

# DEVELOPMENTS IN THE ARTS, ENTERTAINMENT AND RECREATION SECTOR<sup>1,2</sup>

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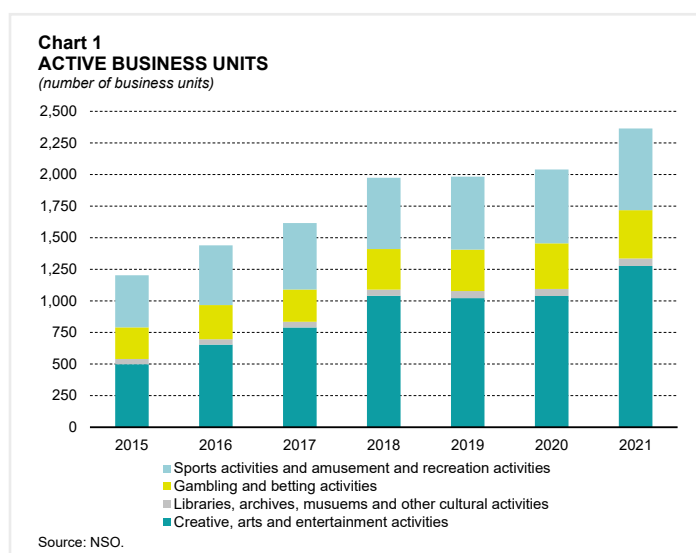
This article is part of a series of studies focusing on different sectors of the economy. It specifically focuses on the arts, entertainment, and recreation sector (NACE sector R).<sup>3</sup> It assesses key trends and developments, using different sources of data, including the statistical business register, activity indicators, as well as input-output tables.

The arts, entertainment and recreation sector is composed of four sub-sectors (see Annex 1). The first sub-sector covers creative, arts and entertainment activities (NACE 90), which includes the operation of facilities and provision of services to meet cultural and entertainment interests, (such as live performances, public events, or exhibits), as well the provision of artistic, creative or technical skills for the production of artistic products and live performances. NACE 91 covers libraries, archives, museums, and other cultural activities, which includes the preservation and exhibit of historical sites and nature reserves activities. The gambling and betting activities category (NACE 92) includes the operation of gambling facilities (such as casinos, bingo halls and video gaming terminals) and the provision of gambling services (such as lotteries and off-track betting). NACE 93 comprises the provision of recreational, amusement and sports activities, including the operation of sports facilities, the promoting, managing and participation in sports events, as well as the operation of a variety of attractions (such as mechanical rides, games' shows and theme exhibits).

## Business structure

According to data published by the National Statistics Office (NSO), the number of active business units registered within the arts, entertainment and recreation sector stood at 2,454 in 2022, comprising 4.2% of total registered business units in Malta that year (see Chart 1).

Between 2015 and 2022, the number of active business units in this NACE division broadly doubled, compared with a 44.5% increase for the whole economy.<sup>4</sup>



<sup>1</sup> Prepared by Michaela Ghigo, a Senior Economist at the Economic Analysis Department within the Central Bank of Malta. Helpful comments by Dr Aaron G. Grech, Ms Rita Schembri and Mr John Farrugia are gratefully acknowledged. The views expressed in this article are those of the author and do not necessarily reflect those of the Central Bank of Malta. Any errors are the author's own.

<sup>2</sup> The cut-off date for this article is 10 April 2024.

<sup>3</sup> The definition of the arts, entertainment and recreation sector used in this article are based on [Eurostat's NACE Rev 2. Statistical classification of economic activities](#).

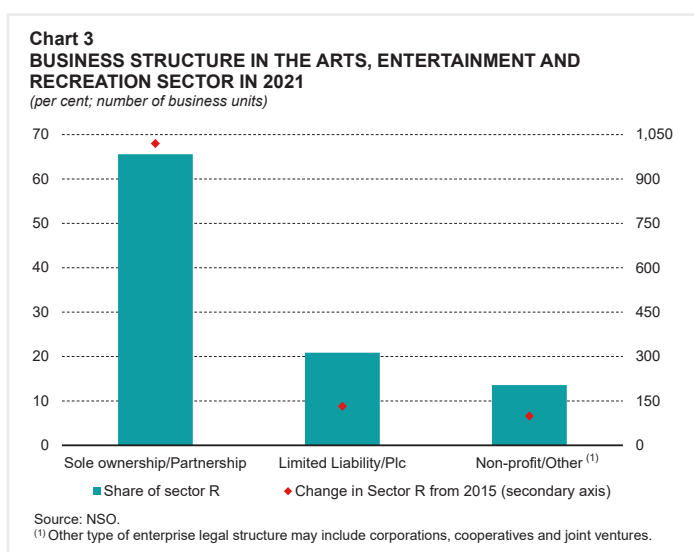
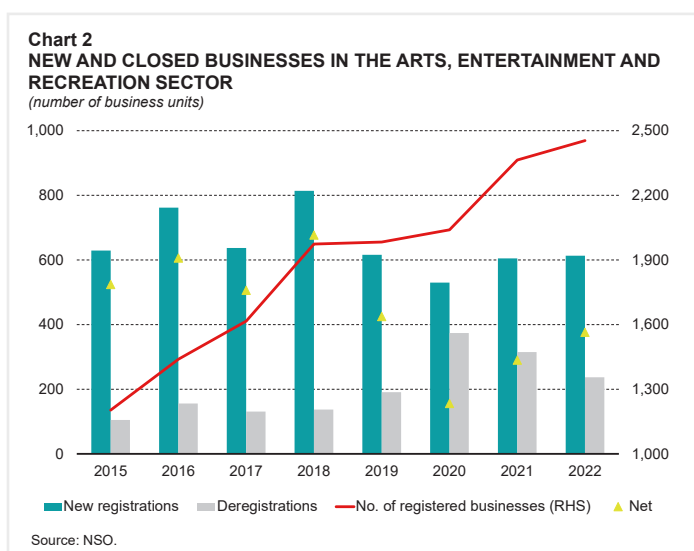
<sup>4</sup> Registered business data for at NACE division level is available as from 2015 onwards.

Disaggregated data at sub-sector level is only available until 2021. Around two-thirds of the increase in active business units within NACE division R since 2015 is due to the sub-sector comprising creative, arts and entertainment activities. As a result, this sub-sector continued to increase its dominance throughout the years. Active business units also increased in the sub-sectors comprising the sports activities and amusement and recreation activities, and the gambling and betting activities, though to a lesser extent. Meanwhile, the number of registered business units operating in the sub-sector comprising libraries, archives, museums, and other cultural activities increased slightly.

