STATE OF THE MALTESE ECONOMY
SUBMISSION TO THE NATIONAL POST-COVID STRATEGY STEERING COMMITTEE

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Introduction

The Covid-19 pandemic has brought about substantial challenges to our lives not only from a health perspective but also in the socio-economic dimension to all countries across the globe. Malta was not an exception to this outbreak and the pandemic has tested the strengths of the Maltese economy. Indeed, to understand better the performance of the Maltese economy during the pandemic, we felt the need to establish how the economy developed prior to the pandemic and illustrate the characteristics of the economy which ultimately determined its reaction during the pandemic. Understanding the strengths and weaknesses of the economy is deemed essential to identify the opportunities and threats of the Maltese economy in the post-COVID period.

The analysis generally surveys the five years prior to the onset of the Pandemic and, where data is available, follows with an account of the effect of the pandemic in 2020.

The first chapter depicts in some detail the general demographic, social and employment situation in Malta. In this chapter the demographic transition over the past few years is examined with the latest data available. In terms of the labour market, an analysis of how the labour force has evolved is conducted based on skills and nationality. The social dimension is also explored using the latest SILC data, which enables the analysis of various fruitful indicators relating to the at-risk-of-poverty dimension, people working in low intensity jobs and material deprivation.

The second chapter deals with the environmental dimension and developments in Malta and divides its analysis into four parts. The first part looks at the air quality and the different types of energy sources and their use in Malta. This chapter follows with an analysis of waste generation and resource productivity.

The third chapter aims to look at the macroeconomic dimension of the Maltese economy and takes a deeper look at the expenditure components which typically make up the Gross Domestic Product. This section is further supplemented by an overview on different sectors of the economy and their contribution to growth. Furthermore, this chapter also simulates the economic impact of the COVID-19 crisis and estimates the mitigating effect of Government's fiscal policy response to the impact of the pandemic.

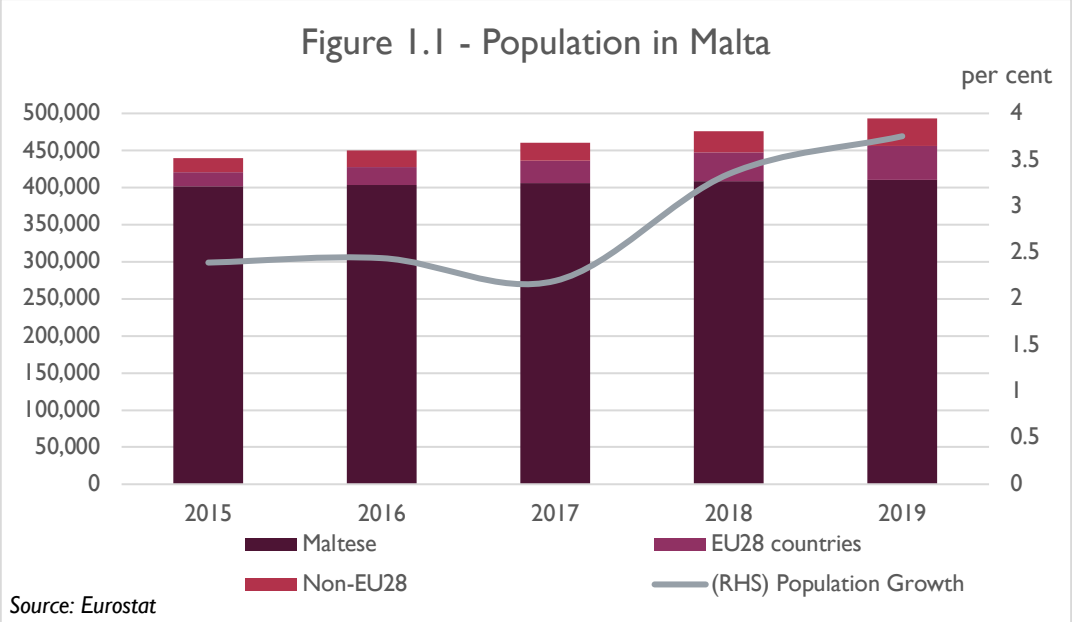
The fourth chapter analyses developments in various external indicators, productivity measures and price developments in goods and services including property. Malta's external competitiveness is also evaluated based on real effective exchange rates and a shift-share analysis of Maltese exports.

The fifth chapter delves into the private and public finances. In terms of private finance this chapter provides an overview of some key indicators of financial stability. It also evaluates the credit situation in Malta. Furthermore, this section also delves into public finances and provides an overview on how government finances have evolved, discussing the role of automatic stabilizers and discretionary fiscal measures which cushioned the impact of the crisis. A debt sustainability analysis of public debt following the pandemic is also provided.

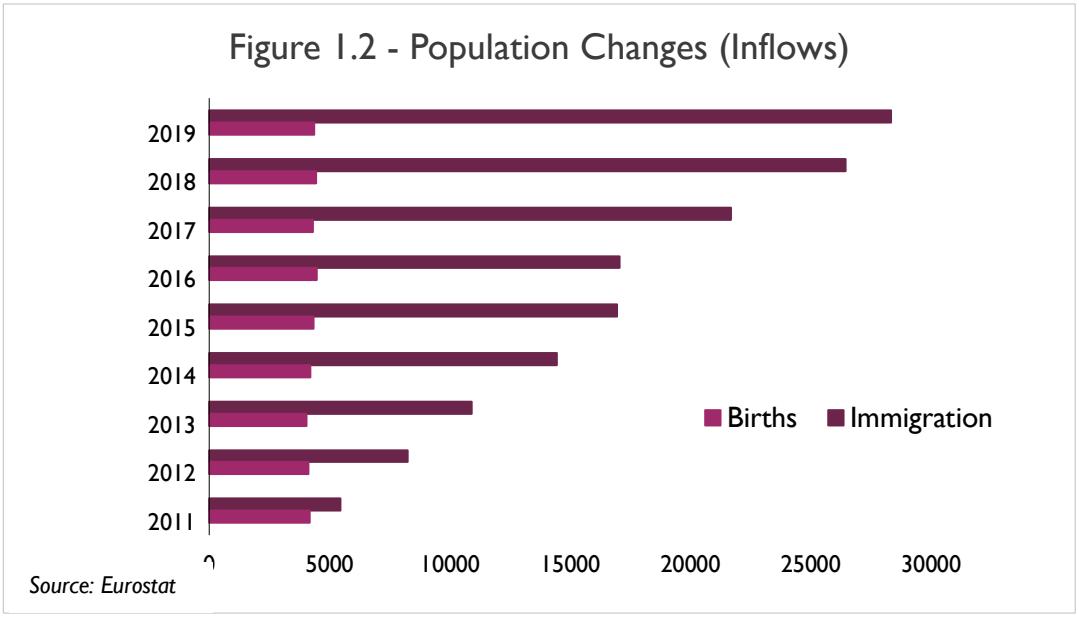
CHAPTER 1
EMPLOYMENT AND SOCIAL DEVELOPMENTS

A. Demographics

The structure of the Maltese population has changed significantly over the past years. From 2015 to 2019, population size increased by 17.0 per cent, reaching 514,564 by 2020, growing at an average of 3.1 per cent every year. Whilst such an increase can be partly attributed to the improvements in life expectancy, the increase mainly reflects inward migration flows of both EU and non-EU nationals. Demographic developments over the past few years have involved an ageing process on the one hand due to the falling fertility rates and the increasing life expectancy, which was countered by the increasing net migration, most of whom were persons of working age.



Source: Eurostat

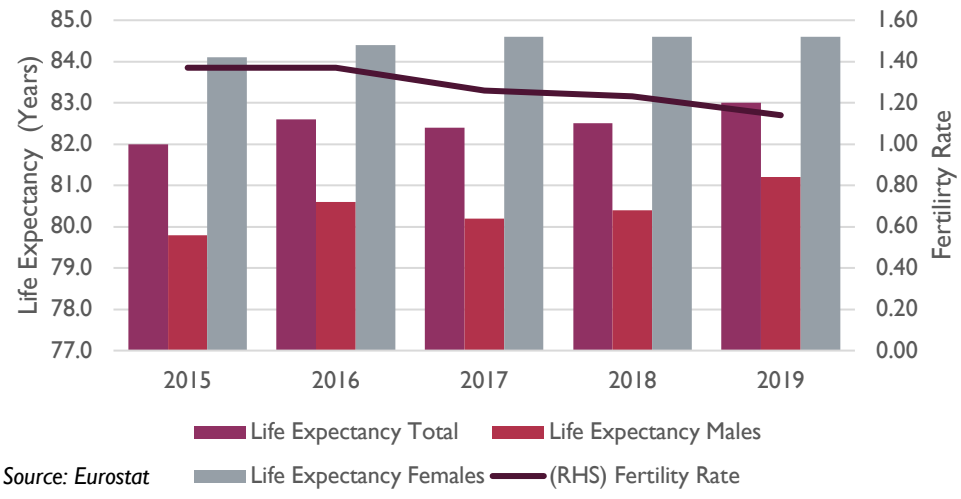


Source: Eurostat

As can be seen in Figure 1.3, the fertility rate has been consistently declining, reaching 1.14 births per woman by 2019, well below the 2.1 replacement rate considered as necessary for the population to retain its stability. Malta has the lowest fertility rate among its EU-27 counterparts with the EU-27 average standing at 1.14 in 2019. On the other hand, the notable health advances over recent years have led to an improvement in life expectancy. Whilst such an improvement is more evident if one had to look across decades, over the five period under consideration, the life expectancy increased by 1 year. Life expectancy for females remains higher than those of males. Indeed, whilst a female born in 2019 is expected to live 84.6 years, the males' life expectancy is on average around 81.2 years. It is worth noting however that the gains in life expectancy for males over the past five years were significantly larger than those for females with gains of 1.4 and 0.5 for males and females respectively, signifying a move towards convergence in the life expectancy across genders. Indeed, whilst the life expectancy for males increased year after year, the life expectancy for females has remained constant for the past 3 consecutive years.

As a result of these demographic changes, since 2015, the share of young dependents in the total population decreased from 14.3 per cent to 13.7 per cent, whilst the share of the elderly cohort increased from 18.2 per cent to 18.7 per cent of the total population.

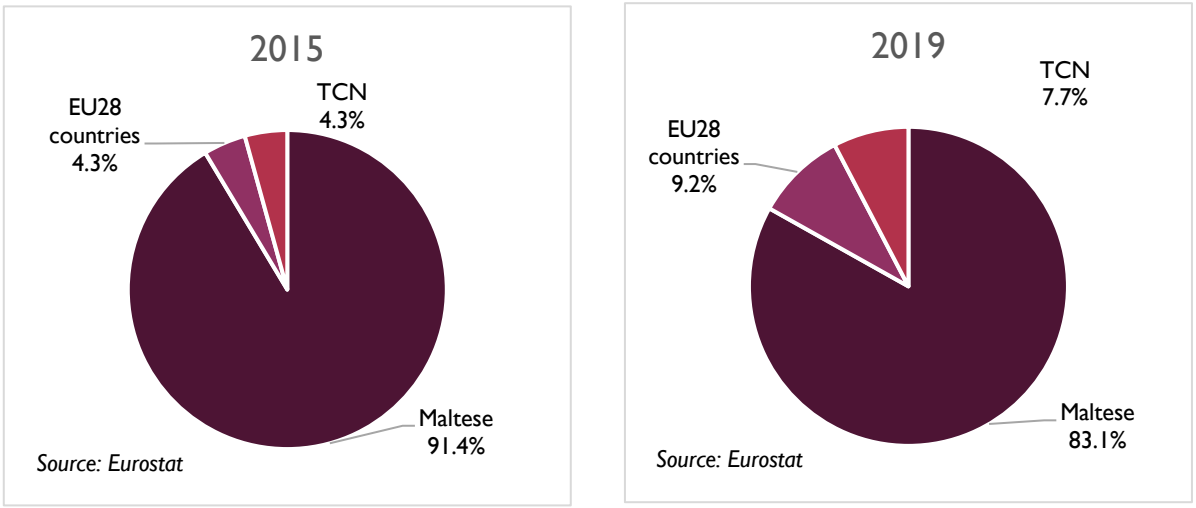
Figure 1.3: Life Expectancy and Fertilty



Source: Eurostat

Although the gains in life expectancy, sustained for decades, may have contributed towards population growth since 2015, the increase is predominantly attributed to inward migration. In 2015, the share of EU citizens and Third Country Nationals (TCNs) in the total population was equal at 4.3 per cent of the population in each case, by 2019, 9.2 per cent of the population came from EU countries while 7.7 per cent came from non-EU countries (Figure 1.4).

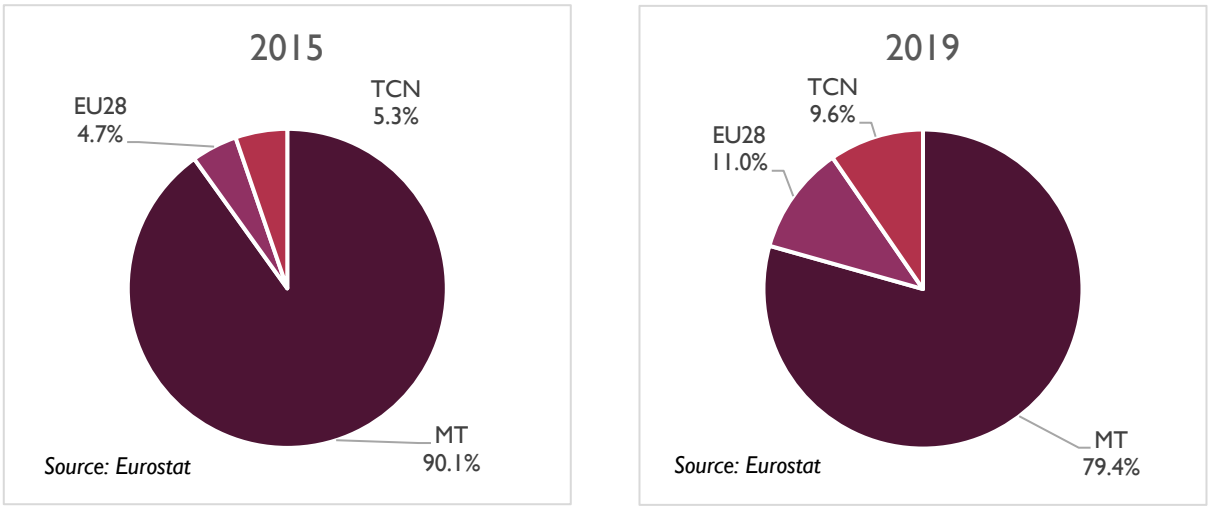
Figure 1.4 - Population by Nationality



Migration has not only had a crucial impact on the size of the population but also on its structure. Whilst the natural demographic developments over the past few years (falling fertility rates and increasing life expectancies), involved an ageing process, the increasing migration flows, most of whom are of working age, has helped offset such a process.

In 2019, 82.7 per cent of migrants residing in Malta were of working age (15-64). Putting things into perspective, this comprises 20.6 per cent of the total population in this age cohort, rendering significant demographic implications (Figure 1.5).

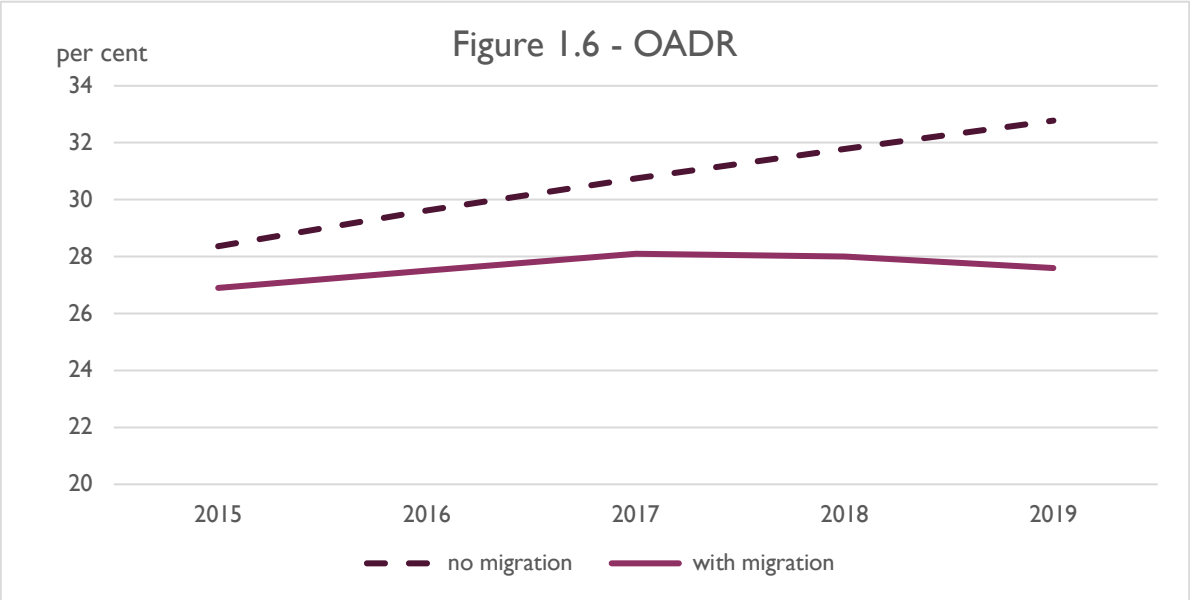
Figure 1.5 - Composition of Working Age Population in Malta



Developments in the dependency ratios shed light on both these demographic changes and the intensification of the ageing process in Malta. The 'ageing of the aged ratio', which compares the 80+ age bracket as a percentage of the 65+ age bracket, increased by 1.1 percentage points over the period under comparison, implying that the old-old cohort is growing at a faster pace than the young-old cohort, in line with the rising life expectancy. The pressures from the ageing population

are further accentuated by the increase in the 'Old Age Dependency ratio' (showing persons aged 65 years or more in relation to the number of individuals aged 15-64 years) which pursued an upward trajectory, increasing from 26.8 per cent in 2015 to 27.6 per cent in 2019.

Here, however, it is worth noting that such an increase in the dependency ratio would have been bigger without the migration inflows. Indeed, in a hypothetical scenario without migration, the OADR would have increased by 4.4 percentage points between 2015 and 2019. In this scenario, the increase in population would have been of 2.1 per cent rather than 12.3 whilst the working age population would have fallen by nearly 1.0 percent over 2015 rather than increase by 12.4 per cent.



Source: Eurostat

Despite the increases observed in the old age dependency ratio and the ageing of the aged ratio, the Economic Dependency Ratio (which measures the proportion of the total inactive population as a percentage of the employed population 15-64) decreased by 10.0 percentage points between 2015 and 2019. Such improvements not only reflect the improvements in participation rates, (as will be seen further on in this chapter), but also indicate that the population increase has been absorbed in the labour force and is helping to counteract the pressures stemming from the rising old age dependency and the lower fertility rates. Thus, migration contributed towards the strengthening of labour market and supported economic growth. In addition, it helped support the sustainability of the pension system through contributions. Furthermore, a recent study by the Central Bank of Malta established that foreign workers only stay in Malta for a temporary period, with the average length of stay being 3.5 years and only 30.0 per cent of the migrants remaining in Malta for a period exceeding 6 years, possibly mitigating the increase in pension liabilities in the future.

Over the past five years, the educational level of the population has also evolved. Looking at the population by education attainment, one can note that between 2015 and 2019, the working age population with tertiary education (15-64) increased by 52.0 per cent whilst the number of individuals with less than primary level of education decreased by 6.5 per cent. Indeed, since 2015, the population of persons aged 15-64 having a tertiary level of education increased by around 31,300 with a large spike observed in 2018 and 2019 where an increase of around 21,600 individuals can be observed.

B. Labour Market

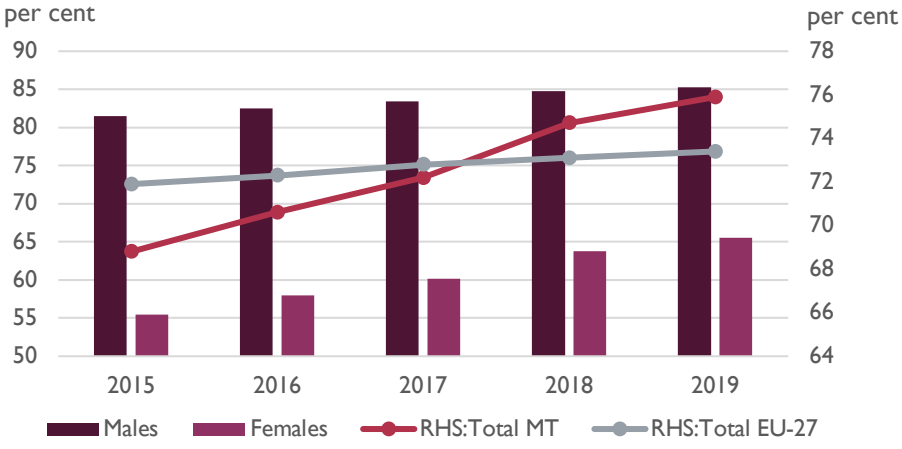
The labour market's performance over the 5-year period under analysis was buoyant, with an upward trend in activity and employment rates and a corresponding decline in unemployment to historically low levels. Furthermore, the structure of the Maltese labour market continued to evolve, with the integration of females, older workers, and foreign workers as well as through changes in the skills decomposition, with a shift towards a higher educated workforce. This Chapter will provide a deeper analysis into these developments.

Activity Rates

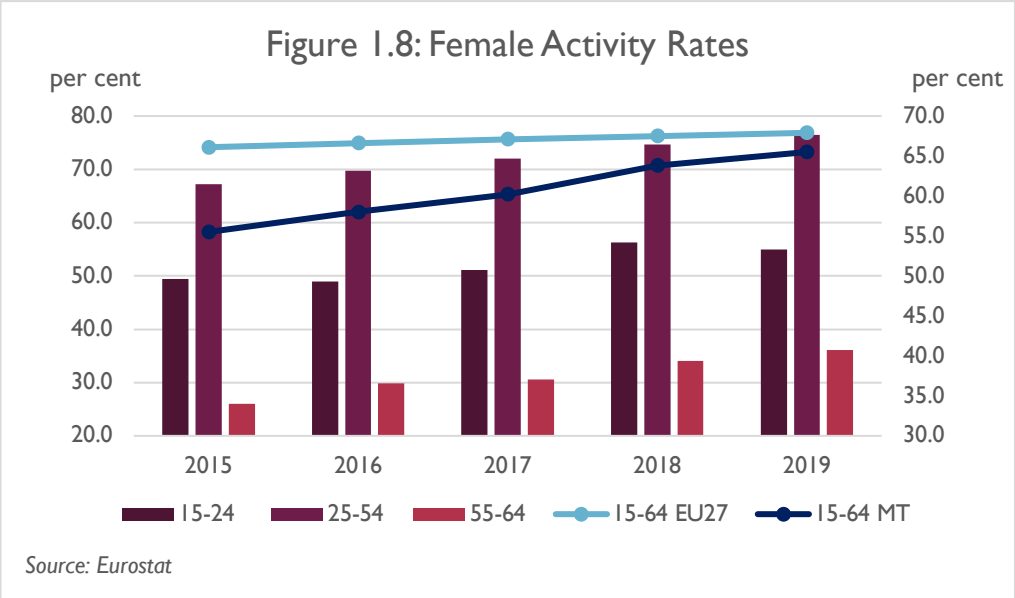
Since 2015, participation in the labour market has increased. Whereas in 2015, out of every 100 individuals aged 15-64, 69 were active in the labour market, in 2019, there were 76 individuals. Activity rates for males stood at 85.3 per cent while those for females at 65.5 per cent.

The increase of 7.1 percentage points in overall activity rates in Malta over the period under review was significantly higher than the increase of 1.5 percentage points recorded at EU level, with Malta attaining higher than EU average activity rates from 2018 onwards (Figure 1.7). Such an increase follows the several incentives and polices adopted by the Government with the aim to increase participation rates of female workers and several vulnerable cohorts with typically high inactivity rates. Whilst an increase in activity rates was registered for both males and females, the increase in female participation rate was of significant magnitude. Indeed, female participation rate increased for all age groups (Figure 1.8), with an overall increase of 10.0 percentage points over the period 2015-2019, raising activity rates for females in Malta close to the EU average. Measures such as the provision of childcare, the breakfast and 3-16 club, the setting up of the Maternity Leave Benefit Fund, the reduction in income taxes, the widening of the non-taxable income brackets as well as the introduction of the tapering and in-work benefits schemes all proved to be fruitful in incentivising more individuals, especially females, to join the labour market.

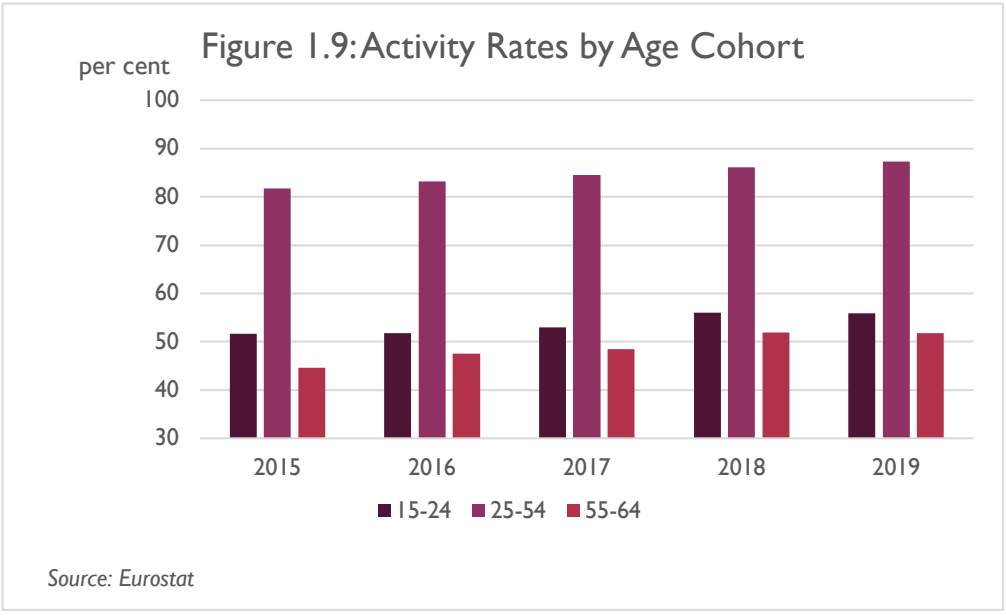
Figure 1.7: Activity Rates by Gender



Source: Eurostat



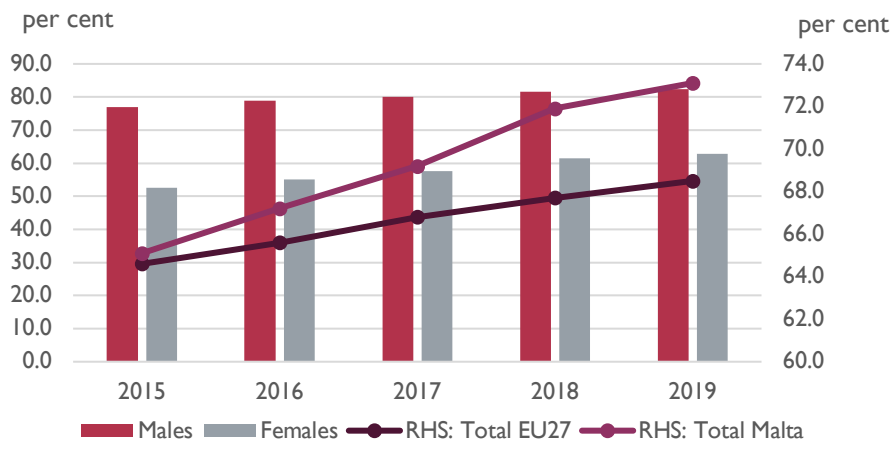
Overall, activity rates followed an upward trend for all age cohorts (Figure 1.9). However, whilst activity rates rose significantly for the 25-54 and 55-64 age groups, the increase was much less pronounced for the 15-24 age bracket, reflecting the fact that more individuals in this age cohort are pursuing further education. Activity rates for the 55-64 age cohort increased by 7.2 percentage points, reflecting the government's incentives aimed at encouraging older workers to participate in the labour market and to increase working lives. With this aim, in 2006 a pension reform was adopted with reforms including the gradual increase in retirement age, the lengthening of the contributory period as well as the stricter rules for early retirement, all of which were targeted at increasing activity rates of older workers, in line with the improvements in life expectancy. In addition to this reform, fiscal incentives were introduced in 2016 whereby workers in both the public and private sector can benefit from an increase in their pension for each additional year they spend in employment post their retirement age up to 65 years. Furthermore, older workers are now able to benefit from lifelong learning and ongoing skills development, enabling them to retain a foothold in the labour market.



Employment

The strong economic performance over the past years led to a robust demand for labour. Employment rates for 15-64, stood at 73.1 per cent in 2019, 8.0 percentage points higher than the rate in 2015. Overall, in 2019, employment rates in Malta were 4.6 percentage points higher than those at EU level (Figure 1.10).

Figure 1.11: Employment Rate (15-64)



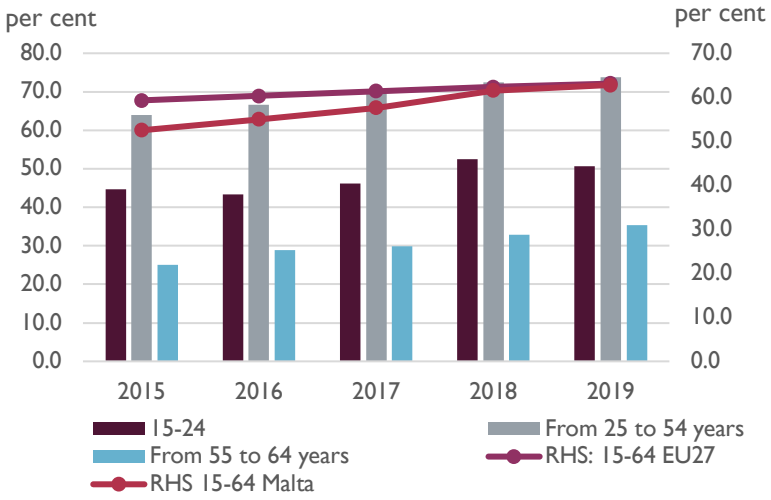
Source: Eurostat

As observed above, while an increase was registered for both males and females, the increase was more pronounced for female's employment rates. In fact, the increase in males' employment rate was of 5.4 percentage points and that of females of 10.3 percentage points. Such improvements in female employment rates, effectively contributed towards the narrowing of the employment rate gap between genders. In addition, Malta's employment rates for females aged 15-64 has effectively converged to the EU average. The gap from EU average was reduced from being 6.8 percentage points lower in 2015 to just 0.3 percentage points in 2019.

These results suggest that the active labour market policies were not only successful in raising participation but also resulted in higher employment rates. Indeed, policies were designed not only to make work more attractive and to support families, but also towards employers to incentivise them to employ vulnerable groups. For instance, Government set up the Maternity Leave Benefit Fund in a bid to eliminate discrimination by employers against young female workers when it comes to hiring. The Maternity Leave Contribution of 0.3% of the basic weekly wage, that came into effect as of 1st July 2015 through Legal Notice 257 of 2015 (Trusts and Trustees Act Cap. 331), is to be paid by employers for all their employees (irrespective of Gender) in the private sector. Under this scheme, employers will pay the maternity/adoption leave to their employees for the first 14 weeks, and then apply for a refund from the Department of Social Security when the employee returns to work.

As indicated in Figure 1.11, the largest increases in employment rates for females were in the 55-64 and 25-54 at 10.3 percentage points and 9.7 percentage points respectively. This reflects both the policies targeted at the younger cohort (child-care and family support services) as well as those targeted at the older age cohort. Among the incentives targeted at older females specifically, tax exemptions were introduced for females aged over 40 who choose to return to the labour market. In addition, females were also able to benefit from the incentives offered to all older workers.

Figure 1.12: Female Employment Rate



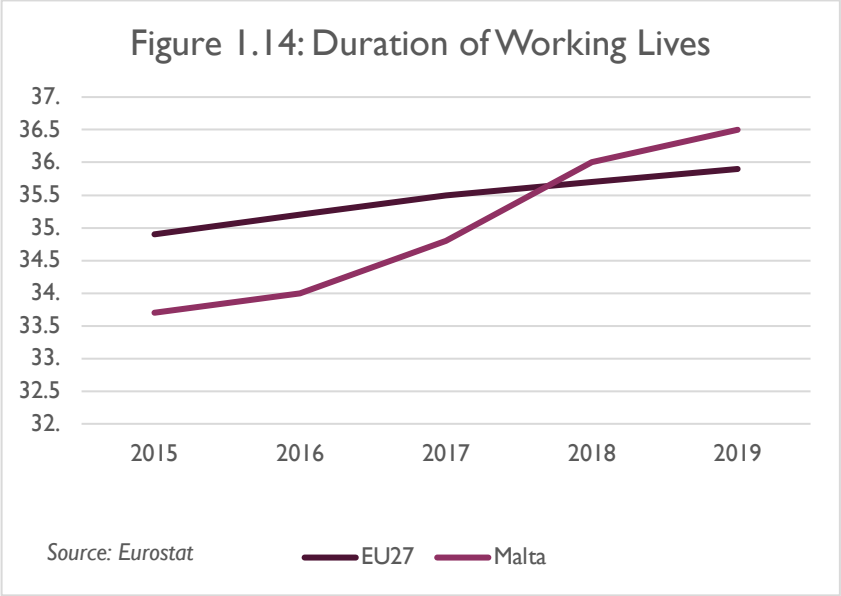
Source: Eurostat

In fact, considerable progress has been made in terms of the employment rate of all older workers (55-64) not only of females. This reflects pension reforms as well as the policies targeted at older workers to encourage them to remain actively employed (through lifelong learning and skill development opportunities and incentives to defer retirement) and through incentives for employers to employ older workers, for instance through the offering of a tax reimbursement to those employers who employ mature workers. As a result, employment rate for 55-64 increased by 8.8 percentage points (Figure 1.12).

As a result, duration of working lives in Malta has increased by 2.8 years over the period 2015-2019, effectively eliminating the gap and even surpassing the EU average (Figure 1.13).

Figure 1.13: Employment Rate 55-64

Source: Eurostat



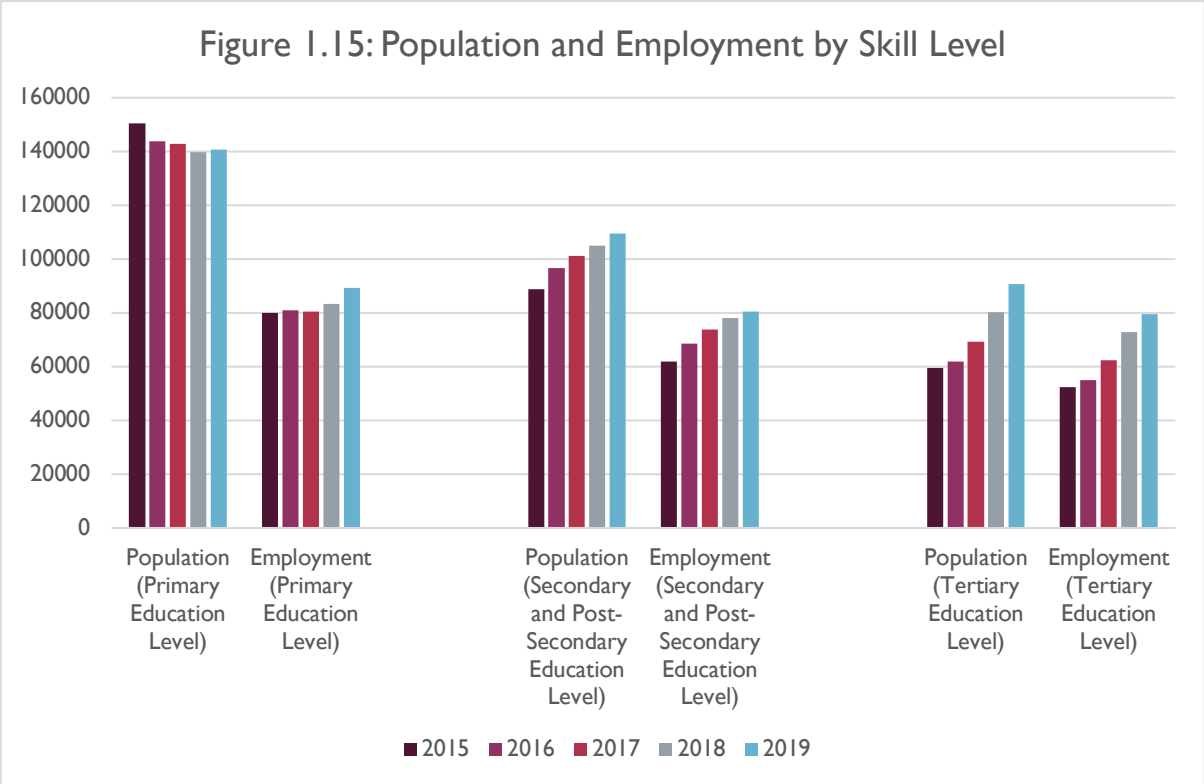
Policies over the past years also addressed the integration of persons with disability into the labour market through measures that focused on simplifying access to the labour market and through specialised tax deductions and exemptions that incentivise the employment of persons with a disability. Furthermore, discussions on the implementation of the two per cent quota legislated in the "Persons with Disability Employment Act" (Chapter 210 of the Laws of Malta) are at an advanced stage. Employers who fail to adhere to this legislation are requested to make an annual contribution of €2,400 for every person with disability (capped at €10,000 per employer) they should be employing.

Employment by Skill Level

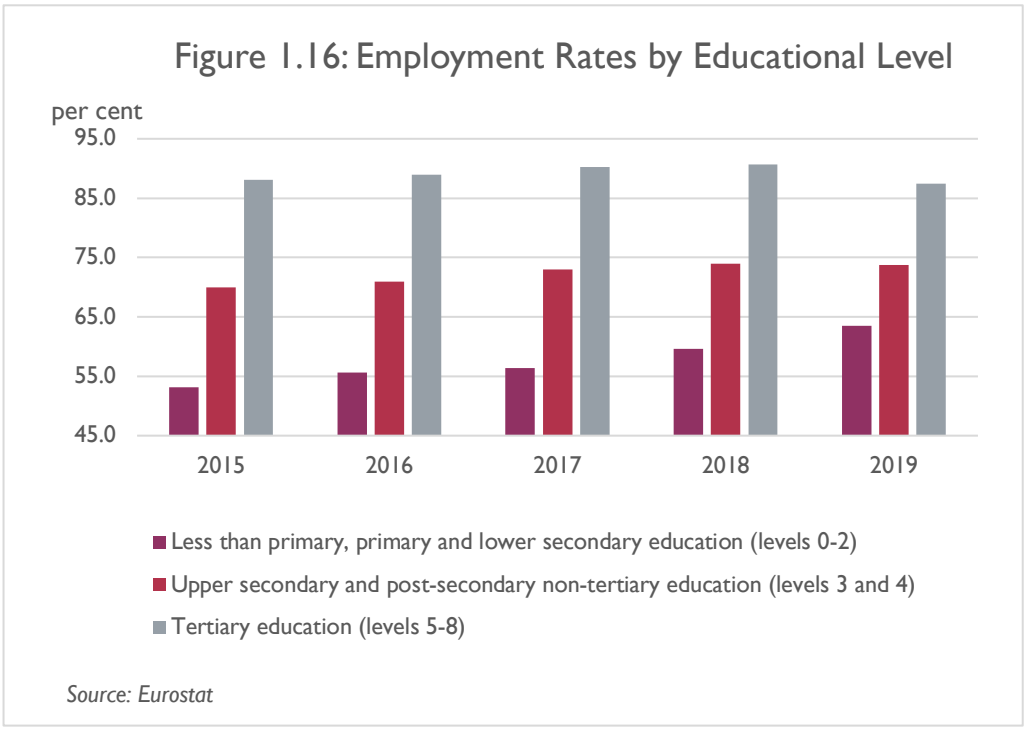
As Figure 1.14 shows, employment levels have increased across all skill levels over the five-year period under consideration. The biggest increase was in the number of persons employed with tertiary education which increased by 27,000 (51.5 per cent). This compares with an even higher increase of 31,300 in the population with a tertiary education. Except for 2018, employment rates were however generally rising or stable suggesting that a growing portion of this group may have found employment at a lower skill level than their qualifications. The substantial increase in persons with tertiary education has changed the composition of education level of the employed population: whereas in 2014, 27.0 per cent of those employed had tertiary level of education, by 2019 this share increased to 31.9 per cent.

Meanwhile, as the population with upper secondary and post-secondary education increased by 20,700, employment among this group increased by 18,500 (29.8 per cent). Employment rates among this group increased consistently suggesting that a proportion of this group found employment at a lower skill level.

Despite the decline in the population with less than primary level of education by 9,800, employment levels for those with less than primary level of education increased by 9,400 (11.8 per cent) supporting an increase in the employment rate among this group.

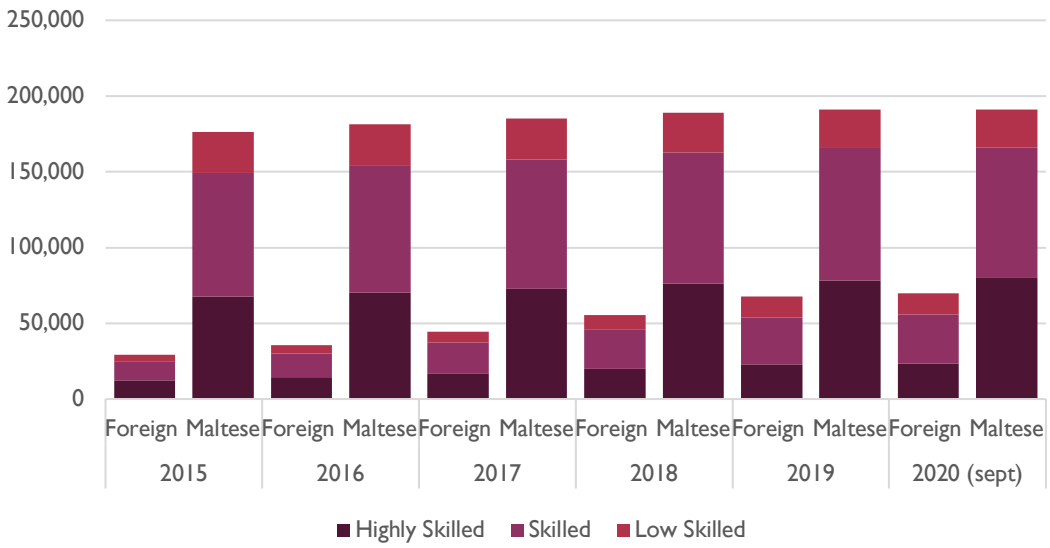


Despite an increase in employment rates across all education levels, differences in employment rates for different skill levels remain. Whilst the highest employment rates remained for persons who attained tertiary education, the biggest increase over 2015 was in employment rates for persons with low levels of education, indicating increasing job opportunities for low skilled as well. A marginal fall in employment rates for tertiary educated persons was registered in 2019 as compared to the 4 preceding years.



Administrative data from JobsPlus (Figure 1.16), which gives the number of persons working in jobs that require a certain skill level, shows that the number of individuals in high skilled jobs that require a tertiary level of education increased by around 5,000.

Figure 1.17: Workers by Skill Level



Source: Jobsplus Administrative Data

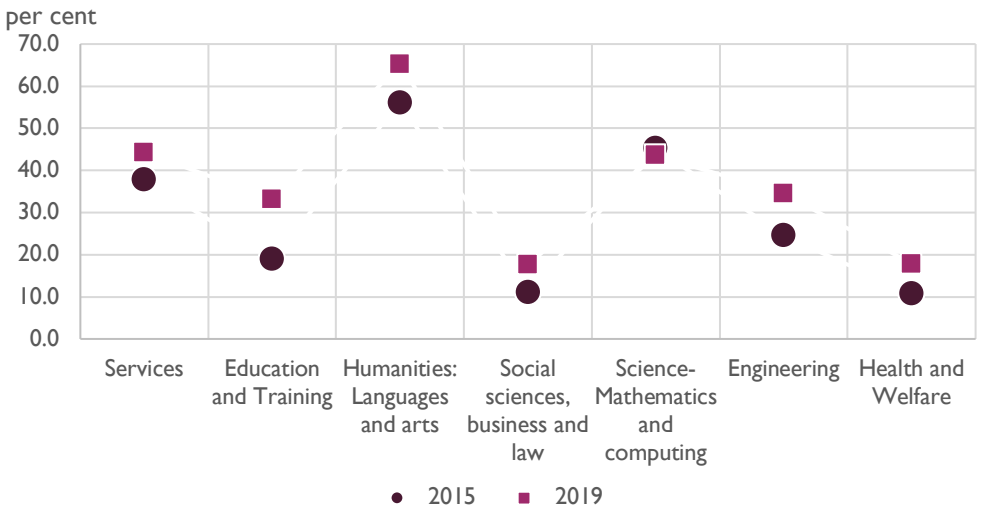
Skills mismatch

A thorough analysis of the labour market would also require an analysis of the level of mismatches and imbalances between skills and occupations. Two of the several indicators encompassed under the term "skills mismatches", chosen by Eurostat, and presented as experimental statistics are the Horizontal Skills Mismatches and the Overqualification Rate. [1] The rate of skills mismatch by field of education (Horizontal Skills Mismatches) is defined as the discrepancy between a person's current occupation and their field of education related to the highest level of education attainment. On the other hand, the Overqualification Rate is defined as the number of employed persons who have attained tertiary education (ISCED 2011 level 5-8) but work in occupations for which a tertiary education level is not required.

Whilst employment of persons with tertiary education has overall increased over the past five years (albeit the minor fall in 2019), and the high employment rates for this age group as shown in Figure 1.17 the skills mismatch has increased over the 5-year period under consideration,. The highest degree of horizontal skills mismatch is in the humanities, language, and arts, whereas it is the lowest in the areas of Social Sciences, Business and Law and Health and Welfare. The only decrease in the level of skill mismatches was observed for those individuals whose field of education is in Science, Mathematics and Computing. This could potentially be explained by the higher number of job opportunities in the Gaming and IT sectors for such individuals.

[1] Note that data on Skills Mismatches is still in its experimental phase and thus should be interpreted with caution.

