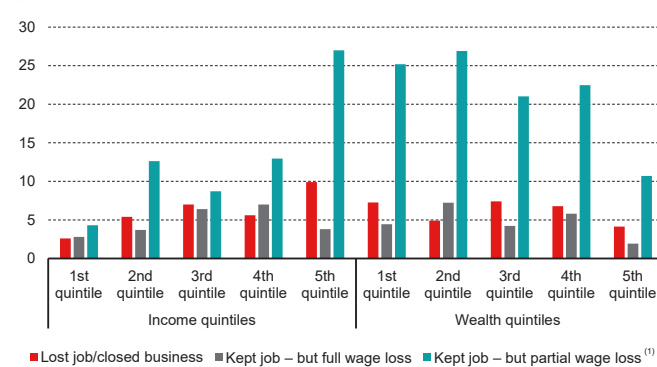
Around 70% of respondents who reported a decrease in income stated that they lowered their expenditure on food, clothes, travelling, and other consumer goods and services to

Chart 3a
COVID IMPACT – ANY IMPACT ON EMPLOYMENT STATUS, BREAKDOWNS
(percentage of households)



Source: Authors' calculations based on MT-HFCS data.
⁽¹⁾ In this category, the following households' replies are combined:
 - Kept job with a partial temporal reduction in wages or labour earnings or business income;
 - Had to ask for a reduction in hours or for a leave of absence to take care of children or dependents;
 - Had to stop working due to illness or a health problem.

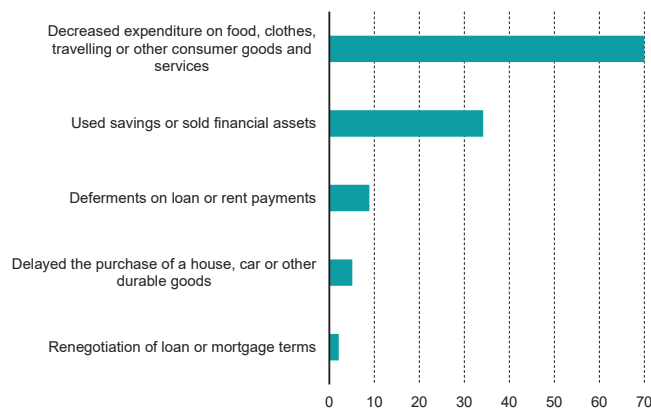
Chart 3b
COVID IMPACT – CHANGE IN EMPLOYMENT STATUS, BREAKDOWNS
(percentage of households)



Source: Authors' calculations based on MT-HFCS data.
⁽¹⁾ In this category, the following households' replies are combined:
 - Kept job with a partial temporal reduction in wages or labour earnings or business income;
 - Had to ask for a reduction in hours or for a leave of absence to take care of children or dependents;
 - Had to stop working due to illness or a health problem.

cope with the reduction in earnings (see Chart 4).⁶ Taking only the panel component of the survey, when comparing expenditure on travel and holidays of households who suffered a full or partial loss in income due to COVID-19 in 2020 with that in 2017, a 53% reduction is noted. In fact, the median value dropped from €1,750 in 2017 to €940 in 2020.

Chart 4
COMPENSATION FOR INCOME LOSS DUE TO COVID
(percentage of households)



Source: Authors' calculations based on MT-HFCS data.
Note: The question put to respondents was: 'How did your household compensate for the loss of income?'

Other ways to compensate for the decrease in income included dissaving and the sale of financial assets (34.2%). However, this could also reflect the low interest rate environment which might have hindered the attractiveness of such a financial asset. Some households (8.9%) also deferred loan and rent payments (8.9%). Lastly, none of the respondents took additional loans to make up for their income losses, while some (2.1%) were able to renegotiate their loan or mortgage terms.

Overall, the results of this Survey confirm that even though COVID-19 had repercussions on economic activity, the Maltese labour market remained resilient, and in large part households' income was safeguarded. This reflects the substantial support measures offered by Government, notably the wage supplement scheme.

Only a small proportion of households, mostly self-employed or employees in the private sector, have experienced full or temporary loss in income, but those who were affected mostly opted to lower consumption or draw on accumulated assets. This helps explain why private consumption bounced back so rapidly in subsequent years, such that by 2022 household consumption was already 6.4% higher than in 2019.

⁶ It is important to note that respondents were allowed to select more than one measure in which they compensated for their loss in income as most respondents adopted a mixture of measures.