During 2021, more than half of units operating in NACE division R were classified under the sub-sector of creative, arts and entertainment activities (R90), and a further 27% formed part of the sub-sector comprising sports activities and amusement and recreation activities (R93). Slightly over 16% of total active units in NACE division R were included in the gambling and betting activities sub-sector (R92), while just 2.5% formed part of the sub-sector comprising libraries, archives, museums, and other cultural activities.

In absolute terms, net registrations in recent years were strongest in 2016 and 2018, as the number of newly registered businesses significantly exceeded the number of deregistered entities (see Chart 2). Net registrations fell significantly to 156 units in 2020, as the COVID-19 pandemic contributed to a surge in de-registrations. Net registrations began to recover in subsequent years, and reached 376 units in 2022. However, this was still below the average recorded before the outbreak of the pandemic.

In 2022, around two-thirds of active business units were in the form of sole proprietors or partnerships (see Chart 3). Entities operating as limited companies or public limited companies made up 20.9% of total units. The remaining 13.6% operated under a different legal structure, such as a corporation, cooperative or joint venture. This share



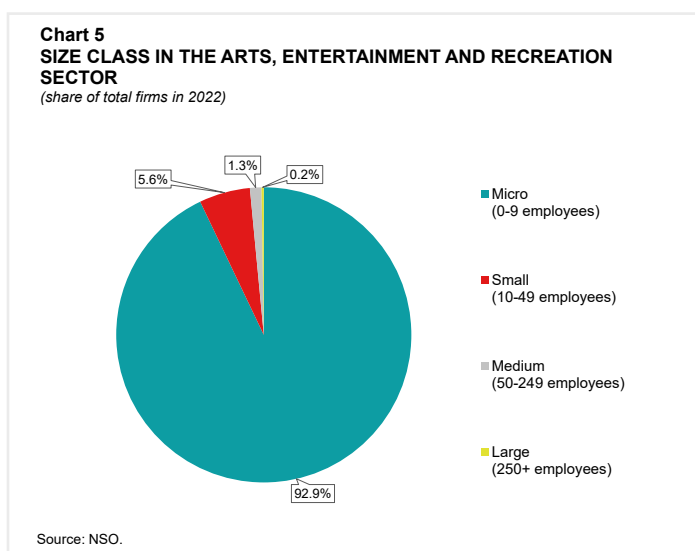
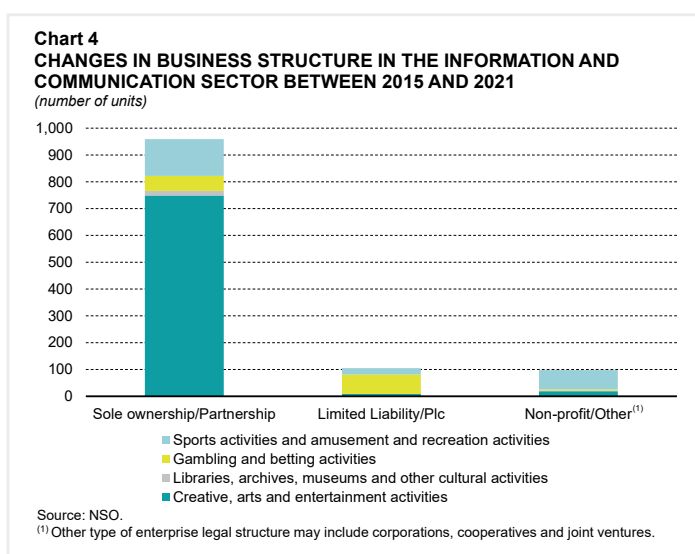
is above that of other sectors in the economy, and may reflect the higher concentration of clubs (e.g. cultural and sports clubs) in sector R.

The composition of active business by legal ownership in the sector differs from that prevailing in 2015, when almost 32% of registered businesses were limited liability companies or public limited companies, while those operating as sole ownerships or partnerships stood at 49%. Thus, sole ownerships and partnerships have gained more importance relative to other legal structures since 2015.

Information on the business structure by sub-sector is available until 2021. Between 2015 and 2021, the largest increase in active business units in NACE section R was recorded in the sub-sector comprising creative, arts and entertainment activities, with the increase largely observed in sole ownerships and partnerships (see Chart 4). This was followed by sole ownerships and partnerships in the sub-sector comprising the sports activities and amusement and recreation activities, and the limited liability companies operating in the gambling and betting activities sub-sector.

The vast majority – 92.9% of enterprises within the arts, entertainment and recreation sector in 2022 – were classified as micro-enterprises, employing less than ten employees (see Chart 5).<sup>5</sup> An additional 5.6% were classified as small enterprises, with just 1.5% being classified as medium or large enterprises. The large share of micro enterprises is not only a feature of sector R overall, but is also a characteristic of all its sub-sectors.

Business register data on employment by firm size is available until 2021. Although microenterprises prevail, in 2021 they only accounted for 26.2% of employment in sector R, representing an increase of 0.5 percentage point from 2015 (see Chart 6). Medium and large enterprises accounted for around 51% of jobs, an increase



<sup>5</sup> According to the NSO *News Release* 081/2021 on registered business units, microenterprises are ones which employ up to nine employees. Small enterprises employ between ten and 49 employees, while medium enterprises engage between 50 and 249 employees. Units employing 250 or more employees are considered as large businesses.

on the 47.2% registered in 2015. Meanwhile, the share of small business entities declined by 4.1 percentage points over the period 2015 to 2021, standing at slightly over a fifth during 2021.

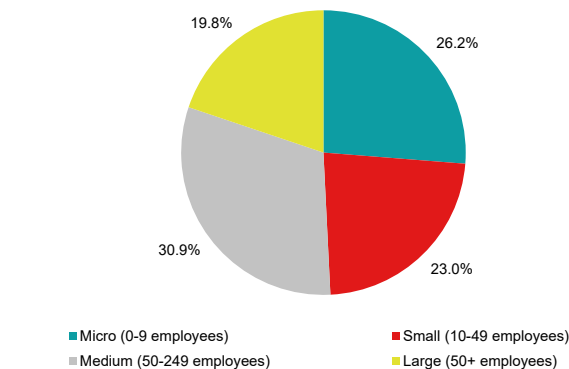
### Activity indicators

National accounts data show that the volume of GVA in the arts, entertainment and recreation sector stood at €1,519.2 million in 2023. This is equivalent to 10.5% of real GVA generated by the whole economy (see Chart 7). In 2023, sector R ranked fifth in size compared to other sectors.