Figure 1.18: Horizontal Skills Mismatches (15-34 years)



Source: Eurostat (Experimental Statistics)

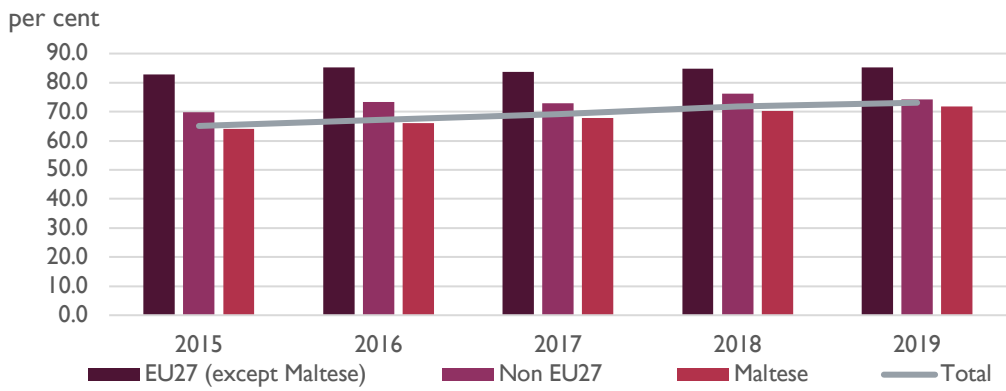
Furthermore, the over qualification rate (vertical skills mismatch) in 2019 was 18.2 per cent of high skilled persons (persons who have completed tertiary education level based on the ISCED classification) were employed in occupations (based on the ISCO classification) that do not require tertiary education. This represents a 5.0 percentage points increase in the rate relative to 2015. However, Malta's rate remains below the EU average which in 2019 stood at 21.9 per cent.

Foreign Workers:

Over the past five years, foreign workers played an important role in the Maltese labour market. At the end of 2019, data on the Gainfully Occupied from Jobsplus shows that employed foreign nationals in Malta amounted to 67,596, an increase of 38,983 individuals over 2015. In 2019, foreign workers made up 29.9 per cent of the total full time Gainfully Occupied, an increase of 13.6 percentage points over the share in 2015.

Employment Rates increased across all nationality groups (Figure 1.19), yet, the highest employment rates remained for EU-27 group, followed by the NonEU27. The biggest increase in employment rates was however for the Maltese at an increase of 7.6 percentage points. Such a strong increase has narrowed the gap between the employment rate of the Maltese and the EU27 and Non EU27.

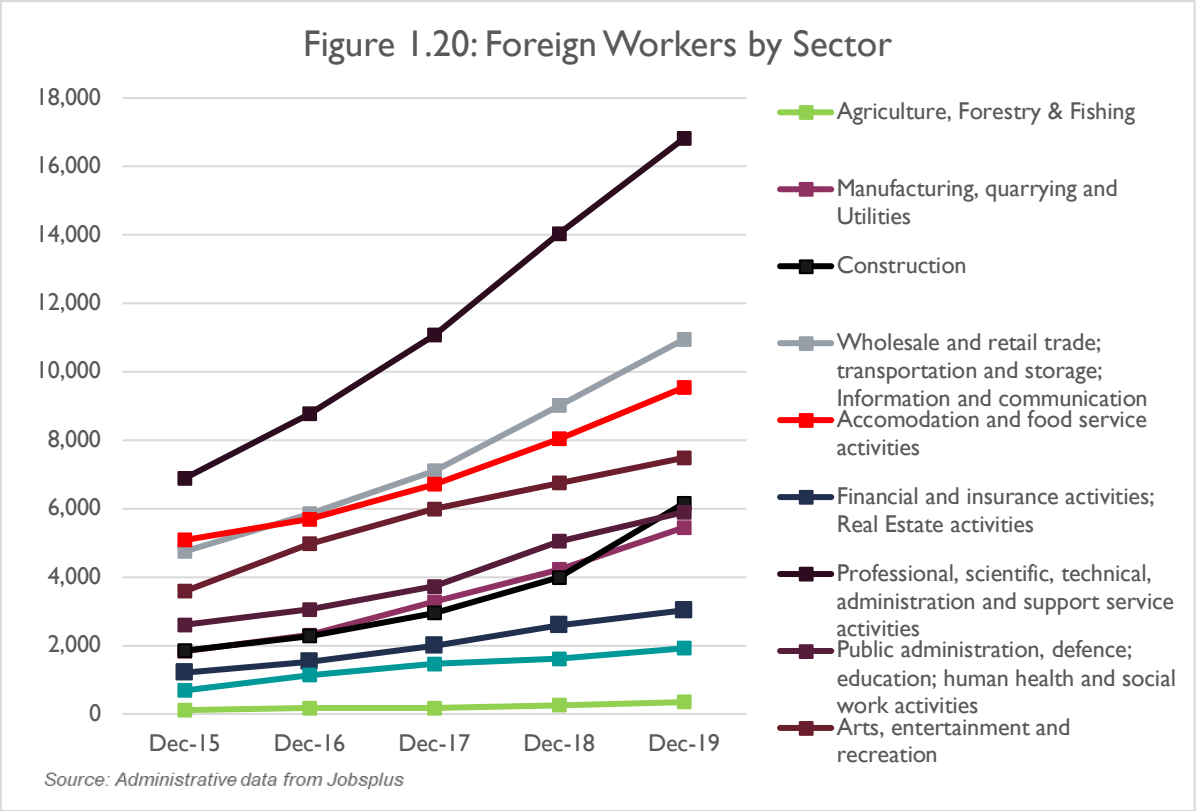
Figure 1.19: Employment Rates (15-64) by Nationality



Source: Eurostat

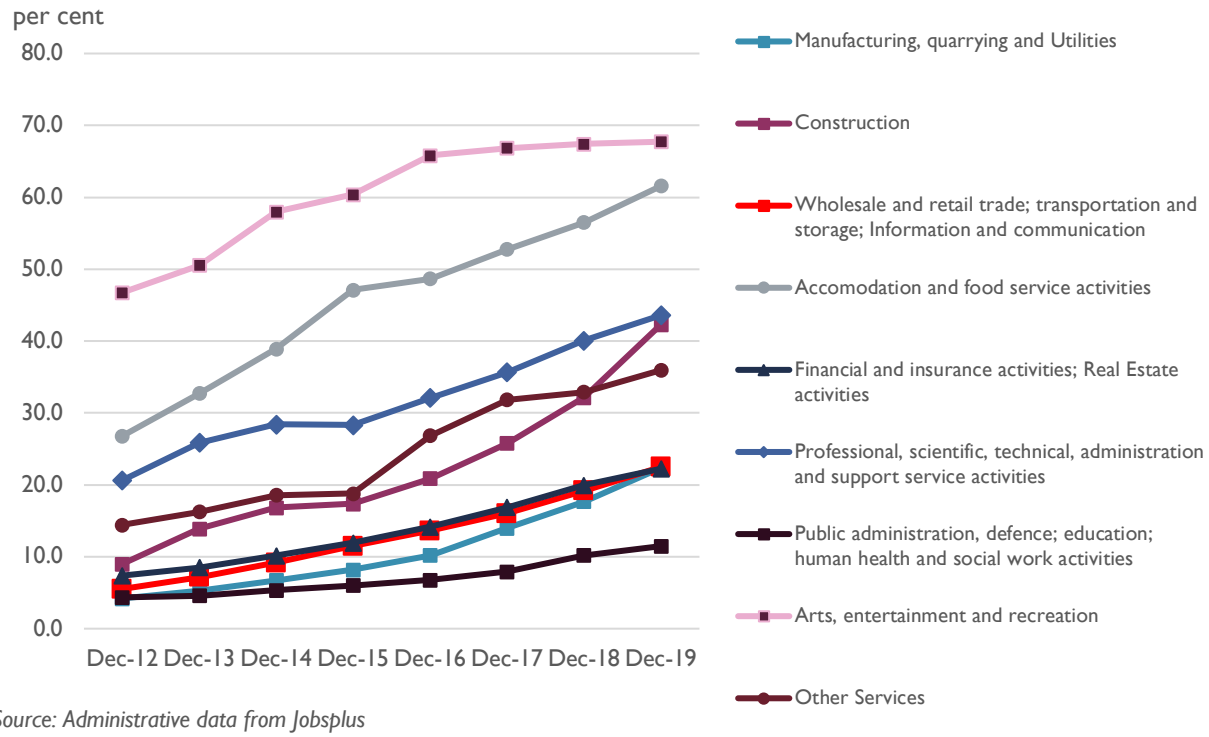
Over recent years, employment of foreign workers has been increasing across all economic sectors, In 2019 the Accommodation and Food Services Activities sector employed the third largest share of foreign workers in Malta (14.1 percent) with the first and second being the Professional, scientific, technical, administration and support service activities (24.9 per cent) and Wholesale and retail trade; transportation and storage; Information and communication (16.2 per cent). The Arts, Entertainment and Recreation sector employed 11.1 per cent of foreign workers. Together these sectors employed nearly two thirds of all foreign workers in 2019.

EU nationals are mainly employed in the Professional, Scientific, Technical, Administration and Support Service Activities sector (22%); followed closely by the Wholesale & Retail Trade; Transportation & Storage (19%) and the Arts, Entertainment and Recreation sector (18%). On the other hand, whilst the Professional, Scientific, Technical, Administration and Support Service Activities Sector similarly accounts for 29.0 per cent of total third country nationals, with the other two main sectors being Accommodation and food service activities (15%); Construction (14%) and the Public Administration, Education, Human Health and Social Work Activities sector (12%).



As can be seen from Figure 1.19, the share of foreign workers has increased in all sectors. It is notable that foreign workers make up a substantial amount out of all gainfully occupied in Arts, entertainment and recreation sector (67.7 per cent) , making it the sector most dependent on foreign workers, followed by Accommodation and Food Services Activities (61.6 per cent). In the Arts, Entertainment and recreation sector, Accommodation and Food service activities and Construction sector, more than one third of their workforce in 2019 was foreign. The most notable increase since 2015 is noted in the Construction sector whereby the share of foreign workers increased by 26.2 percentage points.

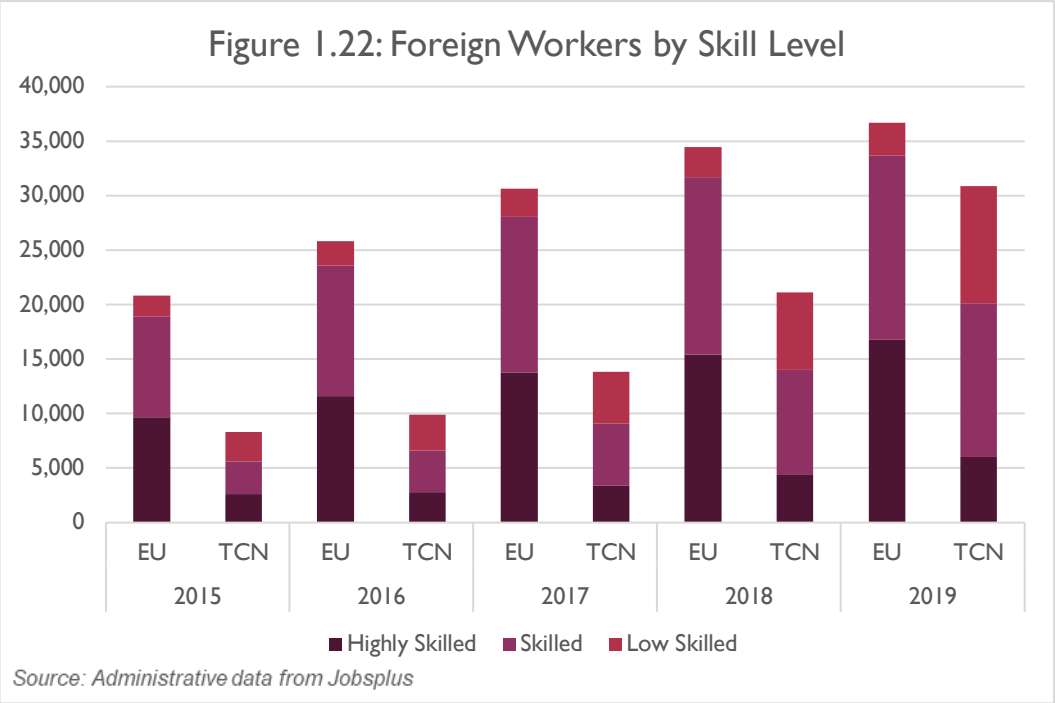
Figure 1.21: Share of Foreign Workers in each sector



Source: Administrative data from Jobsplus

Administrative data from JobsPlus shows that foreign workers increased among jobs requiring all skill levels between 2015 and 2019 (Figure 1.21); foreigners working in jobs requiring low skills increased by 196.7 per cent whilst those in high skilled jobs increased by 86.2 per cent. EU nationals mostly take up high skilled and medium skilled jobs whilst TCNs mostly take up low skilled jobs. However, despite such a significant increase in foreign workers in low skilled jobs over the past 5 years and despite the improvements in employment rates for persons with this skill level, the share of low skilled employed persons out of the total employed fell by 5.3 percentage points from 2015 to 2019 underscoring the sectoral transformations that Malta underwent in recent years.

This observation aligns with the fact that more Maltese individuals are moving towards higher levels of education and that the significant influx of low skilled foreign workers was necessary to fill in the emerging skill gaps. Indeed, data from JobPlus shows that the number of Maltese individuals in low skilled jobs decreased by 6.6 per cent since 2019 whilst those in high skilled and medium skilled jobs increased by 15.5 per cent and 7.2 per cent respectively.



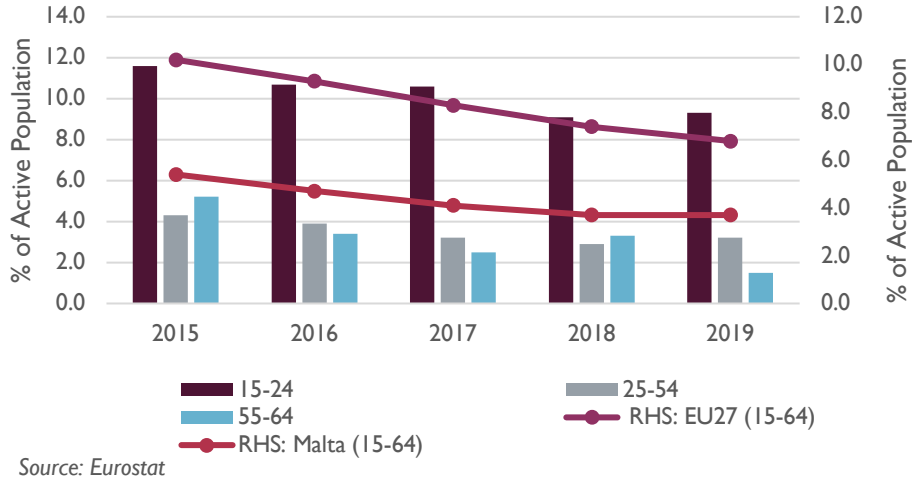
Unemployment

In 2019, the unemployment rate in Malta stood at a record low. At 3.7 per cent, the unemployment rate in Malta is well below the EU average which in 2019 stood at 6.8 per cent.

Since 2015, unemployment rates have followed a downward trajectory, falling by 1.7 percentage points. A downward trend can be observed both across genders (decreasing by 2.1 and 1.3 for males and females respectively) as well as across age groups, including for younger and older workers. For the younger age cohort (15-24), unemployment in 2019 stood at 9.3 per cent, 2.3 percentage points lower than the rates in 2015. For the older workers category (55-64) unemployment rates in 2019 were 1.5 per cent, which is 3.7 percentage points lower than the rates in 2015. Once again, such a decrease, shows the success of measures targeted at employers to encourage them to employ mature workers. Whereas in 2015, the unemployment rate for older workers exceeded that of those aged between 25-54, in 2018, it was considerably lower.

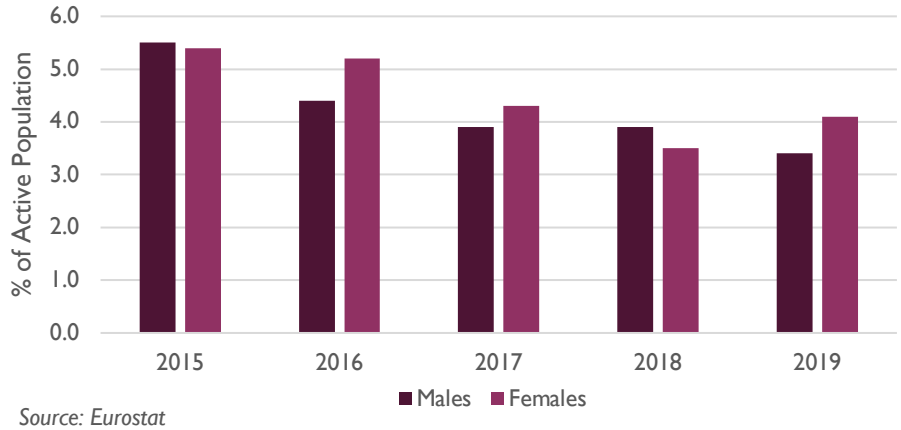
In addition, improvements in unemployment rates for persons with disability were also observed. Indeed, data from Jobsplus presented in Figure 1.24 shows that the number of persons with disability registering under Part I and Part II of the Unemployment Register fell by around 43.2 per cent since 2015.

Figure 1.23 Unemployment Rates



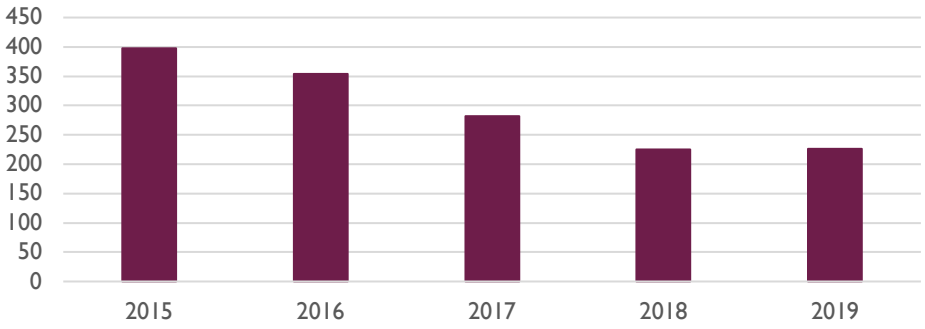
Source: Eurostat

Figure 1.24: Unemployment Rates (15-64) By Gender



Source: Eurostat

Figure 1.25: Number of persons with disability registering for work under Part I and part II of the Employment Register



Source: Jobsplus

Wages

Overall, average salary in 2019 stood at €9.85 per hour. The highest salaries per hour were for Financial and Insurance Activities at € 12.82 per hour followed by the Information and Communication Sector at €11.49 per hour and the Arts, Entertainment and Recreation and Other Services sector at €11.18 per hour. On the other hand, the sectors with the lowest salaries were Construction (€8.34) and Wholesale and retail trade, repair of motor activities and motorcycles, transportation and storage, accommodation, and food service activities (€8.43). Over the period 2015-2019, overall average growth in salaries per hour across sectors was of 13.2 per cent. It is to be noted that overall salary growth is rather contained compared to the buoyant performance of the labour market, especially the record low unemployment rates. The increased economic activity over the past years, has resulted in an increasing demand for labour, which has been met by increases in the labour supply both domestically through increased participation especially for females and older workers as by well as by migrant workers, thus helping to contain any wage pressures from labour shortages. The highest increase in salaries was recorded for the Arts, entertainment and recreation, repairs and another Services sector at 23.7 per cent. A similarly strong growth in wages was recorded in financial services (+20.1 per cent). Incidentally both these sectors are generally associated with high-skilled labour, with average annual growth in wages in both these sectors exceeding 5 per cent per annum. The growth in other sectors was more modest with an average annual growth of around 3 per cent per annum over this period. Of particular interest is the modest growth in wages in IT which contrasts sharply with the substantial increase in labour productivity recorded by this sector (refer to Figure 3.21 in Chapter 3)

Table 1.1: Salaries (LFS)

	2015	**2016**	**2017**	**2018**	**2019**	**Change 2015-2019 %**
	Mean €	Mean €	Mean €	Mean €	Mean €	
Mining and quarrying; manufacturing; electricity, gas, steam, and air conditioning supply; water supply; sewerage, waste management and remediation activities	7.98	8.24	8.29	8.52	9.22	15.5
Construction	7.30	7.34	7.58	8.26	8.34	14.3
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	7.39	7.63	7.97	8.33	8.43	14.0
Information and Communication	10.93	10.97	10.80	11.34	11.49	5.1
Financial and Insurance Activities	10.68	11.55	12.49	13.07	12.82	20.1
Real Estate Activities	11.12	10.74	9.29	9.26	9.36	-15.8
Professional, Scientific and technical activities and Administrative and support service activities	8.93	9.13	8.73	9.28	10.31	15.4
Public Administration and Defence, Education and Human Health and social work activities	9.59	9.70	9.78	10.12	10.42	8.7
Arts, entertainment and recreation, repair of household goods and other services	9.03	10.68	10.45	10.73	11.18	23.7
Total	**8.71**	**8.98**	**9.13**	**9.54**	**9.85**	**13.2**

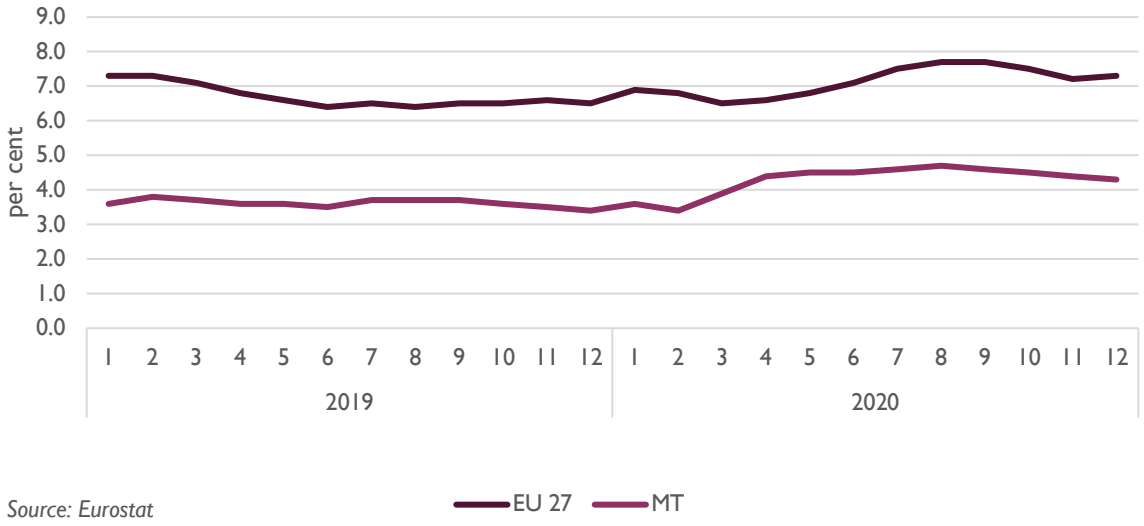
Covid-19 and the Labour Market

The global Covid-19 pandemic brought challenges into the Maltese labour market through the unexpected disruption in business activities in several sectors. The closing down of the airport, education institutions and other non-essential retail, service and catering industries together with other restrictive measures imposed by the government on the onset of the pandemic to contain virus transmission had an impact on the employment status and employment conditions of several individuals.

Yet, despite being directly hit by the confinement measures taken in response, the performance of the Maltese labour market remained robust. During this time, the Government launched several measures and financial aid packages to encourage the retention of employees such as the quarantine leave supplement and the Covid-19 Wage Supplement Scheme. The latter, introduced in March 2020, provides employees in hardest hit sectors with a financial support to the employers to support basic wages of their employees. The highest rate of this supplement was given to those employees, including self employed, in sectors mostly affected by the COVID-19 pandemic or else who had to temporarily suspend operations on the order of the Superintendent of Public Health. A lesser rate of the supplement was also provided to individulas employed in other adversely affected sectors including Wholesale, Manufacturing, and Warehousing. The scheme was extended until the end of 2021. As of January 2021, the wage supplement was tied to the drop in sales over six months between March and October 2019 against turnover declared over six months between March and October 2020. Where no VAT records are available, the wage supplement is disbursed based on the criteria applicable in 2020. The scheme is envisaged to run until the end of 2021.

These measures, alongside the resilience of the Maltese labour market ensured that high levels of employment were safeguarded. Whilst because of the pandemic, the downward trend in unemployment rates observed in recent years was curtailed, unemployment rate in Malta remained one of the lowest in the European Union. Indeed, as from Match 2020, the unemployment rate started to gradually increase, reaching 4.7 per cent. In December 2020, Malta's unemployment rate stood at 4.3 per cent. 0.9 percentage points higher than the unemployment rate in the same month of the previous year.

Figure 1.26 Monthly Unemployment Rate



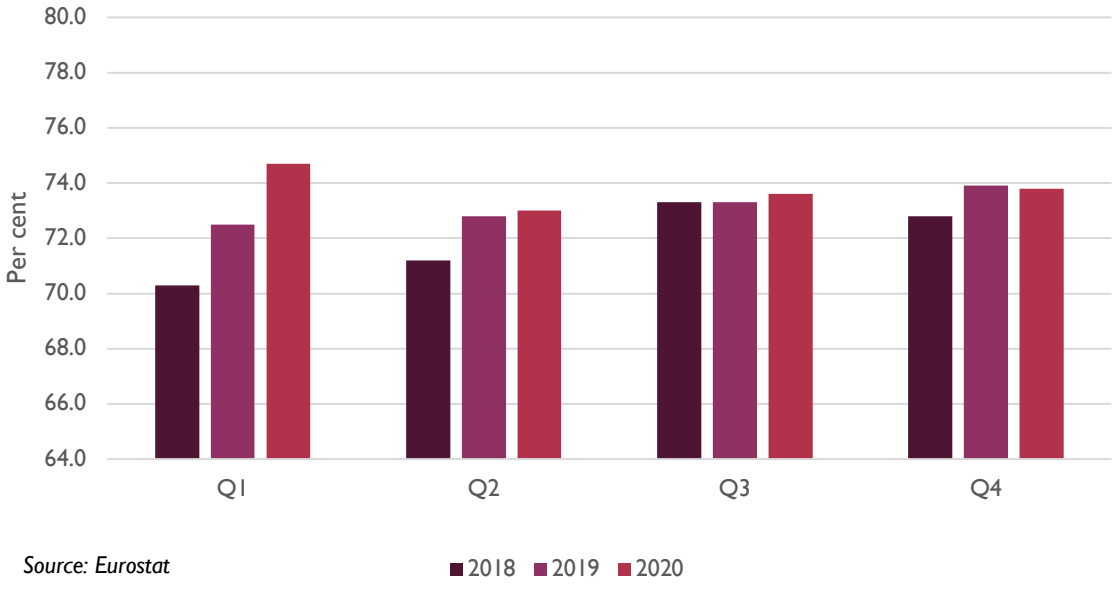
Source: Eurostat

Notwithstanding this marginal increase in unemployment, up till the time of writing, both the activity rates and the employment rates remained stable in 2020. Whilst it may be too early to assess the impacts on activity and employment rates, overall, neither activity rates nor employment rates were considerably impacted.

Specifically, the activity rates stood at 77.2 per cent, 1.2 percentage points higher than the rate in 2019, with improvements registered in all quarters. Improvements were also registered in employment rates, with an increase recorded in all quarters except for the fourth quarter of 2020.

Nevertheless, employment rates in the third quarter of 2020 were significantly lower than the employment rates in the first quarter of the year. Moreover, despite observing a slight increase in the employment rates in the second and third quarters of 2020, when compared to the same quarters in 2019 employment growth was much less pronounced than the growth observed in the first quarter. Overall, the employment rate for 2020 increased by 0.6 percentage points over the previous year reaching 73.8. Such results reflect the moderating effect of the measures taken by Government to encourage retention of employees.

Figure 1.26: Employment Rates (15-64)



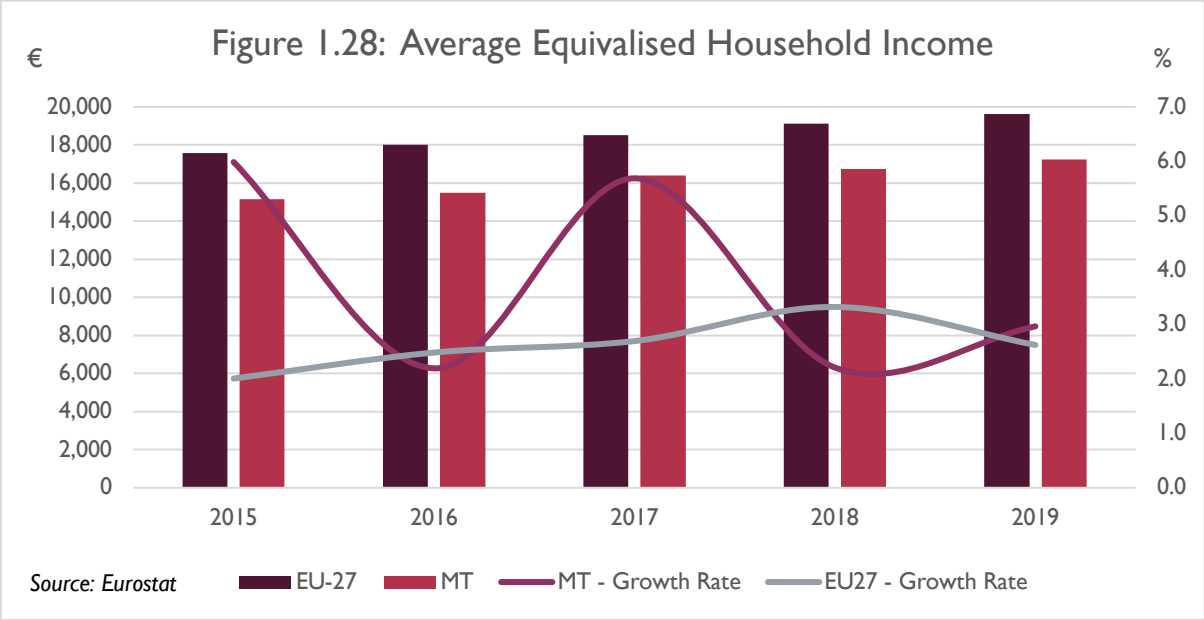
Source: Eurostat

C. Income and Living Conditions[2]

The analysis provided in this section illustrates the main indicators that capture the changes in the income distribution, as well as changes in poverty and social exclusion over the past five years.

Average Household Income and Poverty Threshold

The average equivalised household income[3] for Malta and the EU27 are illustrated in Figure 1.27. The Maltese average household income has been increasing over the past years; however, it is still below the EU average. Indeed, based on the latest data as at 2019, the average household income of Malta stood at €17,246. Nevertheless, between 2015 and 2019, Malta's household's income grew at a faster rate (13.7 per cent) than the rate of the EU (11.6 per cent) thus indicating that Malta's average household income is steadily converging towards the EU average.

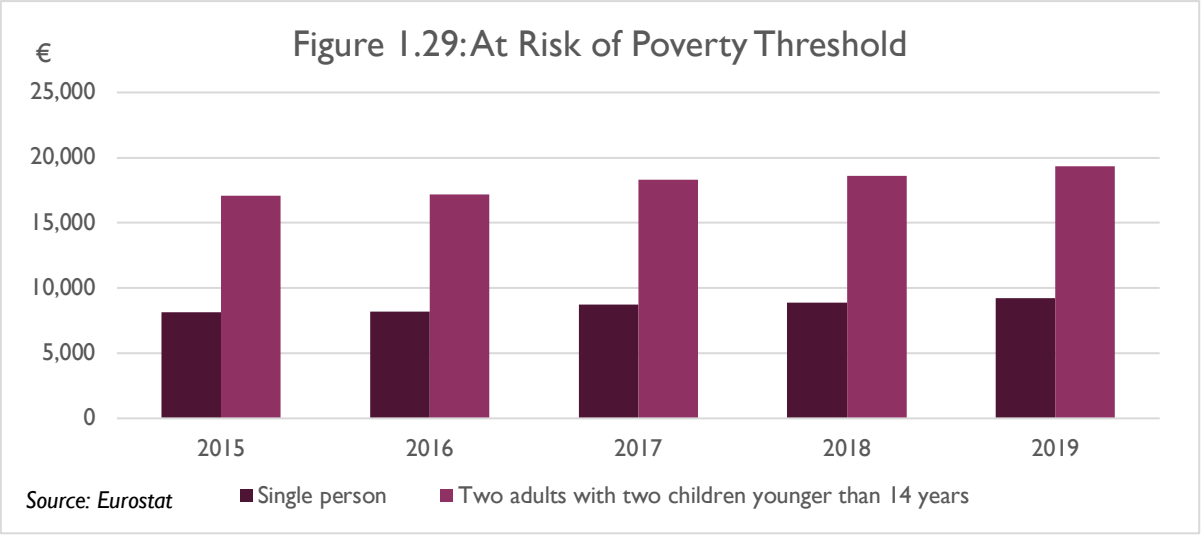


As shown in Figure 1.28, the increase in average income has led to an increase in the at-risk-of-poverty threshold, also known as the poverty line[4]. In 2019 the poverty line for a single person stood at €9,212, while the poverty line for a household of two adults with two children younger than 14 years of age stood at €19,346. When compared with the poverty rate recorded in 2015, the threshold increased by 13.3 per cent for both the single person household and the two adult and two children younger than 14 years household.

[2] Data for 2020 is currently unavailable, however, the COVID-19 pandemic is likely to have worsened the household financial position, thus increasing the risk of more households falling into poverty.

[3] The equivalised household disposable income is the gross income net of any taxes and inclusive of any subsidies, adjusted to reflect household family size. The equivalised value is based on the weight specified by the so-called modified OECD equivalence scale, in which the reference person takes a value of one, all other adults in the household take a value of 0.5 each and children take a weighting value of 0.3. Source: Adjusting household incomes: equivalence scales (oecd.org).

[4] According to Eurostat, the at-risk-of-poverty threshold is defined as the 60 per cent of median income and is the level of income under which individual/households are considered to be at risk of poverty.



Income Inequality

The income quantile share ratio[5], also known as the S80/S20 ratio, is a measure of income inequality. As shown in Table 1.2, the income inequality in Malta has been below the EU average over the past 5 years. In 2019, the income quartile share ratio for Malta stood at 4.18, which suggests that the income of the wealthiest 20.0 per cent of the population was on average 4.18 times higher than the income of the bottom quantile. Over the past five years, the gap has overall declined among persons aged 65 and over, while it has fluctuated between 4.2 and 4.4 among persons aged less than 65 years.

The Gini coefficient[6], which is another indicator of income inequality, also indicates that income inequality in Malta is less than in the EU. Over the last five years, whilst the Gini coefficient for the EU has generally followed a gradual decline, that for Malta has fluctuated between 28.0 and 28.7.

Table 1.2: Indicators of Income Inequality

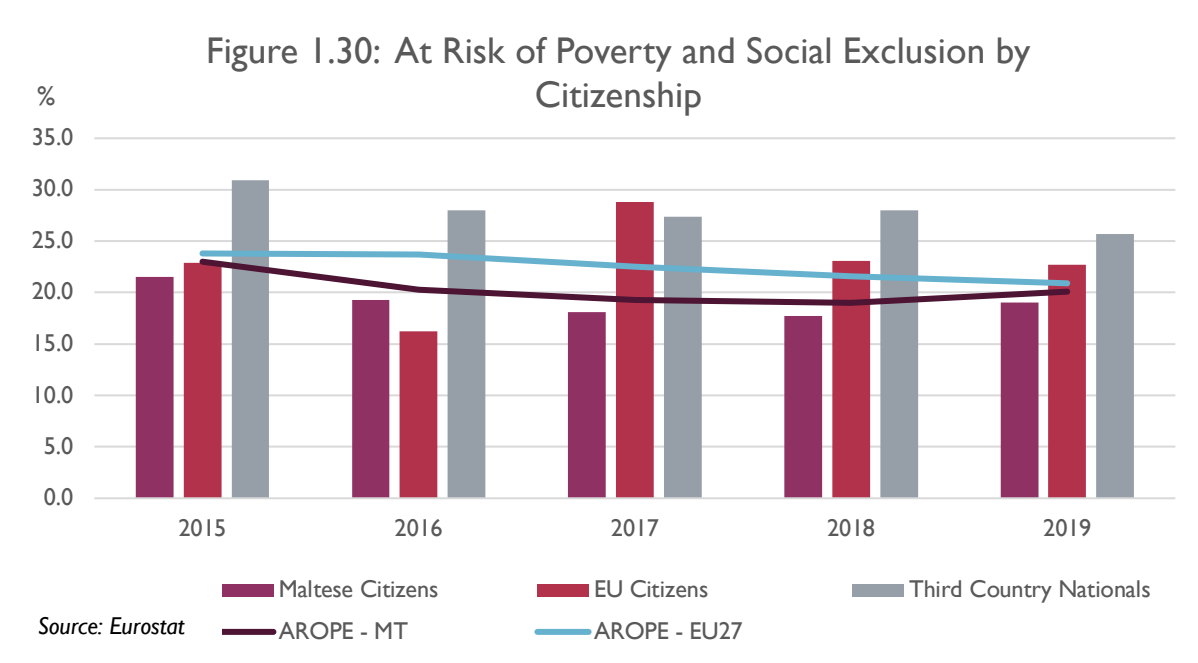
	2015	2016	2017	2018	2019
EU-27					
S80/S20 ratio	5.22	5.16	5.03	5.05	4.99
Persons aged less than 65 years	5.52	5.45	5.29	5.29	5.17
Persons aged 65 years or over	4.10	4.09	4.05	4.12	4.24
Gini Coefficient (%)	30.8	30.6	30.3	30.4	30.2
Malta					
S80/S20 ratio	4.15	4.22	4.21	4.28	4.18
Persons aged less than 65 years	4.23	4.29	4.25	4.41	4.26
Persons aged 65 years or over	3.41	3.38	3.3	3.10	3.11
Gini Coefficient (%)	28.1	28.6	28.2	28.7	28.0

[5] The S80/S20 ratio is calculated as the ratio of total income received by the 20 per cent of the population with the highest income (the top quintile) to that received by the 20 per cent of the population with the lowest income (the bottom quintile).
[6] The Gini coefficient measures the inequality of income distribution. it may take value ranging from 0 per cent, which implies perfect equality in the income distribution to 100 per cent, which implies absolute inequality.

Poverty and Social Exclusion

The principal indicator of poverty and social exclusion is the at-risk-of-poverty-or-social-exclusion (AROPE) rate. The AROPE is made up of three components: at-risk-of-poverty (AROP) rate, severe material deprivation and low work intensity.

As shown in Figure 1.30, the AROPE rate for Malta has been on the decline, decreasing from 23.0 per cent in 2015 to 19.0 per cent in 2018 before increasing back to 20.1 per cent in 2019. Malta's AROPE rate has been consistently below the EU average during the last five years and in 2019 the rate was 0.8 percentage points lower than the rate recorded at EU level. Nevertheless, the gap with Maltese nationals has declined in the last five years by 5.2 percentage points for the TCN and 0.2 percentage points for the EU citizens.



Within the AROPE, the AROP indicator is a measure of poverty in monetary terms: the percentage of the population that fall below the 60 per cent median equivalised income (the poverty line). The AROP before social transfers for Malta stood at 36.8 per cent in 2019, 6.2 percentage points lower when compared to the EU27's corresponding rate for the same year. After the inclusion of social transfers, the AROP rate for Malta is reduced by 19.7 percentage points to 17.1 per cent in 2019. In the EU, social transfers contribute to a substantially larger reduction in the AROP of 26.5 percentage points in 2019, reflecting higher market inequalities in the EU.

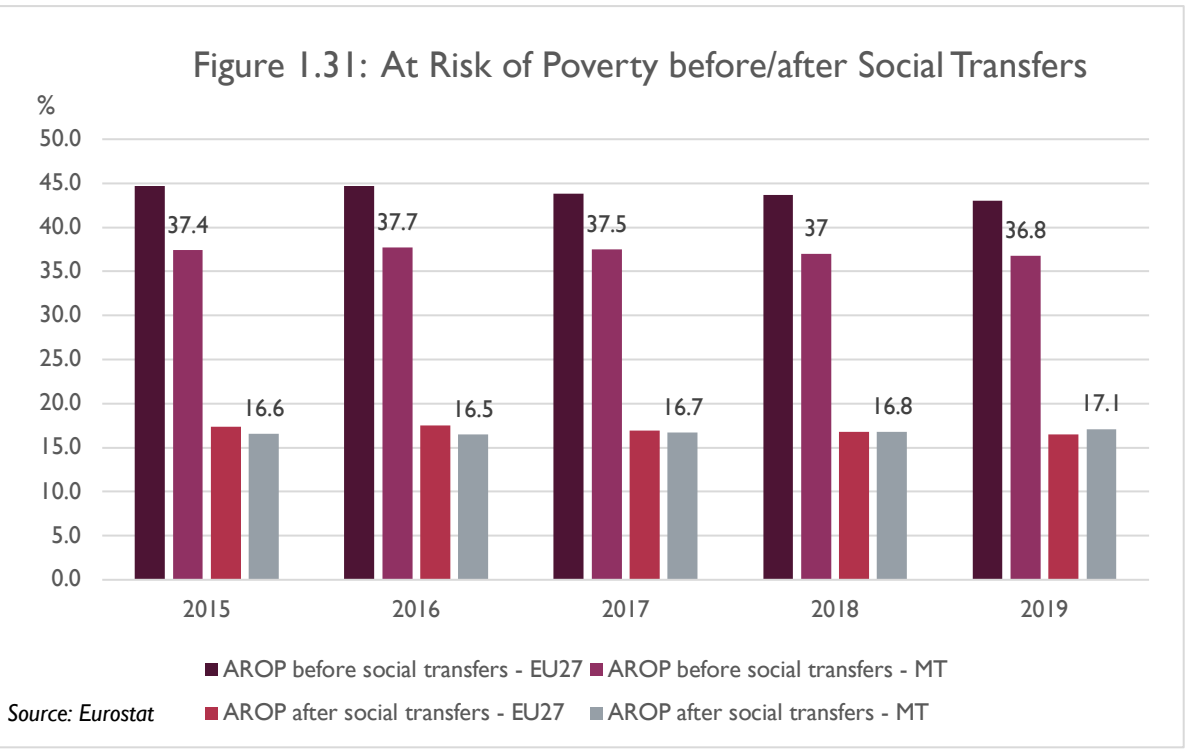
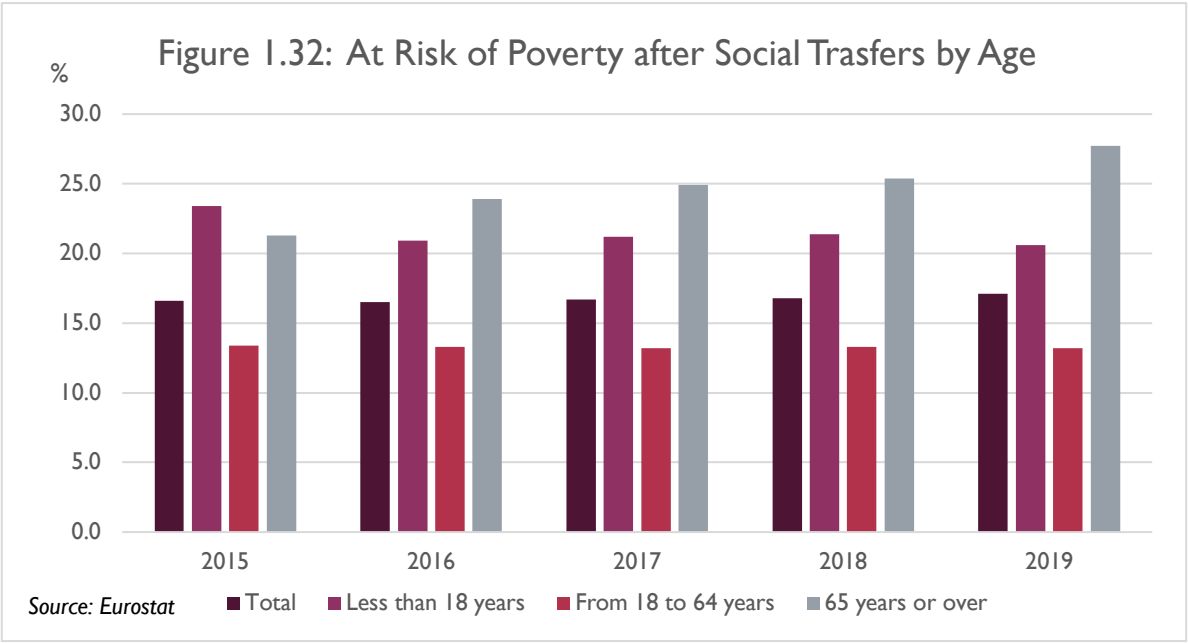


Figure 1.30 indicates that the increase in the AROP seems to be the result of a larger number of persons aged 65 and over falling below the poverty line. Whilst the cohorts aged less than 18 years and 18-64 years have experienced a decline of 2.8 and 0.2 percentage points respectively, the AROP rate during the past five years, for the 65+ years increased by 6.4 percentage points during the same period of analysis.

This is expected as this cohort's income tends to be dependent on transfers such as pensions, where the increase in pensions is not keeping up with the increases in the poverty line which were driven by growth in wages under buoyant economic conditions. To counter this, in past few years the Government has been introducing an annual increase in pension over and above the Cost of Living Adjustment (COLA) with the aim of reducing elderly's poverty risk and support the living standard of the elderly.



As shown in Figure 1.31, the AROP rate after social transfers for households with person above 65 years, increased during the period of analysis. For the one adult 65 years or over household the rate increased from 21.6 per cent in 2015 to 28.5 per cent in 2019 and for the two adults, at least one aged 65 years or over household the AROP increased from 24.1 per cent in 2015 to 29.6 per cent in 2019.. In this regard, over the past few years the Government has introduced a number of measures to assist parents to return to employment and attain a better work-life balance, such as, free childcare centres and Klabb 3-16 scheme. Despite these in-kind benefits not featuring in this indicator, the AROP was on the decline from 45.0 per cent in 2015 to 42.6 per cent in 2019.

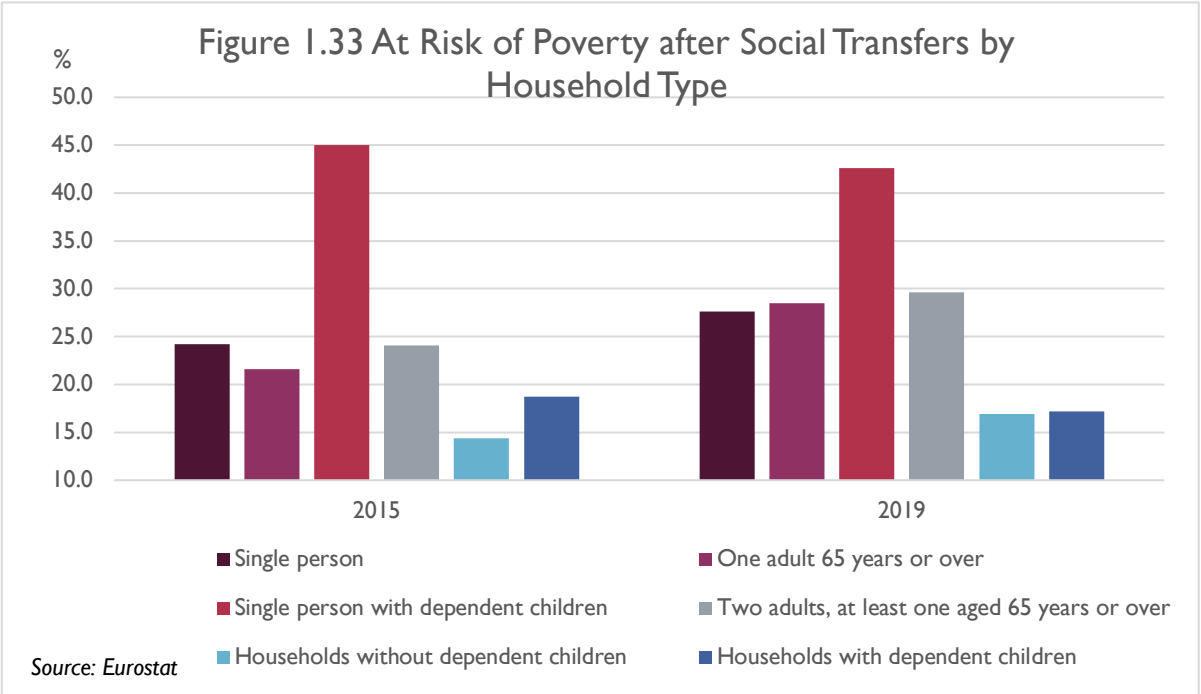


Figure 1.32 shows the at risk of poverty rate among individuals who are active in the labour market. The in-work poverty rate in Malta is substantially below that for the EU average, in 2019 the rate for Malta stood at 6.5 per cent, 2.5 percentage points lower than the EU average (9.0 per cent). In this regard policies targeted at low income earners - in particular single persons with dependent children, which is the cohort that faces the highest rate of in-work poverty - are required to address poverty among working individuals. The in-work benefit is already providing additional support to such low-income families.

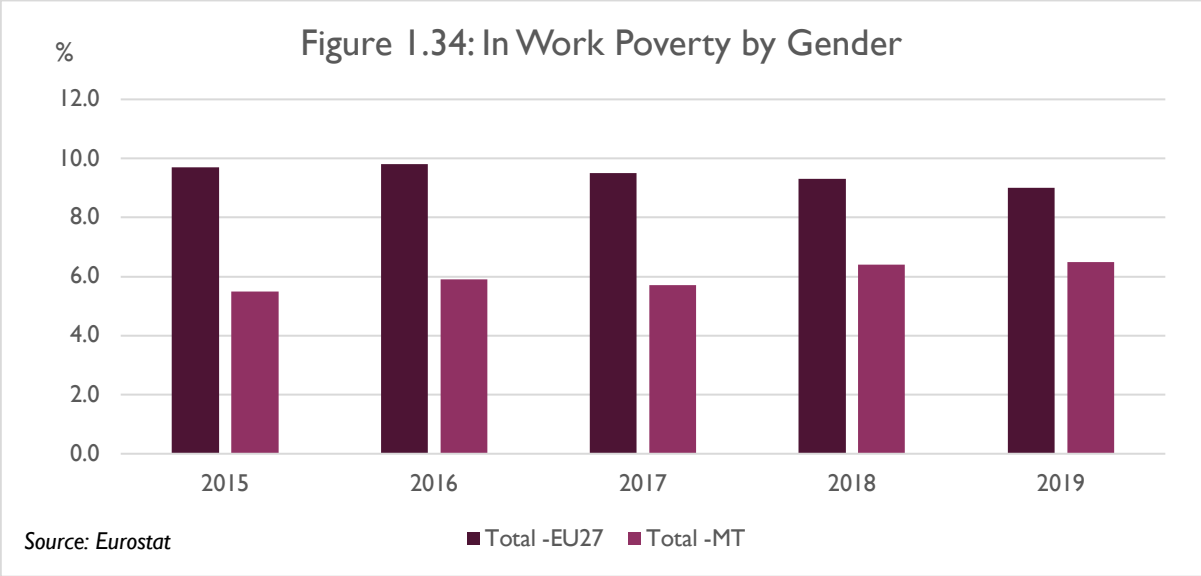
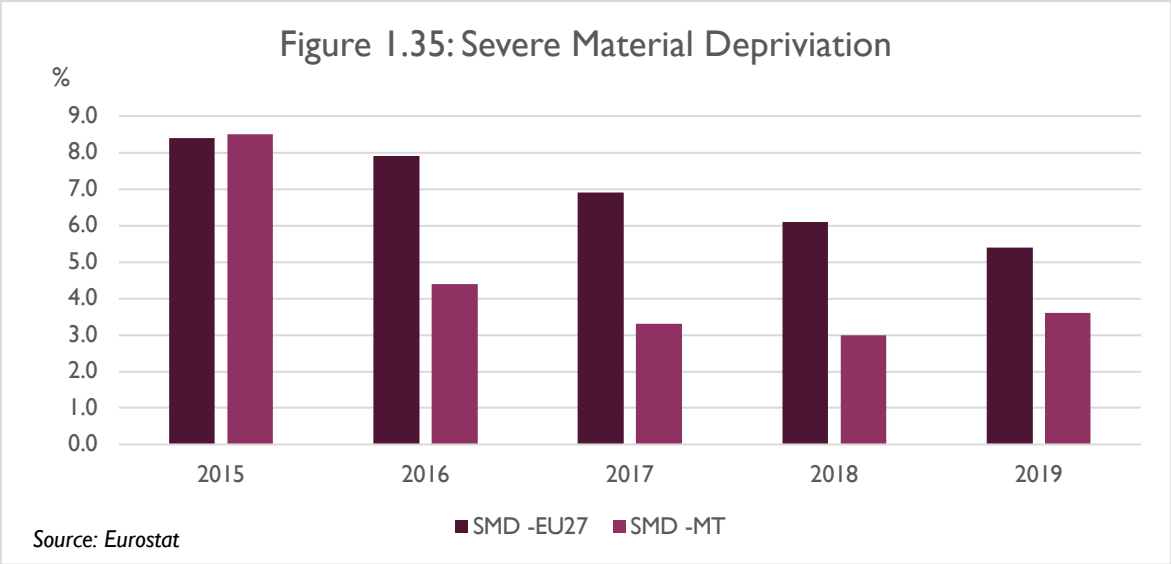
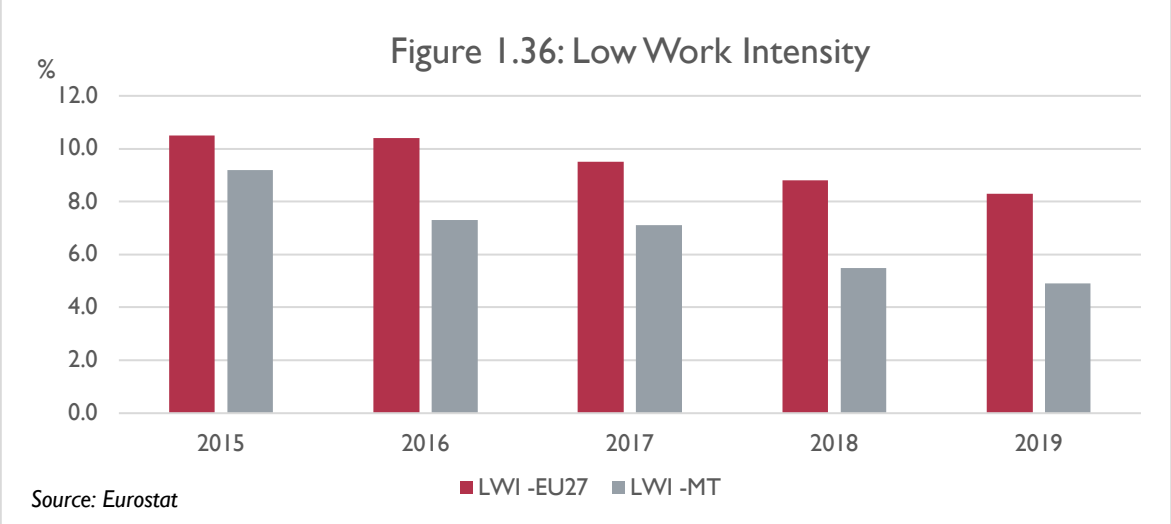


Figure 1.34 and 1.35 illustrates the pattern of the two other components of the AROPE indicator the severe material deprivation (SMD)[7] and low work intensity (LWI)[8]. In 2019, the SMD rate among persons living in household stood at 3.6 per cent, which is 4.9 percentage points lower than the rate in 2015. This decline is mostly driven by the improvement in the household's ability to face unexpected financial expenses. Additionally, when compared to the EU average, the decline in Malta's SMD is more prominent than the decline registered in the EU (a drop of 3.0 percentage points). Furthermore, the share of person residing in a household with LWI declined from 9.2 per cent in 2015 to 4.9 per cent in 2019. This indicator has also fallen more rapidly in Malta than in the EU and was 3.4 percentage points lower than the rate recorded at EU level in 2019. This implies that in Malta in 2019 more individuals aged between 18 and 59, were living in households were their activity of work is equivalent to their potential. This indicates strong labour market performance which is in line with what is observed in the previous section.

[7] Persons living in households who were not able to afford at least four of the following nine deprivation items are considered to be severely material deprived. The nine deprivation criteria include; ability to face unexpected financial expenses; ability to pay for one week's annual holiday away from home; whether they have been in arrears on mortgage or rent payments, utility bills, hire purchase instalments or other loan payments; ability to have a meal with meat, chicken, fish or vegetarian equivalent every second day; ability to keep home adequately warm in winter; own a washing machine; own a colour TV; own a telephone (including mobile phone) and own a car.

[8] People living in households with very low work intensity are defined as people aged 0–59 living in households where the members of working age worked less than 20 per cent of their total potential during the previous 12 months.





Housing Cost Burden

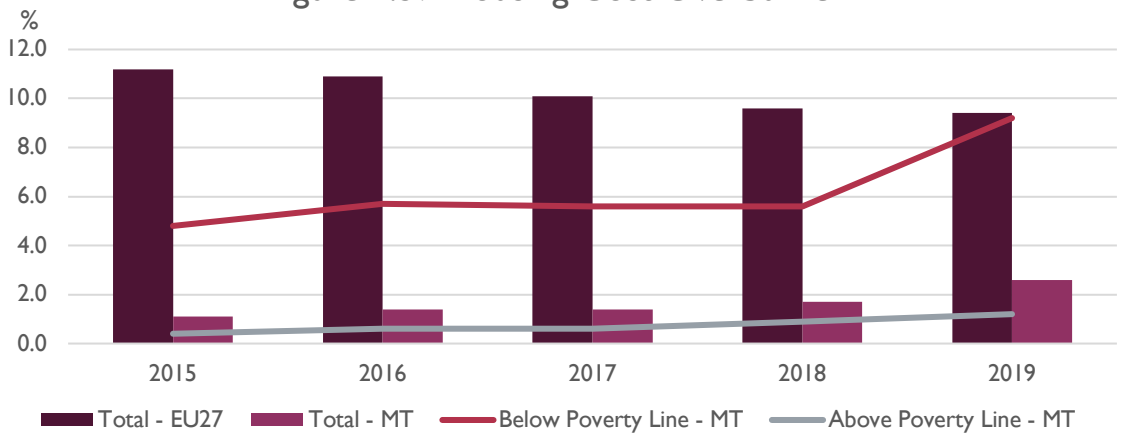
Adequate and affordable housing is a crucial element for a good quality of life. As housing provides a place of shelter to individuals, where on**e** can feel secure and bring up a family. The recent increased demand for accommodation has led to a spike in prices of residential property and rent, resulting in higher housing costs for households Nevertheless, data based on EU-SILC indicates that in 2019, 58.4 per cent of Maltese households were homeowners with no outstanding loan or mortgage, while 21.3 per cent lived in an owner-occupied home with a loan or mortgage. The rest (20.2%) lived in rented dwelling, with 8.7 per cent renting at the prevailing market rate and 11.5 per cent renting at reduced rates.

Figure 1.36 illustrates the housing cost burden[9], which shows the proportion of the population that spent 40 per cent or more of their equivalised disposable income on housing. The housing cost burden in Malta is considerably lower than the EU average, in 2019 the rate for Malta stood at 2.6 percent, 6.8 percentage points lower than the EU. During this period, the housing cost burden has remained broadly stable for people who earn more than the 60 per cent poverty threshold, while it has increased from 4.8 per cent in 2015 to 9.2 per cent in 2019 for those individuals at risk of poverty.

[9] The housing cost burden is net of housing allowances and includes mortgage repayments, or rent repayment, structural insurance, cost of utilities, expenses related to regular maintenance and repair.

This is expected as house prices rose by more than the average household income. Based on house price index (NSO), property prices increased by 24.6 per cent from 2015 to 2019, whereas the average equivalised income increased by 13.3 per cent. In this context, the reformed housing benefit, which was introduced in 2019 and which aims to financially aid low-income households who rent at the prevailing market prices is expected to alleviate the housing cost burden of households that rent as from the next data release. As this reform is not captured in the above analysis since the 2019 SILC is based on the income reference year of 2018.

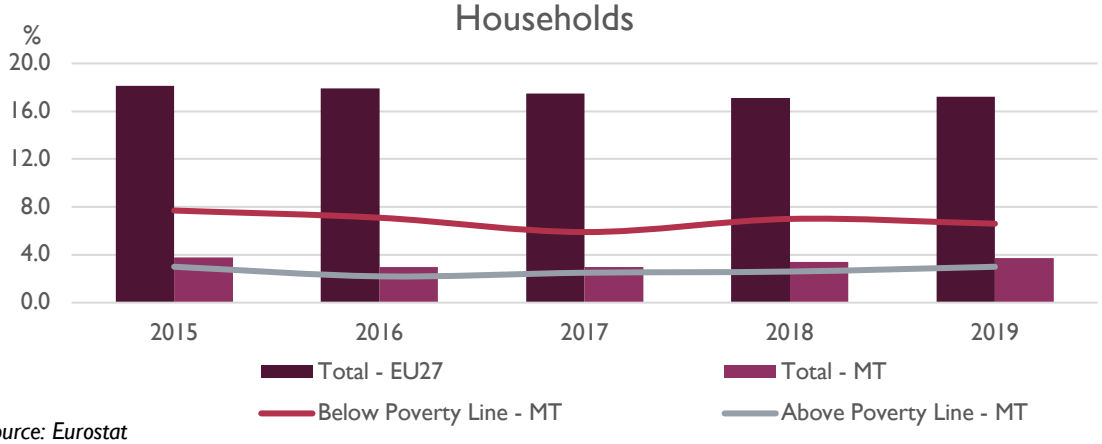
Figure 1.37 Housing Cost Overburden



Source: Eurostat

Finally, Figure 1.37 illustrates the percentage of the population who reside in overcrowded accommodation. In 2019, this indicator stood at 3.7 per cent of the population, which is equivalent to approximately 17,700 individuals. The rate for Malta has been rather stable in the last five years and it was much lower when compared to the EU average which stood at 17.2 per cent in 2019. The share of individuals residing in an overcrowded dwelling was stable at around 3.0 per cent for individuals above the poverty threshold, whereas it was generally on the decrease for individuals at risk of poverty even though some increases were recorded in 2018 and 2019. In addition, it is also noted that people who rent are more prone to live in an overcrowded household (12.5 per cent) than homeowners (2 per cent).

Figure 1.38: Percentage of People Residing in Overcrowded Households



Source: Eurostat

Summary

Over the last years, the Maltese population has undergone significant demographic developments. Population size has been rapidly increasing, reflecting large inward migration flows and the improvements in life expectancy. At the same time, the age structure of the population is becoming older because of the gains in life expectancy and the fall in fertility rates sustained for decades. Such dynamics have resulted in an ever-increasing share of persons aged 65 and over and a decline in the proportion of young people in the total population. This was however partially mitigated by the increase in inward migration, mostly of persons of working age.

The labour market, performance over the five year period under analysis remained buoyant, with an upward trend in activity and employment rates. This was brought about by the strong economic performance over the past years, which led to a high demand for labour. Strengthening the supply was vital in this regard and several reforms were implemented to incentivize otherwise inactive groups to join the labour market, in particular females and older workers. Various active labour market policies have been effective to counterbalance the shrinking working force due to an ageing population. Indeed, the female employment rate increased by 10.3 percentage points between 2015 and 2019, while duration of working lives in Malta has increased by 6.2 years over the period 2010-2019, effectively eliminating the gap and even surpassing the EU average.

Nevertheless, these positive improvements, were not sufficient to meet the ever-increasing demands in the labour market, and the recent increase in foreign workers within our labour market helped in addressing such shortage. The share of foreign workers out of the full time gainfully occupied population in Malta increased by 13.6 percentage points over 2015, reaching 29.9 per cent in 2020. Foreigners, both from EU and non-EU countries and helped address shortages at both at high and low skill levels.

Economic growth in Malta was broad based and created increasing demand for labour at all skill levels. Nevertheless, the proportion of high skilled jobs has increased. Supply of labour generally followed these trends with the largest increase being registered among the tertiary educated whilst those with a primary level of education declined between 2015 and 2019. Despite these positive improvements, there are still indications of skill mismatches

The strong labour market performance and increase in participation rates has contributed positively towards poverty and social exclusion. Specifically, the AROPE indicator has declined from 23.0 per cent in 2015 to 20.1 per cent in 2019. This downward trend is driven by a lower number of individuals residing in households with low work intensity (LWI) and severely materially deprivation (SMD).

However, the other component of the AROPE, monetary poverty (AROP), has slightly increased by 0.5 percentage points in the last five years. This contrasts with the decline in the AROP before social transfers during this period. This suggests that the social security transfer system has not kept pace with the rise in market income, mostly wages, buoyed by the rapid economic growth. .Furthermore, figures indicate that whilst the housing cost burden remained significantly lower than the EU average, some increases were recorded for households that are at risk of poverty,

CHAPTER 2
THE ENVIRONMENTAL DIMENSION

This Chapter focuses on the environmental dimension of the economy, more specifically, the elements of the economy that interact with the environment, and vice versa. Whilst it is not within the scope of this report to provide a comprehensive assessment of all relevant environmental issues, this Chapter focuses on the efficient and effective use of natural resources necessary to safeguard future generations. Specifically, developments regarding air pollution energy use, water, waste, and climate change are analysed.

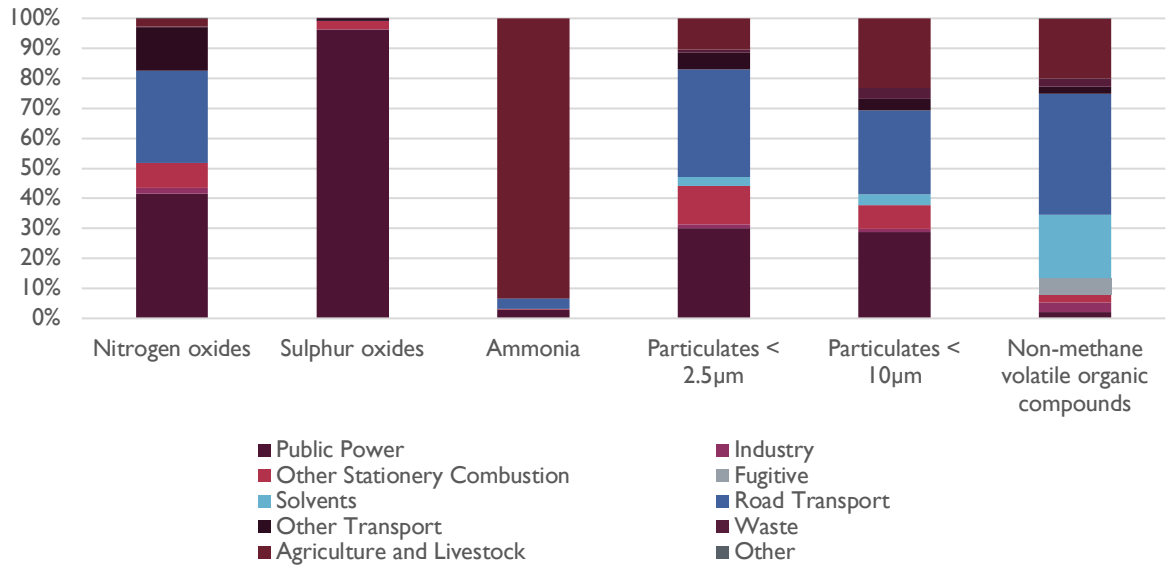
Air Pollutants

There are two types of air emissions: greenhouse gas emissions (causing climate change) and air pollutants, which have long-term effects on both human health and the environment. This section's focus is on the latter.

National emissions inventory by Eurostat is estimated for a number of pollutants, among others, nitrogen oxides (NO_x), non-methane volatile organic compounds (NMVOCs), ammonia (NH_3), particulates < 2.5μm and < 10 μm (PM2.5 and PM10, respectively) and sulphur oxides (SO_x). Over the five-year period 2013 to 2018, transport was responsible for two thirds of all NO_x emissions and accounted for a significant proportion (around 30.0 per cent in total) of the NMVOCs and PM pollutants. Road transport continues to account for a significant proportion of emissions of all the main air pollutants (with the exception of SO_x), while agriculture and livestock capture 94.0 per cent of NH_3 pollution. When compared to 2013, SO_x emissions have decreased by 96.2 per cent in 2018, mainly due to the use of cleaner fuels, particularly as a result of recent developments in the power generation sector. It is estimated that approximately 69.0 per cent of SO_x emissions include stationary sources (commercial/institutional and stationary combustion in manufacturing industries and construction), followed by 16.0 per cent from international aviation (civil) and other sources. Figures 2.1 and 2.2 portray air pollutants by source for 2013 and 2018, respectively, as a percentage share of the total national air pollutants.

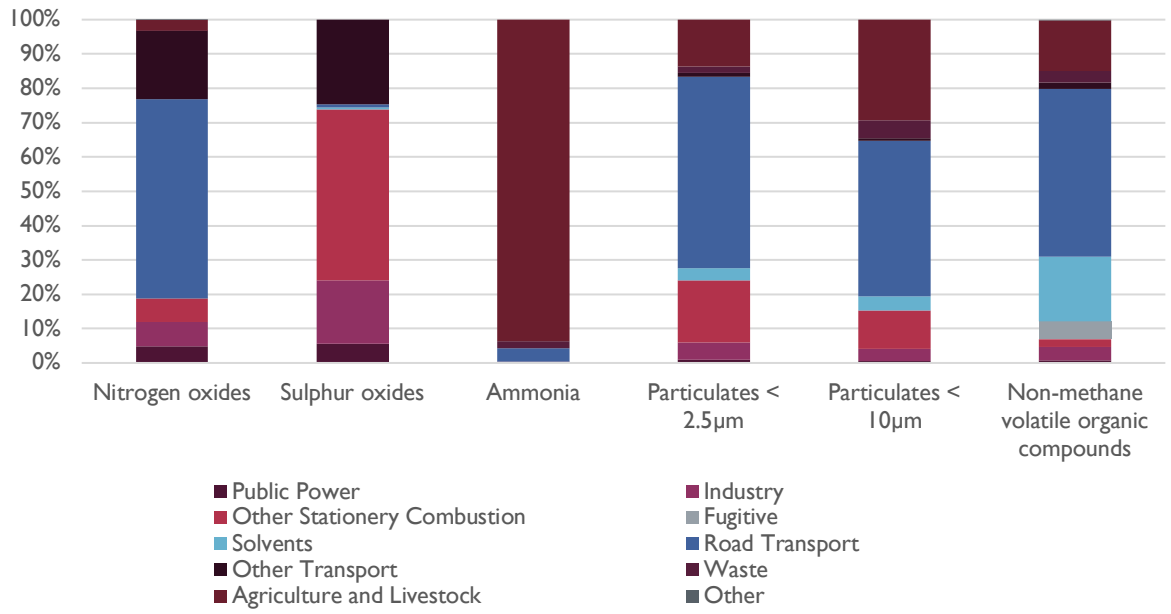
While emissions from road transport are mostly exhaust emissions arising from fuel combustion (NO_x), non-exhaust releases contribute to both NMVOC (from fuel evaporation) and primary PM emissions (from tyre - and brake-wear, and road abrasion). More specifically, emissions of NO_x from road transport have increased by 54.0 per cent in 5 years over 2013 and 2018 period. The non-exhaust emissions of PM2.5, PM10 and NMVOCs increased by 21.6, 26.2 and 40.2 per cent, respectively, over the same five-year comparable period.

Figure 2.1: Air pollutants by source sector for 2013, as a percentage share of the air pollutant's national total



Source: Eurostat

Figure 2.2: Air pollutants by source sector for 2018, as a percentage share of the air pollutant's national total



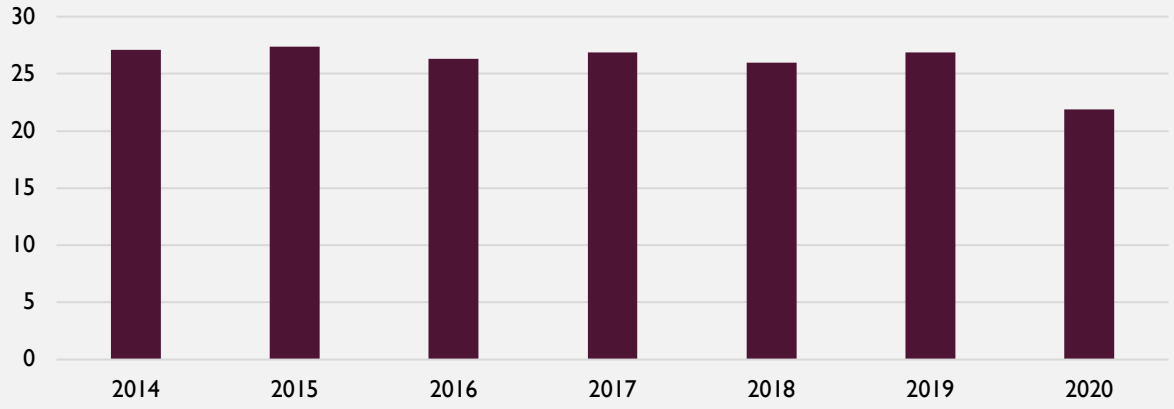
Source: Eurostat

Box 2.1 Ambient Air Quality[10]

Ambient air monitoring involves the monitoring of the quality of the air in a particular area. Apart from its near real time air monitoring network, the Environment and Resources Authority (ERA) also monitors NO_2 levels[11] through a diffusion tube network, spreads across 100 points in the Maltese Islands. National air quality data as collected by ERA shows that the major contributor to air pollution is the road transport sector. Geographically, the area which is most impacted by air pollution from traffic is that which is most densely populated, and exhibiting higher traffic influx, namely the inner harbour area[12].

As indicated in Figure 1 below, the annual average NO_2 concentration over the years has been relatively stable. However, the onset of the pandemic brought about notable changes in the levels of air pollutants[13] in 2020, with nitrogen dioxide (NO_2) registering an annual average decrease of 18.6 per cent when compared to the previous year. Underpinning this decrease is a lower amount of newly licenced motor vehicles, and the public health measures implemented to reduce the spread of the virus.

Figure 1: Annual average nitrogen dioxide (NO2) concentration, in µg/m3



Source: ERA

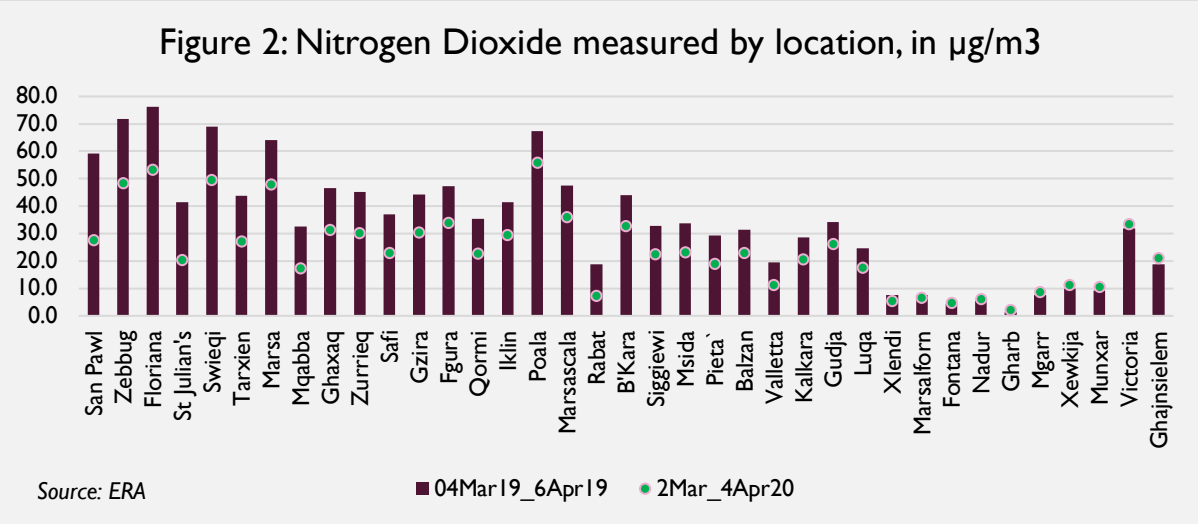
A closer look at the data suggests that the impact on air quality varied substantially by locality. Figure 2 indeed shows the NO2 readings in a sample of localities on the onset of the pandemic in Malta, when compared to a similar period in 2019. Whilst the nitrogen dioxide level is lower in March 2020 when compared to March 2019 in most localities in Malta, the level of nitrogen dioxide during March 2020 in most localities in Gozo, has actually marginally increased. The variation across the islands is probably a result of Gozitans relocating to Gozo. The latter discrepancy is not noted in May, when nearly all localities around Malta and Gozo registered a substantial decrease in NO2 when compared to the previous years.

[10] It is pertinent to note that the data presented in the Box (as collected in near real time by ERA) is not comparable to the air emissions inventory (estimated by Eurostat) referred earlier.

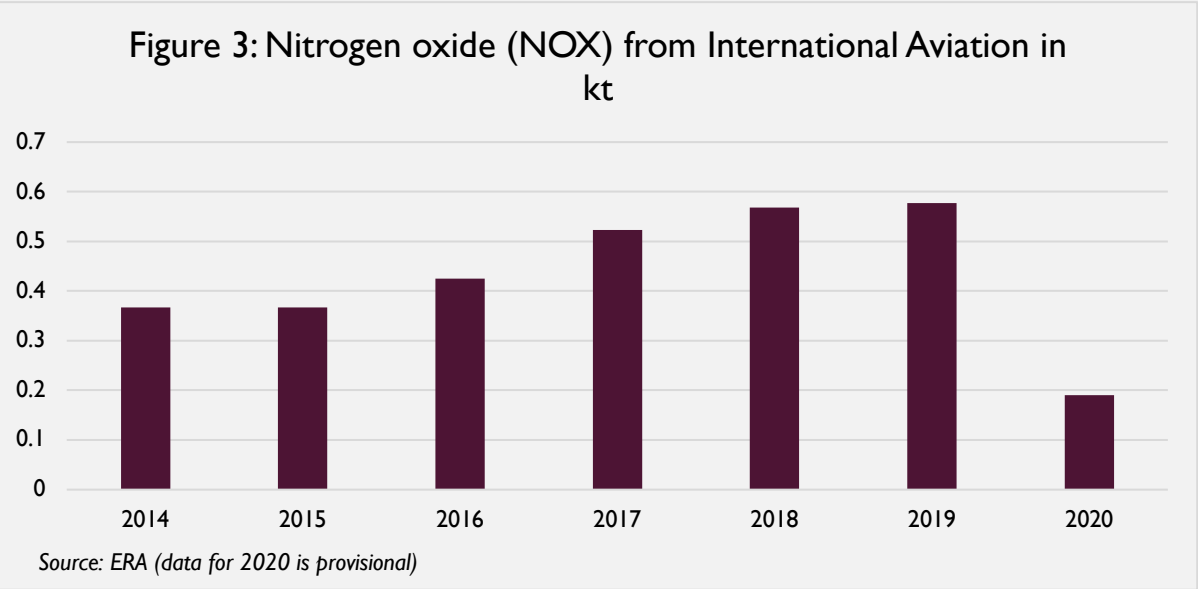
[11] Analysis is focusing on NO_2 as this is the main indicator for fuel combustion (i.e. road and aviation emissions). Other challenging air pollutants include ozone and Particulate Matter (PM), which however do not necessarily capture the local activity (ozone is mostly transboundary, and PM is also generated naturally from Sahara dust and sea salt).

[12] Environment and Resources Authority (2020). Nitrogen dioxide concentrations for 2019.

[13] Environment and Resources Authority (2020). A preliminary assessment related to the impact of Covid-19 measures on air quality in Malta.



Sustained growth in the tourism industry and the associated increase in flights have contributed to an increase in air pollution from international aviation over the period under analysis. Similar to pollutants from transport, air emissions have also decreased in 2020 due to the reduction in flights travelling from/to Malta. Indeed, in 2020, inbound tourist trips totalled to 658,567, a decrease of 76.1 per cent over the same period in 2019. Emissions of nitrogen oxides (NO_x) from international aviation in 2020 have decreased by a factor of 3 when compared to 2019 (see Figure 3)[14].

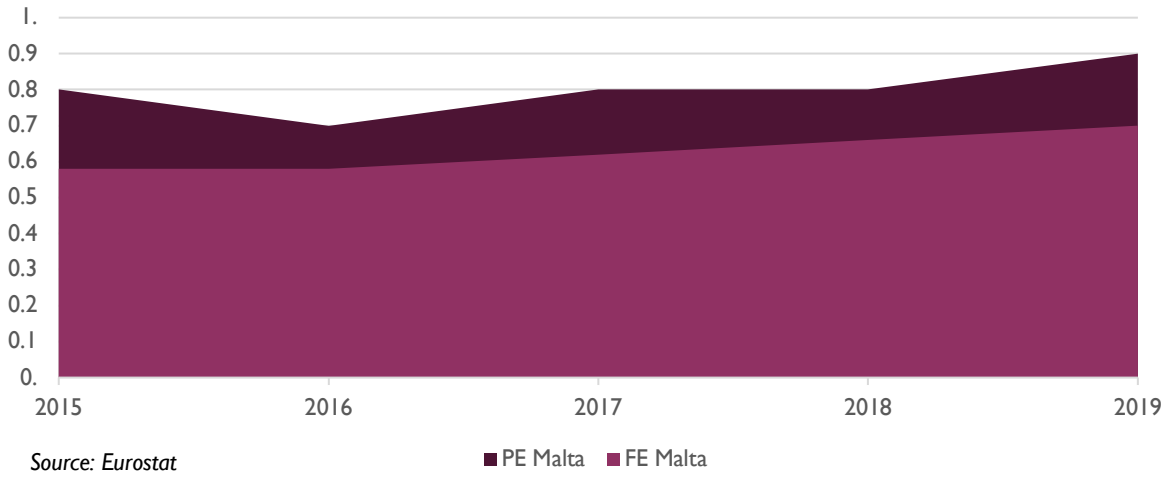


[14] Emissions of NOx are calculated using emission factors provided by Eurocontrol, and the basis of these calculations is data related to the number of landing and take-off cycles acquired from the Malta International Airport.

Energy

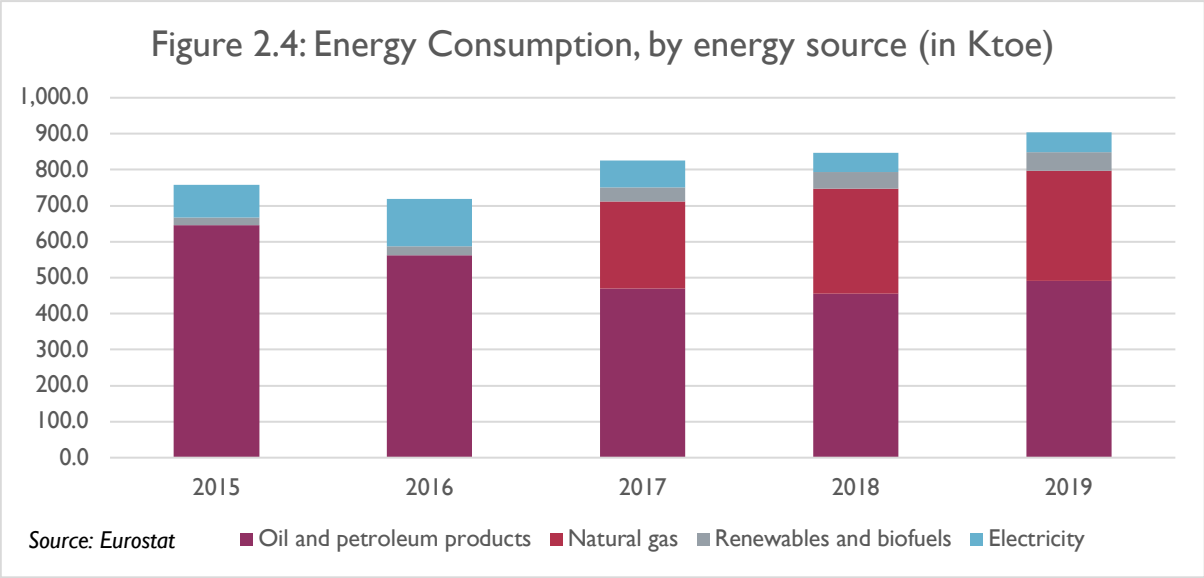
Final energy (FE) consumption has increased substantially over the past years, registering a growth of over 20.0 per cent in 2019, when compared to 2015, as can be noted from Figure 2.3. During the same period, Primary Energy (PE) consumption has increased by less than 13.0 per cent, highlighting that less energy is now being consumed by the energy sector itself for the production and transformation of energies, as well as any energy losses during transmission and distribution. Indeed, during this 5-year period, energy production and distribution seems to have registered an efficiency gain of around 5.0 percentage points. The changes in energy consumption contrasts with that of the EU27, where final energy consumption has increased marginally by 2.6 per cent, with no changes registered for the primary energy consumption.

Figure 2.3: Primary and Final Energy Consumption



Source: Eurostat

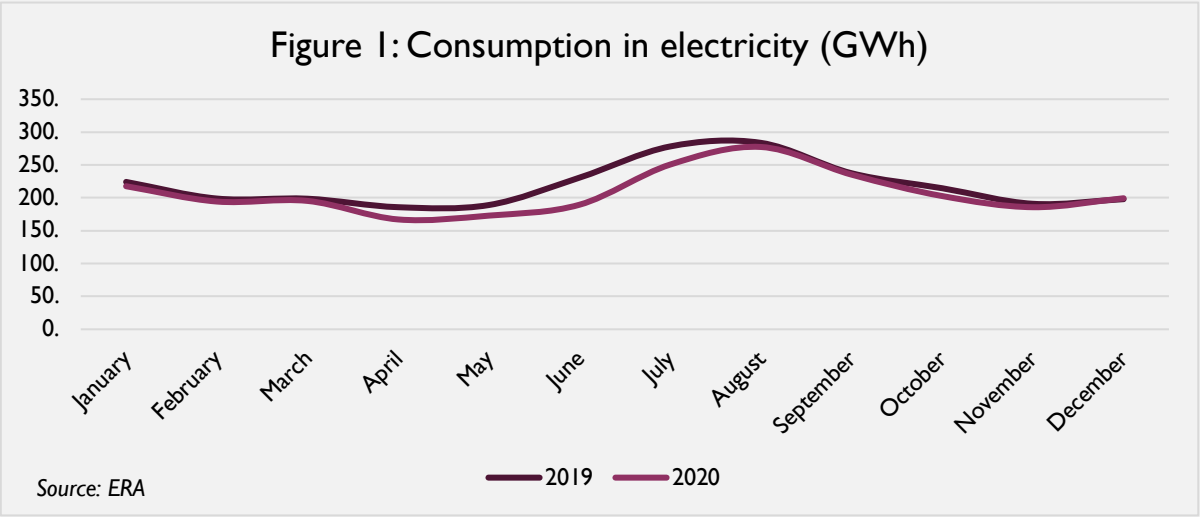
As regards the primary energy sources, there have been considerable shifts over the past five years. In particular, the share of oil and petroleum products, which are considered the most polluting sources has decreased from 85.3 per cent in 2015 to 54.4 per cent in 2019. This decrease was mainly possible due to the new gas-powered power station, which has accounted for around 33.0 per cent of energy consumption in the past three years. Imported electricity using the interconnector has also decreased over the period in question; from 12.0 per cent in 2015 to 6.1 per cent in 2019. Meanwhile, the share of renewables and biofuels have also increased, albeit at a slower rate, from 2.8 per cent to 5.6 per cent. Figure 2.4 illustrates energy consumption in Ktoe by energy source, for 2015-2019.



The Government has over the year issued numerous schemes encouraging investment in renewables, namely in Photovoltaic panels. Thanks to these measures, the share of renewable energy in gross final energy consumption has increased to 8.5 per cent in 2019, when compared to 5.1 per cent in 2015. However, this means that Malta has not achieved its 10.0 per cent EU target in 2020. The introduction of the biofuel substitute obligation, requiring both importers and wholesalers of petrol and diesel to place a pre-determined amount of biofuel in the market, aids in achieving further environmental targets.

Box 2.2 Electricity Consumption

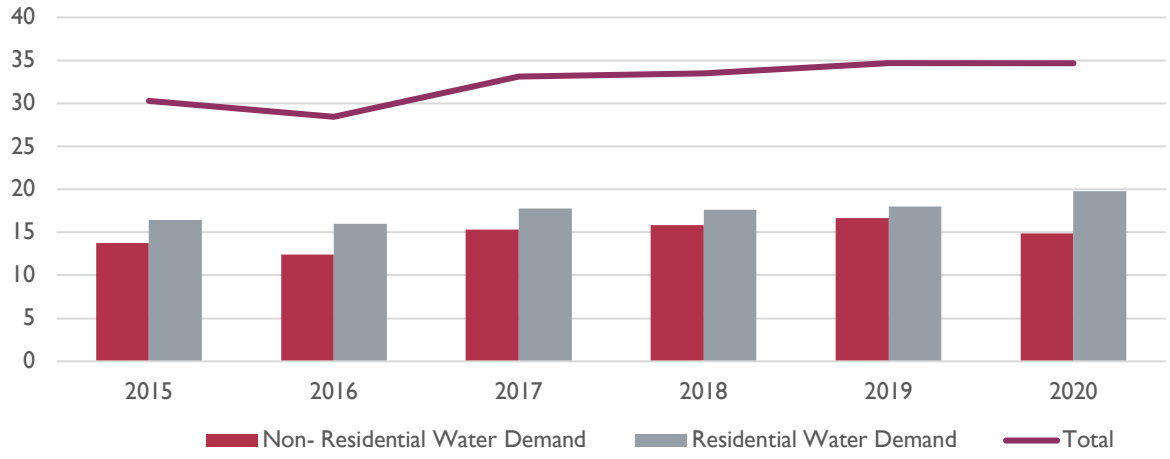
The pandemic also affected the demand for electricity, which decreased by 5.4 per cent in 2020 when compared to 2019, as can be noted from the figure below. Whilst electricity consumption in 2020 has followed the 2019 pattern in most of the shoulder months, electricity consumption has decreased by 12.5 per cent during the second quarter when non-essential businesses were forced to close and cross-border travelling was not allowed. Demand remained relatively lower (4.5 per cent lower) also during the third quarter of 2020 in reflection of the impact of the pandemic on tourism. However, during the last quarter of 2020, when public health measures were rather limited, electricity consumption was very close to that registered in the previous year.



Water

Water constitutes a scarce resource in Malta and the supply of potable water is produced through various groundwater sources through desalination of seawater into high purity drinking water in its three-reverse osmosis (RO) plants. As indicated by the Water Services Corporation (WSC), this method of water production and treatment currently requires 2.63 kWh per cubic metre of energy input, attributed to our dependence on seawater RO and deep groundwater extraction to meet national water demand. The demand for water, as measured by the WSC, has been following an upward trend over the recent years. The total demand for water has indeed increased by 14.6 per cent in 2020 (see Figure 2.5), when compared to 2015. During this period, residential water demand increased by 20.0 per cent, whilst non-residential demand increased by 8.1 per cent. This increase in demand, especially in the residential sector is largely explained by the substantial increase in population, which has registered an increase of 17.0 percentage points during the period analysed. The stronger economic growth has also led to increasing water demand, especially arising from the tourism sector, which is a rather water intensive sector.