Following the outbreak of COVID-19 in 2020, sector R's share in the economy's GVA edged up to around 11% by 2023, from around 9% in 2019. Indeed, in 2023, the level of GVA in sector R exceeded its pre-pandemic level by around 40%. This sector was among those that succeeded to expand further during the pandemic, possibly reflecting changes in consumer behaviour. Indeed, the sector experienced an increase in demand for online music streaming, e-books, and the use of digital platforms, such as cloud gaming and e-sports.

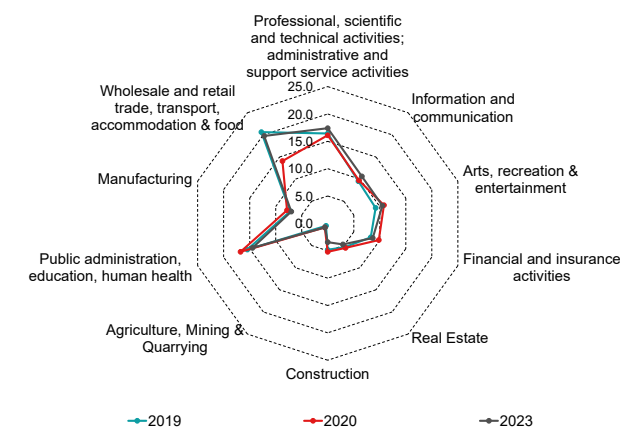
A longer-term assessment of the 20 years prior the pandemic reveals that sector R registered the third largest gain when compared to the other sectors in the economy. Its share more than doubled over this period, reaching 10.2% in 2019, from below 5% in 2000 (see Chart 8). Growth in real GVA was

**CHART 6**  
**EMPLOYMENT BY FIRM SIZE IN THE ARTS, ENTERTAINMENT AND RECREATION SECTOR**  
*(share of total employment in 2021)*



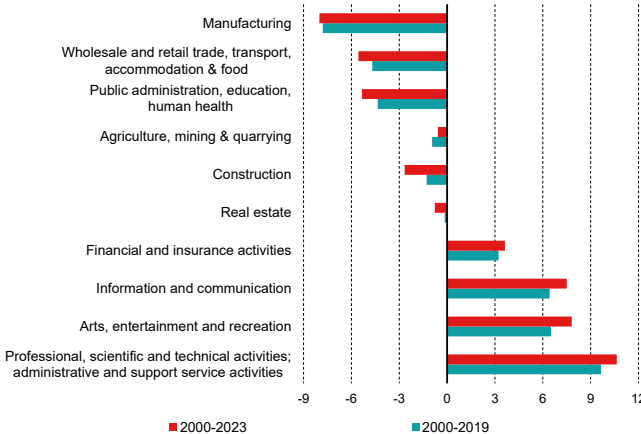
Source: NSO.

**Chart 7**  
**SHARE OF REAL GVA BY SECTOR**  
*(per cent)*



Source: NSO.

**Chart 8**  
**CHANGES IN REAL GVA OVER TIME**  
*(as a % total economy)*



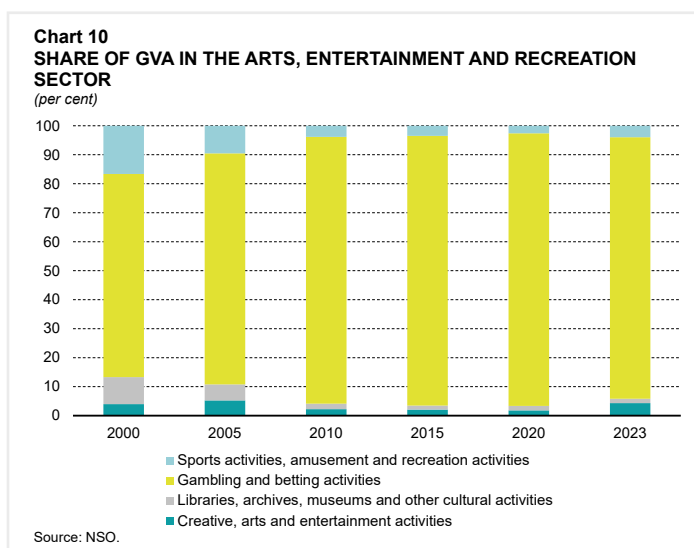
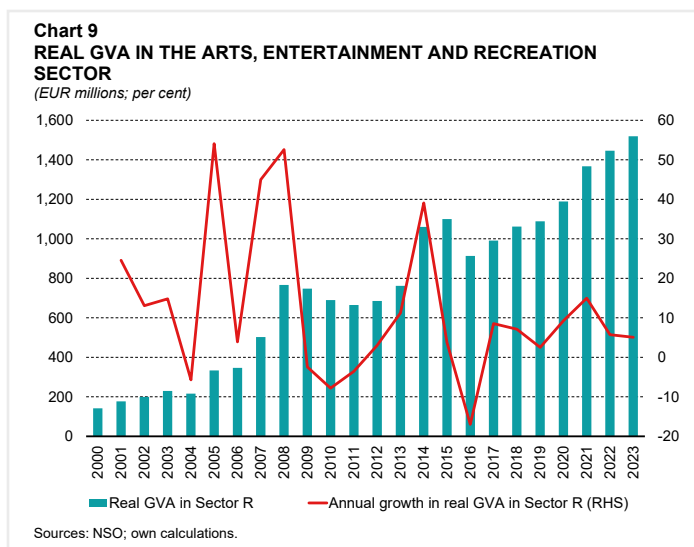
Source: NSO.

particularly significant in 2005, 2007, 2008 and 2014, where growth rates ranged between 40% and 50% per annum (see Chart 9). This sector continued to register strong growth more recently, though less than before, as the sector matures. In 2021, for example, it grew by 15%, with growth moderating to around 5% to 6% in the last two years.

Nominal data indicate that activity in the sector is largely driven by the gambling and betting activities sub-sector.<sup>6</sup> The latter generated around 90% of the sector R's GVA in 2023 (see Chart 10). This is equivalent to 9.3% of total economy's GVA.

The share of this sub-sector increased significantly since 2000, when it constituted around 70% of value added in sector R. By 2008, it had already reached around 92% of sector R's GVA, and hovered around the 90% mark for the remaining period. This reflects Malta's robust and attractive regulatory framework, which began in 2004 following EU succession, leading to the booming of the online gaming industry and making Malta an international hub for iGaming.

The share of real GVA in sector R for the creative, arts and entertainment activities sub-sector also increased over this period, slightly exceeding 4%, consistent with the share recorded in 2000. By contrast, the sub-sector comprising libraries, archives, museums, and other cultural activities, as well as the sub-sector including sports activities, amusement and recreation activities, saw a significant decrease in the share of GVA in sector R since 2000, with most of this decline arising before 2015.