Figure 2.5: Water Demand (in mill. m^3)

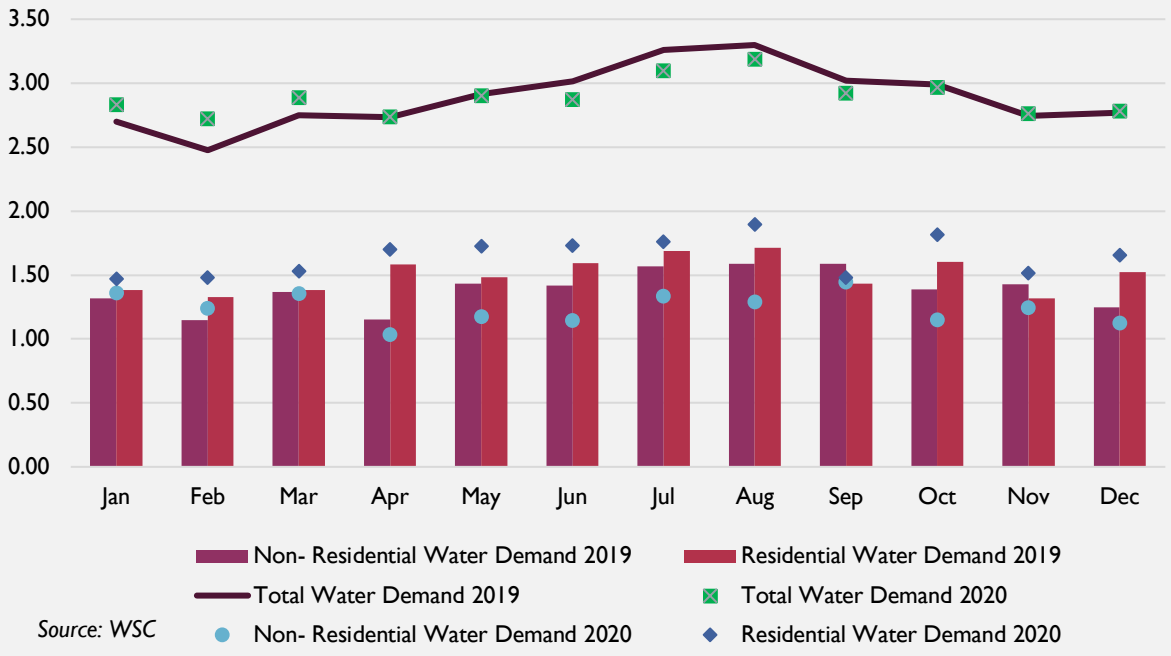


Source: Eurostat

Box 2.3 Monthly Water Demand

Unlike air pollution and energy demand, water consumption does not seem to have been impacted much by the pandemic, with the demand for water remaining broadly constant in 2020 when compared to the previous year. Following the outbreak of the COVID-19 in Malta, particularly during the May to August period, there has been a considerable decrease in the demand for water by non-residential units. This was compensated by an increase in the demand for water by the residential sector in the months of May, October and November whereas the drop in tourism impacted total demand downwards between June and September which represent the peak tourism season in Malta (see Figure 1). This reflected the change in working patterns triggered by the pandemic as a result of remote working.

Figure 1:Water Demand in 2019 and 2020 (in mill. m3)



Source: WSC

At the same time, it should be noted that whilst fresh surface and groundwater remain the main water input source at around 66 per cent in 2018, this has decreased by around 2 percentage points since 2015 (see Figure 2). Indeed, the increased demand for water has been sourced through increased use of desalinated water. In 2018, the Water Services Corporation (WSC) announced a wide range of EU-funded projects that will substantially increase the quality of tap water, reduce carbon emissions, increase efficiencies, and safeguard Malta's groundwater resources.

Figure 2:Water Input Sources 2018

Source: Eurostat

It can be noted that over the years Malta's economy became less dependent on water. Indeed, whereas in 2015 the total output of Eur 140.8 per m^3 of water resources was generated, the total output increased to Eur 174.6 per m^3 of water resources. This could reflect changes in economic and industry structure, where more economic output is being generated by less water-intensive industries.

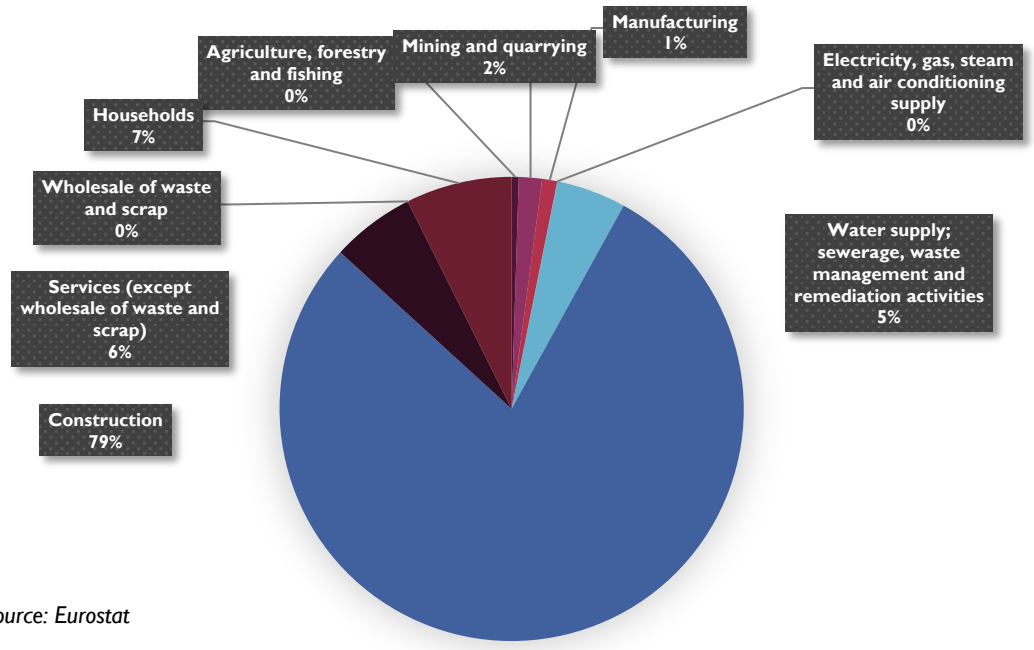
Waste

Apart from the negative impact on climate change, air pollution and the negative impact on many ecosystems and species, waste also represents an economic loss and burden to our society. Increased focus on reducing waste and improving the circularity of the economy has indeed gained substantial momentum in the last decade.

Eurostat data for waste generation by waste category and NACE, available biennially, indicates that over the span of 5 years from 2014 to 2018, waste from the construction industry always contributed to the highest share in total waste generated by Malta, with an average share of 73.8 per cent. Over the comparable 5-year period, households generated an average share of 8.4 per cent in the total waste generated. The share of different economic activities and of households in total waste generation in 2018 is presented in Figure 2.7.

Waste generated from construction increased by 59.1 per cent between 2014 and 2018, mostly driven by a larger growth in 2018. This was largely underpinned by higher mineral and solidified waste, including mineral waste from construction and demolition (98 per cent).

Figure 2.7: Waste Generation by economic activities and households, 2018 (% share of total waste)



Source: Eurostat

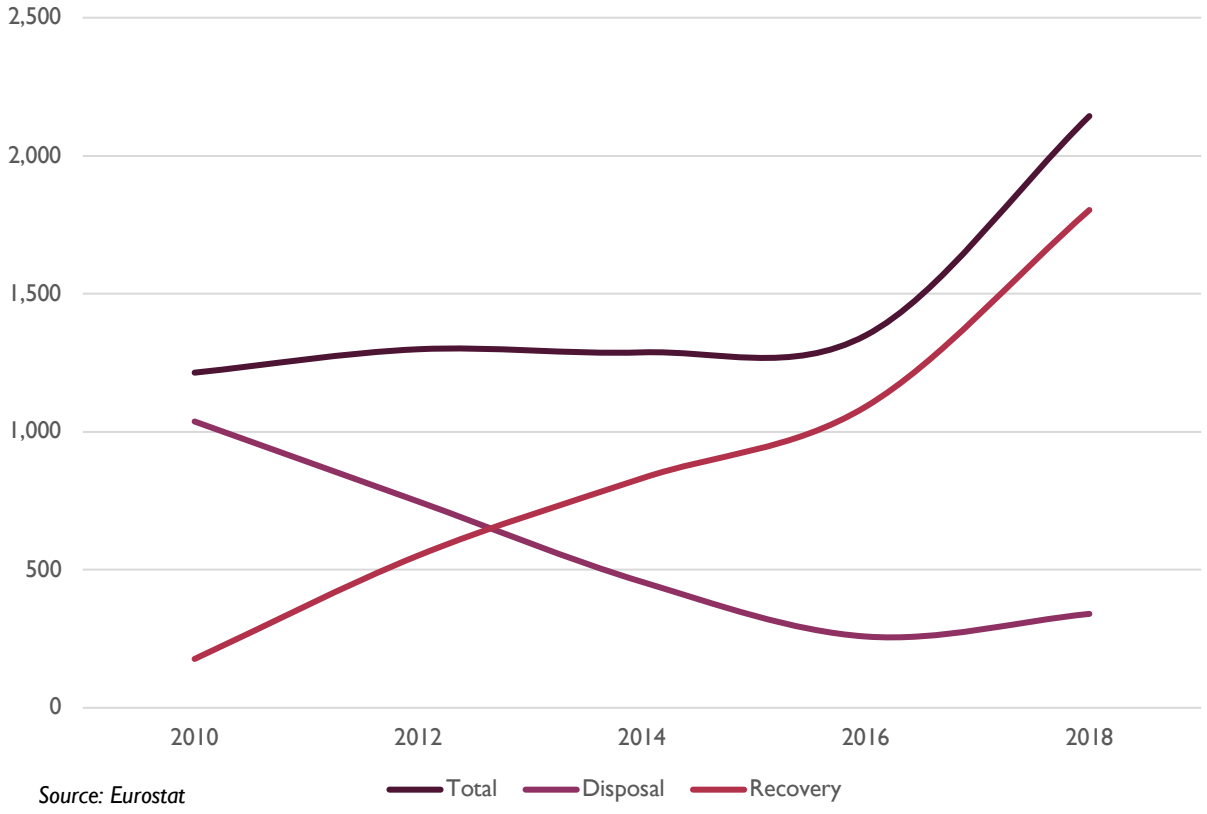
Between 2014 and 2018, waste generated by households increased by 20.0 per cent, with gradual increases in growth biennially. In 2018, 71.2 per cent of this waste was classified as mixed and undifferentiated household waste, while 6.0 per cent was discarded vehicles. In quantity terms, the largest contributor to higher waste generated by households was an increase of 7.7 thousand tonnes from discarded vehicles, as mixed and undifferentiated household waste increased by 3.4 thousand tonnes over the 5-year period.

Hazardous waste may pose an elevated risk to human health and to the environment if not managed and disposed of safely. Among the waste generated in Malta in 2018, 30.3 thousand tonnes (1.2 per cent of the total) were classified as hazardous waste. Compared with 2014, 17.3 per cent less hazardous waste was generated in 2018 which is a decrease in quantity terms of 6.3 thousand tonnes.

An analysis of the amount of waste generated in relation to population size shows that in 2018, Malta generated 5,173 kilograms of waste per inhabitant. This compares similarly to the waste generated in the EU of 5,232 kilograms per inhabitant.

Over the 5-year period 2014-2018, waste treated in Malta increased by 66.5 per cent, which waste was largely being backfilled (the use of waste in excavated areas for the purpose of slope reclamation or safety or for engineering purposes in landscaping). This does not include exported waste (or treatment of imported waste) and therefore not directly comparable with data on waste generation. In 2018, some 2.1 million tonnes of waste were treated in Malta, representing a 58.9 per cent increase in waste treatment over 2016, The largest share (65.6 per cent) of waste treated in 2018 was recovered through backfilling. This is consistent with the similarly high share of construction waste which waste is generally backfilled. Other recovered waste through recycling made up 18,5 per cent of total treated waste, followed by 12.8 per cent which was landfilled. Figure 2.8 shows the development of total waste treatment, as well as for the two main treatment categories – recovery and disposal – during the period 2010-2018.

Figure 2.8: Waste Treatment, 2010-2018, in kilo tonnes



Source: Eurostat

Climate Change

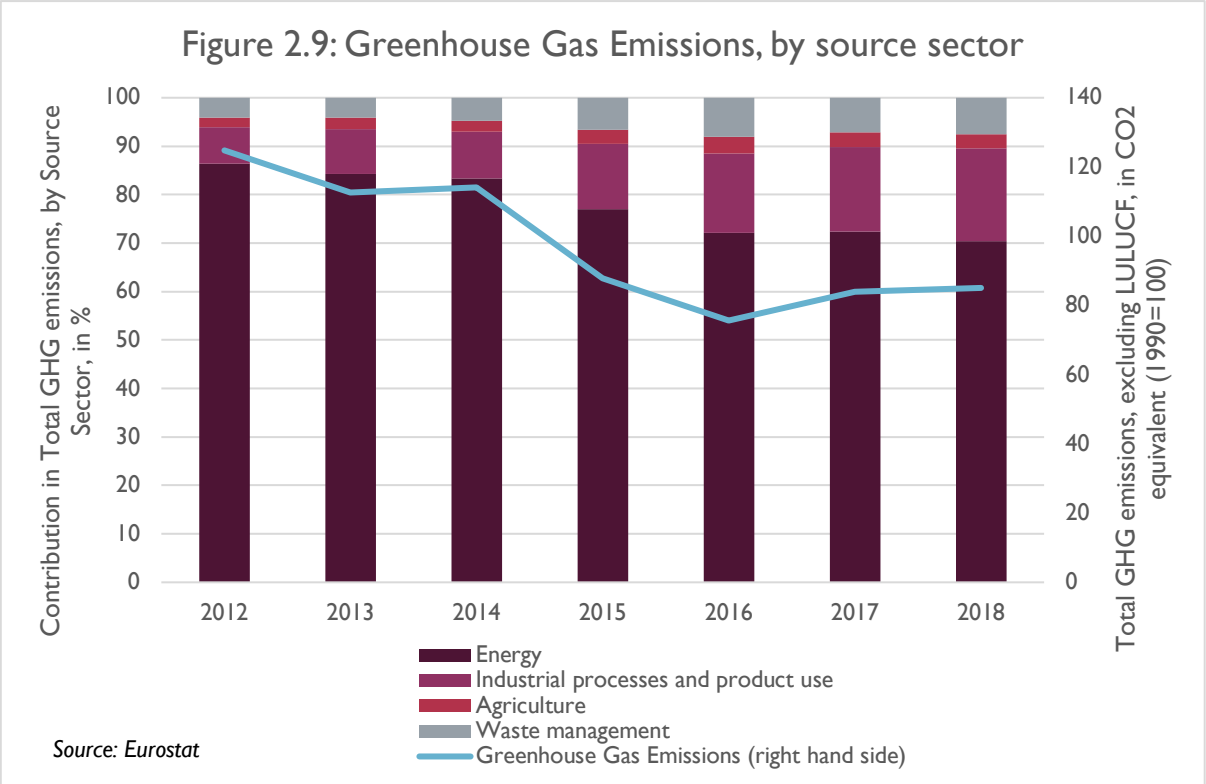
With the coming into force of the Paris Agreement in 2016 and the European Commission's action plan towards a climate-neutral EU – the European Green Deal, climate change is an aspect of the environment that has been garnering more attention, not only among the public but also as a priority in the policy agenda.

Under the 2020 package, the EU and its Member States, were collectively committed to a 20.0 per cent reduction in greenhouse gas emissions from 1990 levels by 2020. The EU Emissions Trading System (ETS) was the key tool for cutting greenhouse gas emissions from large-scale facilities in the power and industry sectors, as well as the aviation sector. In addition, through the Effort Sharing Decision (ESD), EU countries have taken on a binding annual target until 2020 for cutting emissions stemming from those sectors of the economy that fall outside the scope of the EU ETS, namely emissions from non-ETS industry, housing, agriculture, waste and transport (excluding aviation). Malta has been committed to limit its emissions under the ESD to a 5.0 per cent increase when compared to 2005 levels by 2020.

When compared to 2000, Malta's greenhouse gas (GhG) emissions over a twelve-year period increased by 15.0 per cent in 2012. The increasing trend in GhG emissions has been reversed with GhG emissions as at 2018 being 31.2 per cent lower than their 2012 levels. This reflects the shift in energy production with the new gas-powered electricity plant, as discussed earlier.

As depicted in Figure 2.9, up to 2018, it is estimated that emissions from the energy sector (which includes transport) accounted for slightly more than 70.0 per cent of total national GhG emissions, which share had surpassed 90 per cent until 2004. While Government's investments in the energy sector has contributed to a decline in the share of emissions from fuel combustion in energy industries to the total emissions in this sector, the share of emissions from fuel combustion in road transport continues to increase. Emissions from fuel combustion in energy industries as a share of emissions in the energy sector decreased to 45.4 per cent in 2018 when compared to a share of 73.1 per cent in 2012. Contrastingly, the share for emissions from fuel combustion in road transport increased from 20.9 per cent to 43.1 per cent over the same comparable period. The Industrial Processes and Product Use (IPPU) sector has, over the last two decades, seen a major increase in emissions, both in absolute terms and in terms of its relative share of total national greenhouse gas emissions. Emissions from this sector are largely driven by increases in estimated emissions of hydrofluorocarbons (HFCs). HFCs, mostly from refrigeration and air-conditioning units, are the most important source of fluorinated gases reported by Malta, in terms of overall GhGs and emission source, respectively. Emissions from HFCs are growing as more refrigeration and air-conditioning systems are installed in the residential and commercial sectors, as an adaptive means to minimize the effect of climatic conditions particularly in the hot summer season and driven by increased affluence of the population and growth in tourism.

On the other hand, waste management produces mainly methane emissions, contributing to about 80 per cent of all methane emissions generated in Malta. Emissions from the waste sector is greatly influenced by the profile of emissions for Solid Waste Disposal, this being the category with the highest share (94 per cent in 2018) of emissions in this sector. Over the four-year period leading to 2018, the share of emissions from the waste sector in the total emissions remained relatively stable at 7.3 per cent. The rest of the methane emissions are mainly derived from the agriculture sector. The agriculture sector shows a gradual decrease in total greenhouse gas emissions over time, with a relatively stable contribution of this sector's emissions to total national emissions over the years.



For the next decade to 2030, through the 2030 climate and energy framework[15], the EU and its Member States were collectively targeting to achieve at least a 40 per cent reduction in greenhouse gas emissions from 1990 levels. To ensure that all sectors contribute to the achievement of the 40 per cent target, the 40 per cent greenhouse gas target is implemented by the EU Emissions Trading System, the Effort Sharing Regulation (ESR) with Member States' emissions reduction targets and the Land use, land use change and forestry Regulation. Under the current legislation, for those sectors of the economy that fall outside the scope of the EU Emissions Trading System (EU ETS), Malta has binding annual greenhouse gas emission targets for 2021-2030, expressed as percentage change from 2005 levels up to a 19 per cent reduction by 2030. The sectors falling under the ESR include transport, buildings, agriculture, non-ETS industry and waste.

[15] All three pieces of climate legislation will be updated with a view to implement increased ambition as set out by the European Green Deal.

Conclusion

An efficient and effective use of natural resources is necessary in order to safeguard future generations.

National air quality data shows that the major contributor to air pollution is the road transport sector. The increase in the number of vehicles registered on our roads on a daily basis and the relatively old average age of Malta's car fleet further amplify this. Indeed, with the onset of the pandemic, decreased car activity has brought about notable changes in the levels of air pollutants in 2020, with Nitrogen Dioxide (NO2) registering an annual average decrease of 18.6 per cent when compared to the previous year.

Whilst the demand for energy has continued to increase over these part year, the new gas-powered power station, which has been a source of around 33.0 per cent of energy consumption in the past three years, has contributed to lower energy driven greenhouse gases emissions. Following the outbreak of COVID-19 in Malta, electricity consumption and the demand for water by non-residential units has decreased remarkably during the second quarter when non-essential businesses were required to close and cross-border travelling was interrupted. While an overall lower consumption in electricity in GwH was noted in 2020 over 2019, water demand in millions of cubic metres remained relatively constant in 2020 when compared to the previous year as an increase in the demand for water by the residential sector compensated for the decrease in demand by non-residential units.

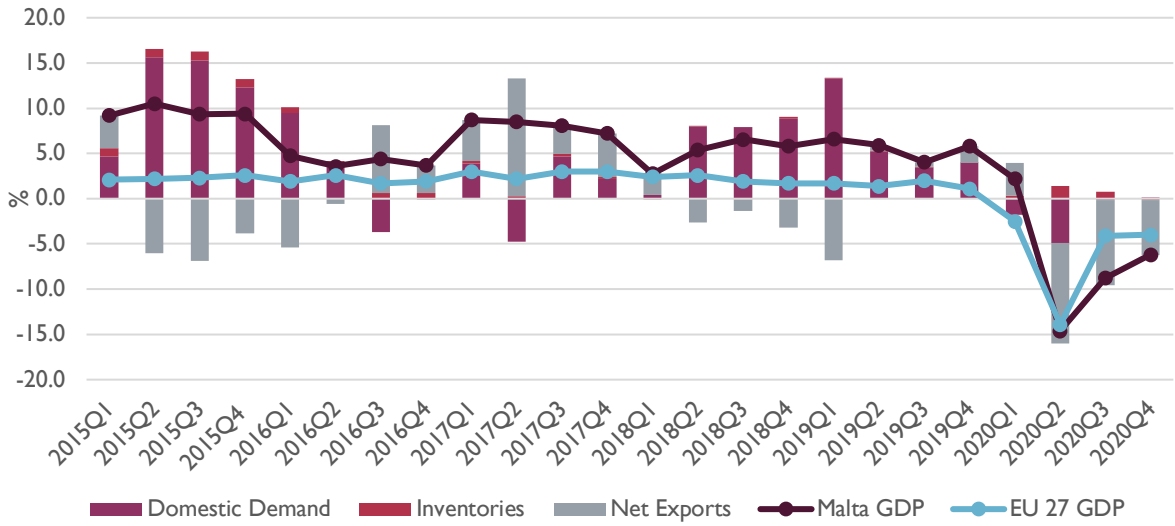
Recalling that waste, especially non-recycled waste, represents an economic loss and burden to our society, even though over 5 years the total recyclable waste increased by 10 percentage points in 2020, Malta has only started to register a decrease in overall waste collection in 2019. This indicates that policy initiatives are starting to have an important impact on outcomes.

CHAPTER 3
MACROECONOMIC DEVELOPMENTS

A. Expenditure Components

In recent years Malta's economy has been growing at a rapid pace, fuelled by expansions in export-oriented service industries and buoyant investment. Malta's annual growth in real Gross Domestic Product averaged 6.5 per cent between 2015 to 2019, making it one of the fastest growing economies in the European Union while facilitating rapid income convergence to the EU average. However as seen from Figure 3.1, data indicated that although the economy was still above its long-term average, growth was moderating and becoming increasingly dependent on domestic demand.

Figure 3.1: Contributions to growth



Source: Eurostat, NSO

The Covid-19 pandemic led to a series of unprecedented stresses on the global economy, including Malta. The effect of this shock distinguishes itself from previous crises because the declines in demand were also complemented with supply restrictions in both Malta and countries with which Malta trades. Although financial aid packages implemented by Government mitigated some of the economic consequences of the pandemic, Malta's economy contracted by 7.0 per cent in real terms, or by 5.7 per cent in nominal terms in 2020, making it one of the hardest hit countries in the European Union.

The largest contraction was in the second quarter of the year as restrictive measures imposed to contain the spread of COVID-19 resulted in a significant drop in household consumption while restricted air traffic interrupted international tourist arrivals to the island. The contraction remained substantial in the second half of 2020 as the continued limitations of tourism and social activities, along with a second wave of restrictions placed globally and locally continued to place additional strain on the highly open domestic economy. The largest contributor to the decline in GDP in 2020 was net exports, with the external side of the economy contributing a negative 5.9 percentage points towards growth, underpinned by decreased foreign demand, restrictions on travel related activities and disruptions to the global supply-chain. Domestic demand also declined, accounting for a negative contribution of 1.7 percentage points as household consumption and private investment have both been adversely affected, amidst the temporary shutdown of various activities and heightened levels of uncertainty, leading to higher savings.

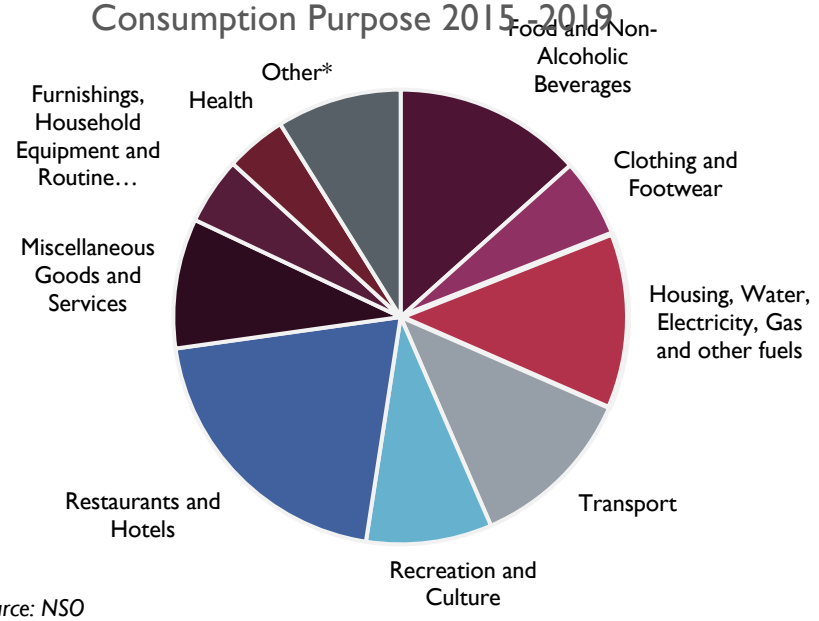
Consumption

During the past five years prior to the pandemic, Malta's total household expenditure averaged at 47.8 per cent of GDP. Despite the growing population and improving living standards, a steady decline in consumption as a share of GDP has been observed since 2005. This gradual decline in the consumption share is reflective of several factors, including a compositional shift due to robust investment and strong external led growth, as well as an increasingly ageing population.

The composition of Malta's household expenditure by consumption purpose (COICOP) for 2015-2019 can be seen in Figure 3.2. It is to be noted that the figures published by NSO by COICOP level are based on the "domestic concept" of households' final consumption, meaning it includes all consumption expenditures in the domestic territory (Malta), irrespective of whether these refer to expenditures by residents or non-residents. On the other hand, final consumption expenditures of households calculated in the Gross Domestic Product follows the "national concept", meaning it includes only the total expenditures of residents of Malta, whether in Malta or abroad, while excluding consumption by non-residents in Malta. This balance, the 'Balance of Expenditures of Residents Abroad and of Non-Residents on the Economic Territory' has had a notable share in the recent years averaging 20.9 percentage points from 2015-2019, indicating that a high share of consumption by non-residents in Malta. In fact, tourist expenditure in Malta, together with Greece, Cyprus and Croatia accounts for more than 10 per cent of GDP (compared to an EU average of less than 3 per cent), and thus presents a disproportionate share of the domestic component of consumption.

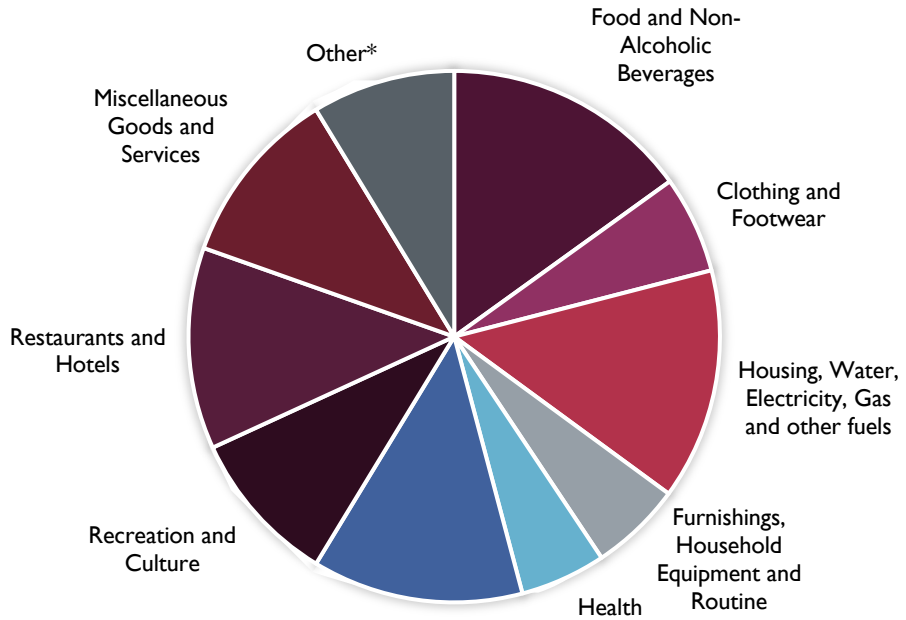
It is worth noting that when deducting the tourism element from the consumption categories (i.e. convert it into the "national concept") (see Figure 3.3) the share of goods and services typically associated with social activities, i.e. consumption on 'Restaurants and Hotels', 'Recreation and Culture', 'Transport' and 'Clothing and Footwear' still account for roughly 40.0 per cent of household consumption in Malta. This is a significant share of household consumption and notably more than the EU average, making Malta's household consumption more vulnerable to the shocks of COVID-19.

Figure 3.2: Consumption Expenditure by Consumption Purpose 2015 - 2019



Source: NSO

Figure 3.3: Tourism Adjusted Consumption Expenditure by Consumption Purpose 2015-2019



Source: EPD calculations

**Other include Consumption of Alcoholic Beverages and Tobacco, Communication and Education*

Overall consumption declined by 7.6 per cent in 2020, when compared to 2019. This decline compares with a similar decline in household consumption in the rest of the EU which declined by 7.4 per cent. In the EU one can observe diverse consumption dynamics ranging from the decline of more than 10.0 per cent in Italy and Spain to more modest declines of less than 2.0 per cent in Slovakia and Denmark. Based on EPD estimates of household consumption adjusted for the national concept by COICOP level indicates that the drop in household consumption was primarily driven by a substantial drop in consumption on restaurants and hotels, recreation and culture and transport, followed by drops in expenditure on clothing and footwear and even health.

The COVID-19 pandemic also led to a significant digitisation of business models. This is evident in the shift to remote working, the take up of telemedicine and shifts to online entertainment and online shopping. While the shift to an increasingly digital economy was already manifesting prior to the pandemic, the pandemic accelerated these trends. It has yet to be seen whether certain impacts will be circumstantial or structural. Indeed, consumers may become accustomed to new ways of consumption, which could lead to secular shifts in the retail sector away from physical sales to e-commerce.

Government Consumption

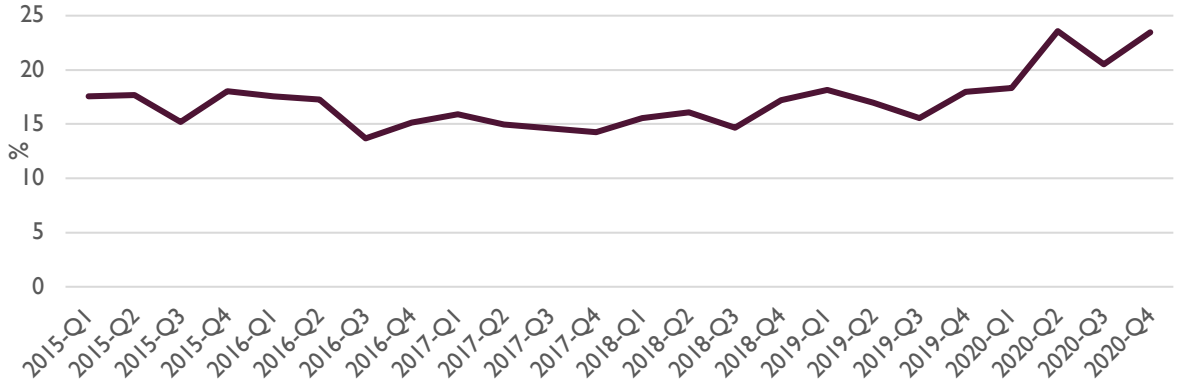
The ratio of Government Consumption to GDP has been stable in recent years, reaching an average of 16.2 per cent in the past five years prior to the pandemic.

In 2020, government expenditure climbed to 21.4 per cent of GDP, as the government rapidly increased its spending to mitigate the impact of the pandemic on the economy and the wider community (Figure 3.4).

The measures undertaken by government which influence government consumption in national accounts were mainly health related expenditures. However Government support also included measures aimed at sustaining employment and keeping businesses liquid. Transfer payments injected into the economy during the COVID-19 pandemic in the form of the wage supplement proved crucial to keeping employment relatively strong in most sectors. The take up of these measures has been extensive across all affected sectors, so much so that subsidies on production grew by 241.4 per cent in the last three quarters of 2020, when compared to the same period of the previous year.

A more comprehensive assessment of government consumption and COVID-19 measures will be tackled in Chapter 5

Figure 3.4: The Ratio of Government Expenditure to Gross Domestic Product



Source: NSO

Gross Fixed Capital Formation

Increases in investment are critical to any economy as it leads to improved productivity, employment, and competitiveness, all of which foster economic growth. The Gross Capital Formation to GDP ratio averaged around 20.2 per cent over the last ten years. The ratio peaked in 2016 at 24.5 per cent, largely due to substantial public investment financed by EU funds, as well as significant private investment in the aviation industry and the energy sector, including the construction of a new power plant. Nonetheless, the investment to GDP ratio remained relatively high over the last five years, averaging 23.1 per cent, notably exceeding the EU average of 21.4 per cent.

Most investment expenditure is undertaken by the private sector, with private investment accounting for around 85 per cent of total investment in the past five years.

Figure 3.5: Average Share of Assets in Total GFCF (2015-2019)

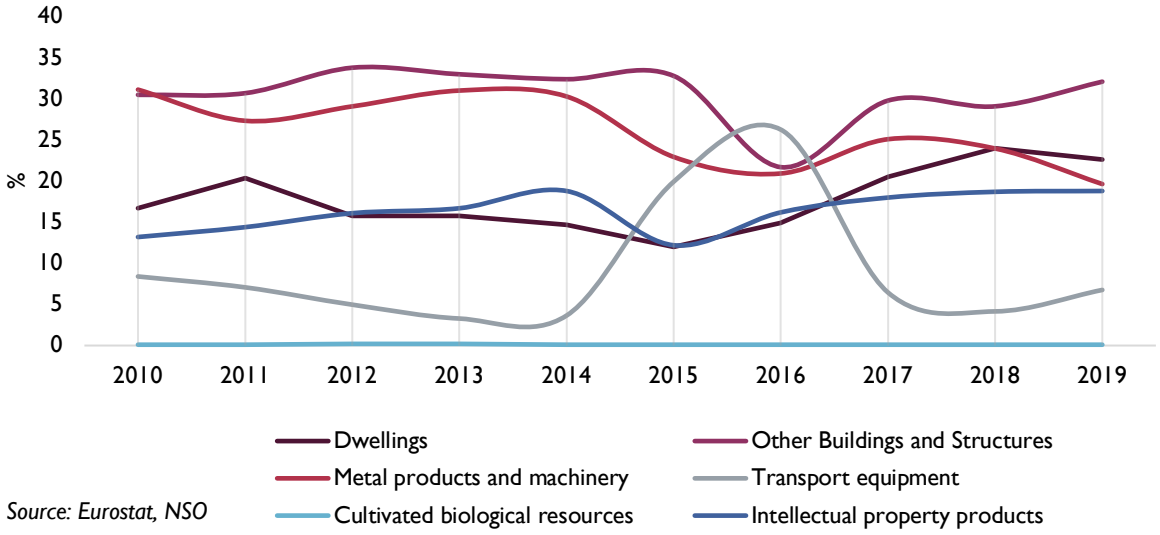
- Metal products and machinery
- Dwellings
- Intellectual property products
- Transport equipment
- Other Buildings and Structures

Source: Eurostat, NSO

In the past five years, 'Buildings and structures' held the largest share of GFCF, explaining 28.3 per cent of total GFCF, supplemented by 'Dwellings' which make up 20.4 per cent of total GFCF. Thus almost half of total investment activity in Malta over the last five years was construction related. Investment in 'Metal products and machinery' accounted for 22.4 per cent of total GFCF. Other significant shares are held by investment in 'Intellectual property products' and 'Transport', which accounted for 17.9 per cent and 10.9 per cent of total GFCF, respectively.

Whilst most asset types registered growth since 2015, investment in dwellings account for most of the increase in GFCF in the past five years. The temporary relief of stamp duty for first time buyers of residential property and population growth resulting from the strong inflow of foreign workers have all encouraged investment into residential dwellings. This was further boosted by the buoyant demand for high-end residential property, particularly from participants of the Individual Investor Programme. GFCF growth is more volatile than other components and this volatility is magnified in a small country like Malta, where one major project can significantly impact overall investment. This is clear in Figure 3.6.

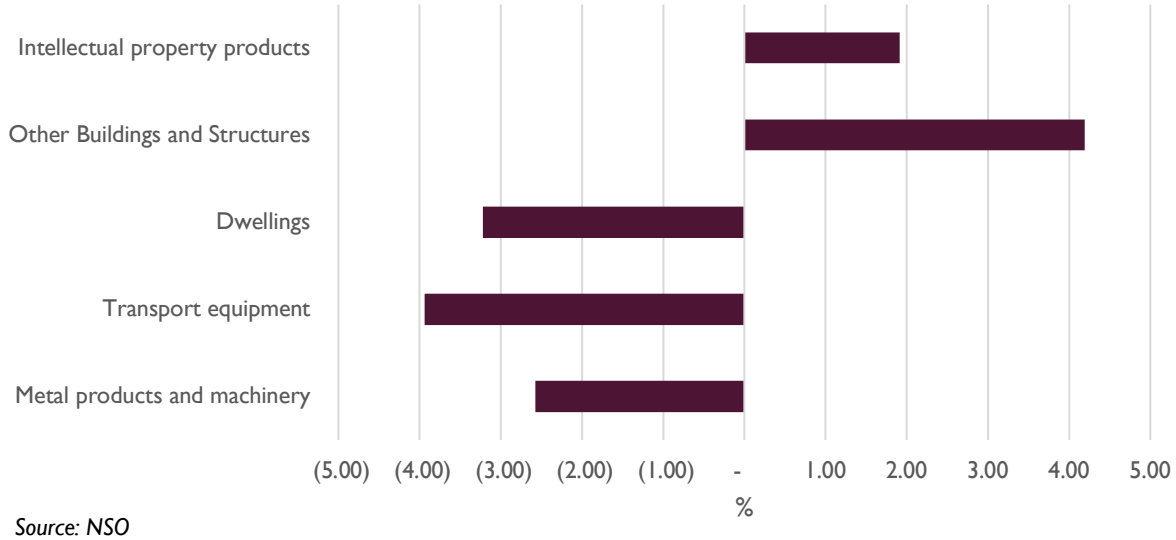
Figure 3.6: Gross Fixed Capital Formation by Asset Type



Source: Eurostat, NSO

The Covid-19 pandemic brought a downturn in demand and supply disruptions along with heightened uncertainty surrounding the outlook of the economy. This led to a decrease of 4.5 per cent in investment during 2020. While public investment registered an increase of 8.8 per cent during the period as several ongoing projects resumed course, private investment declined by 6.4 per cent in 2020. The decline in investment is evident in most assets, with the main contributors to the drop being 'Transport Equipment', 'Dwellings' and 'Metal products and machinery', contributing -3.9 per cent, -3.2 per cent and - 2.6 per cent respectively. On the other hand, 'Other Buildings and Structures' and 'Intellectual property products' contributed positively to investment, owing to increases in both the public and private sector.

Figure 3.7: Contributions to Change in GFCF 2020



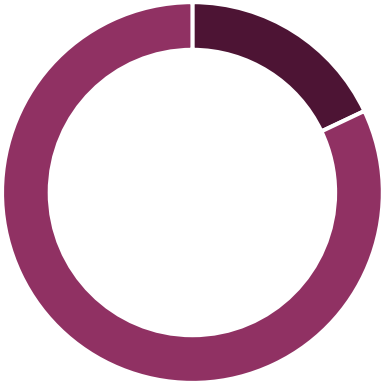
Source: NSO

Exports and Imports

Exports

Being a small, open economy, Malta's economy is highly dependent on exports, which in 2019 accounted for 144.7 per cent of GDP. With the emergence of several export-oriented services sectors, such as online gaming and financial services among others, along with significant increases in tourism, during the past few years, Malta's growth in exports has been highly service-oriented, with exports of services accounting for an average of 82 per cent of total exports in the past five years.

Figure 3.8: Exports in 2019



Source: NSO

Figure 3.9: Imports in 2019

Source: NSO

Due to its size and openness and greater dependence on tourism, Malta's economic outlook is contingent on the economic performance of its trading partners making it more vulnerable to shocks such as the COVID-19 pandemic. In fact, net exports were the main contributor to the decline in GDP in 2020. Exports declined by 7.8 per cent in 2020, primarily driven by exports of goods (-18.9 per cent), and to a lesser extent by the exports of services (-5.5 per cent).

Although Maltese exports are relatively diversified, a key component that is driving the decline is tourism. The tourism industry was the most negatively affected by the pandemic, as measures introduced to contain the virus led to a near-complete cessation of tourism activities around the world. In fact, tourist arrivals dropped by 76.1 per cent in 2020, accompanied by a decrease of 79.5 per cent in tourism expenditure. While positive news on the vaccines has indeed boosted the hopes of operators in the tourism industry and travellers alike, challenges remain.

More details on the share of exports of goods and services in the past years and the impact of COVID-19 can be found in Chapter 4 Section A.

Imports

The degree of openness is also evident in imports, with imports averaging 136.7 per cent of GDP in in the 2015 – 2019 period, with most imports being services (68.9 per cent). Although the share of service imports is growing, goods have a larger share in imports than in exports owing to Malta's reliance on importation of 'Fuels, Machinery and Transport Equipment', 'Chemicals' and 'Food'.

It is worth noting that investment activity tends to be highly import-intensive and import growth highly correlates with investment dynamics. Certain services exports such as gaming are also highly dependent on imports of business services.

Imports declined by 4.1 per cent in 2020, primarily driven by imports of goods (-15.7 per cent) reflecting a decrease in consumption and investment while there was an increase of 0.6 per cent in imports of services mirroring an increase in demand by more resilient service sectors.

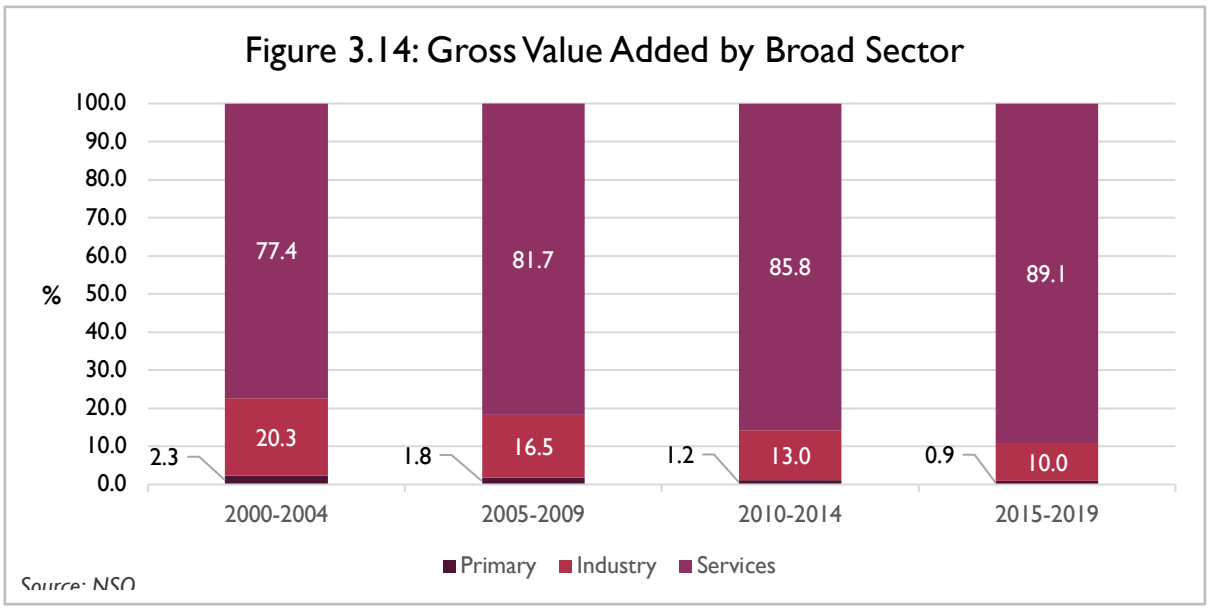
More details on the share of imports of goods and services in the past years and the impact of COVID-19 can be found in Chapter 4 Section A.

B. Sectoral Developments

This section analyses the evolution of the structure of the Maltese economy, and explores the impact of the COVID-19 pandemic on economic sectors.

Economic Structure by Broad Sector

The structure of the Maltese economy has notably evolved over the past two decades. The relative importance of both the Primary and Industrial sectors has diminished, with their share of total Gross Value Added (GVA) in the economy subsiding by more than half.[16] This contrasts with the increasing share of the Services sector, which increased from 73.7 per cent in 2000 to 83.4 per cent in 2010 respectively, before growing further to 89.3 per cent in 2019. In fact, in 2019, Malta was the economy with the third-highest share of services in GVA amongst EU countries.



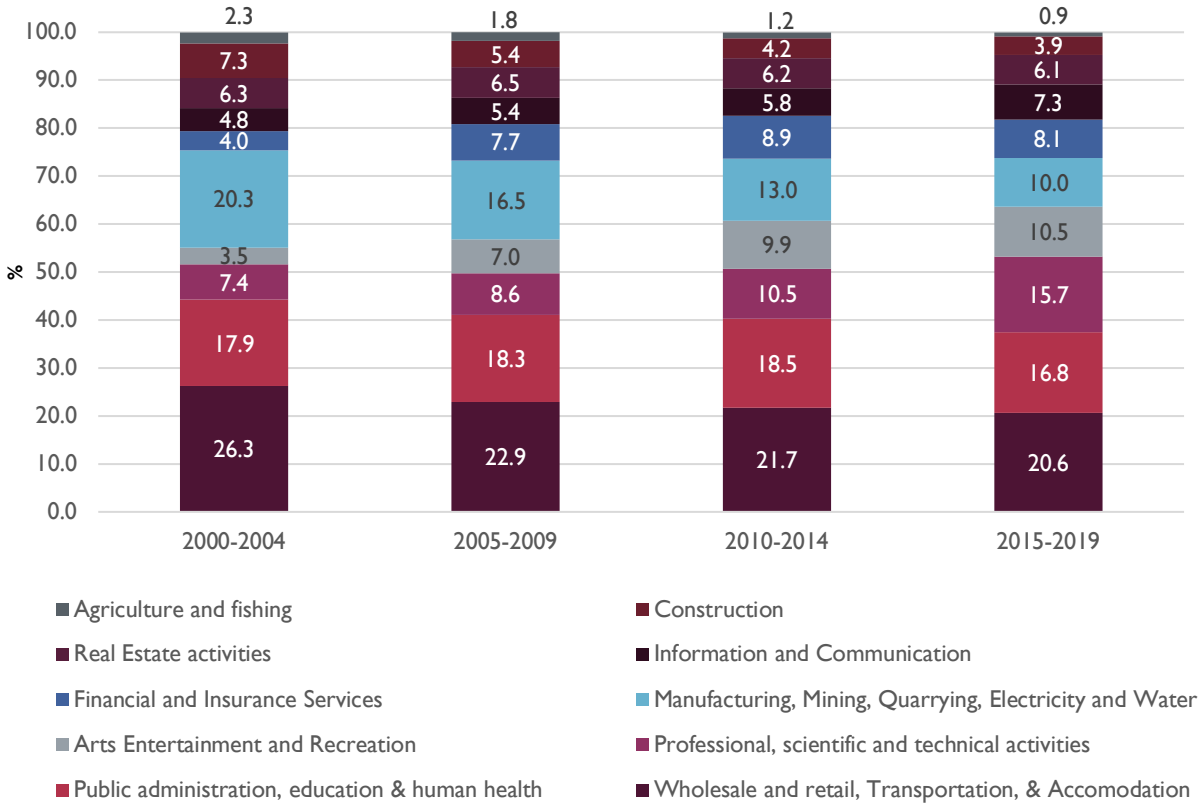
These structural developments coincided with Malta's positive economic performance, particularly over the recent five years, when total GVA grew by an average of 9.4 per cent per annum. In spite of the declining share in total GVA, the Industrial sector still grew at an average annual growth rate of 7 per cent over the 5 years prior to the outset of the pandemic. During the same period, growth in the Primary Sector averaged 2.8 per cent. Consequently, the rising share of the Services sector, which grew at an average annual growth rate of 9.8 per cent during the same period, is a result of a sizable expansion of the existing services, as well as the creation of new industries. Indeed, over the years, the share in GVA of the Arts, Entertainment and Recreation sector, Information and Communication, Financial and Insurance services and Professional services was on the rise.

Developments in employment emulate the improvements in output. The Services sector absorbed 87.9 per cent of the total workforce in 2019, an increase of 2.2 percentage points from 2015 and 5.2 percentage points from 2010, whereas the share of total employment in the Industrial sector decreased from 13.8 per cent in 2010 to 11.3 per cent in 2015, and further down to 9.5 per cent in 2019.

[16] The primary sector is comprised of Agriculture, forestry and fishing. The Industrial sector is made up of Manufacturing industries, Electricity, gas, steam and air conditioning supply, Water supply, sewerage and waste management, and Mining and Quarrying.

In 2019, the largest sector by NACE in terms of value added remained the Wholesale and Retail Trade, Transportation, and Accommodation sector. However, its share in GVA witnessed a steady decline since 2000, reaching 20.1 per cent in 2019, although the sector grew at an average annual growth rate of 7.9 per cent since 2015. As evidenced in Figure 3.15, the declining share of this industry is explained by a shift towards services sectors, most notably the Professional, scientific and technical activities sector, the Arts, Entertainment and Recreational sector (which includes the online gaming industry), the Information and Communication sector and the Financial and Insurance activities sector.

Figure 3.15: Share of Gross Value Added by NACE



Source: NSO

The Primary Sector

Table 3.1 – Developments in the Primary Sector

	2015/2019 (Average)	2020
Annual Growth Rate	2.8%	-14.3%
Share of Total Economy	0.9%	0.7%
Share of Total Employment *(National Accounts Definition)*	2.9%	2.6%
GVA per Worker Growth	0.8%	-15.7%

Source: NSO

In 2019, the Agriculture and fisheries sector comprised around 0.8 per cent of the total economy in terms of GVA and employed around 2.6 per cent of the Maltese workforce. Employment in the sector amounted to 3.0 per cent of the gainfully occupied population in 2015, 0.4 percentage points higher than the 2020 share. GVA per worker growth was relatively subdued, averaging 0.8 per cent between 2015 and 2019.

The Industrial Sector

Table 3.2 – Developments in the Industrial Sector

	2015/2019 (Average)	2020
Annual Growth Rate	*7.0%*	*-0.6%*
Share of Total Economy	*10.0%*	*10.3%*
Share of Total Employment *(National Accounts Definition)*	*10.4%*	*9.4%*
GVA per Worker Growth	*6.4%*	*-3.4%*

Source: NSO

In 2019 the Industry sector generated €1.2bn of GVA, a 7.0 per cent increase on the previous year, making up 9.9 per cent in the total economy and employing around 9.5 per cent of the gainfully occupied population. Between 2015 and 2019, the share of the Industrial sector in terms of GVA decreased from 10.2 per cent to 9.9 per cent, which is a more modest decline than that observed in the share of total employment, which decreased from 11.3 per cent to 9.5 per cent. This is reflected in strong productivity growth in the sector, where GVA per worker growth averaged 6.4 per cent during these years, indicating a shift towards higher value-added manufacturing activities.

In terms of GVA, during the period 2015 to 2019, the share of the largest five sub-sectors in Industry decreased marginally, indicating that some diversification ensued during the years. However, these five sectors, which include Electricity, gas, steam and air conditioning supply, Manufacturing of Computer, electronic and optical products, Manufacturing of Food products, Printing and

reproduction of recorded media, and Repair and Installation of Machinery and equipment, still constituted around 40.1 per cent of total value-added in the Industrial sector. During the same period, some sub-sectors, such as the Manufacturing of Computer, electronic and optical products, of Fabricated metal products, and of other Non-Metallic mineral products, significantly enhanced their prominence in the sector. These were compensated by a declining share of total GVA in the sector from the Manufacturing of Food products and of Basic pharmaceutical products and pharmaceutical preparations.

The Services Sector

Table 3.3 – Developments in the Services Sector

	2015/2019 (Average)	2020
Annual Growth Rate	*9.8%*	*-4.7%*
Share of Total Economy	*89.1%*	*89.0%*
Share of Total Employment *(National Accounts Definition)*	*86.8%*	*88.1%*
GVA per Worker Growth	*3.4%*	*-8.6%*

Source: NSO

The growth of the Services sector has transformed both the composition of output and employment in Malta. The Services sector contributed 8.1 percentage points to GVA growth in 2019, amounting to 89.3 per cent of total value-added in the economy. The share of workers employed in the Services sector increased from 82.7 per cent in 2010, to 87.9 per cent of the total workforce in 2019, and 88.1 per cent in 2020.

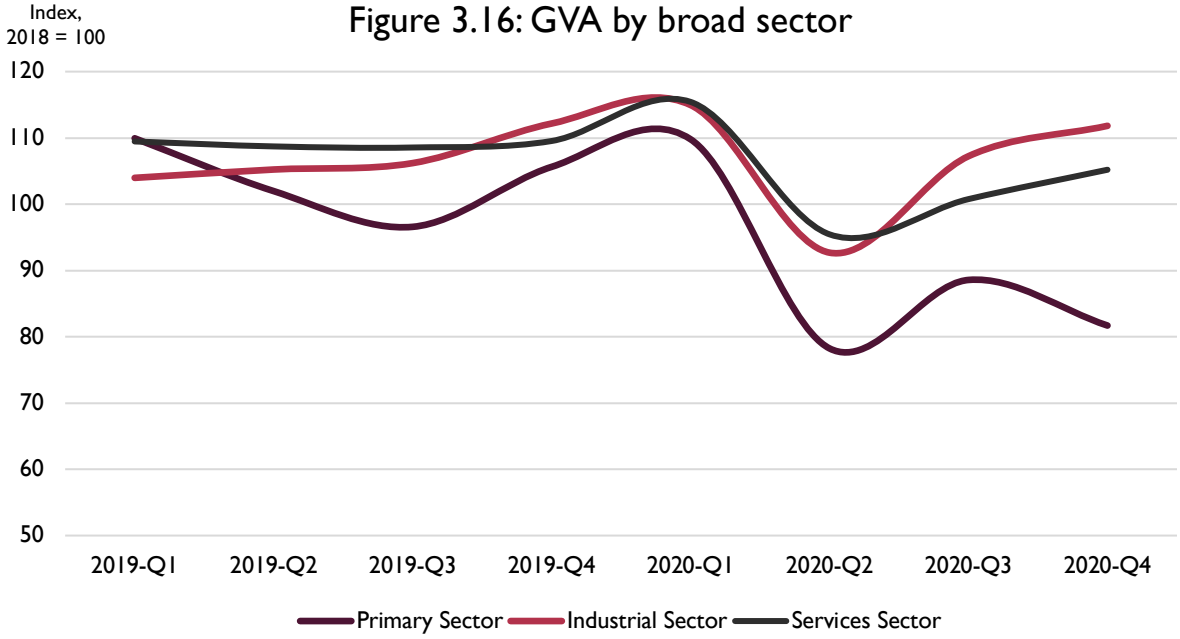
In terms of GVA, the largest services sub-sectors include Gambling and betting activities, Real Estate activities, Public Administration and defence, Financial services activities, and the Wholesale and Retail Trade services sector. Recent developments in digital services and other high skilled sectors have also contributed to an increase of the share of Management consultancy activities, Advertising and marketing research and Computer programming and related activities. These sectors have notable interlinkages with the Remote Gaming and Financial services sectors. These sectors generated significant GVA for each unit of labour employed, thus indicating high productivity.

Moreover, a heightened demand for housing and rental properties led to robust growth in the Construction sector. On the other hand, the highly labour-intensive tourism-related services such as Accommodation, Food and beverage service activities, Transport and travel agencies, together with the Wholesale and Retail Trade sector, constituted 30.8 per cent of the workforce in the sector, but only generated 23.0 per cent of value added in 2019, suggesting that these sectors generate relatively low productivity.

The sectoral impact of Covid-19

The Covid-19 pandemic, along with its economic effects, is impacting all sectors in the economy, albeit with different intensities and through multiple channels. In terms of GVA, the Primary sector contracted by 14.3 per cent, while the decline witnessed in the Services sector, which contracted by 4.7 per cent outpaced the drop in the Industrial sector which declined by 0.6 per cent (Figure 3.16). This is a result of the fact that the Services sector includes tourism-related activities and contact-intensive personal services, which were restricted due to the containment measures imposed in Malta and abroad. In fact, the NACE category which was worst impacted is the Wholesale and Retail, Transportation and Accommodation sector, as it contracted by 33.0 per cent in 2020 over the previous year. Following the strong performance of the Professional, Scientific and Technical activities sector throughout the previous five years, the sector contracted by 4.1 per cent.

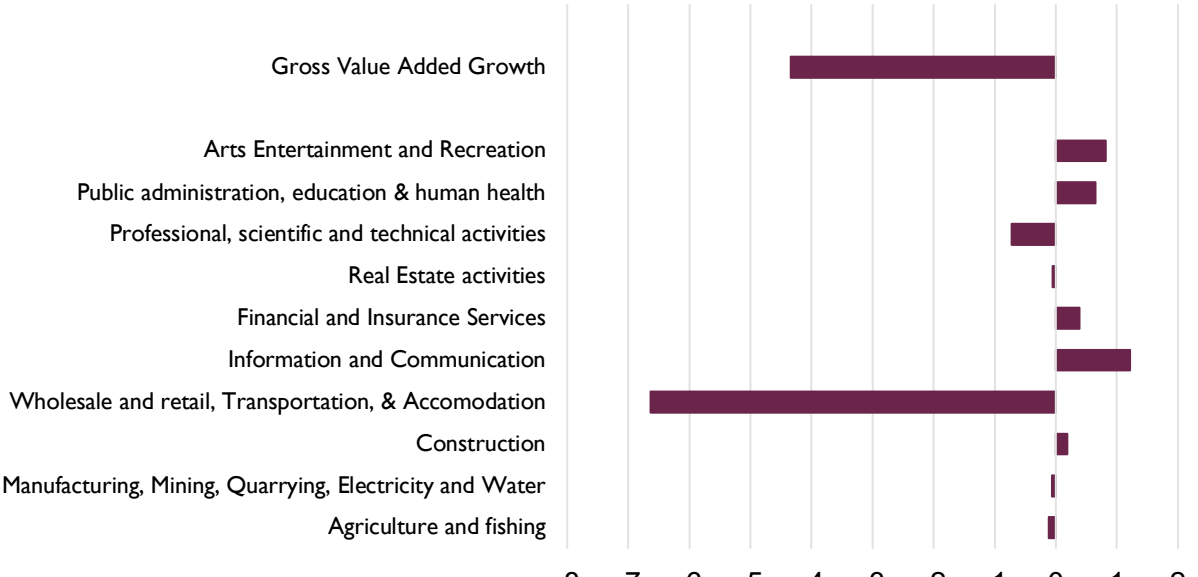
Figure 3.16: GVA by broad sector



Source: NSO

The recovery in the Services sector has been gradual and is expected to be rather slow particularly in the case of tourism, in view of its dependence on global epidemiological developments and the vaccine rollout. However, some sectors proved to be relatively resilient, considering that the nature of their activities are compatible with a shift in behaviour such as teleworking and e-commerce. Gaming and betting activities in the Arts, Entertainment and Recreation sector grew by 9.6 per cent in 2020. Also consistent with a change in consumption behaviour, the Information and Communication sector surged by a remarkable 15.3 per cent, in terms of GVA. Moreover, the Financial Services and Insurance also grew by 4.9 per cent, followed by the Construction (4.3 per cent), Public Administration (3.9 per cent) and Manufacturing (0.3 per cent). It is worth noting that Financial Services and Insurance activities sector continue with its operations, in contrast to other sectors, which were constrained by public health restrictions. The same can be said for the Construction sector where activity remained positive.

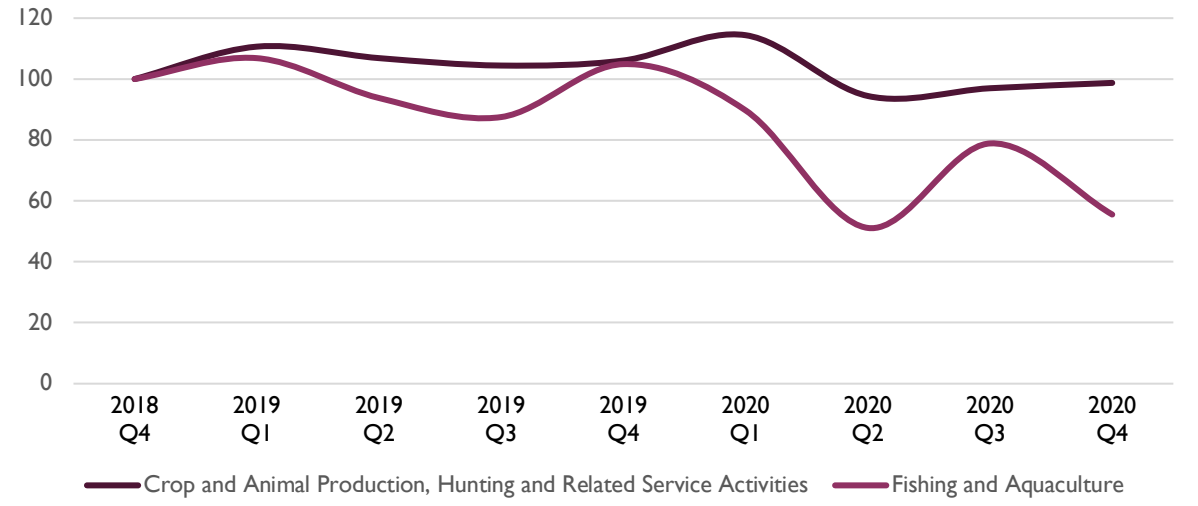
Figure 3.17: Contributions to GVA Growth, 2020



Source: NSO

The pandemic has also adversely impacted the Primary sector, as it suffered a substantial decline in GVA. This was mainly driven by Fishing and aquaculture (Figure 3.18), reflecting the partial restrictions imposed on restaurants and hotels, which traditionally sustained demand for these fisheries products particularly in peak tourism season. On the other hand, the Crop and animal production sub-sector was overall relatively resilient to the pandemic, with only a modest decline in GVA, possibly due to a substitution effect in spending on local produce rather than imported products. This development in noteworthy in light of strategic importance of the food production and security of its supplies.

Figure 3.18: Developments of GVA in Primary Sector (2018 = 100)

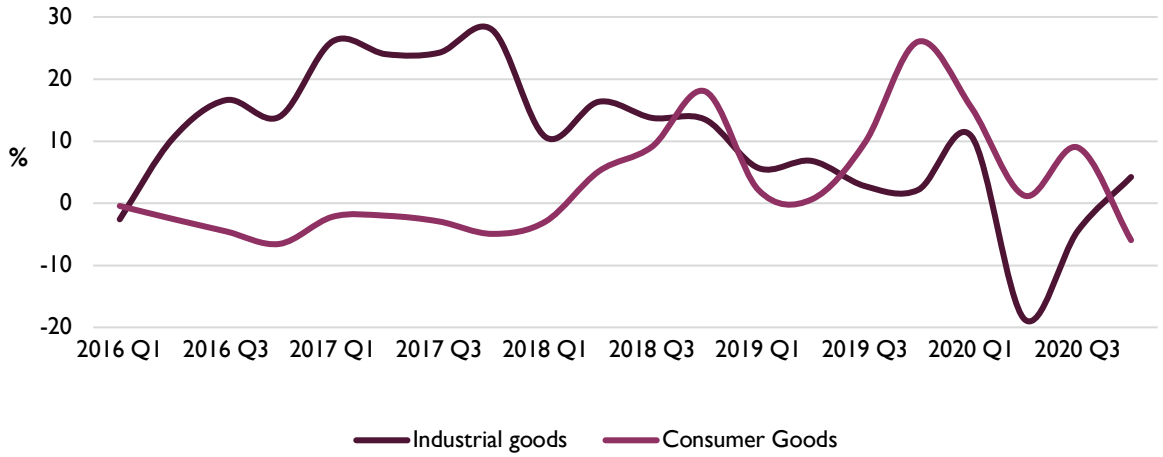


Source: NSO

The impact of COVID-19 on the industrial sector is diverse and depends on the nature of manufacturing operations. The manufacturing of beverages witnessed a significant contraction of 19.6 per cent in 2020, due to lower demand from restaurants and entertainment establishments whose operations were restricted to curb Covid-19 infections and also in view of the decrease in tourism flows. Furthermore, other industries were affected by factory closures abroad, leading to supply-chain disruptions. Main industries that suffered severe contractions include the manufacturing of Fabricated metal products (21.0 per cent), the manufacturing of Furniture (19.1 per cent), manufacturing of Computer, electronic and optical products (11.5 per cent) and manufacturing of Rubber and plastic products (8.7 per cent). These five manufacturing industries made up 28.3 per cent of value added in the Industrial sector in 2019. On the other hand, the manufacturing of food products was relatively robust, surpassing 2019 levels, after a small contraction in the second quarter. Manufacturing of Basic metals, Printing and reproduction of recorded media, Manufacturing of Electrical equipment, and Manufacturing of Basic pharmaceutical products and preparations all recorded significant growth rates of 72 per cent, 31.7 per cent, 21.2 per cent and 14.7 per cent respectively demonstrating the resilience of most manufacturing activity during the COVID-19 pandemic.

Manufacturing industries were also grouped in industrial and consumer goods in Figure 3.19, according to Main Industrial Groupings (MIG). From 2016 to 2018, manufacturing of consumer goods recorded declines, primarily driven by the Manufacture of Food products and Manufacture of Basic pharmaceutical products. However, these sectors recovered in 2019, and together with Printing and reproduction of recorded media, experienced positive growth in 2020, as manufacturing of consumer goods grew by 3.9 per cent in 2020. On the other hand, industrial goods endured a substantial hit in 2020, contracting by 5.2 per cent in the first three quarters of 2020, before partially recovering in the fourth quarter by 4.2 per cent. Consequently, manufacturing of industrial goods contracted by 2.7 per cent in 2020, continuing a downward trend of growth in these industries. Such diverse impact can be attributable to demand from ancillary sectors that make use of intermediate and investment goods produced by industries such as Fabricated metal products, manufacturing of Rubber and plastic products, and Computer, electronic and optical products.

Figure 3.19: Growth for Industrial and Consumer Goods (GVA, q-on-q)



Source: NSO

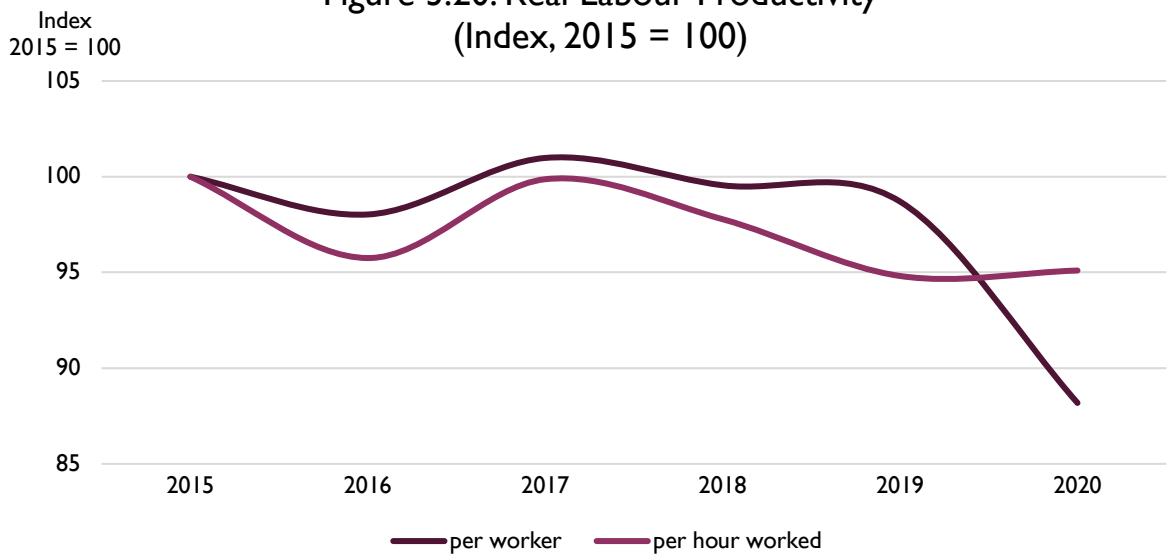
Thus, all in all, the decline witnessed in the Industry sector was significantly less than that recorded in the Services sector. Once the containment measures were lifted, many manufacturing operators were able to return to their workplaces and resume their operations with social distancing measures in place. Compounded with strong external demand for certain industrial manufacturing components such as currency printing, pharmaceuticals, semi-conductors and automotive equipment, the pace of recovery in the Industry sector was faster than in the other sectors.

Undoubtedly, the most hard-hit sectors were tourism-related activities and ancillary services, which constitute a significant part of the economy, both in terms of GVA and of employment. Other services activities proved to be resilient to the economic effects of the pandemic, and some were positively affected, since the nature of their activities and business models accommodate the practice of teleworking and e-commerce, in addition to a change in spending behaviour, which was evident in Gambling and betting activities. Such diverse impact across economic sectors accentuates the importance of having a diversified economy, to withstand future external shocks.

Labour Productivity

This section delves into the developments in labour productivity at an aggregate and at sectoral level. Productivity is an important economic measure since it is instrumental to increase long-run economic growth. Labour productivity can be defined as the quantity of goods and services produced for each unit of labour input. In this section, real GDP is used as a measure of production when assessing the overall economy, while nominal GVA is used at a sectoral level. Labour input can be expressed both in terms of persons employed or hours worked. Productivity as measured by the number of employed workers, or by the number of hours worked are both good indicators of productivity, however, they show a contrasting picture, especially for 2020.

Figure 3.20: Real Labour Productivity
(Index, 2015 = 100)

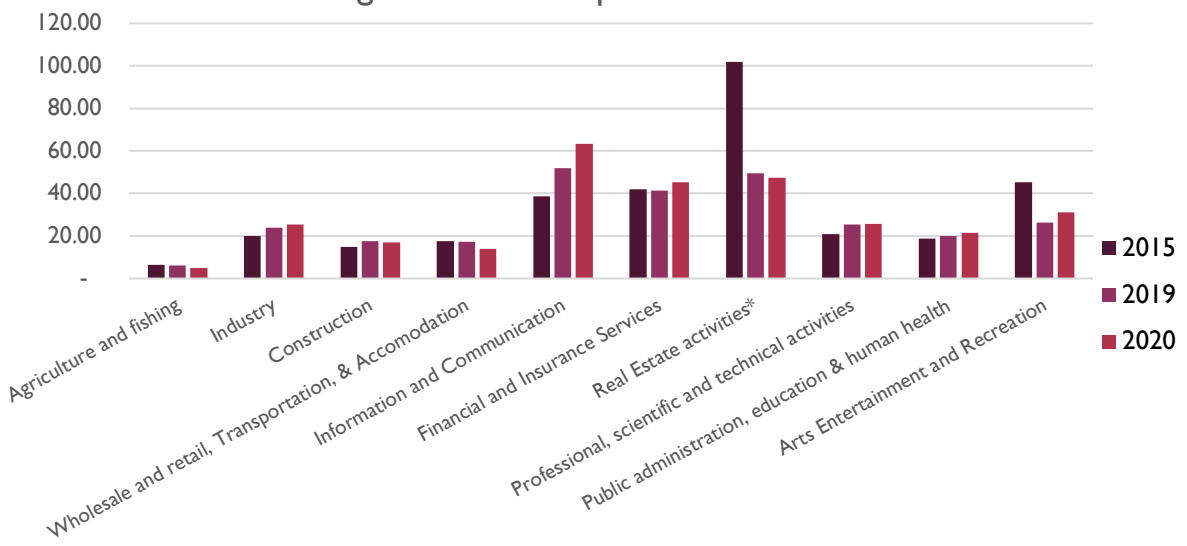


Source: NSO

During the previous five years, real labour productivity remained relatively stable when measured per employee, but showed signs of a trend decline, particularly after 2017, when measured per hour. By 2019, real labour productivity was below the levels of 2015 in both metrics, but substantially so when measured per hour, as evidenced by Figure 3.20. One should note however, that this comes after a period of significant productivity growth, where between 2010 and 2015, real labour productivity grew at an average annual growth rate of 3.0 per cent and 3.9 per cent, for per worker and per hours worked respectively.

Since government support enabled firms to retain workers, only adjusting to lower economic activity by reduced working hours, real labour productivity by hours worked increased marginally by 0.3 per cent. As total hours worked are expected to recover once restrictions are eased and the economic recovery kicks off, real labour productivity by worker should rebound strongly. The optimal withdrawal of job retention schemes will play a fundamental role in productivity developments. This calls for a balanced approach as premature withdrawal of measures would impact the labour market, leading to declines in employment, hours worked and output. On the other hand, maintaining such measures too long may delay sectoral reallocation of labour towards more productive sectors, and increasing the risk of extending support to non-viable firms, thus exerting downward pressure on productivity.

Figure 3.21: GVA per Hour Worked

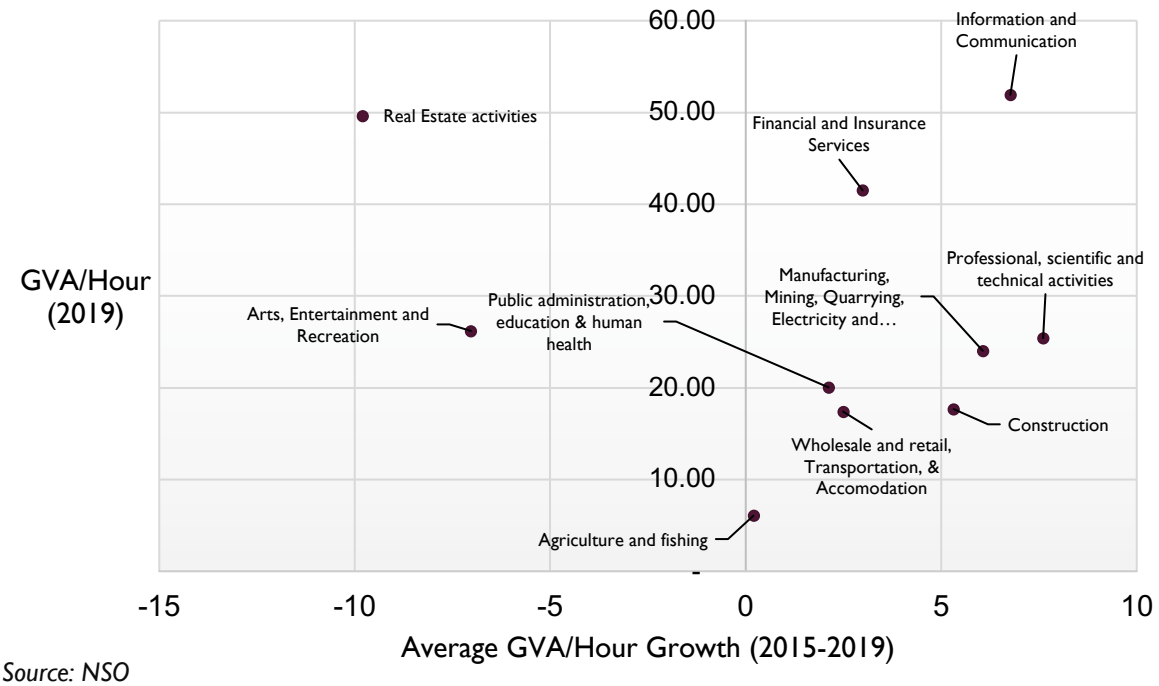


Source: NSO

*GVA for the Real Estate sector was adjusted to deduct imputed rents, however, data for hours worked is considered unreliable.

While recording high productivity rates, in terms of hours worked, the Arts, Entertainment and Recreation sector, experienced a decrease in such rates between 2015 and 2019, as shown in Figure 3.20. This decline in productivity is not surprising, as the online gaming industry moves to a phase of maturity, following the initial period of rapid growth. Other service sectors with notable GVA per hour include the Professional, Scientific, and Technical activities sector, the Financial and Insurance activities sector and the Information and Communication sector, which have recorded a constant growth in productivity from 2015 to 2019. While generating relatively lower productivity when compared to the sectors, both the Construction and Industrial sectors experienced an increase in GVA per hour worked between 2015 and 2019. By contrast, the Agriculture and fishing, and the Wholesale and retail trade, transportation, and accommodation sector, which are the sectors that generate the least GVA per hour worked, recorded a reduction in such rates during the same period. These two sectors experienced a substantial deterioration in productivity in 2020, since the impact of the pandemic was more significant on its value-added rather than hours worked.

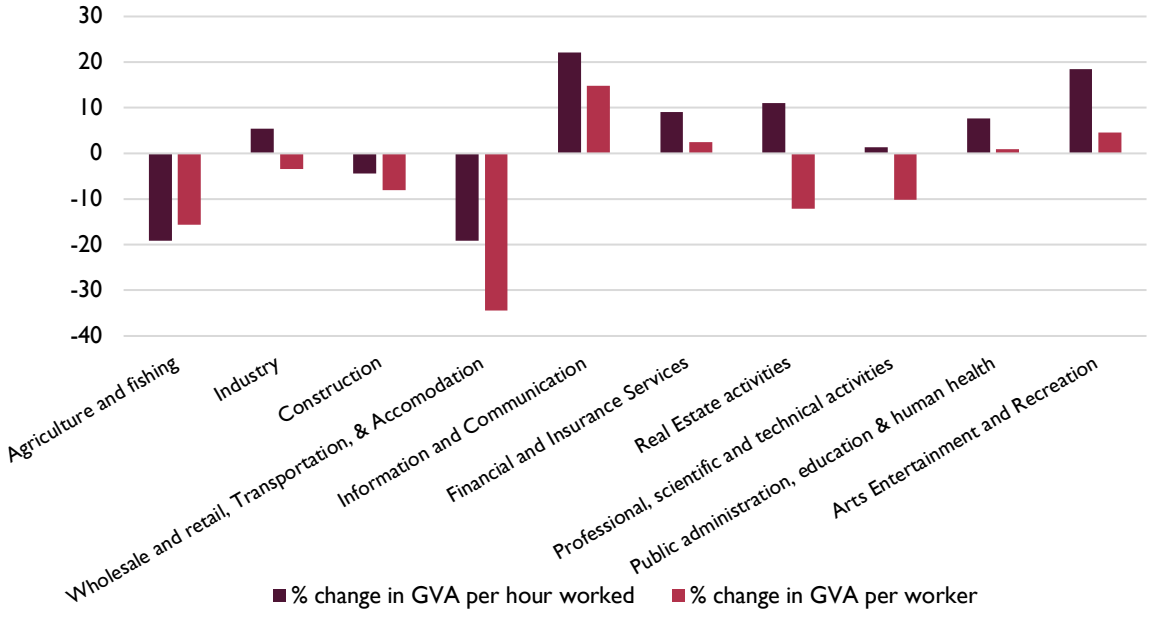
Figure 3.22: GVA/hour in 2019 vs. Average GVA/hour growth (2015-2019)



Source: NSO

Figure 3.21 indicates that most economic sectors recorded positive productivity growth from 2015 to 2019, and aside from the Arts, entertainment and recreation and Real estate sectors, it seems that sectors with a high productivity in 2019 were still recording healthy average productivity growth rates.

Figure 3.23: Labour Productivity Growth (2020-2019)



Source: NSO

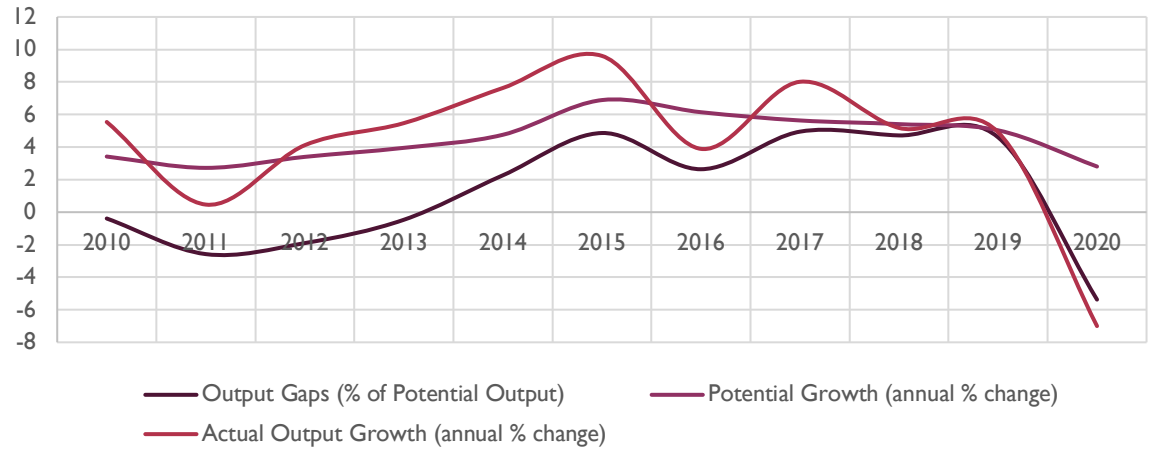
In 2020, the Financial Services and Insurance, Information and Communication, Public Administration and the Arts, Entertainment and Recreation sector, all registered increases in both metrics of productivity. On the other hand, the Industrial, the Professional, Scientific and Technical activities, and the Real Estate activities sectors recorded an increase of productivity in terms of hours worked, but a decrease when measured in terms of total employees, while the decline in productivity in the Wholesale and Retail trade, Transportation and Accommodation sector is around 15 percentage points more when measured in terms of GVA per worker when compared to the hourly rate. This suggests that labour hoarding was even more prevalent in this sector, and hours worked could not be reduced sufficiently to compensate for the substantial loss in output experienced during the pandemic.

Potential Output and Output Gap

Potential output defines the level of output which can be achieved using available production factors without creating inflationary pressures. The output gap measures the difference between the actual output of an economy and its potential output expressed as a percentage of GDP. Figure 3.23 shows the actual output (GDP) growth registered by the Maltese economy during 2010-2019, together with the estimated growth in potential output and the output gap. The output gap is thus indicative of the cyclical developments prevailing in the Maltese economy. Malta's potential output has been consistently expanding since 2012.

The output gap was negative between 2010 and 2013 following the international recession and the subsequent contraction of the domestic economy in 2009. It turned positive as from 2014 as the economic recovery was outpacing the increasing productive capacity of the economy.

Figure 3.24: Potential Output and Output Gap



Source: NSO, MFIN Calculations

Given the extent of the impact of the pandemic on Malta's economy, as expected the output gap turned negative during 2020 standing at -7.0 per cent. Furthermore, the COVID-19 pandemic led to significant supply-side disruptions which also affected the economy's productive capacity. In the short-term, the labour contribution to potential output is being supported by sizeable policy measures, potentially limiting longer-term scarring in the Maltese labour market. Supportive financial conditions are also providing liquidity to firms, but low demand and high uncertainty have already impacted private investment during 2020 as discussed previously in Section A of this Chapter.

In the short term, government supportive measures are limiting the scale of the impact of the pandemic on potential output. However, in the long run, it depends on how long the pandemic will last and the extent to which policy measures are able to protect the economy from excessive scarring. The current crisis is likely to induce some structural changes in the Maltese economy and economic policies could play a pivotal role in this transformative process.

C. A Model-Based Simulation of the Impact of COVID-19 on the Maltese Economy

This section presents the simulated quantified economic impacts of the COVID-19 pandemic on the Maltese economy with and without Government support measures using the Structural Annualised Econometric Model for Malta (SAMM) of the Economic Policy Department.

SAMM is a macro-sectoral model built around the Keynesian tradition of macroeconomic models, where output and employment are driven by the expenditure components of aggregate demand. The model incorporates the use of an input-output framework, through the utilisation of symmetric input-output tables (SIOT). Such tables show the economy's inter-industry transactions through the disaggregation into 51 product and 51 industries. Whilst the main purpose of the model is to perform policy simulations at a detailed product or sectoral level, it can also be used to make short-term economic projections and counterfactual analysis. The emphasis on structure makes it feasible to address a variety of policy questions and to measuring direct and indirect effects of unforeseen economic shocks. Hence, this model is appropriate for the assessment of the COVID-19 impact on the Maltese economy as well as the impact of Government support. The assessment should be construed as a lower bound measure of the impact of COVID as the model does not capture the effect of liquidity constraints which could have caused solvent firms to close down and lay off many more workers in the absence of Government liquidity support measures.

The impact of COVID-19 is compared to a counterfactual, no-COVID-19 baseline scenario where growth would have continued to follow model-based projections without the effect of COVID-19 on global and domestic demand, including higher external demand conditions, higher commodity prices and continued growth in tourism. In overall terms, we find that the economy would have performed much worse in a no Government support scenario, confirming that the fiscal support measures have been effective in alleviating part of the impact of the COVID-19 pandemic. Whilst the level of uncertainty surrounding the pandemic is quite substantial, with specific risks associated with virus mutations and vaccine supplies, it is projected that a partial economic rebound will take hold in 2021 with the economy projected to return to 2019 levels by 2022 as a result of the economic support provided by government in line with official forecasts. Indeed, in the absence of government support the economic contraction would have been greater and thus, the recovery would be significantly delayed further.

The COVID-19 impact in a no government scenario: A model-based simulation

To identify the direct and the indirect impacts of the COVID-19 crisis in the absence of Government support a counterfactual analysis is employed using the SAMM model. The aim of this exercise is to reveal the aggregate impact on the Maltese economy as well as to underscore the industries which would have suffered the most in the absence of Government support.

Malta's high dependence on the tourism industry has made it especially vulnerable to the COVID-19 pandemic, such that the impact on tourism represents the single greatest shock on the economy in 2020. To model the effect on tourism, tourism expenditure is shocked to represent an 80 per cent decline in 2020.[17] Moreover, a slow and partial recovery in tourism is assumed from 2021 onwards as the rollout of the vaccine worldwide is expected to take time and as air-routes gradually recover. This suggests that some of the losses sustained in this sector will persist and slow down the recovery. These assumptions are more pessimistic than present assumptions in official projections of Government because we are modelling a no-government support scenario. Due to the model's linkages across products and industries, both the direct impact on the tourism industry, essentially accommodation, food services, transport, and retail, as well as spill-over effects on indirectly linked sectors were estimated.

Several exogenous variables were jointly shocked: world demand, international prices, and oil prices were updated to reflect latest Consensus Forecasts. In 2020, the growth rate of Malta's key trading partners (WGDP) is 7.9 percentage points lower than in the counterfactual baseline scenario (without COVID-19). The world economy is assumed to start recovering over 2021-2022 where it is assumed to record a growth rate of 4.2 per cent in 2021 and 3.8 per cent in 2022. Accordingly, in 2020, world prices are lower in the COVID-19 scenario (compared to the no-COVID-19 baseline scenario) and are assumed to recover to 2019 levels by 2021. Lastly, oil prices are also substantially lower in the COVID-19 scenario to reflect the slump in oil prices; the percentage points differences from growth in the baseline scenario for 2020, 2021, and 2022 are 43.2, 23.8 and 23.8 respectively.

Since SAMM is a demand-driven model, additional shocks were imposed on the model to capture supply-side impacts of the pandemic that go beyond the typical demand shock. Using available national accounts statistics for 2020 as a guide, the model was adjusted to capture positive supply-side developments in certain sub-sectors which have experienced growth because of COVID-19. Accordingly, the following export product categories were shocked in SAMM: Gambling and betting; Basic pharmaceutical products and pharmaceutical preparations; Paper and printing; Other non-metallic mineral products; Water, sewerage, and waste; and, Machinery and transport equipment. Since initially we wanted to exclude Government-induced effects resulting from fiscal policy measures from this counterfactual scenario, we were careful to model only developments in those sub-sectors that have not been subject to demand-side Government measures.

Table 3.4 reports the main results of the impact of COVID-19 in the absence of Government support. The figures represent the difference between the baseline no-COVID-19 scenario and the scenario with COVID-19 but without Government support.

[17] This corresponds to the actual decline in tourism expenditure during 2020, which amounted to 79%.

It is to be noted that SAMM is not designed to capture balance sheet effects. Liquidity shock resulting from the recession can lead to much more severe number of solvent but illiquid firms. Consequently, the model counterfactual may underestimate the full effect of COVID-19 on the economy. Nevertheless, the shock on corporate profits is in itself indicative of the extent of the liquidity squeeze caused by the Pandemic. Overall, around 1/5th of corporate profits would have been wiped out, with corporate profits in the most affected industries falling by around 70 percent to 80 per cent compared to the non-COVID baseline.

Table 3.4 Economic impact of the COVID-19 crisis without Government support.

	2020	2021	2022	2023	2024	2025
Impact on GDP (constant prices)						
diff from base level (%)	-15.9	-17.5	-13.2	-9.1	-4.0	-1.2
diff from base growth (pp)	-16.6	-2.0	5.4	4.9	5.8	3.0
Impact on Operating Surplus (current prices)						
diff from base level (%)	-19.3	-22.7	-16.9	-9.0	1.0	6.1
diff from base growth (pp)	-21.0	-4.6	8.0	9.8	11.4	5.2
Impact on Employment						
diff from base level (%)	-4.5	-6.8	-6.9	-5.4	-2.9	-0.6
diff from base growth (pp)	-4.6	-2.5	-0.1	1.6	2.7	2.5
diff from base level (headcount)	-10,637	-16,522	-16,845	-13,417	-7,325	-1,471

According to this simulation, without government support, it is estimated that the pandemic shock would have resulted in the value added contracting by 50 per cent or more in the accommodation and the food service activities sector. Due to their strong interlinkages with the tourism sector, the transportation and storage sector, the wholesale and retail trade sector as well as the agriculture and fishing sector are also hard-hit in the COVID-19 scenario. On the other hand, financial and business services, and professional, scientific, and technical activities are less impacted due to limited supply disruptions. Similarly, the manufacturing sector is quite resilient reflecting an increase in global demand especially for certain products such as automotive parts and microchips, currency printing, and pharmaceuticals. Within the arts, entertainment, and recreation section, the gaming sector performs exceedingly well due to increased global demand while art and sport activities suffer. In contrast, in the absence of government incentives, the construction sector would have performed quite poorly especially since this sector is usually sensitive to the business cycles.

Table 3.5 Main Sectoral Impacts in 2020 of the COVID-19 crisis **without** Government Support (per cent change from Baseline No-COVID-19)

	Total Value Added (Real)	Total Operating Surplus	Total Employment
Agriculture, fishing, and quarrying	-14.7	-25.2	-3.1
Manufacturing	-2.7	-5.7	-2.3
Construction	-14.3	-19.7	-3.1
Wholesale and retail trade	-15.1	-21.0	-3.3
Transportation and storage	-31.8	-47.5	-14.8
Accommodation	-61.4	-66.2	-46.6
Food services	-52.0	-76.9	-13.6
Financial and insurance activities	-2.4	-11.8	-0.9
Professional, scientific, and technical activities	-0.2	-1.6	-1.1
Art and Sport	-10.3	-15.8	-2.7
Gambling and betting	15.7	15.1	2.2

The Mitigating Impact of Fiscal Support Measures: A Model-Based Simulation

The impact of COVID-19 on the economy involves not only a demand shock but also supply-side disruptions. Thus, the resulting magnitude of the economic recession is extraordinary, not only in Malta but worldwide. Moreover, this is occurring at a time when monetary policy in the Euro Area had reached its limits with the nominal interest rate at its zero-lower bound. This meant that fiscal policy was effectively the only tool that Governments could use to mitigate the impact of COVID-19. In Malta, the government has introduced extensive fiscal measures aiming to support businesses and employment as well as to assist the economic recovery. Using the SAMM model, we estimated the main fiscal support measures aimed at restoring aggregate demand during the crisis. These measures are summarised in Table 3.6.

Table 3.6 Fiscal Measures to Mitigate the Impact of COVID (€ millions) as at April 2021

	2020	2021	2022	2023
Subsidy on Electricity bill to businesses	30			
Wage Supplement	235	180		
Rent Subsidy	50			
Voucher Scheme	34	50		
Above Trend Increase in Infrastructure Spending	130	180	160	110
Extraordinary Increase in Intermediate Consumption	140			
Extraordinary Loss in Market Output	88			
Sub-Total	707	410	160	110
in per cent of GDP	6.1	3.5	1.3	0.8
Lower Excise on Petroleum	10%			
Lower Stamp Duty	20%			

These measures exclude a few other important measures aimed at supporting enterprise liquidity and ensure that viable enterprises remain solvent during the pandemic, thus preventing a temporary shock to the economy from becoming a permanent structural shock with longer-lasting negative effects. These principally include tax payment deferrals, the moratoria on loan repayments, credit guarantees, and social redistributive measures. Such measures, whilst essential to mitigate the fallout from the pandemic, are namely balance sheet support measures which cannot be readily modelled by SAMM. Therefore, the results presented here represent a lower bound and the impact of all fiscal support measures probably exceeds the impact illustrated in this note.