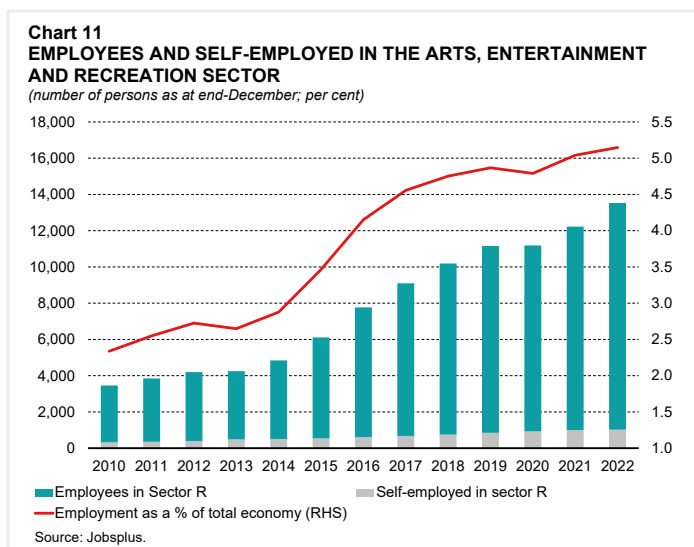
<sup>6</sup> Chain-linked data at two-digit NACE are not available in real terms. Therefore, while chain-linked data are used to assess sector R as a whole, the analysis at sub-sector level is based on nominal data. Therefore, this section does not account for certain factors such as the impact of price changes.

## Labour market developments

According to administrative data, employment in the arts, entertainment and recreation sector grew by double-digit rates in most years since 2010 (see Chart 11). Growth was slowest in 2020, when it reached 0.2%. By 2022, full-time employment in the sector stood at 13,525 persons, accounting for 5.1% of total employment in Malta. The majority of the workers in the industry are employees, although the share of self-employed workers more than

tripled in the period under review. In 2022, the number of employees stood at 12,506 persons, equivalent to 92.5% of full-time job holders in sector R, compared with around 90% in 2010. Self-employed workers accounted for 7.5% of full-time employment in the industry, or 1,019 workers, compared with just above 9% in 2010. The composition of employment in sector R is in line with that observed in other services sectors.

In terms of full-time employment, around 77% of such jobs in the sector in 2022 were generated by the gambling and betting activities sub-sector. The latter employed 10,449 full-time workers (see Table 1). The sub-sector comprising sports activities, and amusement and recreation activities followed, with 1,430 persons, or 10.6% of full-time employment in sector R. The creative, arts and entertainment activities sub-sector generated an additional 1,052 full-time positions, with a



**Table 1**  
**FULL-TIME AND PART-TIME GAINFULLY OCCUPIED POPULATION**

Number of persons as at end-December

	2010	2015	2019	2020	2021	2022	2022 change from 2010	2022 change from 2019
<b>FULL-TIME EMPLOYMENT</b>	<b>3,455</b>	<b>6,111</b>	<b>11,163</b>	<b>11,182</b>	<b>12,224</b>	<b>13,525</b>	<b>10,070</b>	<b>2,362</b>
Creative, arts and entertainment activities	327	505	916	975	1,020	1,052	725	136
Libraries, archives, museums and other cultural activities	412	445	543	564	580	594	182	51
Gambling and betting activities	2,235	4,405	8,488	8,376	9,319	10,449	8,214	1,961
Sports activities and amusement and recreation activities	481	756	1,216	1,267	1,305	1,430	949	214
<b>PART-TIME EMPLOYMENT</b>	<b>1,394</b>	<b>1,854</b>	<b>3,252</b>	<b>3,167</b>	<b>3,439</b>	<b>3,811</b>	<b>2,417</b>	<b>559</b>
<b>Part-time as a Primary Job</b>	<b>726</b>	<b>981</b>	<b>1,511</b>	<b>1,426</b>	<b>1,470</b>	<b>1,570</b>	<b>844</b>	<b>59</b>
Creative, arts and entertainment activities	173	233	517	537	589	638	465	121
Libraries, archives, museums and other cultural activities	77	78	70	60	61	67	-10	-3
Gambling and betting activities	206	296	322	326	293	280	74	-42
Sports activities and amusement and recreation activities	270	374	602	503	527	585	315	-17
<b>Part-time as a Secondary Job</b>	<b>668</b>	<b>873</b>	<b>1,741</b>	<b>1,741</b>	<b>1,969</b>	<b>2,241</b>	<b>1,573</b>	<b>500</b>
Creative, arts and entertainment activities	178	254	701	781	874	1,057	879	356
Libraries, archives, museums and other cultural activities	28	29	47	38	34	36	8	-11
Gambling and betting activities	127	124	197	190	197	205	78	8
Sports activities and amusement and recreation activities	335	466	796	732	864	943	608	147

Source: Jobsplus.

share of almost 8%, while the remaining 4.4% of full-time employees in sector R (just under 600 persons), were employed in the sub-sector comprising libraries, archives, museums and other cultural activities.

A contrasting picture emerges from data on the number of persons in part-time employment as a primary job, which shows less concentration in gambling and betting activities. The creative, arts and entertainment activities sub-sector accounts for over 40% of such jobs, while the second most important is the sub-sector comprising sports activities and amusement and recreation activities (37.3%). Furthermore, the gambling and betting activities sub-sector accounts for around 18% of workers, while the share of workers in the libraries, archives, museums, and other cultural activities sub-sector remained broadly in line with that for full-time workers (4.3%). A similar structure is further observed in data on the number of persons in part-time employment as a secondary job.

The share of part-time workers as a primary job in total employment in sector R stand at around 9%, slightly below the average of 10.0% for the whole economy. By comparison, the sectors for wholesale and retail trade, real estate activities, as well as accommodation and food services activities recorded ratios of around 13% or higher. However, the share of part-time employment as a secondary job in sector R stood around 13%, which is slightly higher than the average of around 11% for the whole economy. This share is nevertheless lower than that in real estate, transportation and storage, and the professional, scientific, and technical activities sector. In these sectors, it ranged from just over 16% to just over 25%.

The number of full-time jobs almost quadrupled since 2010, with more than 80.0% of the rise generated by the gambling and betting activities sub-sector. This was followed by increases in the sub-sectors comprising sports activities and amusement and recreation activities, and in creative, arts and entertainment activities.