The fiscal support measures mitigate the impact of COVID-19 and prevent an even deeper contraction in GDP. The positive impact of these measures is estimated at a minimum of 4.2 per cent of GDP in 2020.

Table 3.7 Economic Impact of Fiscal Support Measures with Government Support
(per cent change from without Government Support Baseline scenario)

	2020	2021	2022	2023	2024	2025
Impact on GDP						
diff from base level (%)	4.2	3.3	2.3	1.9	1.0	0.8
diff from base growth (pp)	3.7	-0.9	-1.1	-0.5	-1.0	-0.2
Impact on Operating Surplus						
diff from base level (%)	15.3	9.7	3.6	3.0	1.4	1.2
diff from base growth (pp)	13.5	-5.1	-6.3	-0.7	-1.7	-0.3
Impact on Employment						
diff from base level (%)	0.8	1.2	1.1	0.8	0.3	0.1
diff from base growth (pp)	0.8	0.4	-0.1	-0.3	-0.5	-0.3
diff from base level (headcount)	1,916	2,771	2,560	1,865	778	129

Table 3.8 Main Sectoral Impact in 2020 of Government Support on Real Value Added

(per cent change from without Government Support Baseline scenario)

Agriculture, fishing and quarrying	2.4
Transportation and storage	3.6
Manufacturing	3.9
Art and Sport	4.3
Wholesale and Retail trade	5.0
Food services	6.8
Construction	6.8
Accommodation	9.9

In general, the economic impact of the main fiscal measures has supported those industries mostly impacted by the COVID-19 crisis. This reflected both direct effects from well-targeted fiscal support measures - such as accommodation, food services, and wholesale and retail benefitted through Government vouchers, and the construction industry benefitted through the stamp duty measure –

as well as indirect effects through sectoral interlinkages. While the fiscal support measures have generally been well targeted, certain sectors have benefitted more strongly than other hard-hit sectors, such that the distribution of Government support measures may have been skewed toward certain sectors. For instance, in a no Government support scenario Construction would have experienced a 14.3 per cent drop in total value added while Food services would have a witnessed a drop of 52.0 per cent (refer to Table 3.5). Yet, the impact of fiscal support is equivalent in both sectors – a 6.8 per cent change (Table 3.8).

To conclude, the results of the simulations using the SAMM model show that the effect of the fiscal measures aimed to mitigate the impact of the COVID-19 pandemic reaches at least 4.2 per cent of GDP in 2020. This consequently helps to contextualize the economic rationale of the recent extension of the measures as announced in the first quarter of 2021. Indeed, it is important not to withdraw the fiscal support prematurely as this would result in further employment and income losses. At the same time, if such support is extended for too long, Government would be artificially maintaining jobs and unviable firms afloat, which could hinder the efficient allocation of resources and weigh on future productivity. Given the severity of the economic recession, it is important to ensure effective support until the economy recovery regains momentum, whilst at the same time, gradually shifting from short-term support measures to more growth-enhancing policies.

Summary

As a small open economy, Malta's performance has always been highly dependent on the economic performance of its trading partners. Indeed, net exports were the largest contributor to the decline in GDP in 2020, underpinned by decreased foreign demand, restrictions on travel related activities and disruptions to the global supply-chain. However recent growth in export-oriented services including online gaming and financial services, mitigated the impact of the pandemic as these sectors showed resilience during 2020 and have mitigated, to some extent, the shock experienced by the tourism industry. This highlights the importance of economic diversification to reduce Malta's vulnerability to economic shocks.

Domestic demand has also been adversely affected by Covid-19. The investment to GDP ratio has been relatively high in the last five years, mainly owing to increases in investment in dwellings. However, due to heightened uncertainty surrounding the outlook of the economy, private investment has also been negatively impacted by the pandemic as investment projects were delayed to a further date. Going forward, businesses are faced with a high degree of uncertainty due to the pandemic and as a result, some firms may be delaying their investment and innovation plans. This suggests that there may be scope to leverage the boost in digital adoption and act to help broaden the reach and use of digital technologies, especially among smaller and harder-to-reach firms to reduce uncertainty and pave the way to a stronger, productivity-driven recovery.

The decline in consumption and investment was partially offset by the increase in government expenditure as government rapidly increased its spending to mitigate the impact of the pandemic on the economy and the wider community. Looking ahead, whilst Government needs to continue to support the recovery, there should be a gradual shift from short-term, defensive income support responses to growth-enhancing policies.

The Maltese economy has become more service-oriented over the past two decades, as evidenced by the increasing share of services in terms of value added and employment. This is a consequence of both an expansion of existing services, such as Financial services, but also the creation of new industries such as the Gaming industry. Strong interlinkages were developed between the Gambling and betting activities and other economic sectors, leading to significant growth for auxiliary services including, Financial services, Management consultancy, Advertising and marketing research, and Computer programming and related activities.

The Covid-19 pandemic exposed Malta's reliance on services. Services sectors that suffered the most substantial declines during 2020 were contact-intensive and tourism-related activities which form part of the Wholesale and Retail Trade, Transportation and Accommodation sector. The Professional, scientific and technical activities sector was also exposed to the negative economic impact of the pandemic, following a period of dynamic growth. These two sectors constituted around 37.8 per cent of total GVA before the pandemic.

However, some services were able to adapt their business model and operations, and others benefitted from a change in consumption patterns, which was evident in the positive performance of the Information and Communication sector, and the Gaming and betting industry. Furthermore, the Construction sector also recorded growth in 2020, in part due to Government measures, but also in view of ongoing infrastructural and residential dwelling projects.

The primary sector was severely impacted by the Covid-19 pandemic, including the spill-over effects of lower tourism flows on the fisheries sub-sector. Despite the diminishing importance of the primary sector in the Maltese economy, the pandemic highlighted the importance of the security of food supply, especially for a small island such as Malta, which is more exposed to possible supply disruptions.

Contrastingly, the Industrial sector proved to be relatively resilient to the pandemic. In fact, the Industrial sector only contracted by 0.6 per cent during 2020. However, some manufacturing industries, especially those producing industrial goods, such as manufacturing of Fabricated metal and of Computer and electronic products, were more prone to the economic effects of the pandemic. Furthermore, the Industrial sector remains dominated by five main industries, which generated almost 40.0 per cent of total value-added in the Secondary sector in 2019. Nonetheless, further diversification, even within the Industrial sector, may be warranted to be able to withstand future shocks.

The impact of Covid-19 on labour productivity was substantial, when measured by persons employed, while productivity remained relatively stable when measured in hours worked. This reflects government support in 2020, which cushioned the impact on employment, while firms adjusted to lower economic activity by reducing labour hours. This meant that the drop in value-added significantly exceeded the decline in employment. As the economic recovery ensues, the optimal withdrawal of Government measures will play a key role in the rebound and long-run growth of labour productivity.

The Arts, Entertainment, and Recreation, Financial and insurance, and Information and communication services sectors all recorded increases in both metrics of productivity during 2020. By contrast, the Wholesale and retail, Transportation, & Accommodation sector was most susceptible to productivity losses, where the decline in GVA per worker was significantly higher than when measured in terms of hours worked. This sector was heavily restricted by containment measures, but still retained workers in anticipation of a subsequent recovery, on the back of Government support, explaining such declines in productivity. It should be noted that even before the pandemic, this sector generated relatively low productivity. Other sectors with persistently high productivity rates include Real Estate, Information and Communication, Financial and Insurance Services and the Arts, Entertainment and Recreation sectors.

Finally this chapter has shown, using a counterfactual analysis the far reaching consequences of the COVID-19 pandemic, had Government refrained from supporting the economy. In the absence of Government support, model simulations suggest that the economy could have lost around 16 per cent of its output. Model simulations also suggest that the fiscal support measures in 2020 mitigated these negative effects and cushioned the economic impact of the pandemic by at least 4 per cent of GDP. In that regard, the extension of measures announced by Government to further support the economy in 2021 are justified when considering the extended effects of the pandemic in 2021.

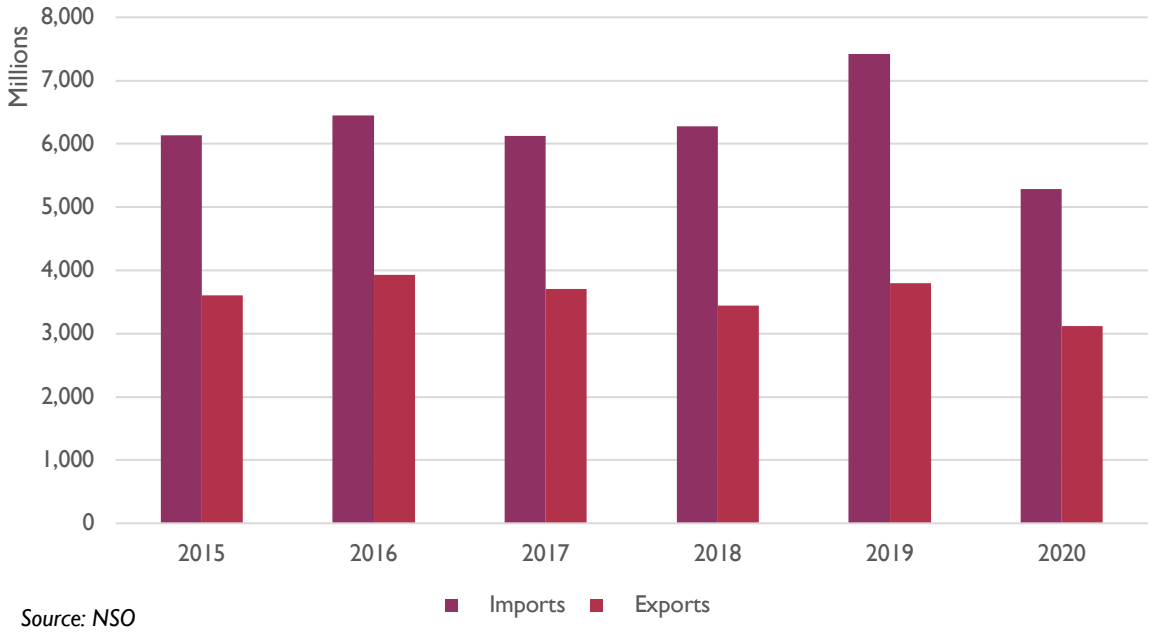
CHAPTER 4
THE EXTERNAL SECTOR, COMPETITIVENESS, AND PRICE DEVELOPMENTS

A. General Trends in imports and exports

Goods

Over the past few decades Malta's external sector saw significant structural change, as evidenced by the growing contribution of service activities such as financial services, tourism, business services and online gaming to output. During this transition Malta's trade in goods balance remained in a deficit position. The net import balance was virtually constant from 2015 to 2017, followed by an increase in 2018, and reaching a peak position in 2019, which was largely attributable to a substantial increase in Machinery and transport equipment reflecting strong investment activity in Malta (Figure 4.1). The main import categories involve importation of Fuels, Machinery and Transport Equipment, Chemicals and Food. In terms of exports of goods, Fuels, Chemicals, Machinery and transport equipment, and Miscellaneous manufactured articles form the majority of exports.

Figure 4.1: Trade in Goods



Source: NSO

In 2020 the customary trade characteristics were disrupted by the COVID-19 pandemic, which has impacted both exports and imports of goods. On the one hand, imports declined by 28.8 per cent whilst exports declined by 17.8 per cent. Table 4.1 shows a decomposition of these growth figures where Fuels and Machinery and transport equipment are evidently responsible for a substantial part of the decline in imports – reflecting both a base effect in 2019 as well as a decline in investment activity in 2020 (see Figure 3.11) - and exports. The net import balance net of fuels declined from €2,915.3 in 2019 to €1,652.3m in 2020.[18] Including fuels, the net import balance for 2020 was €2,159.8 down from €3,622.1 in 2019. The decline in fuel imports during the pandemic reflected lower fuel demand given the travel limitations as well as from households in light of remote working taking hold. In other import categories, the decreases in imports were marginal and the same applies

[18] The reason for excluding Fuels from the net import calculation is that this item is essentially very volatile in terms of both imports and exports due to offshore oil bunkering and transhipment activities in Malta which in large part do not represent economic activity in Malta.

to most categories of exports, reflecting the resilience of the manufacturing sectors as discussed in Section B of Chapter 3.

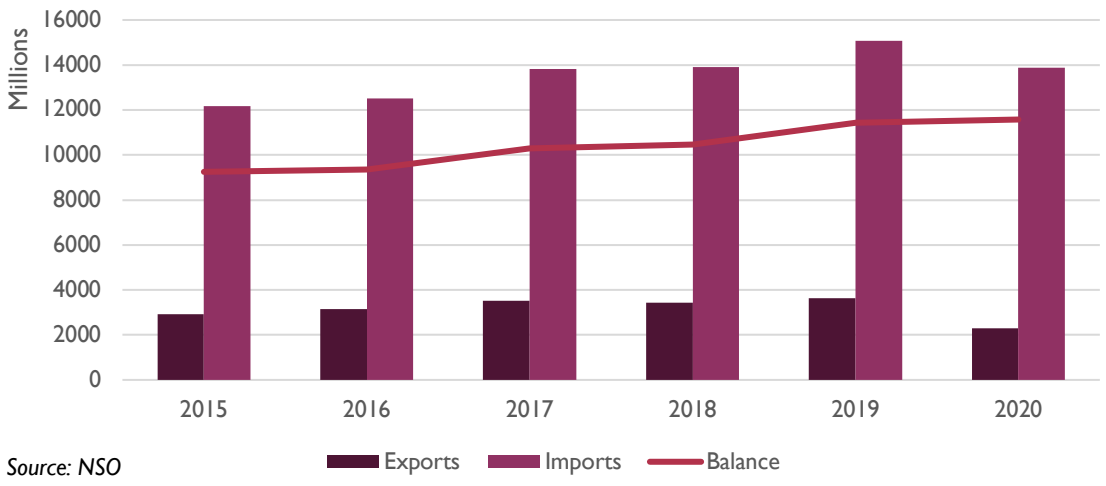
Table 4.1: Contribution to import growth and export growth 2019-2020	Imports	Exports
Food	-1.2	-1.3
Beverages and Tobacco	-0.3	-0.1
Crude Materials	-0.1	0.0
Mineral Fuels, Lubricants and related materials	-8.8	-12.0
Animal and Vegetable Oils and Fats	0.0	0.0
Chemicals	-0.2	-0.5
Semi-Manufactured Goods	0.0	-1.0
Machinery and Transport Equipment	-17.0	-2.9
Miscellaneous Manufactured Articles	-1.1	0.1
Total	**-28.8**	**-17.8**

Source: Own Calculations from NSO data

Services

The services balance has recorded a surplus position over time even during the COVID-19 pandemic (Figure 4.2). In particular, the Personal, cultural, and recreational services - the largest component of the services balance - has experienced rapid growth over the past years and has proved to be especially resilient during the current pandemic. From 2015 to 2019, the personal, cultural, and recreational services balance was quite stable, averaging at 30.8 per cent of GDP (Figure 4.3). In 2020, net exports as a per cent of GDP increased by 8.1 percentage points over the comparable period of 2019.

Figure 4.2: Services balance



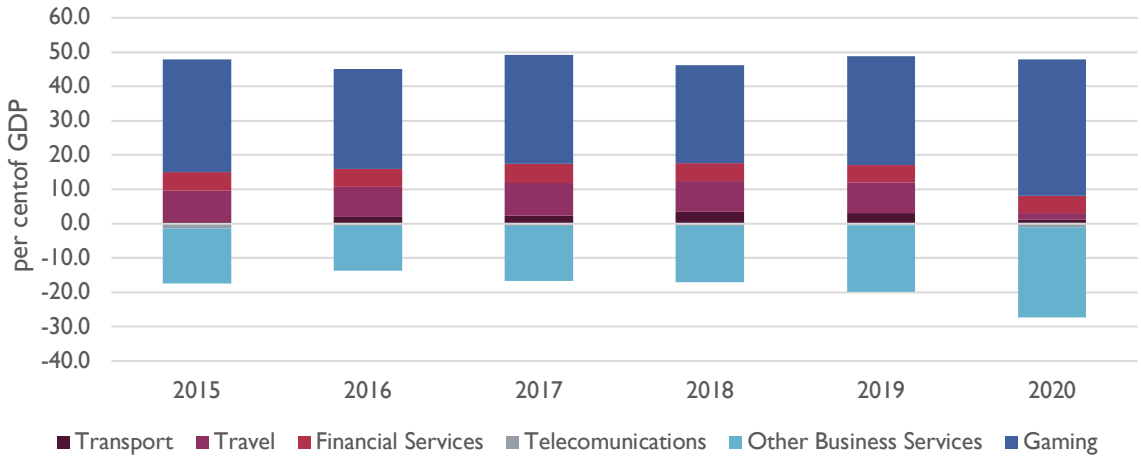
Source: NSO

The tourism (travel) services component within the balance of payments has experienced a steady increase in its trade balance over the past years, mostly reflective of upward trend in inbound tourists, which widened the gap between exports and imports of travel services. As a share of GDP, the travel services balance averaged at 9.1 per cent of GDP from 2015 to 2019. However, this trend was disrupted in 2020, as travel restrictions hampered cross-border travel, whilst individuals exhibited caution with respect to international travelling. Specifically, in 2020, the travel net export balance recorded a 7.0 percentage points decline over the corresponding period of 2019, making this item one of the most heavily impacted categories within the services items. This decline was attributable to a steep fall in tourism earnings that was barely offset by the reduction in imports due to a decrease in Maltese travelling abroad. Due to this service's linkages with the rest of the economy, other services such as transport also recorded a decline in net exports during 2020.

Net export balances from financial services have hovered around 5 per cent of GDP during 2015-2019. Even during the current pandemic, when economic activity has been severely impacted, financial services managed to stay resilient, possibly owing to minimal supply-side disruptions, as most companies quickly adapted to remote working.

Other business services represent imports and exports of professional and technical services. Since an element of imports of business services serves as an input in the production of other services, this sector has consistently recorded a net import position over time. Other business services typically mirror developments in personal, cultural, and recreational services. Correspondingly, while from 2015 to 2019, net import balances were quite steady, Other business services imports as a per cent of GDP recorded an increase by 6.8 percentage points over 2019.

Figure 4.3: Services Components Net Balances



Source: NSO

Shift-Share Analysis and Export Market Shares

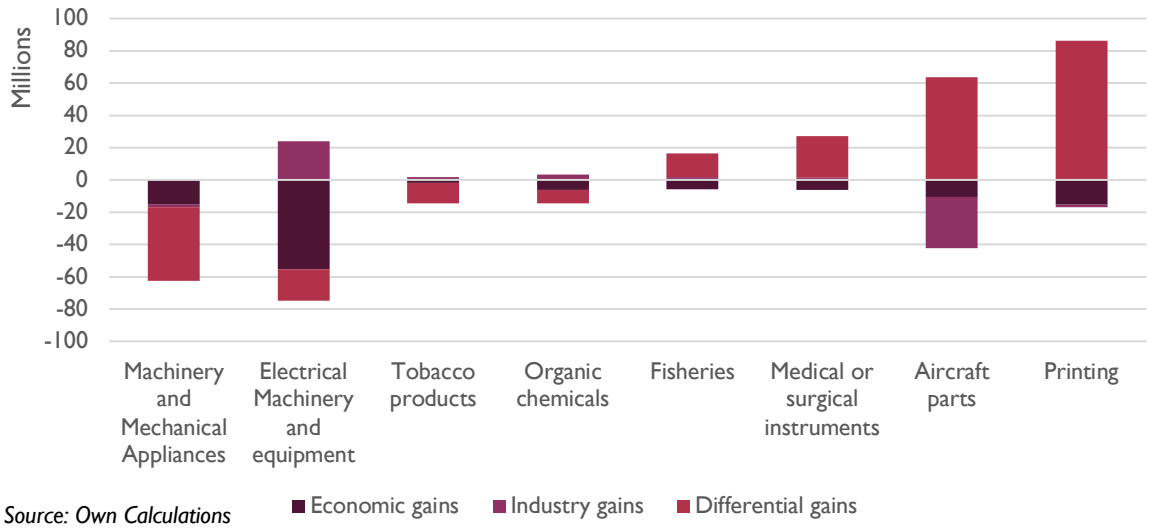
A shift-share analysis of Maltese exports enables the analysis to delve deeper into the main causes behind such changes in the trade balance for Malta. This decomposition technique separates gains into three components:

1. General Economic gains/losses: That is gains/losses in the industry stemming from the general performance of the economy of the whole region (in this case the EU27)
2. Industry gains/losses: Any gains that accrue from regional industry trends as a whole
3. Differential gains/losses: Those gains which arise from domestic competitiveness gains in the sector.

Using the shift-share analysis we can thus distinguish the export competitiveness gains of any given product or service export from developments which are either purely cyclical or those which are determined by regional consumer preferences over which we have no control. Thus the impact of COVID is captured in the changes classified under general economic gains and industry losses. In this way we can still identify competitiveness gains even during such a tumultuous period as 2020.

This analysis was conducted for Malta's exports between January and October of 2020 vis-a-vis the same period in 2019. The period of choice was subject to data availability and more specifically to identify how industries fared with respect to the pandemic. Also, the charts below present the best performing industries and the worst performing industries in terms of competitiveness gains. The period chosen would offer a good 'natural experiment' as to how the COVID-19 crisis has affected the Maltese external sector. As shown in Figure 4.4, export market shares for Malta have exhibited heterogeneous results across different types of goods and services. For instance, as regards exports of goods, fisheries, medical or surgical instruments, aircraft parts, and printing have exhibited substantial competitive gains despite having general economic and industrial losses relative to the rest of the world. At the other end of the spectrum, machinery, tobacco products and organic chemicals have registered competitiveness losses in addition to global and industrial losses whilst industrial gains made by electrical machinery and equipment were offset by both global and competitiveness losses.

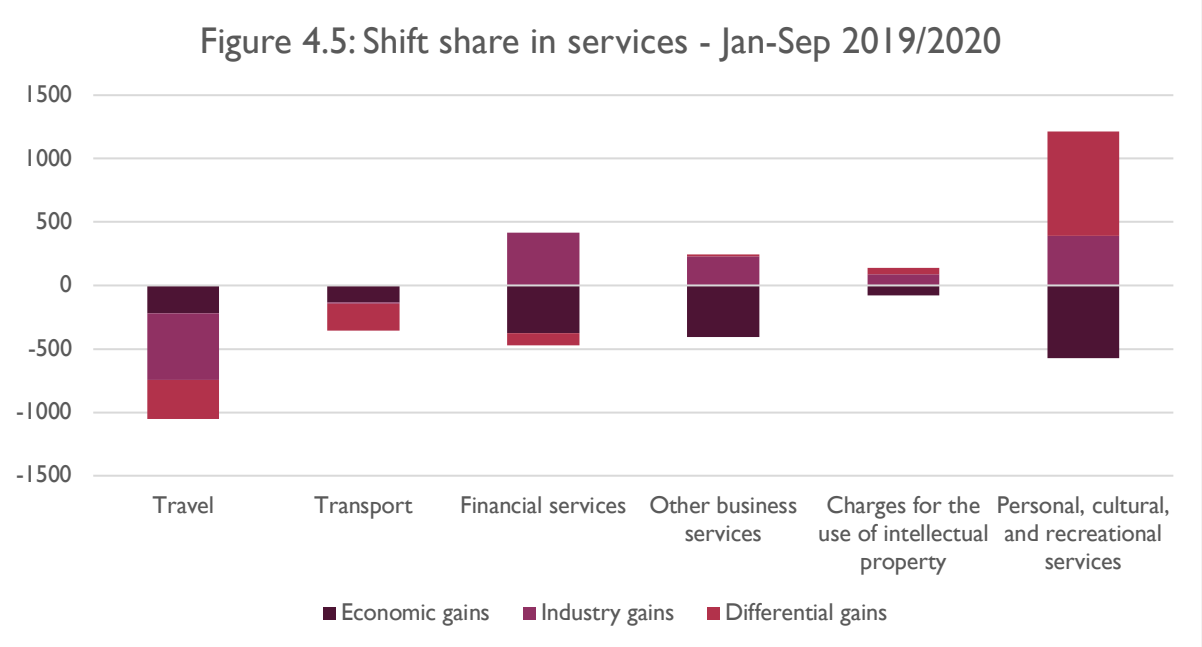
Figure 4.4: Shift share analysis Goods - Jan-Oct 2019/2020



Source: Own Calculations

All-in-all, Malta experienced a mixed performance in trade-in-goods. Most sectors have indeed faced challenges due to the pandemic. In some cases these losses were further exacerbated by competitiveness losses (as in the case of exports of machinery, tobacco products and chemicals). But others (fisheries, medical instruments, aircraft parts and printing) have managed to compensate for the negative impact of the pandemic by substantial competitiveness gains.

Using balance of payments data, analysis on the services sector was also conducted for the period covering the first three quarters of 2019 and 2020. Again, the choice of this time period is to focus on the immediate effects of the pandemic and the data availability at the cut-off date. For services, there were some competitiveness gains as well. By and large the main contributor to this is the Personal cultural and recreational services sector which saw a large and significant competitiveness gain coupled with an increase in the industry demand in line with increasing consumer preferences world-wide for remote gaming during the pandemic. The competitiveness gains in services were however almost exclusively attributed to this component alone, increasing the reliance of the Maltese economy on this sector. The travel (which incorporates the tourism sector) and transport components all registered competitiveness losses indicating that their losses cannot be entirely explained by the pandemic effects on global demand or its impact on the demand for these services. Finally, even the financial services component suffered in terms of competitiveness losses, albeit this was partially offset by some industry gains.

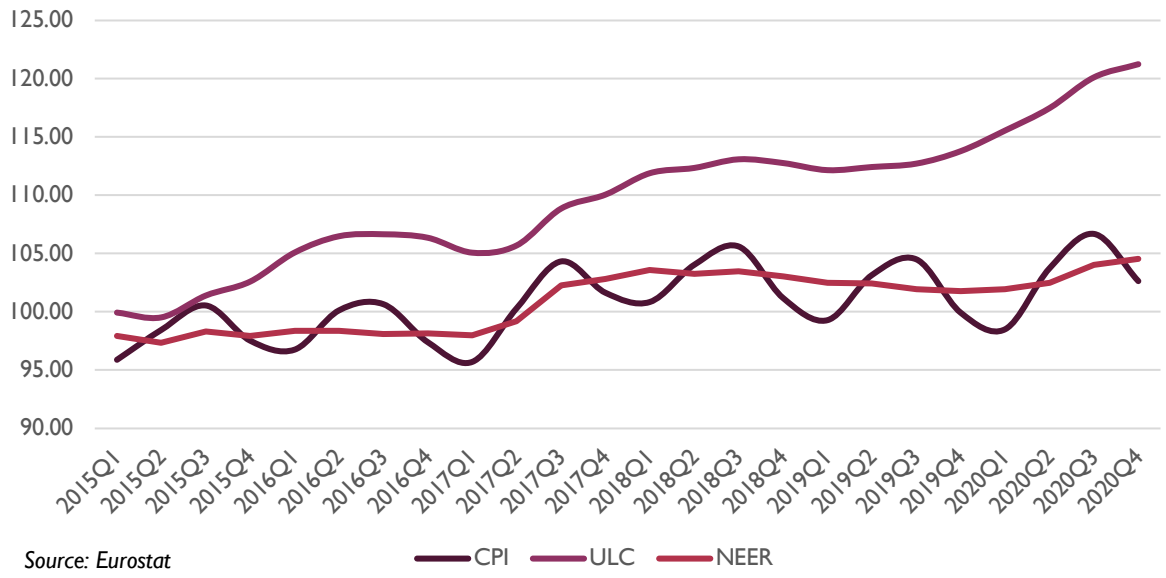


Exchange Rate, Price and Cost Competitiveness

The real effective exchange rate (REER) is a weighted average exchange rate based on the largest 37 trading partners around the world. This indicator essentially measures how the exchange rate changed relative to these trading partners. An increase in the REER would suggest that Malta's currency has relatively appreciated, possibly indicating some competitiveness losses. Over the past few years, Malta's REER has been generally stable, except for increases during 2017 and again during the pandemic. A deeper analysis was conducted by comparing the CPI-based REER with the ULC-

based REER.[19] By doing so we may deduce whether the increase in the REER is due to increased relative prices and increased relative unit labour costs. Figure 4.6 indicates that the CPI-based REER is seasonal in nature but has an upward trend. However, it moves in line with the NEER suggesting that it is mainly explained by movements in the Euro exchange rate over which we have no control. However, the ULC-based REER shows a steeper increase meaning that the REER has been affected by the rising relative cost of labour to a greater extent.

Figure 4.6: NEER, CPI-based REER, and ULC-based REER



Source: Eurostat

Balance of Payments Developments

Current Account

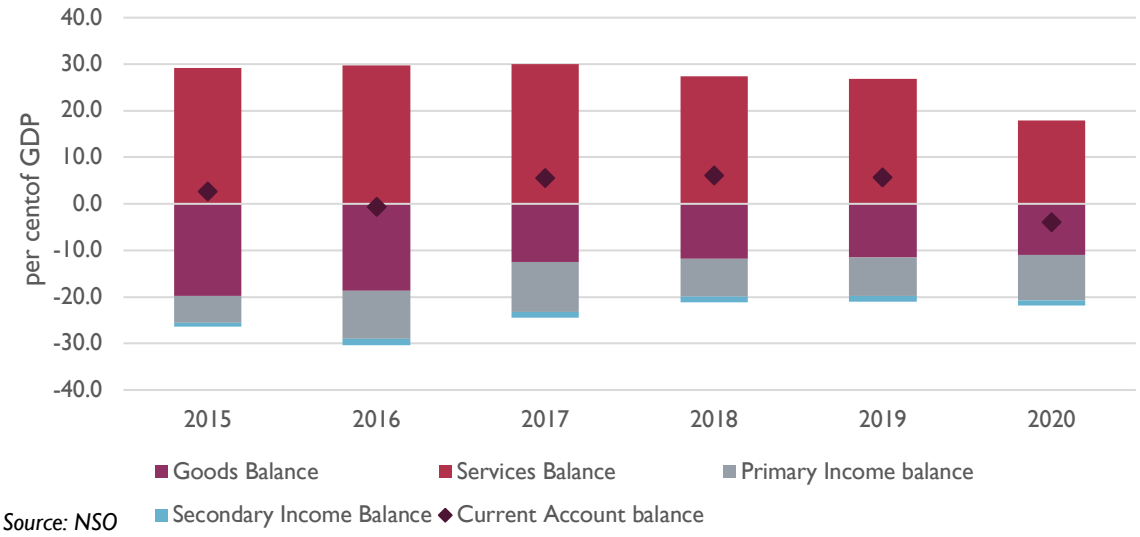
The development of the Maltese current account has been favourable over the past few years, highlighting Malta's competitiveness in the export market. Except for the year 2016, Malta has recorded a current account surplus, largely owing to a substantial net export position in the services balance, as previously discussed (see Figure 4.7).

In 2016, the current account registered a deficit equivalent to 0.6 per cent of the GDP. This deterioration was largely attributable to an increase in net payments in the primary income balance that was not be offset by the improvement in the net export services balance despite it registering an improvement. From 2017 to 2019, the current account balance recorded a substantial surplus of around 6.0 per cent of GDP. The large positive balance in the services account, amounting to around 28.0 per cent of GDP, more than offset the net outflows of around 11.0 per cent of GDP in goods and 9.0 per cent in the primary income balance. The primary income registered a larger net payments Figure in 2017 and a somewhat lower net payments figure over 2018-2019, mirroring developments in inward foreign direct investment (FDI).

[19] The CPI-based REER of the euro is the nominal effective exchange rates (NEER) deflated by consumer price indices (CPIs) based on 37 trading partners. The ULC-based REER of the euro is the NEER deflated by the unit labour costs in the total economy based on 37 trading partners.

The restrictions related to the containment of the COVID-19 virus have led to a substantial decrease in economic activity, which ultimately determined the developments of the balance of payments during 2020. Accordingly, throughout 2020, the strong current account surplus trend of the previous years was reversed with a deficit of 4.0 per cent of GDP being recorded. This drop is largely attributable to a weakening in services net exports, particularly in tourism activity (through the Travel component) and interlinked sectors such as transport.

Figure 4.7: Current Account Balance and Its Components



Source: NSO

Financial Account

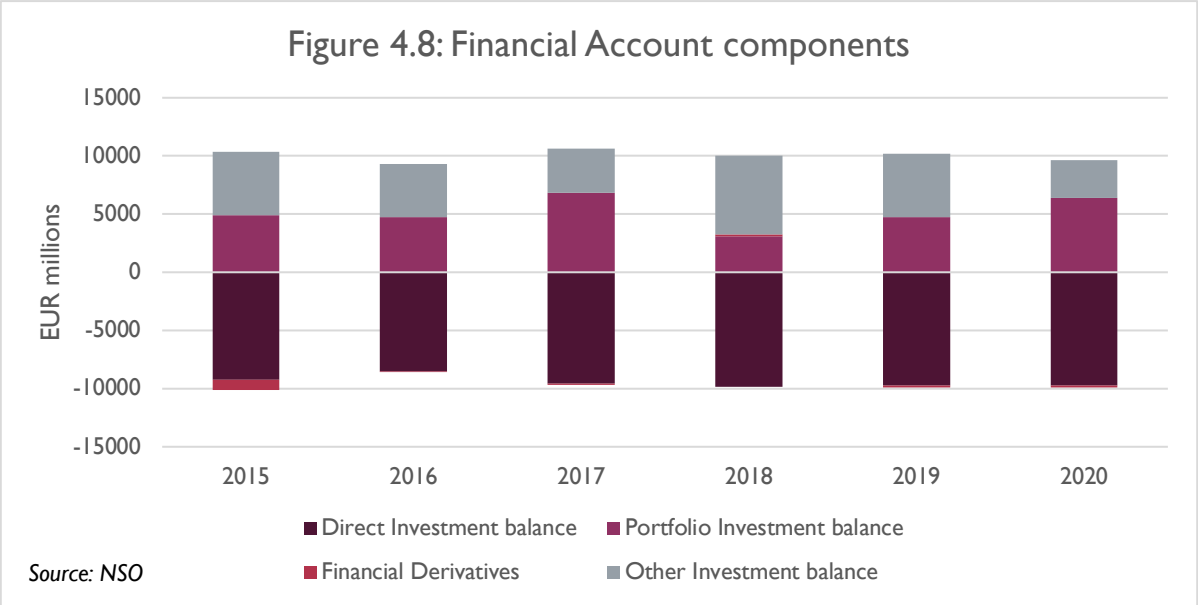
The financial account records cross-border transactions in financial assets and liabilities (see Figure 4.8). Over the past years, the financial account has been in a net lending position, reflecting Malta's current account surplus.

The largest component of the financial account is direct investment, which has consistently been in a net borrowing position over the recent years. Net direct investment liabilities reflect the importance of foreign direct investment in the Maltese economy and has remained stable at around €9.8 billion in the last three years, including in 2020.

The second largest component of the financial account is portfolio investment. This component is rather more volatile than direct investment and over the last five years portfolio investment flows have fluctuated from €6.8 billion in 2017 to €3.1 billion in 2018. Portfolio investment has been in a net lending position over time, implying substantial outward investments in foreign assets by Maltese residents, largely in the form of equity and investment fund shares. During 2020, the portfolio investment balance registered a €6.4 billion increase over 2019, mostly pertaining to an increase in the acquisition of financial assets.

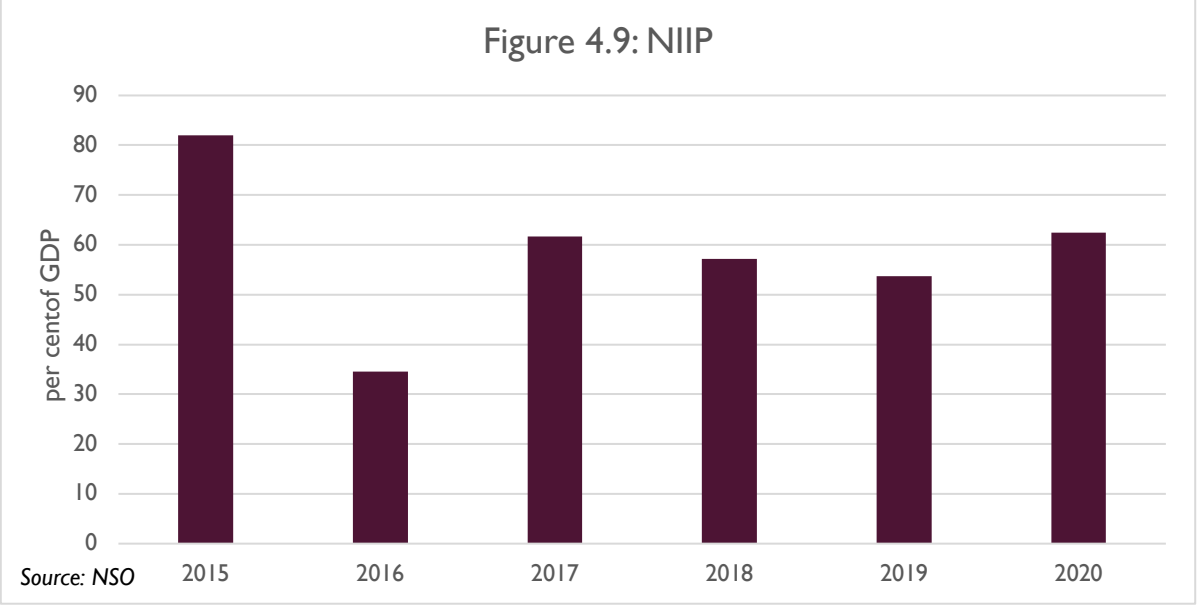
Other investment has consistently reached a net lending position over time. This is also a relatively volatile component of the financial account, fluctuating between €3.8 billion and €6.8 billion during the period under analysis. In 2020, the other investment balance shrank by a half the figure recorded in the corresponding period of 2019 to reach a low of €3.3 billion, reflecting a substantial fall in net incurrence of liabilities.

Financial derivatives represent a small fraction of the financial account, such that their influence over the rest of the financial account is minimal (Chart 4.7), financial derivatives have consistently reached a net borrowing position over time. However, in 2020, the financial derivatives balance shrank, reflecting heightened uncertainty.



Net International Investment Position (NIIP)

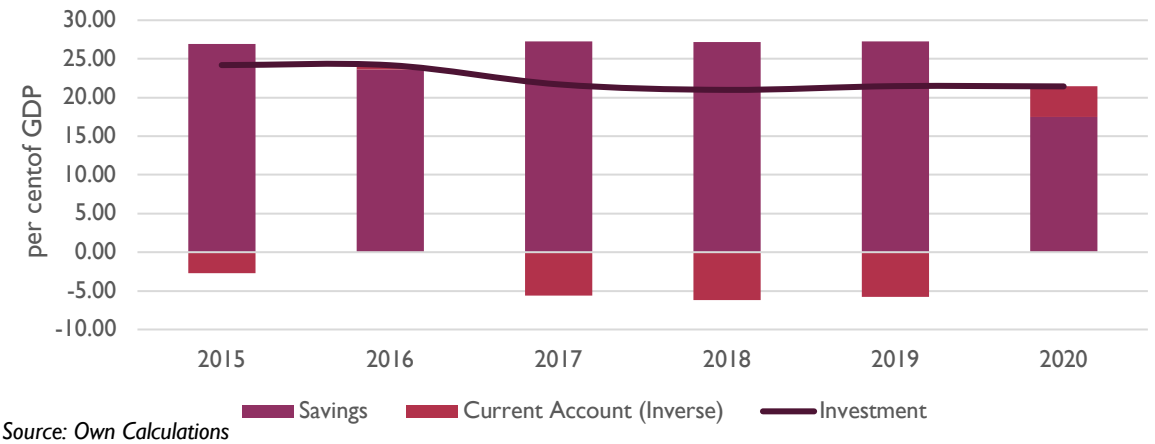
The Net International Investment Position (NIIP), which shows stock of financial assets and liabilities, has displayed a net lending position over the recent years, reflecting the developments in the financial account coupled with valuation changes (Figure 4.9). Whilst remaining in a net lending position, in 2016, the NIIP experienced a drop from the high levels registered in 2015. This largely reflected increases in inward FDI, which narrowed the gap between assets and liabilities. From 2017 to 2019, the NIIP stabilised at comparatively higher levels, averaging at 55.4 per cent of GDP, reflecting a declining trend in liabilities.



Savings and Investment

Strong economic performance coupled with stable savings have contributed to a current account surplus over the recent years (Figure 4.10). This means that domestic savings have exceeded investments in the domestic economy, as domestic absorption lagged income gains, with the difference reflected in a net investment abroad. However, this trend has been reversed during the first months of 2020, as Malta registered a current account deficit for the first time since 2016. This implies that during this period domestic savings fell short of the funds needed to support domestic investment, which has led to an increase in external borrowing and debt. The liquidity shock has been absorbed by corporates which had to dig into their past savings whilst public finances have turned into a substantial deficit position also indicating dissaving on the part of the public sector as Government increased its spending to support the economy.

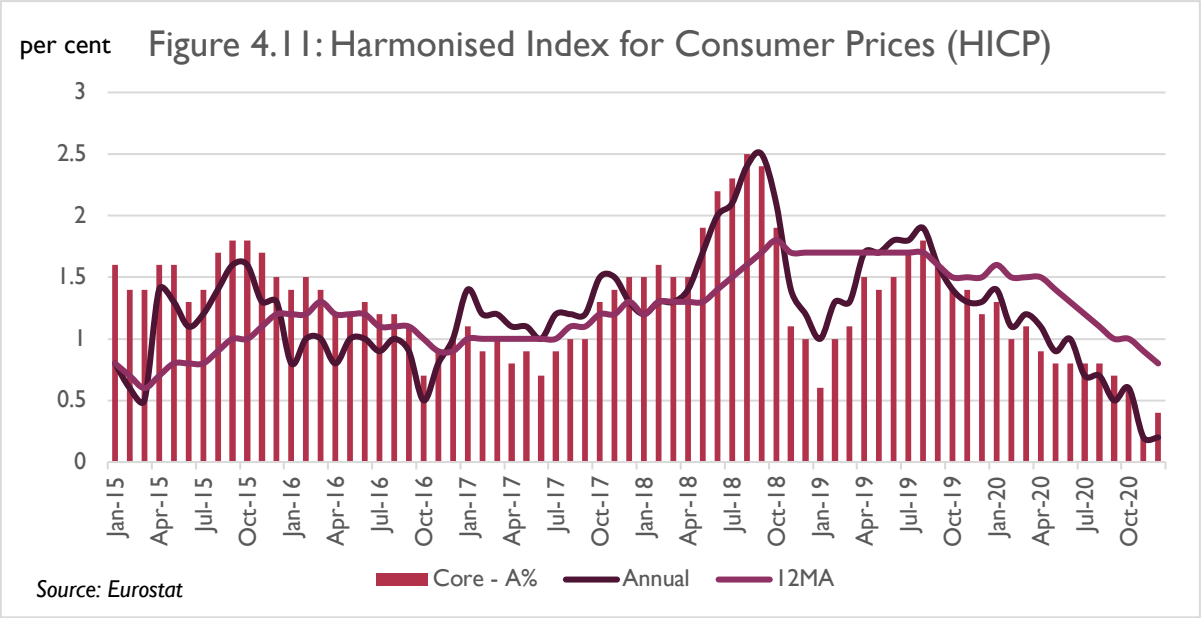
Figure 4.10: Savings and investment



Source: Own Calculations

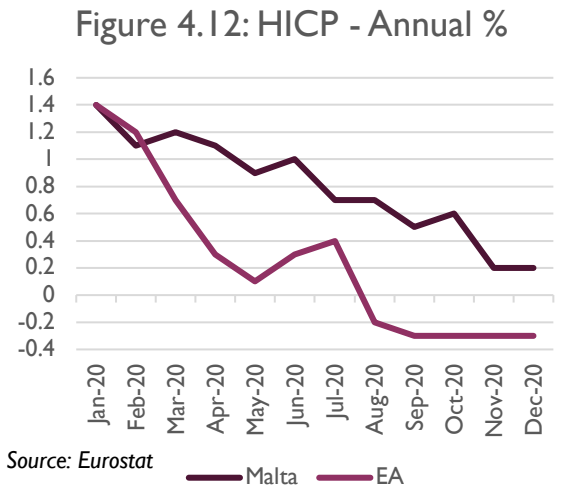
Price Developments

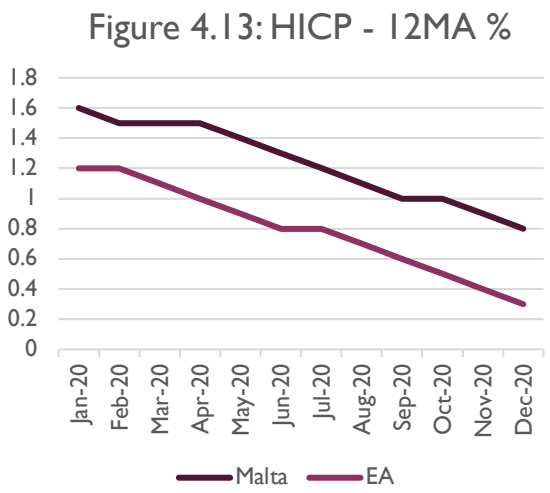
Historically, Malta has experienced a relatively stable trend of low inflation rates. Figure 4.11 indicates that the overall annual inflation rate, as measured by the Harmonised Index of Consumer Prices (HICP), remained in the region of 1.2 per cent up to mid-2018, where subsequently a short span of upward developments were observed. Since September 2019, the annual rate of inflation gradually followed a declining trend reaching the rate of 0.2 per cent in December 2020. Observing recent developments in the 12-month average, during 2020, the rate of inflation fell from 1.6 per cent in January to 0.8 per cent in December. As regards to core inflation (excluding energy and unprocessed food), this followed a similar trend where in December it recorded the rate of 0.4 per cent.