Meanwhile, the number of persons in part-time employment almost tripled, with most of the increase being driven by part-time employment as a secondary job. More than half of the increase in the latter (55.9%) was driven by the creative, arts and entertainment activities sub-sector. Strong increases were also recorded in the sport activities and amusement and recreation activities sub-sector.

Overall, sector R accounts for around 9% of the growth in total employment in Malta since 2010.

Table 1 shows that most sub-sectors registered a small increase in full-time employment between 2019 and 2020, the first year of the COVID-19 pandemic. However, full-time employment in the gambling and betting activities sub-sector decreased in 2020. This reflects the limited level of activities in this sector that year, brought about by social and travel restrictions, which were only partly alleviated by Government support through the Wage Supplement Scheme. Changes in part-time employment were generally small, although such jobs declined quite significantly in the sub-sector comprising sports activities. By 2021, however, full-time and part-time employment exceeded 2019 levels in all sub-sectors.

The labour market in sector R is composed of predominantly male workers. Males account for almost 59.0% of full-time employment in the sector, broadly in line with the 60.0% for the whole economy. By way of comparison, this share ranges from 32.0% in the education sector to 92.0% in the construction sector.

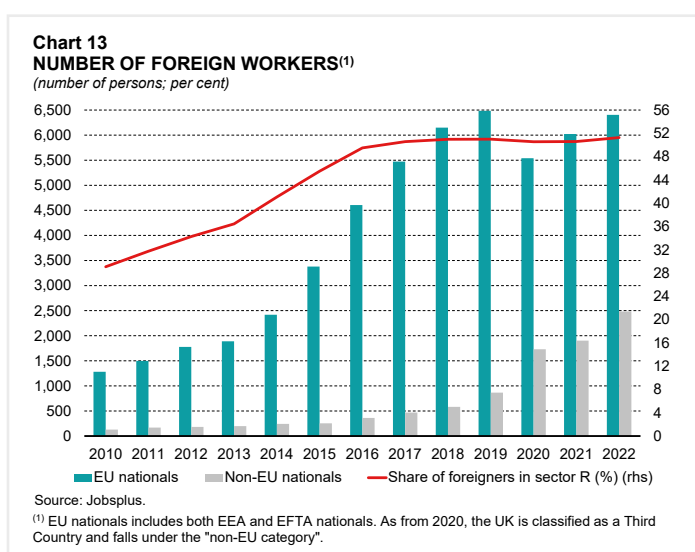
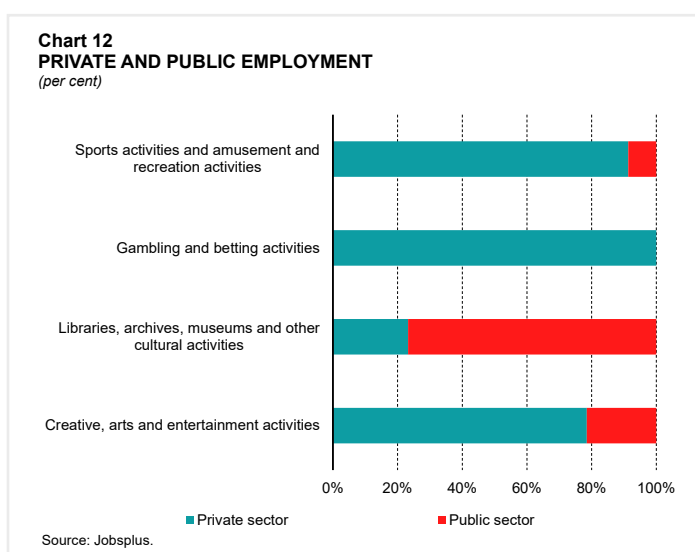
Sub-sector data for 2022 show that men outweigh women in almost all sub-categories, with the largest discrepancy being recorded in full-time employment in the sports activities and amusement and recreation activities. By contrast, and in line with patterns in most other sectors of the economy, part-time employment as a primary job was dominated by females across all sub-sectors. However, this was notably the case in the sub-sector comprising creative, arts and entertainment activities.

Less than one-tenth (6%) of full-time workers in the arts, entertainment and recreation sector during 2022 were employed with the public sector. Among the latter, more than half worked in the libraries, archives, museums and other cultural activities sub-sector (see Chart 12). Workers engaged in creative, arts and entertainment activities accounted for another 28.0% of public sector employment in sector R with a small share employed in the sector comprising sports and related activities. Overall, 97.5% of the increase in employment since 2010 was driven by new jobs in the private sector, primarily in the gambling and betting activities sub-sector.

### Foreign workers

The arts, entertainment and recreation sector has witnessed a significant rise in the number of foreign workers. By 2022, the total number of full-time and part-time foreigners employed in this sector stood at 8,888 persons – around six times the number of foreigners employed in this sector in 2010. Furthermore, foreign workers accounted for around 51% of total employment in the sector, significantly above the 29.0% registered for the whole economy (see Chart 13). This is the highest ratio for all sectors in the economy. It was followed by the sector comprising accommodation and food service activities, construction, as well as administrative and support service activities, with shares of between 40% and 50%.

Almost three-fourths of foreign workers employed in the arts,





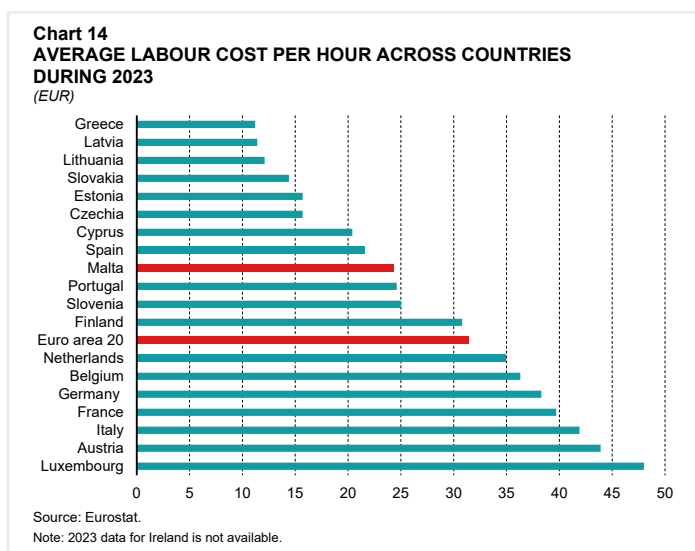
entertainment and recreation sector during 2022 were EU nationals. Non-EU workers working in sector R have been on the increase over the period under review. Although this partly reflects the re-classification of British foreign workers from EU to non-EU workers after Brexit in 2020, this pattern has also persisted in more recent years.

Overall, foreigners in the arts, entertainment and recreation sector account for around 9% of all foreign workers in Malta.

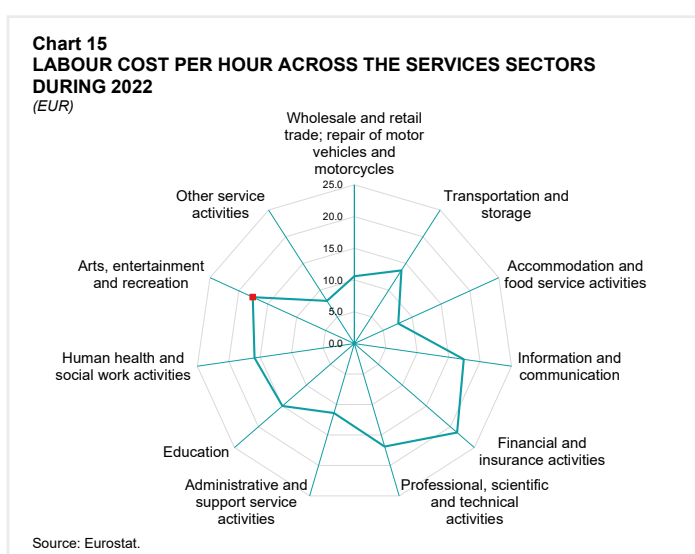
In 2019 the Central Bank of Malta conducted a study on the length of stay of foreign workers in Malta, using anonymised data up to 2017.<sup>7</sup> According to this study, the arts, entertainment and recreation sector recorded the fifth lowest exit rates within one year, at 19.3%. The only sectors with a lower exit rate were the wholesale and retail trade sector (17.5%), the information and communication sector (18.4%), the sector comprising financial and insurance services (18.6%), and the other services category (18.8%). This sector also exhibited a relatively higher length of stay relative to other sectors, possibly driven by the need for a higher degree of expertise and thus, higher wages paid (see below).

### Labour costs

Eurostat's Labour Cost Survey shows that labour costs in the arts, entertainment and recreation sector stood at €24.30 per hour in 2023. These costs stood below the euro area average of €31.40 per hour (see Chart 14).



Nevertheless, when compared with other services sectors in Malta, the cost of labour per hour in arts, entertainment and recreation sector in 2022 is the second highest (see Chart 15). It was exceeded only by the sector comprising financial and insurance activities (€21.40). Labour costs in sector R are similar to those in the information and communication sector (€17.60). On the other hand, other services sectors with lower labour costs include the education sector (€15.00), the



<sup>7</sup> Borg, I. (2019), "The length of stay of foreign workers in Malta", *Policy Note* January 2019, Central Bank of Malta.

sector comprising transport and storage (€13.70), the wholesale and retail trade sector (€10.60), as well as the sector comprising accommodation and food service activities (€7.60).

A similar pattern can be drawn on the basis of CPE data.<sup>8</sup> During 2023, the average CPE in the arts, entertainment and recreation sector ranked the second highest at €42,800 (see Chart 16). This compared with a whole economy average of €30,000. The only sector that registered a higher CPE during 2023 was the financial and insurance sector, at €46,700.

Additional data by sub-sector shows heterogeneity in compensation within the arts, entertainment and recreation sector. By 2023, the gambling and betting activities sub-sector offered the highest CPE in this sector. The high CPE in this sub-sector could partly reflect reliance on highly skilled foreign workers.

By contrast, the sub-sectors including creative, arts and entertainment activities, as well as sports activities, amusement and recreation activities, registered significantly lower CPE compared with the total economy average. This may partly reflect the relatively high degree of persons working in part-time employment within these two sub-sectors, who generate less income due to lower hours worked.

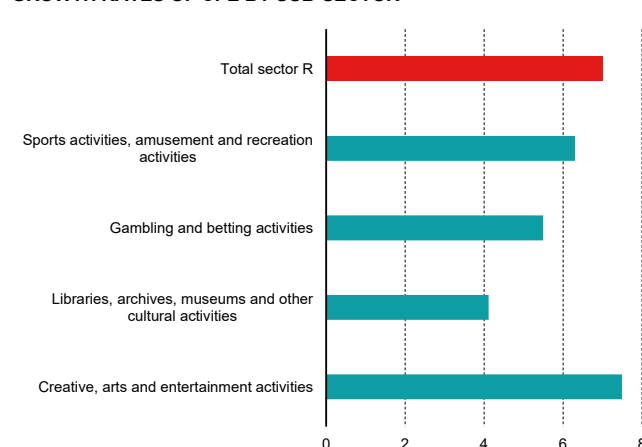
Between 2010 and 2023, CPE generated in the sub-sector comprising creative, arts and entertainment activities grew by an annual average rate of 7.5% (see Chart 17). This was followed by the sub-sector which includes sport activities, amusement and recreation activities, which saw an increase of 6.3%. Meanwhile, the gambling and betting activities sub-sector, and the libraries, archives, museums, and cultural activities sub-sector registered smaller increases of 5.5% and 4.1%, respectively.

**Chart 16**  
**CPE BY SECTOR DURING 2023**



Sources: NSO; Author's calculations.

**Chart 17**  
**GROWTH RATES OF CPE BY SUB-SECTOR**



Sources: NSO; Author's calculations.

<sup>8</sup> Data on CPE are based on data from the national accounts. These figures include sectors which are not included in the Labour Cost Survey, primarily Agriculture and Fisheries sector as well as Public Administration. Moreover, the Labour Cost Survey covers only units with more than ten employees.