Malta and the Euro Area

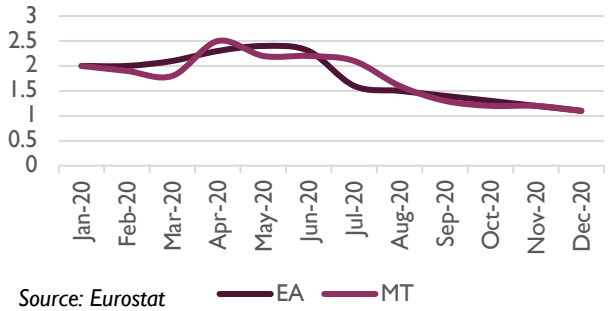
Comparing Malta's inflation rates with those of the EA, whilst both followed a rapid decline throughout 2020, the annual rate for Malta was higher than that of the Euro Area (Figure 4.11). Indeed, it sustained a positive rate whereas the EA rate went negative for the last five months of 2020. These developments were reflected in the 12-month average inflation rate, with similar decreases of 0.8pp and 0.9pp respectively.





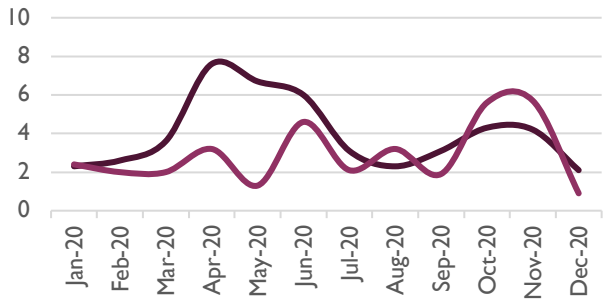
Comparing the main components of overall inflation, between Malta and the EA (Figures 4.12 to 4.18), the largest difference was observed in the Energy sub-component as energy prices in the EA fell more strongly than in Malta. The Processed foods index followed the same path as European levels, while in the case of Non-energy industrial goods, both Malta and EA recorded negative annual rates since September 2020. In the last quarter of 2020, Malta registered bigger changes in the Unprocessed foods component despite following the same trend as that of the EA. The Services component annual rates were also higher in Malta during the same quarter.

Figure 4.14: Processed foods incl. alcohol and tobacco, annual change, %



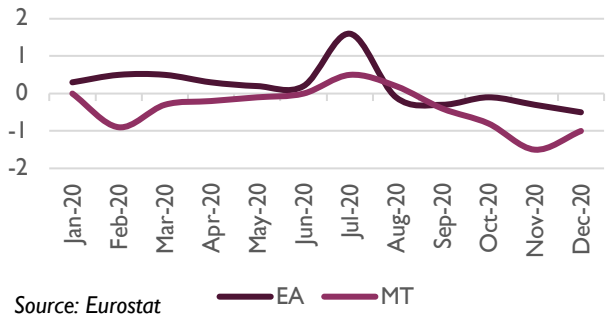
Source: Eurostat

Figure 4.15: Unprocessed foods, annual change, %



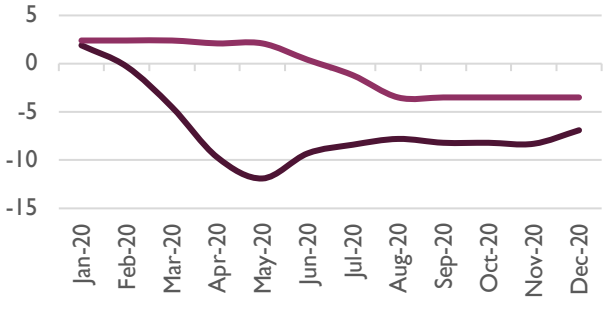
Source: Eurostat

Figure 4.16: Non-energy industrial goods, annual change, %



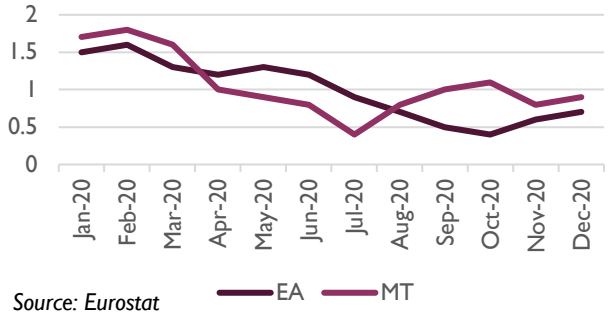
Source: Eurostat

Figure 4.17: Energy, annual change, %



Source: Eurostat

Figure 4.18: Services (overall index excl. goods), annual change, %



Source: Eurostat

Figure 4.19 shows the highest change observed on average during the pandemic period between April and December 2020 (in comparison to 2019 figures). This indicates that price developments may have been impacted by the containment measures adopted to combat the spread of the pandemic.

Figure 4.19: Year-on-year contribution (pp), average over April - December 2019/2020

Source: Eurostat

Taking the average contribution, between April and December 2020[20], to the overall index at item level, one observes that, driving lessons, tests, licenses and road worthiness tests and restaurants, cafes and dancing establishments showed the highest contribution while secondary education and household furniture made up the highest negative contribution.

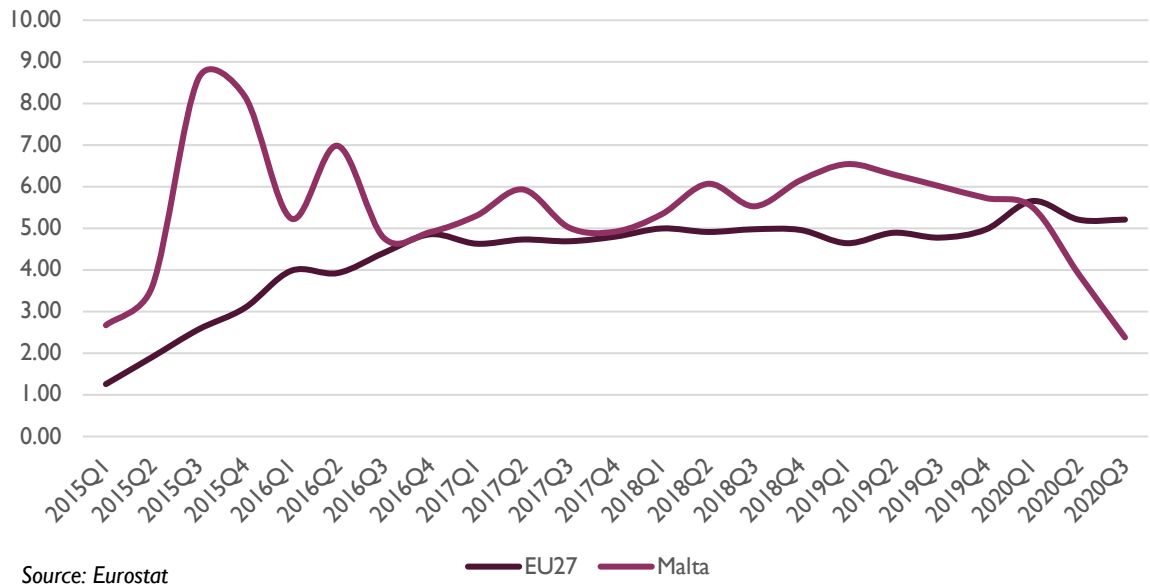
Higher contribution to inflation during 2020 compared to 2019, in cases like driving lessons and hairdressing can reflect additional costs due to public health standards and restrictions while lower contribution observed in passenger transport by sea, primary and secondary education and package holidays The reduction in the prices of petrol and diesel was among the effects of government measures in boosting economic recovery.

[20] During the pandemic period, gathering of data for statistical purposes have also been affected. As per NSO public announcement, for safety reasons, the conducting of interviews has been changed from face to face to telephone interviews. Furthermore, where price collection was not possible other alternative sources were used like websites and electronic emails while in cases where information was not available, imputed prices were adopted.

House Prices

In this section, two sources of information are used to analyse changes in prices of the housing market. Eurostat's property price index is used to compare trends in Malta to those in the EU27 countries and Malta. A deeper analysis into property types by dwellings is then carried out using the Central Bank's property price index based on advertised prices. Figure 4.19 visualises the year-on-year growth of Eurostat's house price index and juxtaposes the Malta's trend with that of the EU over the last few years. Prior to the pandemic this price index grew substantially more in Malta than the EU27 average indicating a more buoyant property market. This ties in with trends observed in increasing investments in dwellings in the sectoral developments section, and the increases in the housing cost burden in Chapter 1. It is only in 2020 that Malta's growth rate dipped below that of the EU average, although remaining in positive territory.

Figure 4.19: Y-O-Y growth in house price index

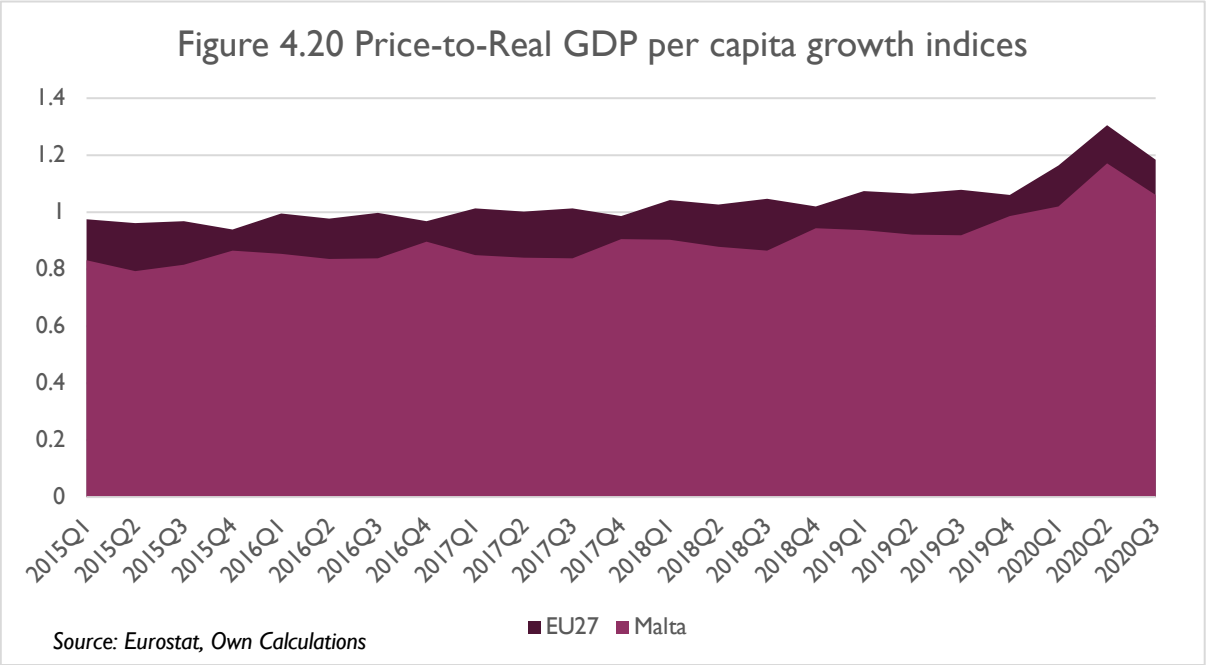


Source: Eurostat

The figure above is indicative of the effects of Covid-19 on Malta's demand for property which could include lower demand for rental property and lower households' disposable income.

At the same time, the property market was supported by governments' commitment towards aiding first time buyers through the first-time buyers' scheme and the reduction of the stamp duties, as part of the economic recovery measures. Both measures helped to support the market during 2020 and mitigate the impact of Covid-19.

A deeper look into how prices in the housing market have evolved vis-à-vis growth in economic output suggests that the house price to real GDP per capita ratio increased steadily over the past few years, though most of the increase occurred in the last few months. This is mostly due to the denominator effect where output decreased in 2020Q2 whilst the house price index continued to increase (Figure 4.20). In the pre-pandemic period one could also note that this ratio was in an upward trend indicating a worsening housing affordability.

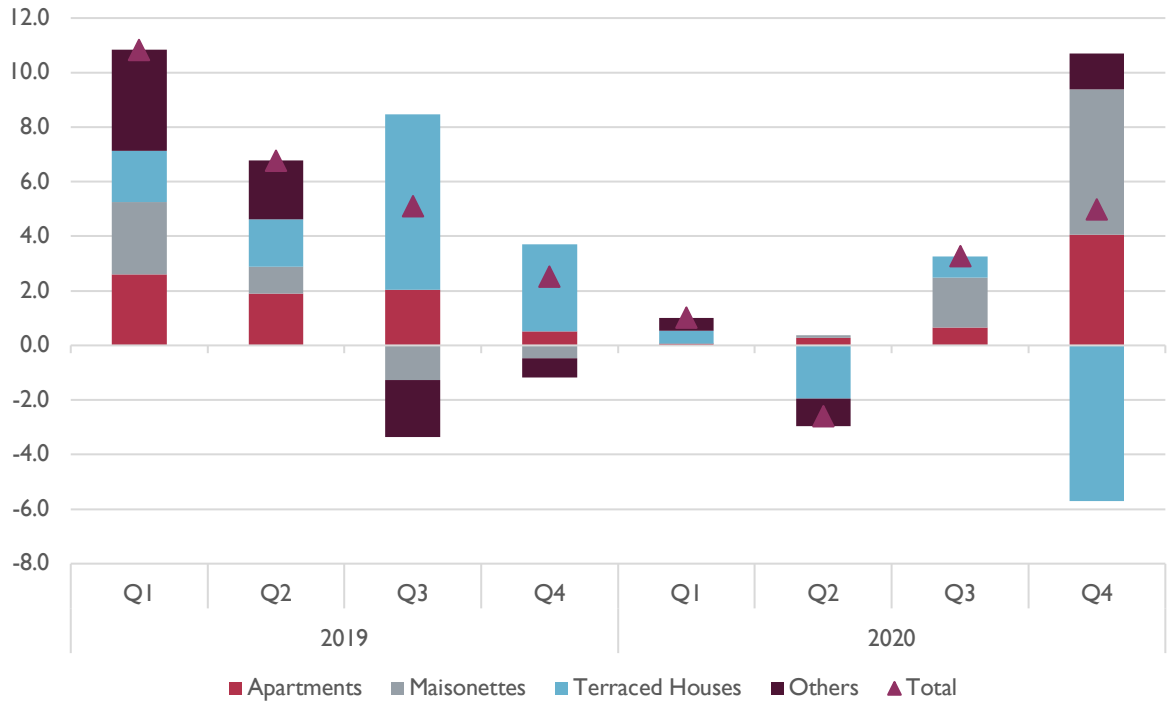


Using the Central Bank's house price index for advertised prices an analysis by property type could be conducted. Figure 4.21 shows the year on year growth rate by dwelling type. The data shows that, whilst remaining positive, the growth in property prices was subsiding throughout 2019 and in the first quarter of 2020. Overall, prices were negative in the second quarter of 2020 as the public health measures in force, as well as the prevailing uncertainty, hindered activity in the market. However, subsequently, property prices recovered, reflecting the effect of the fiscal measures referred to earlier. It is notable that prices of apartments contributed positively to the overall index throughout the last two years. Overall, the property price index for advertised prices is showing that most dwelling types have maintained a positive year-on-year growth rate over the last two years, except for the drop in terraced house prices during 2020Q4. Historically, since 2015, House prices of all types have experienced significant growth rates in their price indices with a few marginal drops in some quarters. An analysis of the price dependency of different dwelling types is presented in table 4.3.

The correlation matrix reveals strong positive correlations between the year-on-year growth rates of apartments and maisonettes. There is also some degree of correlation between apartments and other property types[21]. On the other hand, the correlation combinations with respect to other property types does not indicate a strong link between them. Though it is important to note that the correlation matrix does not necessarily imply a causal link between different dwelling types, it provides an indication of how prices are moving together. The implication of this correlation between different property types or lack thereof would suggest that to some degree different dwelling types may be substitutes to each other. This is particularly evident for apartments which exhibits stronger correlations with other types of dwellings.

[21] The series in index form was not considered when using this correlation matrix because of distortions related to time trends. This means that correlations might be larger because variables move together across time. Taking the growth rate of the indicator aims at eliminating some noise related to this issue.

Figure 4.21: Contribution to price index growth by dwelling type



Source: Central Bank of Malta

Table 4.2: Correlation Matrix

	Apartments	*Maisonettes*	*Terraced Houses*	*Others*
Apartments	1			
Maisonettes	0.86	1		
Terraced Houses	0.05	-0.21	1	
Others	0.53	0.39	0.23	1

Source: Own Calculations

Summary

Malta's External Position

The substantial rate of economic expansion of recent years has led to a strong increase in both income and savings in the economy which exceeded the strong pace of investment activity over this period. As a result, economic expansion was entirely sustained by domestic savings resulting in a current account surplus position in the balance of payments. This was primarily attributable to a decline in the negative goods balance which offset substantial but generally declining services balance. COVID-19 caused disruptions at both ends of the trade balance formula, mirroring declines in both domestic and foreign demand.

The current pandemic has exposed the vulnerabilities of certain sectors but equally revealed the resilience of others. The personal, cultural, and recreational services sector has continued showing improvements in its net export balance, whilst other business services has correspondingly recorded an increase in net imports owing to the interlinkage between these two items The financial services sector, which over the past years has been settling to relatively lower net export balances, was virtually unaffected by the pandemic, possibly owing to minimal supply-side disruptions. In contrast, travel services (tourism) and transport services recorded a substantial net export decline despite recording steady net export increases till 2019.

Whilst the pandemic negatively impacted the exports of goods, some still recorded gains in competitiveness which even offset the declining regional and industry declines. On the other hand, overall competitiveness gains in the services sector were registered though these almost exclusively reflected the gaming industry's strong net export performance, indicating an element of overreliance of the Maltese economy on this sector. Further on international competitiveness, Malta's REER had been following an upward trend over time, reflecting the strength of the Euro as well as higher relative unit cost of labour.

Despite a deteriorating tendency in international cost competitiveness, except for 2016, Malta had consistently recorded a current account surplus over time, largely owing to a net export position in the services balance. However, this trend was cut short in 2020, as the current account surplus recorded a deficit of 4.0 per cent of GDP, which was largely attributable to a weakening in services net exports due to the impact of Covid-19 on tourism.

Reflective of Malta's current account surplus, the financial account has been in a net lending position over time. Its largest component - direct investment - has been in a net borrowing position over the years, mirroring a declining trend in the acquisition of financial assets from abroad and an upward trend in net incurrence of liabilities. This component was not materially impacted by the pandemic, as Malta continued to maintain its competitive edge. In contrast, portfolio investment has been in a net lending position over time. During 2020, the portfolio investment balance registered a substantial increase over 2019, mostly pertaining to an increase in the acquisition of financial assets.

Price developments

During 2020, the rate of inflation in Malta trended downwards. In December, the annual rate stood at 0.2 per cent while the 12-month average recorded the rate of 0.8 per cent. Annual core inflation stood at 0.4 per cent.

In December 2020, annual negative contributions were recorded in Non-energy industrial goods and Energy components while Services, Processed and Unprocessed foods showed positive outcomes. Comparing Malta's inflation rate with the EA in 2020, the annual rate for Malta was higher, mainly reflecting a lower decline in energy prices in Malta compared to the declines in the EA. The 12-month average has followed the same trend with the EA where it decreased consistently.

Malta's House Price Index growth in 2020 has dipped below that of the EU average after sustaining a higher rate during the past years. A deeper look into how prices in the housing market have evolved vis-à-vis economic output suggests that the house price to real GDP per capita ratio increased over the past few months. In the pre-pandemic period one could also note that this ratio was in an upward trend. The Central Bank's house price index shows that most dwelling types have maintained a positive year-on-year growth rate over the last two years. Internal analysis concluded that a strong positive correlation exists between the year-on-year growth rates of apartments and maisonettes.

CHAPTER 5
FINANCIAL OUTLOOK

A. The Private Sector

The adverse economic impact of the global COVID19 also affected business profitability. In fact, industries registered a fall in gross operating surplus of 3.4 per cent (€216.8 million).

Wage supplement, moratoria, and loan guarantees

As regards the COVID wage supplement scheme, the largest number of persons employed benefitting from such scheme were under the Accommodation and food services activities, followed by the Wholesale and retail trade sector, Manufacturing, Administrative and Support Service activities and Transport and Storage sectors.

To address the liquidity squeeze resulting from economic effects of the pandemic on both households and commercial entities, moratorium on loan repayments and credit guarantees were granted. Similarly, as per the income supplement, the Accommodation and food services sector was the main beneficiary of this assistance where, by the end of December 2020, 42.1 per cent of the loans were subject to moratorium. This was followed by the Real estate sector at around 25.2 per cent and Wholesale and retail sector with up to 4.7%.

To provide further liquidity to businesses, the Government assigned the Malta Development Bank to issue loan guarantee schemes. These schemes were issued by commercial banks to businesses for the viability of working capital operations. The loans approved under the scheme benefited from an interest rate subsidy of a maximum of 2.5%. All loans approved under the COVID-19 Guarantee Scheme carry a moratorium of minimum of 6 months which could be extended to 12 months on individual basis. By the end of December 2020, more than half of these loans were granted to the Wholesale and retail activities sector applying for the highest portion followed by Accommodation and food services activities.

Credit growth

Data on lending from Other Financial Monetary Institutions shows that, over 2019, the highest increase in loans to non-financial corporates was recorded in the Accommodation and Food Services sector. The amount of loans in this sector has increased by €125 million or around 33 per cent. This was followed by the Transport, storage, information and communication sector, where in previous years loans has been declining, in 2020, this has increased by €47 million or around 19.0 per cent.

The Real estate activities and the Construction sectors maintained their trend during the same period, showing an increase of €77million (or 8.1 per cent) and €36 million (or 6.1 per cent) respectively. An increase of €25 million (or 11.1 per cent) million was observed under the Electricity, gas & water supply sector while Manufacturing sector showed a slight increase of €3.5 million (or 1.6 per cent). The Wholesale & retail trade and repairs sector was the only sector that registered a decline in lending activity. It is notable that this sector is made up predominantly of self-employed individuals (56.0 per cent of the sector's enterprises) or micro enterprises employing less than 5 employees (32 per cent of the sector's enterprises) and accounts for around 18.0 per cent of self-employed enterprises in Malta and 31.0 per cent of micro enterprises employing less than 5 people. It is pertinent to note that, the increase recorded in household lending was attributable to lending for house purchases. On the other hand, household consumer credit and other lending declined during the same period with the net increase in Households lending being €327 million.

Table 5.1: Loans to residents by Economic Activity

Other monetary financial institutions loans to residents of Malta by economic activity (€ millions)							
		Dec-15	**Dec-16**	**Dec-17**	**Dec-18**	**Dec-19**	**Dec-20**
Electricity, gas & water supply		264.7	274.8	212.9	215.2	219.7	244.3
Transport, storage, Information & communication		369.2	304.0	307.5	274.6	248.1	295.1
Manufacturing		274.8	259.1	287.7	294.7	216.7	220.2
Construction		515.0	485.9	506.4	544.4	590.9	626.9
Accommodation, food services and activities		404.9	344.8	298.9	346.5	381.6	506.6
Wholesale & retail trade; repairs		814.1	780.1	752.6	777.5	659.6	657.0
Real estate activities[1]		713.1	764.6	779.3	854.7	942.1	1,018.7
Households[1]	**Lending for house purchase**	3,905.0	4,204.4	4,548.6	4,948.8	5,459.5	5,823.7
	Consumer credit	362.1	349.5	290.5	278.7	276.5	253.7
	Other lending	268.9	246.8	280.8	293.2	324.8	310.3
	Total	4,536.0	4,800.8	5,119.9	5,520.7	6,060.7	6,387.7
Total lending to residents	**Public sector**	790.6	699.6	726.1	730.3	730.6	815.7
	Private sector	8,414.9	8,729.0	8,965.3	9,586.8	10,245.9	10,920.7
Other[2,3]		1,313.5	1,414.6	1,426.3	1,488.7	1,656.9	1,780.0

[1] Excluding loans to unincorporated bodies such as partnerships, sole proprietors and non-profit institutions. Loans to such bodies are classified by their main activity.

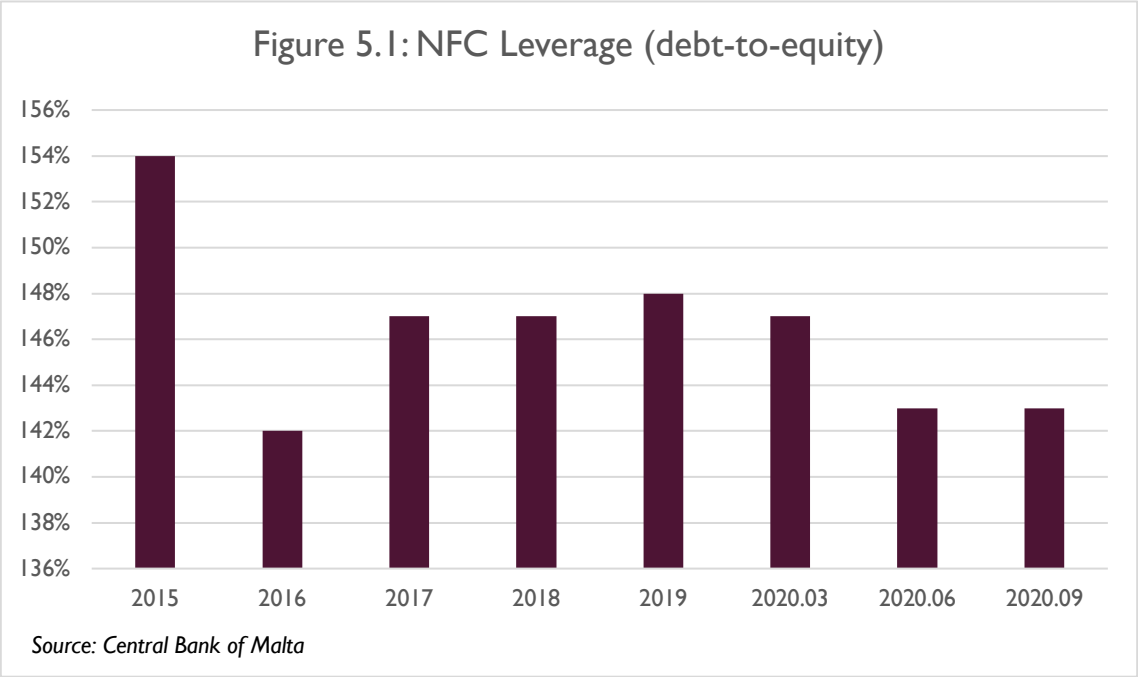
[2] Includes loans to agriculture & fishing, mining & quarrying, public administration, education, health & social work, financial and insurance activities (including interbank loans), professional, scientific and technical activities, administrative and support service activities, arts, entertainment and recreation, other Services activities and extra-territorial bodies & organisations.

[3] As from June 2010 data has been revised to be in line with ESA 2010.

Source: Central Bank of Malta

Aggregate corporate Non-Financial Corporations (NFC) leverage ratio and Non-Performing Loans (NPL)

Estimates for 2020 show that despite the increase in credit, NFCs leverage ratio has decreased when compared to the previous year. This means that firms turned more on internal financial buffers rather than debt-driven instruments to support their operations. Indeed, data show that the equity and investment fund shares increased with a larger proportion compared to loans while debt securities decreased during the first 6 months in 2020. In the third quarter of 2020, estimated data show an increase in debt securities with a drop in the amount of loans leaving leverage ratio at the same levels as previous quarter.



Up till June 2020, total banks' overall NPL ratio increased marginally to 3.23 per cent from 2.96 per cent registered in 2019. For core domestic banks, this went up from 3.21 per cent to 3.45 per cent while non-core domestic banks rate increased more strongly from 5.50 per cent to 7.09 per cent. This indicates that loan moratoria granted to household and firms due to the COVID-19 pandemic, as discussed above, were successful in preventing a substantial increase in corporate financial distress.

Table 5.2: Non-Performing Loans as a ratio of total gross loans

	2015	2016	2017	2018	2019	Jun-20
Non-performing loans to total gross loans %	4.68	4.12	3.23	3.08	2.96	3.23
Core Domestic Banks	7.22	5.32	4.07	3.36	3.21	3.45
Non-Core Domestic Banks	4.04	3.99	2.26	3.64	5.50	7.09
International Banks	1.18	1.70	1.88	2.5	1.82	1.82

source: CBM Interim Financial Stability Report 2019, 2020

Box 5.1: CORPORATE SOLVENCIES OF EUROPEAN ENTERPRISES: STATE OF PLAY

Directorate General Economic and Financial Affairs

Note to the Eurogroup Working Group

Salient conclusions

Production and sales have dropped due to a fall in consumer demand, The policy response has been prompt and strong. However, an abrupt and uncoordinated withdrawal of measures could lead to wide-scale corporate distress, including bankruptcies, causing lasting economic and social damage and further economic divergences. Therefore, as broad corporate support measures start to expire, there will gradually be a need to replace them with more targeted schemes.

Simulations based on firm-level data show that – without accounting for Government support measures (with the exception of short-time work schemes) or new borrowing – 23 per cent of EU companies would have experienced liquidity distress by the end of 2020 after exhausting their working capital buffers. The fraction of firms that are in liquidity distress after exhaustion of working capital buffers ranges from 8 per cent of all firms in the manufacturing of computers and electronics to 75 per cent in the accommodation and food services sector.

Liquidity distress is more likely to translate into solvency concerns for firms that were financially vulnerable at the onset of the crisis. Such vulnerable firms, defined by their high likelihood of default pre-crisis, may face greater difficulties in accessing credit. To give an example, just 38 per cent of firms in liquidity distress due to the Covid-19 shock in the accommodation and food services sector were financially vulnerable before the outbreak of the pandemic, while 80 per cent of firms in liquidity distress in manufacturing of computers and electronics were financially vulnerable pre-crisis.

Corporate credit picked up significantly in 2020, with bank borrowing reaching a multiple of the pre-pandemic levels in some countries. The scale of borrowing has led to a reversal of the decade-long deleveraging trend among SMEs. A large part of the credit uptake is likely to have been used for building liquidity buffers to cope with the increased uncertainty surrounding the economic situation, rather than financing investments. While fresh financing has helped the corporate sector alleviate liquidity pressures and strengthen buffers, it has also increased its leverage – which could hamper their ability to invest in the future.

The increased financial distress across the corporate sector is not yet reflected in NPL ratios. While the debt-servicing capacity of the private sector has been adversely affected by the pandemic, government credit guarantees, and loan repayment moratoria have so far prevented a rise in loan defaults. Once the unprecedented public support measures expire, several businesses are likely to default on their debt obligations, leading to higher NPLs and insolvencies.

Efficient insolvency frameworks align incentives in such a way that viable debt is repaid, while unviable debt is quickly resolved. It will be important to build on the progress so far achieved in this area in implementing the Country Specific Recommendations. In the current crisis context, national insolvency regimes will likely need a capacity boost, and sometimes reforms, to adequately process the forthcoming case-flow. To this end, the Recovery and Resilience Facility (RRF) can provide substantial incentives and support.

As firms exhaust own funds and support schemes taper off, it will be essential to preserve an effective credit channel. Firms will need external financing sources both to address liquidity shortages and for investment. However, surveys indicate that credit needs already seem to be outpacing credit availability in all euro-area countries, indicating a widening of the external financing gap.

In the third and particularly in the fourth quarter of 2020, euro area banks had, on aggregate, started to tighten credit standards to companies, particularly SMEs, as perceptions of company level and economy wide risks increased. According to the ECB's Bank lending survey, banks expect to further tighten credit conditions and raise collateral requirements.

B. The Public Sector

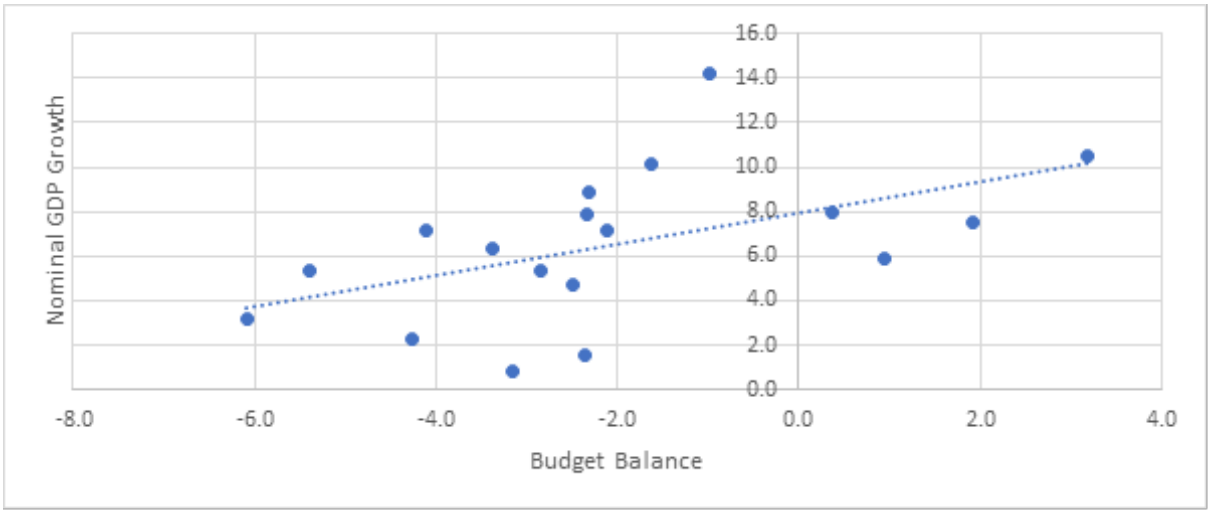
The improvement in Government's finances, driven by favourable economic conditions and the strengthening of Malta's fiscal framework had put public finances on a sound footing before the pandemic. All this has helped to improve the long-term sustainability of public finances as well as provided the necessary fiscal space to allow fiscal policy to act in a countercyclical manner. These developments resulted in positive rating actions in recent years, which in addition to recent reform efforts, have helped to encourage investment in several important areas.

Following four years of consecutive fiscal surpluses and a declining Government debt, the Covid-19 pandemic has had an unprecedented impact on the economy and public finances in Malta. The effect of this pandemic distinguishes itself from previous crises because the declines in demand were also complemented with supply disruptions. This called for several measures on the part of Government to support the economy and ensure no lasting damage is sustained after the pandemic, which in turn could jeopardise public finance sustainability. Under these conditions, the build-up of public savings in the last few years have proved to be quite opportune and allowed the Government to provide the necessary support without putting financial stability at risk. Additionally, following the prudent approach adopted in recent years, together with the strong growth and the favourable financing conditions, the economy can absorb a short-term increase in public borrowing.

Pre-Covid developments in general Government finances

Malta's public finance sustainability had been improving in recent years, characterised by a seven-year long period of stable fiscal consolidation when the deficit declined from 3.4 per cent of GDP in 2012 to a surplus of 3.2 per cent of GDP in 2017. The budget balance remained in surplus until 2019 when a surplus of 0.4 per cent of GDP was registered. It is however notable that this consistent period of fiscal consolidation was supported by a rather unprecedented period of strong economic growth. Between 2012 and 2017, the fiscal consolidation effort was supported by a strong rate of GDP growth rate averaging 9.7 per cent per annum. In 2019, as growth rates moderated to 8.0 per cent, a modest budget surplus of 0.4 per cent of GDP was recorded. As shown in Figure 5.2 Budget surpluses are associated with growth rates above eight per cent per annum. As the pace of economic expansion is projected to moderate over the medium term, maintaining a balanced budget may be more challenging.

Figure 5.2: Budget Balance vs GDP Growth



Looking at fiscal performance between 2015 and 2019 when an average annual growth of 9.1 per cent was recorded, overall revenue growth reached 8.6 per cent per annum. This was driven primarily by direct taxes whereas indirect taxes and social security contributions marginally lagged growth. On the other hand, during the corresponding period, current expenditure increased by an average annual 6.9 per cent whilst capital expenditure including gross fixed capital formation increased by an annual average of 10.0 per cent per annum. Overall, total expenditure rose by an annual average of 7.4 per cent, thus lagging revenue growth and contributing to the fiscal consolidation observed during this period. The more moderate growth in current expenditure was influenced by the moderate growth in social expenditure following the pension reform initiatives. In addition, economic conditions also allowed a reduction in interest expenditure whilst compensation of employees increased at a relatively modest rate compared to the growth in revenue. Nevertheless, intermediate consumption increased by an annual average of 13.4 per cent over this period.

From this analysis one can infer that should the rate of economic expansion slow down in excess of 1 percentage point from trend of recent years, the growth in revenue in the absence of discretionary measures, is likely to be insufficient to support the rate of increase in public expenditure recorded during the years 2015-19 and thus reverting to a surplus position could prove to be challenging.

Box 5.2 STRENGTHENING INSTITUTIONAL FEATURES OF MALTA'S FISCAL FRAMEWORK

The consistent improvement in the Government's fiscal position was supported by the sustained strengthening of the institutional capacity in Malta's fiscal framework:

- The financial and economic crisis and the resulting increases in deficits and debt level in the European Union (EU) was followed by a profound reform of the Stability and Growth Pact. The resulting six-pack and two-pack reforms sought to strengthen and deepen budgetary surveillance by making it more continuous and integrated. These reforms put stronger emphasis on medium-term planning, better synchronised and more transparent budgeting processes, procedures to foster the use of unbiased macroeconomic forecasts for budget planning, as well as independent monitoring of compliance with fiscal rules at national level. These regulations have led to a significant reform to Malta's budgetary system and processes. At the national level, one of the main responses to these reforms has been the **Fiscal Responsibility Act**, which was enacted by Parliament on 8 August 2014. The Act

outlines the main principles of fiscal responsibility and the objectives of fiscal policy. It establishes fiscal rules which bind national fiscal authorities in achieving a balanced structural budget, or in its absence, converge towards the medium-term budgetary objective, and to maintain the public debt at sustainable levels (lower than 60 per cent of GDP) over the medium and long-term. The Fiscal Responsibility Act also establishes rolling 3-year business and financial plans which are based on the (most recently announced) medium-term fiscal strategy. The Act also establishes a Fiscal Council that is tasked with assessing and endorsing macroeconomic and fiscal forecasts, securing compliance with fiscal rules, and with determining the existence of exceptional circumstances (when relevant) and assessing progress in corrective action plan implementation (where relevant). A number of changes were legislated in 2018 to ensure full consistency of the Fiscal Responsibility Act (FRA) with the Directive on Budgetary Frameworks, as well as other amendments intended to ensure clarity in the administration of the Act.

- The **Comprehensive Spending Reviews** reinforced the Maltese Government's strategy to ensure the achievement of a more efficient and effective approach to public spending, improving on the policy process while also ensuring that public spending is reflective of changing priorities and changing social needs. The Comprehensive Spending Reviews process was institutionalised through assistance from the Structural Reform Support Programme. In 2018, a unit was set up within the Ministry's Performance and Evaluation Directorate (MFE), which itself forms part of the Budget Affairs Division. The Directorate supports the Ministry for Finance in enhancing accountability for public expenditure whilst ensuring that public funds are spent effectively and efficiently to achieve the government's desired outcomes. The directorate oversees initiatives aimed to strengthen the value-for-money culture within government and enhance programme evaluation capabilities.

- At the request of the Maltese Government, during 2018 Malta undertook a **Fiscal Transparency Evaluation (FTE) exercise** in conjunction with the IMF's Fiscal Affairs Department. In line with Government's objective for effective fiscal management and accountability, this evaluation provided an in-depth assessment of public finances that substantiate economic decisions, including of the costs and benefits of policy changes and potential risks to public finances. Pursuant to the IMF Fiscal Transparency Evaluation (FTE), several recommendations were taken on board, while discussions within the Ministry are ongoing with regards to the implementation of the remaining recommendations.

- In July 2019, the Financial Administration and Audit Act was repealed by Act XXI of 2019 titled **Public Finance Management Act (Cap. 601)**, which regulates amongst others, financial management in Government to ensure the effective and efficient management of all assets and liabilities, cash flow, and revenue and expenditure of the Government.

Covid-19 impact on public finances in 2020

International and domestic institutions hastily responded to the outbreak by loosening monetary policies and providing fiscal stimulus to cushion the economic setback. Despite the reliance of the Maltese economy on the hospitality industry, other important sectors such as remote gaming, information and communications, pharmaceuticals, electronics, construction and real estate proved to be notably resilient and mitigated some of the economic repercussions of the pandemic.

Following the outbreak of the pandemic, Government's overarching objective has been to plan ahead for the economic recovery, shoring-up household income and keeping firms afloat while

restrictions remain in place. Discretionary policies have complemented the full operation of automatic fiscal stabilisers, as a result of which the general Government balance turned into deficit territory. Indeed, the severe economic situation and the large fiscal policy response have led to a budget deficit of just above 10.0 per cent of GDP in 2020, whilst general Government debt is estimated to have increased by over 12.0 percentage points to 54.3 per cent of GDP. It is pertinent to note that although the fiscal support measures in Malta were among the strongest in the EU, the impact on the debt ratio has been relatively much less pronounced than in other Member States and ranked in the middle of the rise in debt ratios among the EU. Indeed, the rise in the debt ratio was even less than the EU average of 13.2 percentage points of GDP and the debt ratio remains ranked amongst the lowest in the EU. Indirect support, such as credit guarantees and tax deferrals, have complemented direct measures.

The effect on public finances of the Covid-19 pandemic was quite severe. From the revenue side, a substantial fall in tourist expenditure and household spending led to a deterioration in indirect tax revenue whilst corporate losses underlined a significant drop in direct tax revenue. Additionally, proceeds from personal income tax revenue and social security contributions were relatively shielded by the contained impact of the pandemic on the labour market.

Fiscal support is further provided by the functioning of automatic stabilisers, which are estimated at around 5 per cent of GDP in 2020. Furthermore, Government expenditure increased substantially, mainly reflecting the fiscal impact of Covid-19 related support measures, as well as measures legislated by means of the 2020 Budget. Automatic stabilisers on the expenditure side of the budget mainly include cyclical unemployment expenditure, which in 2020 was negligible. Further details on automatic fiscal stabilisers are outlined in Box 5.1.

Expenditure increased for most expenditure components, other than interest expenditure, but most notably towards subsidies (largely due to additional spending in relation to the COVID-19 Business Assistance Programme, which includes the wage supplement scheme, as well as the Economic Regeneration Voucher Scheme) and intermediate consumption. Increase in the latter component was due to the additional healthcare funding needed to address hospital capacity, medical equipment and protective gear, and for repatriation flights to bring home Maltese nationals and residents, and to carry cargo and urgent medical supplies for hospitals, following the ban on travel.

As a result of these factors, the general Government balance worsened to a deficit of 10.1 per cent of GDP. Table 5.5 below presents the general Government expenditure and revenue targets, broken down by main components.

Expenditure and Revenue Targets

(General government expenditure and revenue targets, broken down by main components)

Table 5.3 — % GDP

	2019	2020	2021	2022	2023	2024
General government (S13)						
1. Total revenue target	**37.2**	**36.5**	**36.7**	**36.6**	**36.2**	**35.7**
of which						
1.1. Taxes on production and imports	11.9	10.7	10.6	11.4	11.5	11.5
1.2. Current taxes on income, wealth, etc	13.4	13.2	13.0	13.0	12.8	12.8
1.3. Capital taxes	0.2	0.2	0.1	0.2	0.2	0.2
1.4. Social contributions	5.9	6.6	6.3	6.2	6.1	6.1
1.5. Property income	0.6	0.7	0.6	0.6	0.5	0.5
1.6. Other	5.2	5.1	6.0	5.3	5.1	4.7
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)	31.5	30.7	30.3	30.9	30.7	30.6
2. Total expenditure target	**36.8**	**46.6**	**48.7**	**42.2**	**40.1**	**38.6**
of which						
2.1. Compensation of employees	10.9	12.2	12.5	12.0	11.8	11.6
2.2. Intermediate consumption	7.2	9.5	9.9	8.5	8.2	7.9
2.3. Social payments	9.1	10.5	10.4	9.8	9.6	9.5
of which Unemployment benefits	0.1	0.2	0.2	0.2	0.2	0.2
2.4. Interest expenditure	1.3	1.3	1.2	1.1	1.1	1.1
2.5. Subsidies	1.4	5.0	4.3	1.6	1.5	1.4
2.6. Gross fixed capital formation	3.9	4.5	5.4	4.7	4.6	4.0
2.7. Capital transfers	0.8	1.1	2.3	2.0	1.1	0.9
2.8. Other	2.2	2.4	2.8	2.5	2.4	2.2
3. General Government Balance	**0.4**	**-10.1**	**-12.0**	**-5.6**	**-3.9**	**-2.9**
4. Primary Balance	**1.7**	**-8.8**	**-10.8**	**-4.5**	**-2.8**	**-1.8**

The general Government revenue to GDP ratio declined by 0.7 percentage points of GDP compared to 2019, to 36.5 per cent, as the ratio to GDP of taxes on production and imports declined by 1.2 percentage points to 10.7 per cent of GDP, especially considering that tourism-related industries and the wholesale and retail trade sectors have been adversely affected by the pandemic. The lower impact on direct taxation is on account of the expected success of government support in shoring up employment during the pandemic. In contrast, the ratio-to-GDP of social contributions increased by 0.7 percentage points to 6.6 per cent of GDP. The remaining non-tax revenue components and capital receipts remained relatively unchanged at around 6 per cent of GDP in aggregate.

The ratio of general Government expenditure to GDP increased by 9.8 percentage points to 46.6 per cent in 2020. The increase in the expenditure-to-GDP ratio is mainly estimated on account of fiscal measures introduced to mitigate the effects of Covid-19 pandemic.

Box 5.3 AUTOMATIC FISCAL STABILISERS AND THE COVID-19 PANDEMIC

Over the last twelve months, the Maltese Government has adopted several measures with a significant impact on the general Government balance to stem the economic fallout from the coronavirus (COVID-19) pandemic. A large share of fiscal support has also been provided by the functioning of automatic stabilisers, with the latter almost equalling discretionary fiscal measures.

Automatic fiscal stabilisers refer to elements, built into government revenues and expenditures, that reduce fluctuations in economic activity without the need for discretionary government actions. During a recession, a lower level of aggregate demand and higher unemployment tend to reduce personal incomes and corporate profits, reducing the amount of taxes owed automatically. Higher unemployment and a weaker economy lead to increased government spending on unemployment benefits and welfare. The process works in reverse too, dampening economic booms to limit inflationary pressures. Automatic stabilisers have the advantage of being timely, targeted and temporary in smoothing the economic cycle.