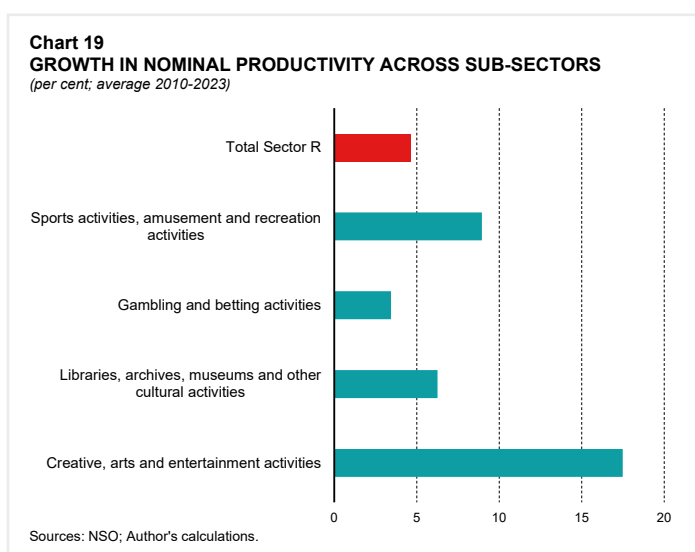
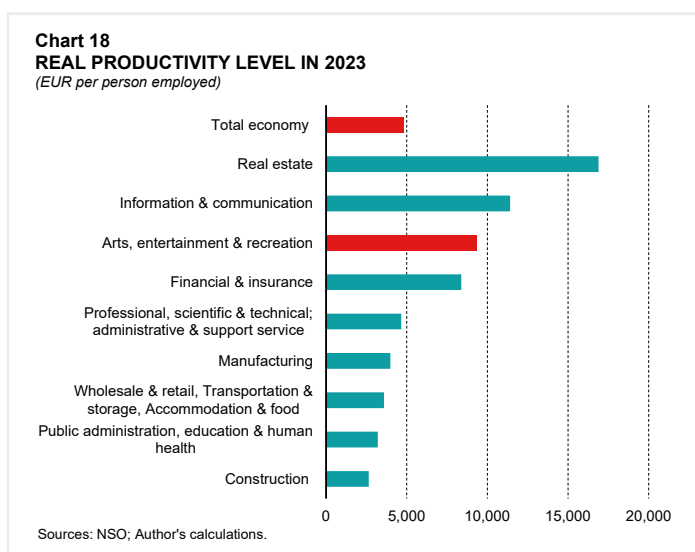
These rates of growth exceed the increase of 3.2% for the whole economy, over the same period.

In terms of productivity per worker, which is being approximated by real GVA per person employed, the arts, entertainment and recreation sector shows very strong results when compared to the rest of the economy. Indeed, it ranked the third highest, exceeded only by the real estate sector, and the information and communication sector (see Chart 18). The productivity level in this sector also stood almost twice that estimated for the whole economy.

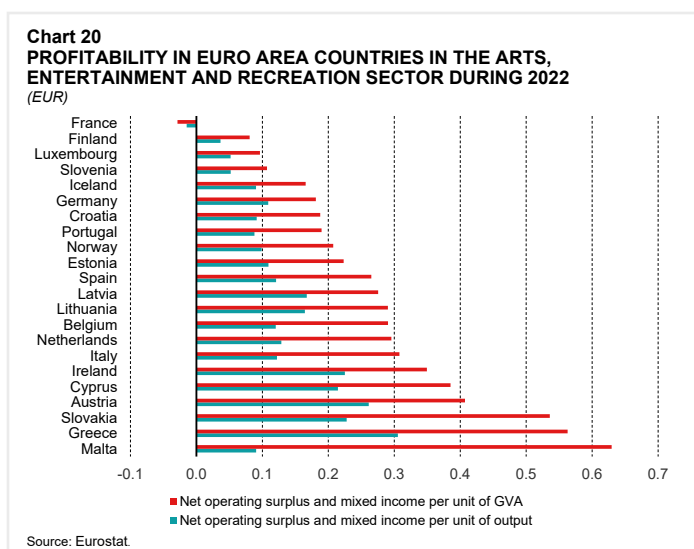
Sub-sectoral data, which are available in current prices, shows that the highest level of nominal value added per person was in the gambling and betting activities sub-sector. This was followed by the creative, art and entertainment activities sub-sector and the sub-sector including libraries, archives, museums, and other cultural activities. Sport activities, amusement and recreation activities registered the lowest nominal value added per person across sub-sectors.

The creative, arts and entertainment activities sub-sector has seen strong growth in its nominal productivity over time, registering an average of around 17% increase between 2010 and 2023 (see Chart 19). The sports activities, amusement and recreation activities sub-sector and the libraries, museums and other cultural activities sub-sector also showed strong growth, albeit to a lesser extent. On average, productivity in these sub-sectors between 2010 and 2023 was higher than in sector R as a whole.

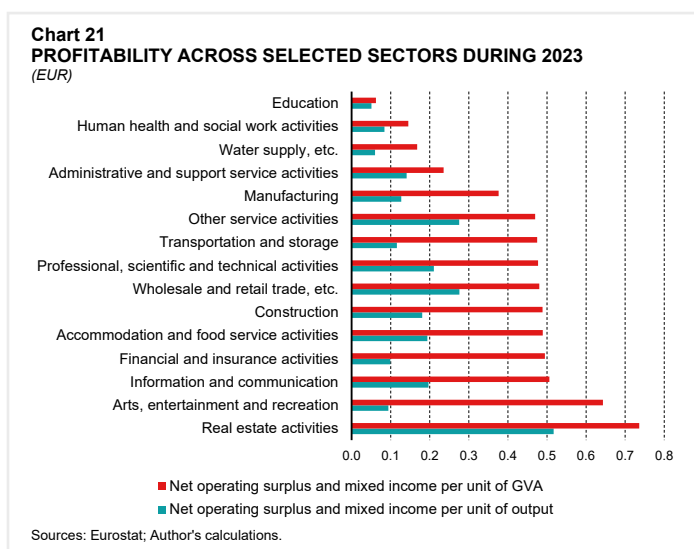
The arts, entertainment and recreation sector in total also exhibits a relatively high degree of profitability. National accounts data from Eurostat show that the net operating surplus of this sector in Malta was high compared to that of



other euro area countries during 2022 (last year for which data are available for all countries). Indeed, Malta had the highest profit per unit of GVA, followed by Greece and Slovakia (see Chart 20). At the same time, profitability per unit of output was more moderate. When measured on this basis, Malta ranked among the bottom seven countries, with the lowest being France and Finland.



Profitability in sector R was also among the highest compared to other large sectors of the domestic economy (see Chart 21). In terms of profitability per unit of GVA, in 2023 this sector was exceeded only by the real estate activities sector. However, when measured in terms of per unit of output, sector R ranked the fourth lowest.