There are multiple methods used in the economic literature to estimate the size of automatic stabilisers, with each method having its own merits and drawbacks. Three methods feature prominently in the literature[22]. The *microeconomic approach* typically uses household-level data and micro-econometric techniques to investigate the impact of direct taxation and benefit systems on disposable income or consumption. The *macroeconomic approach* uses macroeconomic models to assess the stabilising role played by fiscal policy in response to an economic shock, allowing for both direct and indirect effects such as changes in consumer/firm behaviour or monetary policy. The *statistical approach*, on the other hand, uses the estimated response of the budget balance to cyclical changes in the economy (the cyclical component of the headline balance) as a measure of the size of automatic stabilisers. There is no clear consensus on any one of these methods being superior to the others. As an alternative approach, in this report, the impact of automatic fiscal stabilisers is being captured by the effect that the lower outturn for macroeconomic determinants of fiscal elements in the Ministry's fiscal forecasting model had on the components of general Government revenue and expenditure, after controlling for changes in tax elasticities and changes resulting from the base effect.

[22] Mohl, P., Mourre, G. and Stovicek, K. (2019). "Automatic Fiscal Stabilisers in the EU: Size & Effectiveness." European Economy Economic Briefs, Brief 045, European Commission.

Automatic Fiscal Stabilisers

% of GDP	2020
1. Revenue	-5.2%
Taxes on Production and Imports	-3.6%
Current Taxes on Income and Wealth	-1.3%
Capital taxes	0.0%
Net Social Security Contributions	-0.3%
2. Expenditure	0.0%

On the revenue side of the budget, fiscal support provided by the functioning of automatic stabilisers is estimated at around 5.2 per cent of GDP in 2020. For the most part, this reflects lower tax receipts from taxes on production and imports (3.6 per cent of GDP) and to a lesser extent from current taxes on income and wealth (1.3 per cent of GDP). Such developments reflect both the proportional drop in revenues with respect to GDP, as taxes and contributions of households and firms drop in line with their income and consumption, closely following developments in their macroeconomic bases (as compared to lump-sum taxes); but also the progressivity of the tax system, as a result of which revenues decline in excess of the drop in GDP due to different tax brackets such as in the case of the personal income tax system, reducing volatility in personal disposable income. In the case of taxes on production and imports, progressivity is primarily from different (reduced VAT rates and exemptions) rates of VAT on products and services considered basic necessities.

Automatic stabilisers on the expenditure side of the budget mainly include cyclical unemployment expenditure, and in 2020 is negligible, reflecting the effectiveness of Government's policies to safeguard employment during the pandemic. However, an important automatic fiscal stabiliser is accounted for by the inertia of non-cyclical public expenditure. Indeed, even in the absence of discretionary measures, the inertia in government expenditure helps stabilise total output in a downturn because the bulk of government expenditure (which would be already approved in the Budget, such as wages, social payments or intermediate consumption) does not react to the drop in output.

A stronger role for fiscal policy is warranted in the current circumstances when monetary policy remains close to the zero-lower bound. Nevertheless, traditional automatic fiscal stabilisers might not be sufficient to counterbalance the sharp economic downturn, such as the one experienced as a result of the pandemic. It is clear that in such circumstances discretionary measures to supplement automatic stabilisers are needed to preserve macroeconomic stability and sustainability.

To conclude, automatic fiscal stabilisers play an important role for macroeconomic stabilisation, although their effectiveness may not be apparent prima facie and by themselves may not be sufficient to counter the effects of an economic crisis similar to the one we are experiencing today. Looking ahead, the institutionalisation of asymmetric automatic fiscal stabilisers could provide for more macroeconomic stability and a discussion on their potential utility in Malta should be initiated.

Two types of asymmetric automatic fiscal stabilisers may be identified. On the expenditure side, asymmetric automatic fiscal stabilisers can mainly help to stabilise household spending, such as through higher or longer individual unemployment benefit or social assistance payments once a certain pre-defined threshold is reached. Flexible work schemes that activate in deep recessions are another notable example. Alternatively, asymmetric automatic fiscal stabilisers can work directly through higher government spending, such as on infrastructure investment projects. Asymmetric stabilisers that work via the revenue side can influence the timing of household spending such as through temporary tax deferrals or tax credits, such as a temporary decrease in the VAT rate to boost consumption in the short run.

Measures undertaken to address Covid-19 impact

COVID-related temporary measures in 2020 added up to 6.0 per cent of GDP, excluding the 1.5 per cent of GDP in tax deferrals aimed at further supporting corporate liquidity. Budget 2021 measures in support of the recovery originally accounted for 2.2 per cent of GDP but were later extended to a total stimulus of 5.3 per cent of GDP, inclusive of the support to the National Airline.

During the first half of 2020, the Maltese Government immediately launched a series of financial packages to address the health emergency needs, ease liquidity pressures on businesses and safeguard jobs and households' income. Acting pro-actively, the Government also launched a comprehensive recovery plan to regenerate the Maltese economy, seeking to return to the path of economic growth achieved in recent years.

Fiscal policy measures were put in place to cushion the economic impact, in particular:

- Wage Support Measures: The Wage Supplement Scheme provided funds to businesses and self-employed, affected by the Covid-19 pandemic, to support enterprises in retaining their employees. A one-off lump sum grant was also provided with respect to those employees on mandatory quarantine due to the possible contact with individuals that are at risk of infection.

- Liquidity Support Measures: Other measures were intended to ease liquidity problems, including the deferral of tax payments, loan guarantees and interest rate subsidies to support access to credit, whilst also supporting business to facilitate remote working through measures supporting investment in telework equipment.

- Social Support Measures: On the social side, a number of measures were introduced for individuals who were made redundant or who were unable to work. The parental benefit targeted working parents in the private sector, who could not go to work or carry out their functions through teleworking arrangements and were required to stay at home to take care of their school-aged children. The additional unemployment benefit scheme catered for employees who lost their jobs due to Covid-19. Moreover, the medical benefit scheme and the disability benefit scheme were granted to working disabled and vulnerable people who could not carry out their work functions due to being ordered to stay home for medical reasons.

Additionally, following the lifting of restrictions imposed as a result of the pandemic and the re-opening of non-essential retail establishments and services, on 8 June the Government announced a recovery plan aimed at regenerating the Maltese economy based on the following three pillars:

Reducing Business Costs	Stimulating Domestic Demand	Direct Business Support
• The Tax Deferral Scheme was extended. • Utility bills and commercial rents for businesses affected by the pandemic were subsidised, fuel prices reduced and commercial licenses were refunded. • Contributions to support businesses to invest were granted.	• Government granted a €100 voucher to residents aged 16 and over to be spent locally at hotels, licensed accommodations, restaurants, bars or diving schools and at retail outlets that were required to close during the pandemic • Tax refunds and a more generous in-work benefit scheme for low-income households were granted • The stamp-duty on the transfer of residential property was reduced, in addition to the reduction in the tax rate associated with sales of property and the extension and wider coverage of the first-time buyer scheme.	• The wage supplement scheme was extended till the end of October apart from other schemes which directly supported business operations related to logistics, digital promotion, underwriting facilities, participation in international fairs and an export credit guarantee scheme for the establishment of new export markets • Assistance to nursing homes and an allocation to NGOs to mitigate the impact of the pandemic on their income was granted. • The Government announced several capital and infrastructural projects in industrial areas, including the extension of the Life Sciences Park, the upgrade of the Kordin Business Incubation Centre, investment at the Marsa ex-landfill and a new logistics hub.

Subsequently, the 2021 Budget aimed to continue to sustain the economic recovery, post pandemic, safeguard employment, ensure social protection and invest in sustainable development. Initiatives in this context included the extension of the economic regeneration initiatives in place in 2020 up to March 2021, including the wage supplement scheme and the re-issue of the economic regeneration vouchers, as well as an increase in the minimum threshold for Value Added Tax (VAT) exempt trading to reduce the administrative burden on Small and Medium-Sized Enterprises (SMEs) and through the extended concession on the stamp duty payable on the transfer of family businesses.

Beyond the 2021 Budget initiatives, several policy measures which had been put in place to cushion the impact of the pandemic in 2020, were extended beyond the expiry date contemplated in the 2021 Budget. This was necessary in order to somewhat cushion the economy from the negative impact of the containment measures re-introduced in the first quarter of 2021. In particular, in the case of companies and self-employed persons that suffered a significant downturn in their turnover and liquidity as a result of the economic constraints arising from the coronavirus pandemic. Both the COVID-19 Business Assistance Programme and the reduced tax rates applicable on the transfer of immovable property were also extended and widened in scope. In addition, new incentives underpinning the Tourism Recovery Plan are in place to support the tourism industry, which was severely hit by the pandemic.

The coordination of economic response to the Covid-19 outbreak by the European Commission

Considering the unprecedented impact on the economy by the Covid-19 outbreak, international and domestic institutions hastily responded by loosening monetary policies and providing fiscal stimulus to cushion the economic setback. Such intervention has been facilitated by the triggering of the General Escape clause.

The Commission proposed the activation of the general escape clause in March 2020 as part of its strategy to respond quickly, forcefully and in a coordinated manner to the coronavirus pandemic. This allowed Member States to undertake measures to deal adequately with the crisis, while departing from the budgetary requirements that would normally apply under the European fiscal framework. The Council supported that view. In March 2021, The European Commission adopted a Communication providing Member States with broad guidance on the conduct of fiscal policy in the period ahead, including guiding principles for the proper design and quality of fiscal measures and considerations regarding the deactivation or continued activation of the general escape clause. The Commission confirmed that fiscal policy should continue to support the recovery in 2021. Considering this need and the still high uncertainty about the economic consequences of the pandemic, the general escape clause will remain active in 2021. In the view of the Commission, the decision to deactivate the clause should be taken following an overall assessment of the state of the economy based on quantitative criteria, i.e. on the level of economic activity in the EU or euro area compared to pre-crisis levels (end-2019). On the basis of the Commission's 2021 spring forecast, on 2 June the Commission considered that the conditions to continue to apply the general escape clause in 2022 and to deactivate it as of 2023 were met. Country-specific situations will continue to be taken into account after the deactivation of the general escape clause.

It is to be noted, that the Fiscal Responsibility Act (FRA) is intrinsically tied to the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union and the SGP, such that any decision to activate the escape clause at a European level should have the same effect as a formal announcement by Government on the presence of exceptional circumstances. Indeed, the FRA defines exceptional circumstances in the same way as the SGP. In line with the Council agreement, the Government of Malta considers the current circumstances as exceptional. The FRA envisages the suspension of the budgetary rule in the presence of exceptional circumstances. This applies to both the departure from the Medium-Term Objective (MTO), as well as the adjustment path towards it such that, as long as exceptional circumstances prevail, any departure from the MTO in that year and any lack of sufficient adjustment towards the MTO in any of the years that the exceptional circumstances prevail do not constitute a breach of the rules.

The Medium-Term Strategy

Cognisant of the positive bearing that fiscal consolidation and sustainable debt levels have on potential growth, the Government will continue to prioritise fiscal consolidation once the pandemic is over. Indeed, the budget balance is expected to improve to a deficit of 2.9 per cent of GDP by 2024. In structural terms[23], the general Government deficit is expected to improve from 9.6 per cent in 2021 to 3.0 per cent by 2024. As a result of the prudent approach adopted in pre-COVID budgets, the economy can absorb a short-term increase in borrowing. It is worth noting that in view of the current level of economic uncertainty, projections for 2022 to 2024 are technical in nature and are not inclusive of any specific additional policy measures in respect of COVID-19 or other budgetary expenditure. These estimates are indicative in nature and are set for review to consider the situation post-pandemic and the overall fiscal strategy.

The assumed economic recovery is expected to boost taxation receipts over the course of the next year and, by end-2022, tax revenue is estimated to exceed the level that was recorded prior to the pandemic. Indirect taxes are expected to be the main drivers, as consumer spending is expected to rebound strongly next year. In contrast, the direct taxation yield is projected to increase more modestly. General Government expenditure is estimated to decline by 5.6 per cent in 2022, as the temporary support is expected to be eased in line with the improvement in the public health situation and the economy recovery. Over the outer years of the forecast period, the growth in general Government expenditure is expected to turn positive and is forecasted to increase at an annual average rate of 1.8 per cent.

Debt Developments

Government debt declined below the 60.0 per cent Treaty reference value in 2015 and has fallen continuously ever since, reaching a debt-to-GDP ratio of 42.0 per cent in 2019. As of 2020, the level of public debt relative to GDP has increased to 54.3 per cent, reflecting the impact of the Covid-19 pandemic and the subsequent Government measures to mitigate the economic, social and health risks associated with it. Despite this, Malta continues to be one of the Member States with the lowest debt ratio in the Euro area.

Debt developments depend on net lending, which can be attributed to movements in the primary balance and interest expenditure, GDP growth and the stock flow which is made up of financial transactions and accruals that do not affect lending. Developments in the debt ratio and the contributors to developments in the debt-to-GDP ratio are presented in Table 3.6. The debt-to-GDP ratio is expected to continue to rise and reach 65.0 per cent in 2021. By 2023, Malta's debt-to-GDP ratio is expected to further increase by another 0.3 percentage points over 2022 to 66.0 per cent. The level of public debt relative to GDP is forecast to remain above the Maastricht reference value of 60 per cent by the end of the projected period at 65.6 per cent of GDP in 2024.

The expected rise in the debt-to-GDP ratio over the medium-term horizon is mainly driven by the negative primary balances (primary deficit) together with an expansionary contribution stemming from the stock-flow adjustment and interest expenditure which is expected to moderate throughout the forecast horizon, from 1.3 per cent of GDP in 2020 to 1.1 per cent of GDP throughout 2022 to 2024. Nevertheless, once the exceptional circumstances will be withdrawn and the Maltese economy will start its recovery path, the Government will aim to reduce the debt ratio below 60 per cent of

[23] The structural balance is the difference between government revenues and expenditures corrected for the effects that could be attributed to the economic cycle and one-off events.

GDP in line with the fiscal rules enshrined in the Fiscal Responsibility Act and the Stability and Growth Pact.

The Dynamics of Government Debt [1]

Table 5.4

Percentages of GDP	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Gross debt	42.0	54.3	65.0	65.8	66.0	65.6
Change in gross debt ratio	-2.9	12.3	10.7	0.8	0.3	-0.5
Contributions to changes in gross debt						
Primary balance	-1.7	8.8	10.8	4.5	2.8	1.8
Snowball Effect	-2.0	3.8	-1.9	-4.2	-3.0	-2.8
Interest expenditure	1.3	1.3	1.2	1.1	1.1	1.1
Real GDP growth	-2.3	3.2	-2.0	-4.2	-2.8	-2.5
Inflation Effect	-1.0	-0.7	-1.0	-1.1	-1.3	-1.3
Stock-flow adjustment	0.8	-0.3	1.8	0.5	0.5	0.5
p.m. implicit interest rate on debt	3.2	3.0	2.3	1.9	1.8	1.7

[1] Developments in the debt- to-GDP ratio depend on:

where t denotes a time subscript, D, PD, Y and SFA are the government debt, primary deficit, nominal GDP and the

stock-flow adjustment respectively, and i and y represent the average cost of debt and nominal GDP growth.

Box 5.4 DEBT SUSTAINABILITY ANALYSIS

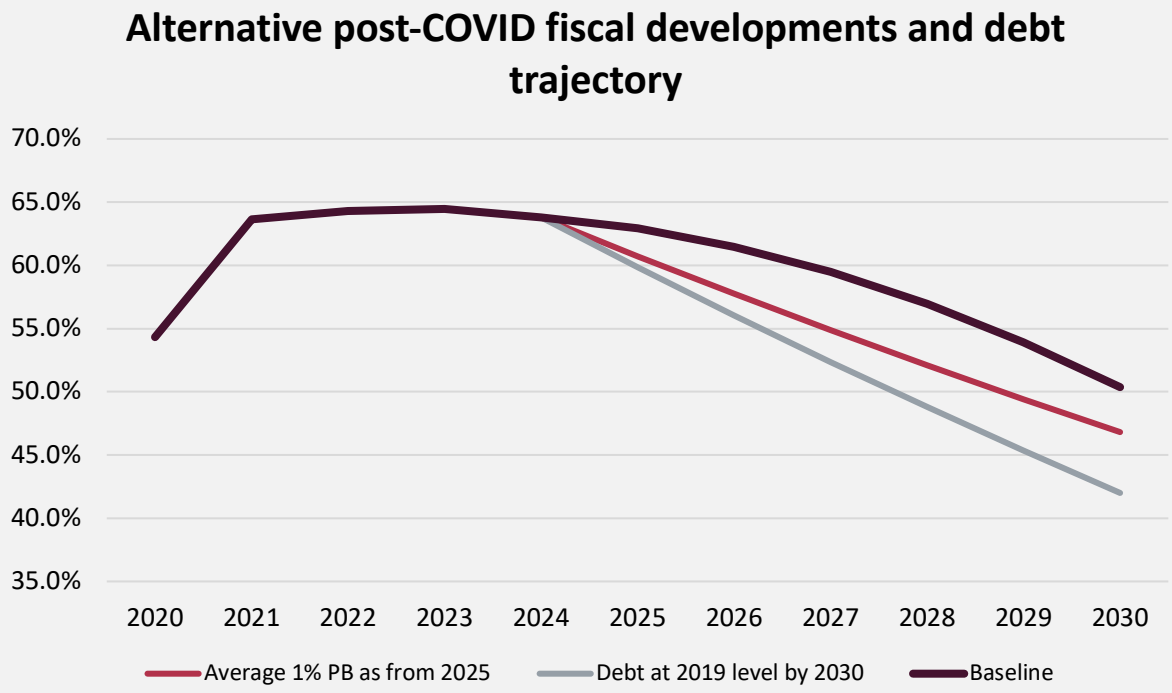
Malta's debt sustainability has been improving in recent years, thanks to prudent fiscal policy, strong growth, and favourable financing conditions. Prior to the pandemic, Malta's public debt ratio and the stock of government guarantees had been declining steadily.

The COVID-19 pandemic has placed a significant strain on public finances in even the most advanced economies, raising concerns over public debt sustainability, especially since sound public finances are a crucial foundation for price and financial stability, and economic growth. A country's public debt is viewed as sustainable if the government can meet all its current and future payment commitments without financial assistance or without going into default.

The following analysis consists of two complementary components: the analysis of the sustainability of total public debt includes a baseline scenario, based on a set of macroeconomic projections that articulate the government's intended policies, with the main assumptions and parameters clearly laid out; and a series of sensitivity tests applied to the baseline scenario, providing an upper bound for the debt dynamics under various assumptions regarding policy variables, macroeconomic developments, and financing costs. The paths of debt indicators under the baseline scenario and the stress tests allow to assess the vulnerability of Malta's debt.

Analysis of alternative post-COVID fiscal developments and resulting debt level by 2030

With a debt-to-GDP ratio of 42 per cent in 2019, Malta was one of the Member States with the lowest debt ratio in the Euro area. As of 2020, the level of public debt relative to GDP has reached 54.3 per cent and according to the Update of the Stability Programme 2021-2024 is expected to remain above the Maastricht reference value of 60 per cent by the end of the projected period at 65.6 per cent of GDP in 2024. All this reflects the impact of the Covid-19 pandemic.



The analysis in this section generates three separate scenarios for Maltese government debt over a ten-year horizon, spanning from 2021 to 2030, which explore different fiscal policy targets the Government may pursue over this horizon. The assumptions underlying these scenarios are the following:

1. In all scenarios, the inflation, economic growth and implicit nominal interest rate assumptions over the 2021-2024 period are based on the Ministry's latest projections published in the most recent Update of the Stability Programme 2021-2024. Thereafter, the paths for these input variables are assumed to revert to their long-run averages. More specifically:
    a. The nominal interest rate, defined as an effective rate, that is, interest payments paid in the current year as a percentage of the previous year's debt, is expected to average 2.1 per cent as from 2025.
    b. Real GDP growth is set to equal 4 per cent annually.
    c. Inflation, as measured by growth in the Harmonised Index of Consumer Prices, is assumed at 1.5 per cent as from 2025, lower than the ECB's objective of euro area inflation, but broadly in line with Malta's long-run average.
    d. The stock flow adjustment, that is the difference between the change in the stock of government debt and the flow of annual deficit/surplus, is assumed to be insignificant.

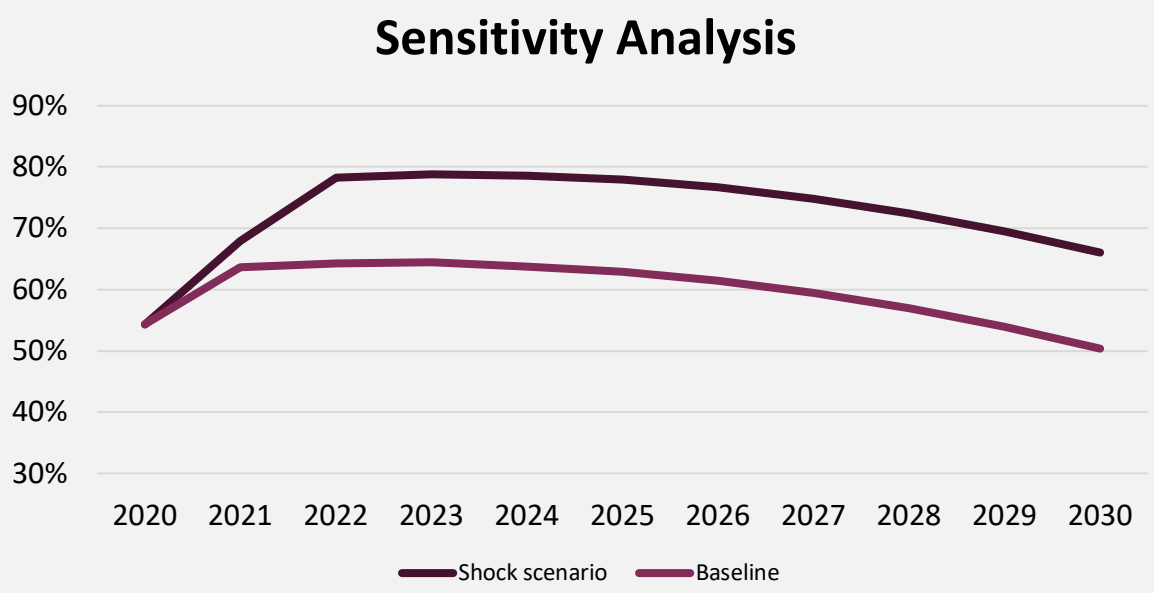
2. The main difference between the scenarios relates to the evolution of the fiscal stance:
    a. In the 'baseline' scenario, the primary balance is assumed to improve in line with the requirements of the structural balance rule of the Fiscal Responsibility Act. These assumptions produce a trajectory for the debt-to-GDP ratio that is set to decline steadily by around 13 percentage points over the course of the next decade to 50.4 per cent by 2030 (excluding the contribution of stock-flow adjustments).
    b. In the second scenario, the primary balance necessary to reach the pre-COVID debt-to-GDP figure of 42 per cent by 2030 is estimated. Consolidation requirements would be much more demanding if the aim were to return debt-to-GDP ratio to the pre-pandemic level. Indeed, a primary balance of 1.9 per cent of GDP as from 2025 would allow the debt ratio to decline to 42 per cent of GDP by 2030. It is however worth noting that this debt trajectory assumes a significant fiscal consolidation effort in 2025, which sees the primary balance improve from a deficit of 1.8 per cent in 2024 to a surplus of 1.9 per cent as from 2025. A more measured fiscal consolidation effort is likely to be less disruptive on economic activity in the short-term.
    c. With a less restrictive fiscal stance, whereby the primary balance would average 1 per cent of GDP as from 2025, the debt-to-GDP ratio would decline less rapidly, reaching 46.8 per cent by 2030. Again, in this scenario a substantial fiscal consolidation effort is assumed in 2025.
    d. With a less restrictive fiscal stance, whereby the primary balance would average 1 per cent of GDP as from 2025, the debt-to-GDP ratio would decline less rapidly, reaching 46.8 per cent by 2030. Again, in this scenario a substantial fiscal consolidation effort is assumed in 2025.

Sensitivity Analysis

To assess the robustness of the projected debt trajectory underlying the baseline scenario, the scenario is subjected to four adverse shocks. The shocks show how the debt trajectory would change if the macroeconomic or fiscal environment is less favourable than assumed above. The different assumptions for GDP growth, inflation, and government's borrowing costs are outlined below:

- Growth shock: The growth shock envisages a temporary shock to real GDP growth of 2 percentage points per year over 2021–22 compared to the baseline projections published in the most recent Update of the Stability Programme 2021-2024 and a 0.5 percentage-point drop in inflation relative to the baseline projection. As from 2024, real GDP growth is assumed at 4 per cent annually, whilst inflation is assumed to revert back to its long-term average of 1.5 per cent.

- Primary balance shock: The primary balance shock envisages a worsening of 3 percentage points of GDP in the primary balance in 2020–2022 over the baseline scenario as published in the most recent Update of the Stability Programme 2021-2024. Beyond 2024, the primary balance is assumed to improve in line with the requirements of the structural balance rule of the Fiscal Responsibility Act, as outlined for the baseline scenario.



- Interest rate shock: Nominal interest rates, defined as interest payments divided by debt stock (excluding guarantees) at the end of the previous year, are assumed to increase by 25 basis points in 2021-2022 and by 50 basis points as from 2023. The shocks to the implicit interest rates are assumed to persist throughout the 2023-2030 period, reflecting higher risk premiums associated with elevated debt levels.

- Government guarantee shock: This scenario analyses a contingency liability risk from State Owned Enterprises (SOEs) and other government guaranteed debt, by assuming a one-time increase in expenditures equivalent to 5 per cent of GDP in 2021.

The sensitivity analysis indicates that with the combined adverse macro-fiscal and government guarantee shock, debt would peak at almost 79 per cent of GDP in 2023and would then decline to just over 66 per cent of GDP by 2030.

Conclusion

Within the context of scenario analysis, over the medium- to long-term, projected debt paths are deemed to be sustainable if they are unlikely to require 'major readjustments', such as substantial increases in taxation, major cuts in government spending or outright default. This analysis does not point towards a likely need for drastic adjustments and that compliance with the minimum requirements of the Fiscal Responsibility Act would bring the debt ratio sufficiently close to its pre-pandemic level in 2030 in the baseline scenario. The three principal scenarios suggest that the debt-to-GDP ratio is set to decline markedly over the next ten years. Since the Government has sustained even higher debt ratios, it is unlikely to face difficulties in servicing lower debt ratios in the absence of significant changes to the current economic strategy. In addition, sensitivity analysis reveals that the need for major adjustments will be unlikely even if substantial shocks materialise, since even with the combined adverse shocks, the debt ratio would soon recover to relatively close to the Treaty reference value by the end of the assessment period.

A faster adjustment could be envisaged to reach the pre-pandemic debt burdens earlier than 2030. This could replicate the performance achieved in the years prior to the pandemic. However, this would be much more difficult to achieve with a medium-term growth rate of 4 per cent and an inflation of 1.5 per cent over the forecast horizon. In this scenario, maintaining a primary balance of more than 1 per cent of GDP may be challenging. It is worth noting that although government managed to sustain an average primary surplus of 2.9 per cent between 2015 and 2019, this was achieved at a time when nominal growth in GDP exceeded 9 per cent on average.

Summary

The Private Sector

Industries have been directly affected by the global COVID19 pandemic resulting in a fall in gross operating surplus of 3.4 per cent (€216.8 million). Most of the negative effects in profits were characterised in the second quarter of 2020, when restrictive measures were imposed. The air transport, travel agency, accommodation and food services, arts and culture, wholesale and retail and manufacture of beverages and clothing were amongst the worse hit industries in terms of profits. Looking at public support facilities as granted by government, these same sectors were amongst those benefitting most from measures such as the wage supplements, moratorium on loan repayments and credit guarantees. In particular the Accommodation and food services activities sector was the main beneficiary of the wage supplement and moratorium on loan repayments. As regards the issuance of loan guarantee schemes, more than half of these loans were granted to the Wholesale and retail activities sector. Bank lending to non-financial corporates also increased substantially thus bolstering the public support measures to keep the economy going. In particular, the highest increase in loans to non-financial corporates was recorded in the Accommodation and Food Services sector. The amount of loans in this sector has increased by €125 million or around 33 per cent. Nevertheless, lending to the wholesale and retail sector declined. Being predominantly made of micro enterprises and self-employed, this suggests difficulties in the monetary transmission mechanism towards smaller enterprises. Public support, especially through credit guarantees to the wholesale and retail sector was hence popular and appropriate given the evident limits of the monetary transmission mechanism with respect to such enterprises in Malta.

Estimated data for 2020 show that NFCs leverage ratio has decreased when compared to the previous year, despite the increase in lending. Indeed, during the first 6 months in 2020, data show that the equity and investment fund shares increased with a larger proportion compared to loans while there was a decline in debt securities. In the third quarter of 2020, estimated data show an increase in debt securities with a drop in the amount of loans leaving leverage ratio at the same levels as previous quarter.

Up till June 2020, total banks' overall NPL ratio increased only marginally to 3.23 per cent from 2.96 per cent registered in 2019. Keeping in mind the loan moratoria as granted to household and firms due to COVID19 pandemic are temporary, this rate is expected to increase as repayment capability will be challenged once support measures are withdrawn.

Public Sector

The COVID-19 pandemic called for unprecedented measures on the part of Government so to support the economy and to ensure no lasting damage is sustained afterwards. The Maltese Government immediately launched a series of financial packages to address the health emergency needs, ease liquidity pressures on businesses and safeguard jobs and households' income. Furthermore, Government launched a comprehensive recovery plan so to stimulate domestic demand, reduce business cost and provide businesses with support so to regenerate the Maltese economy.

The prudent approach adopted in the precedent years allowed the economy to absorb a short-term increase in borrowing. The fiscal support measures were balanced between automatic stabilisers (measured at around 5 per cent of GDP) and discretionary measures (also measured at around 5 per cent of GDP). This was amongst the strongest fiscal stimulus in the EU, though the increase in the debt ratio was more muted compared to other Member States. Even though public debt increased, it is to be noted that Malta's debt sustainability has been improving in recent years and no apparent sustainability risk is currently present. Still, any discretionary measures should be well-tailored to maximise efficiency and effectiveness of government expenditure. Over the medium term, the debt sustainability analysis suggests that adherence to the fiscal rules enshrined in both the Fiscal Responsibility Act and the Stability and Growth Pact will be enough to reduce the debt ratio below the Maastricht treaty requirements in a reasonable time frame, and even in the event of more challenging macroeconomic conditions. However, in view of the expected moderation in the pace of economic expansion, the analysis has suggested that it will be difficult to recover completely in a short time and replicate the pre-pandemic fiscal consolidation performance which prevailed prior to the pandemic to reduce the debt ratio closer to 40 per cent of GDP. Nevertheless, with the pandemic placing significant strain on public finances, it is the express view of the Government that once exceptional circumstances cease to exist, the Government will support a fiscal strategy to revert to the MTO of a balanced budget in structural terms and ensure that the debt ratio remains below 60 per cent of GDP.

CHAPTER 6
CONCLUDING REMARKS AND OBSERVATIONS

This report has documented the starting position of the Maltese economy prior to the impact of the pandemic, an economy characterised by buoyant economic growth, rising employment and devoid of significant macroeconomic and fiscal imbalances. Nonetheless, the COVID-19 pandemic has tested some structural strengths and exposed challenges which deserved to be addressed from a policy making perspective. This chapter also presents certain threats which warrant due consideration, and sheds light on some key opportunities which lie ahead.

Prior to the pandemic, the Maltese economy benefitted from a period of strong growth and a buoyant labour market. This growth was mainly driven by strong investment and export growth. Potential growth reached a peak of 6.1 per cent in 2015 and continued growing at a similar rate over the following two years before moderating. The growth in income was more than enough to sustain the strong investment expansion, thus generating a current account surplus. In additional to domestic savings, foreign investment in a range of economic sectors created jobs and helped boost incomes, which supported higher domestic consumption and resulted in historically low rates of unemployment and increasing labour participation. These positive developments supported a long period of fiscal consolidation, with budget surpluses being recorded and a consistent downward trend in the government debt to GDP ratio. Our reading of the indicators suggests that the rate of economic growth achieved prior to the pandemic was sustainable.

Nevertheless, it is notable that as potential growth stabilized at a lower rate after 2017, labour productivity remained stable and productivity per hour stalled especially after 2017. Estimates of GDP per capita in PPS suggests that after Malta reached the EU average in 2017 further progress stopped being registered. By contrast, SILC data shows that between 2015 and 2019, household income grew at a faster rate (13.7 per cent) than the rate of the EU (11.6 per cent) thus indicating that Malta's average household income was steadily converging towards the EU average**.** This was also a period where the economy created substantial job opportunities, but at the same indications of skill mismatches came to the fore.

The growth momentum in the five years prior to the pandemic was substantially job-rich. Government's active labour market policies considerably improved female participation and effectively encouraged those individuals approaching pension age to defer retirement. This development allows the transfer of skills across cohorts. Besides, the subdued number of labour market entrants at a young age is evidence that further education is being increasingly taken up. Despite the encouraging developments in the labour force, the skills gap remains an issue, particularly when it comes to higher skills. A considerable number of industry operators repeatedly voiced their concerns before the pandemic that native skilled workers was scarce. Whilst an element of this factor is demographic (i.e. a reflection that the absolute number of younger persons that could potentially join the workforce is lower in comparison to the past), this has also led to a dependence on migrant workers.

This report has delved in detail and outlined extensively to contribution of migrants to the labour market. The absorption of migrants in the labour market coincided with a low and decreasing rate of unemployment during the period leading to the pandemic, clearly suggesting that migrant labour was essential to fill the skill gaps and labour shortages that a rapidly growing economy was creating and minimizing the risk of imbalances emerging in the form of excessive inflation or unsustainable wage dynamics which would ultimately hinder competitiveness.

The Post-Pandemic economic strategy going forward should continue to support the growing skill level of the working age population but also support the creation of higher-skilled jobs in a forward-

looking framework. Education policies have a key role to play in that regard. This is deemed crucial in the quest to continue going forward and promoting growth in labour productivity and higher per capita incomes. In addition, there is scope for Government to explore the role of labour market policies in supporting longer careers for older workers as well as smart or targeted migration policies in order to address skill shortages and demographic challenges associated with ageing.

In addition, the higher number of active labour market participants had also positive fiscal effects as reflected in the growth in tax revenues. This in turn contributed towards strengthening the long-term sustainability of public finances through higher potential economic growth but also more directly by helping to finance the implicit liabilities associated with the welfare state including pensions. Nevertheless, the expected moderation in potential growth over the medium term is likely to make it more challenging to return to the fiscal surplus position that characterised the five year period prior to the pandemic. At the same time the debt sustainability analysis did not identify substantial challenges post pandemic to reduce the debt below the Maastricht criteria. In this context, it is observed that once the conditions permit, compliance with the requirements of the Fiscal Responsibility Act would be enough to ensure an orderly correction of fiscal imbalances without jeopardizing the recovery.

The Maltese economy has registered strong value-added contributions across all sectors over the past few years. Notable growth in exports was registered in rapidly growing sectors such as the personal, cultural, and recreational services sector, the tourism sector, the professional services sector, the information and communications sector and the financial services sector. The strong growth in services over the past years has resulted in a relative declining share of the manufacturing sector despite its general positive performance. Nevertheless, certain pockets of manufacturing also registered strong growth rates, even at double digit levels, similar to those observed in the emerging services sectors. These include strong performances from printing, manufacture of non-metallic minerals and electronics. Meanwhile the contribution of the primary sector to total output has also declined.

Notably large sectors such as the information and communication sector and the professional services sector have strong interlinkages with the remote gaming sector. These interdependencies imply that the sector is more integrated in the local economy with positive implications for the generation of local value added, but on the other hand, it also means that the economy is more exposed to any negative structural developments in the remote gaming sector.

Increased construction activity has contributed to the strong investment activity registered over the past years. The strong performance in construction activities has also been a highlight of Malta's recent development. Significant investments were made to accommodate the higher housing demand from a growing population. Besides, investment has been notably skewed towards real estate, which means that the productivity-enhancing benefits associated with such investments remain rather limited.

The above analysis confirms the importance of economic diversification with a view to sustain and strengthen the potential of existing industries and to support the growth of new high-value added industries with a view to create higher quality jobs. In that regard, there is scope to revisit the role of manufacturing which remained quite resilient during the pandemic. This could include concerted efforts to promote research and innovation, including design processes, whilst promoting stronger collaboration between education institutions and private industry, the creation of synergies between education policy and economic development and the internationalization of business could support

this transformative process. From an enterprise point of view, the promotion of Foreign Direct Investment and specifically greater technology transfer could further set economic performance on a sound footing alongside the promotion of domestically owned investment in the real economy.

From a social perspective, the growth in labour income and strong growth in employment coincided with a generally stable income distribution and no major increases in the risk of poverty and social exclusion. It is positive to note that AROPE declined for third country nationals and Maltese nationals alike, but it rose marginally for EU nationals living in Malta. This was supported by declines in severe material deprivation and low work intensity households. Despite the rapid economic developments, social cohesion remained one of the features of the Maltese society as leading indicators of income equality show that income distribution in Malta demonstrates less disparities in comparison to the EU-average.

The AROP before social transfers declined in contrast with the data on in-work poverty which shows a measured increase over this period. Furthermore, whilst social transfers were effective at reducing further the at-risk-of poverty rate, an increasing tendency for inactive persons including older persons to fall below the poverty line can be observed. Indeed, the analysis has also highlighted that persons At-Risk-Of-Poverty after social transfers increased, as social benefits (incl. pensions) have not kept pace with the general increase in wages and income levels. The data available also suggests that until 2019 an improvement in the AROP after social transfers for households with children can be observed but an increase is evident in the AROP after social transfers for households without dependent children. This indicates that a situation could be developing where specific groups in society are facing challenges including as regards housing affordability. In addressing potential challenges of adequacy of the social safety net, fiscal costs will inevitably be incurred. In this context efforts at reviewing public expenditure must be renewed by fully utilising the institutional framework developed prior to the pandemic, address tax evasion, strengthen the growth potential of the economy with a view to strengthen growth in tax revenue whilst sustaining the incentive to work.

A growing economy and a growing population inevitably put a greater strain on the environment resources. In the past years, Malta has engaged in numerous environmentally friendly initiatives and investments, aiming at improving the local environment, whilst also increasing security of energy supply. Notwithstanding, the investment in cleaner electricity production and supply and the drive towards cleaner road transportation, air quality has only marginally improved in the recent years due to the increase in the stock of vehicles. On the upside, the increasing service-orientation of the Maltese economy contributed to an improvement in the resource productivity of the country, as GDP becomes less material intensive. At the same time, the high population density, which was further heightened by a significant net inward migration, has placed further stress on the infrastructure including on demand for energy thus posing an additional challenge to climate change mitigation efforts. This factor and other specificities, such as spatial constraints and a mild Mediterranean climate bring about inherent challenges and opportunities in addressing Malta' decarbonisation commitments.

In that regard, there is scope to explore and support the development of new opportunities in the transport sector and the promotion of a more circular economy. In addition, there is scope to consider appropriate instruments that may enable Government to meet its environmental targets and realize behavioural changes that are conducive to environmentally friendly outcomes. The nurturing of new economic sectors will also be an opportunity for Government to raise new sources of revenue and sustain public finances.

Addressing the COVID Impact

Despite the increased diversification of the Maltese economy into new service sectors, tourism remains an important industry with strong interlinkages to various other sectors. With tourism activity severely limited by the pandemic, Malta experienced a large drop in its GDP. In the absence of Government support, a counterfactual analysis suggest that the economy could have lost around 16 per cent of its output Model simulations also suggest that the fiscal support measures in 2020 mitigated these negative effects and cushioned the economic impact of the pandemic by at least 4 per cent of GDP. The simulations show also that the extension of measures announced by Government to further support the economy in 2021 are justified when considering the extended effects of the pandemic in 2021.

Labour migration patterns were also disrupted with the pandemic. Whilst the overall number of employees (including migrants) rose during 2020, there is evidence that a substantial number of foreigners were repatriated.

It is evident that the wage supplement scheme has been crucial to prevent job losses and together with other measures such as tax deferrals, loan moratoria, lending guarantees and other measures have contributed to save business and prevent corporate insolvencies. The banking sector has also provided needed support, particularly in the tourism sector, to prevent a liquidity shock from giving rise to corporate insolvencies. As a result, the increase in NPLs was contained and there are no indications, in general, of an increase in corporate leverage despite the growth in credit to NFCs. However, in the absence of sectoral performance data, this macro picture may hide diverging patterns in different sectors. It is important to consider the post-pandemic response carefully as this situation is partly dependent on the support of Government with credit guarantees and loan moratoria and partly on the pace of recovery. In the most affected sector, tourism, projections are currently showing a slower pace of recovery than the rest of the economy, indicating that an abrupt and premature withdrawal of Government support could be damaging to the sector and all the sectors dependent on tourism. The report has also highlighted potential weaknesses in the monetary transmission mechanisms vis-à-vis the wholesale and retail sector, a sector which is predominantly made up of SMEs and self-employed. Here again, there is scope to optimise the best form of support for the post-Covid economic strategy. In that regard, there is scope to facilitate and sustain policies and mechanisms that support and promote the restructuring of viable companies which are facing financial challenges. At the same time, strengthening of insolvency procedures remains a key element in enhancing the business environment.

Similarly, there is also scope to leverage the boost in digital adoption and act to help broaden the reach and use of digital technologies, especially among smaller and harder-to-reach firms to reduce uncertainty and pave the way to a stronger, productivity-driven recovery.

Inevitably the pandemic exerted significant stress on the budget with the deficit of 10 per cent being registered in 2020 being one of the highest in the EU in reflection of the generous fiscal support measures adopted by Government. The deficit is also expected to rise further in 2021. Post-pandemic, one must be mindful of the fiscal resources at hand. There needs to be a gradual shift away from expending resources to address the damage caused by the pandemic to supporting the recovery and by aligning public investment to sustainable development. On the one hand, there is a risk that any premature tapering of support will impair the pace of the recovery. At the same time. weaning off the economy from public intervention will ensure that the market function is restored thus complimenting public policy by promoting an efficient redistribution of scarce resources and

the restructuring of viable operations which have been subject to substantial liquidity shocks during the pandemic.

Given data limitations, it is not yet possible to systematically analyse the impact of COVID on poverty and inequality though there is a growing body of literature showing the disproportionate effect of COVID on the most vulnerable of society, including the elderly, those at risk of poverty and the homeless. Whilst the economic recovery is likely to address some of these potential adverse developments, social support measures will remain essential, particularly to address lower employment and income opportunities likely to materialize among low-skilled labour in view of their predominance in sectors expected to recover more slowly.

STRENGTHS

• Diversified economy with well-developed clusters across a number of sub-sectors
• Strong, broad-based and job-rich economic growth pre-pandemic
• GDP per capita convergence to EU average in 2017
• Contribution of migrants to economic growth
• Pro-business environment, policies and regulatory frameworks
• High levels of FDI attractiveness underpinned by an EU and OECD compliant fiscal system, EU membership and market access, a strong incentive framework, English as a national language (workforce, laws, regulations)
• Telecoms infrastructure is amongst the most advanced in Europe and is key to support the transition to the digital economy
• Strategic location for transshipment /hubbing activities and well-developed port infrastructure and routes
• Strong and fast-growing tourism industry pre-pandemic across peak and shoulder months
• Economic growth underpinned by significant growth in labour force (45% increase in persons in employment between 2013-2019)
• Consistent low levels of unemployment (amongst the best in the EU)
• High-labour force participation amongst young females
• Extensive social welfare systems and low levels of income inequality
• Strong government finances supported one of the biggest COVID stimulus packages (as % of GDP) to keep businesses going and people in work
• Large-scale government investment projects underway
• No apparent debt sustainability risk is currently present
• Shift towards service oriented economic activity had a positive impact on resource productivity
• Cleaner source of energy generation through the investments carried out in recent years

WEAKNESSES

• Small and open economy, prone to external shocks
• Indications that the productivity growth rate has started to slow in recent years
• Size of domestic market
• Disparities among different economic sectors in terms of productivity, competitiveness, skills, and wages, possibly leading to dualism
• Low levels of digital maturity, RDI expenditure and weak corporate innovation culture, particularly among SMEs
• Most personal and commercial investment activity is directed towards real-estate
• Size and maturity of start-up ecosystem; venture and risk capital availability
• Small talent pool and tight labour market makes sourcing and retaining specialized skills challenging
• Misalignment between risk appetite of banks and new niche economic areas
• The presence of informal activity with negative implications for public finances as well as employment standards
• Perceived worsening in cost competitiveness as cost of living increases
• Low levels of formal core and digital skills amongst large parts of the population
• Perceived worsening in the state of the environment reduces the external attractiveness of the country with implications for quality of life.
• Local insolvency procedures are not as competitive as some jurisdictions.
• Pressure to improve the generosity of the benefit system will put pressure on public finances

OPPORTUNITIES

• Redirection of the economy towards more sustainable and innovative forms of activity following COVID shake-up
• Opportunity to reassess the tourism model
• EU funding for RRF / NextGen EU and MMF programmes for large scale investment programmes
• Active internationalization and new market opportunities
• Re-shoring and nearshoring of business activity, product lines and supply chains due to COVID-19
• Opportunities with companies looking for places to pilot new technologies with decarbonization, healthcare and education high on the global agenda
• Remote working opportunities across a global jobs market
• Foreign workers / nomads are looking for nice and safe places to live, and these will bring about production complementarities that will benefit economic growth
• Stronger collaboration between education and industry based on a thorough assessment of industry demand relative to supply of workers on the basis of a forward-looking framework.
• Technology transfer from FDI, strengthening the interlinkages with domestic industries and promoting the transfer of skills.

THREATS

• Potential OECD/G20/EU tax policy changes may harm Malta's attractiveness for FDI
• Non-EU countries are not constrained by state-aid rules and may be able to grant subsidies that create an uneven playing field to help the growth of their local companies following COVID-19
• Uncertainties related to government expenditures and revenues considering the epidemiological state of the pandemic.
• Some businesses may face challenges once government support is alleviated.
• Companies may offshore certain jobs, but at the same time labour shortages may emerge once demand fully recovers post pandemic
• Certain sectors such as the wholesale and retail trade and tourism sectors may not fully recover over the short term.
• Competing tourism countries may launch aggressive campaigns and incentives to win back volume and market share