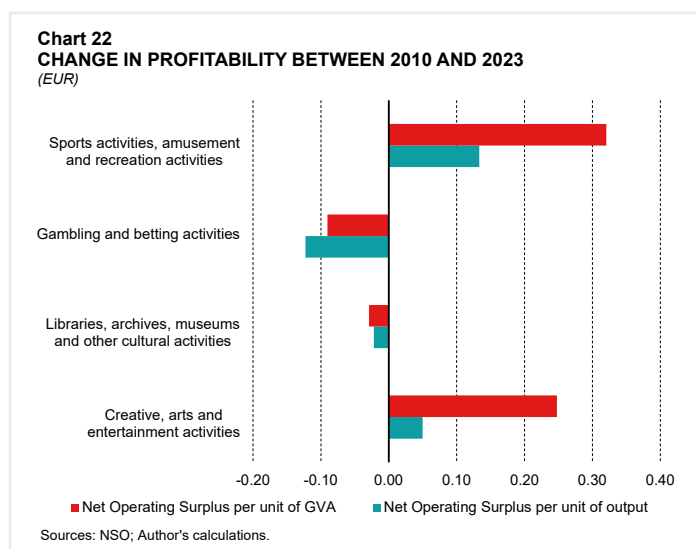
The difference in ranking between the two measures of profitability reflects the high share of intermediate costs of production in output. Indeed, sector R recorded the second highest level of intermediate consumption per unit of output, exceeded only by the financial and insurance activities sector. However, the high productivity of employees, despite the relatively higher labour costs, undoubtedly contributes towards a high level of profitability.

In 2023, the gambling and betting activities sub-sector, together with the sub-sector comprising creative, arts and entertainment activities, recorded the highest profitability. However, this is partly due to the fact that the high proportion of self-employed in these sub-sectors boosts the profit element, as the remuneration of self-employed is recorded in the profit component rather than as part of compensation of employees. Meanwhile, the sub-sector including libraries, archives, museums, and other cultural activities generated the lowest profitability out of the sub-sectors under review.

Developments in profitability between 2010 and 2023 were heterogenous across sub-sectors. Profitability per unit increased strongly among firms operating in the sports activities, amusement

and recreation activities sub-sector (see Chart 22). This partly reflects the increase in the share of self-employed in total employment within this sub-sector, which reached around 19% in 2023, almost 12 percentage points higher compared with 2010.

The sub-sector including creative, arts and entertainment activities also registered an increase in profitability per unit over this period, albeit by a smaller degree. By contrast, profitability per unit of firms operating in gambling and betting activities, and in libraries, archives, museums and other cultural activities, declined when compared with 2010.



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### Linkages with the rest of the economy

Industry R also shares linkages with other sectors of the economy. Looking at the latest input-output tables based on 2015 data, to generate an output worth of €4,384.9 million, the arts, entertainment and recreation sector utilised €3,284.9 million in intermediate inputs. Around €792 million of the latter were in the form of domestically produced inputs (see Table 2). This amounts to 24% of its intermediate consumption, and almost entirely composed of services. Domestic production in sector R was particularly dependant on the information and communication sector (64% of domestic production), and the sector comprising professional, scientific and technical activities (14% of domestic production).<sup>9</sup> The import content of sector R is relatively high, standing at almost 76% of intermediate consumption in 2015.

Looking at the distribution of output for industry R in 2015, output was almost entirely distributed as final demand (€4,290.8 million or 98%), primarily as exports (94%) (see Table 3). Around 4% was generated in final consumption (3.8%) and investment (0.3%). The remaining share of output was used to satisfy intermediate demand (€94.1million), primarily from firms within the same sector and the transport sector.

A study published by the Central Bank of Malta presents modelling and accounting multipliers for various industry sectors in the Maltese economy, using the 2015 input-output framework.<sup>10,11</sup>

Modelling multipliers show the marginal direct and indirect effects (Type I or simple multipliers) as well as the induced effects (Type II or total multipliers) resulting from an increase in the final

<sup>9</sup> For further details, refer to Borg Caruana and Ghigo (2022), "Developments in the Information and Communication Sector", *Quarterly Review 2022(4)*, Central Bank of Malta.

<sup>10</sup> Refer to Debono and Cassar (2021), "Estimates of industry specific multipliers for the Maltese economy on the basis of the SIOT for 2015", *Quarterly Review 2021(2)*, Central Bank of Malta.

<sup>11</sup> The study derives the industry-specific multipliers on the basis of the demand driven input-output framework, updating previous work conducted by the Central Bank of Malta using input-output data for 2010.

**Table 2**  
**DISTRIBUTION OF INTERMEDIATE CONSUMPTION FOR SECTOR R, 2015**

EUR millions

<b>Output at basic prices</b>	<b>4,384.9</b>
<b>Total intermediate consumption</b>	<b>3,284.9</b>
of which:	
Domestic Production	791.7
Agriculture, forestry and fishing	0.1
Mining and quarrying; utilities	6.5
Manufacturing	8.1
Construction	5.9
Services	771.1
of which:	
Professional, scientific & technical activities	108.2
Financial & insurance	62.3
Administrative & support services	17.6
Information & communications	508.5
Transport	5.7
Hotels & restaurants	10.2
Real estate	11.9
Distribution	5.9
<b>Arts, entertainment &amp; recreation</b>	<b>34.7</b>
Imported products	2,482.0
Taxes less subsidies on products	11.1
<b>GVA at basic prices</b>	<b>1,100.0</b>

Source: NSO.

**Table 3**  
**DISTRIBUTION OF OUTPUT OF SECTOR R IN THE ECONOMY, 2015**

EUR millions

Intermediate demand	94.1
Final demand	4,290.8
of which:	
Final consumption	167.6
Gross capital formation	15.3
Exports	4,107.9
<b>Output at basic prices</b>	<b>4,384.9</b>

Source: NSO.

demand to a given sector (see Table 4). The multipliers for the arts, entertainment and recreation sector rank at the lower end of the distribution.

The modelling multipliers shown in Table 4 do not account for the relative size of the respective industries or the magnitude of the final demand for their goods and services. These factors are covered by accounting multipliers which show each industry's (direct and indirect) contribution to total output, income, value added, and employment in the economy, when accounting for each sector's final demand.

**Table 4**  
**MODELLING MULTIPLIERS FOR SPECIFIC SECTORS OF THE ECONOMY**

*Per cent of total*

	Type I				Type II			
	Output	Income	Value added	Employment	Output	Income	Value added	Employment
<b>Selected industries:</b>								
Manufacturing (C)	1.4	0.2	0.4	10.8	1.9	0.3	0.6	15.1
Wholesale and retail (G)	1.4	0.3	0.8	17.1	2.1	0.4	1.1	22.9
Accommodation and food services (I)	1.7	0.3	0.6	17.0	2.2	0.4	0.9	22.3
Information and communication services (J)	1.4	0.2	0.5	6.9	1.8	0.3	0.7	10.6
Financial service activities, except insurance and pension funding (K64)	1.0	0.1	0.1	1.5	1.1	0.1	0.2	2.6
Professional, scientific and technical activities (M)	1.4	0.3	0.6	10.2	2.0	0.4	0.9	15.2
Administration and support services activities (N)	1.4	0.4	0.7	19.6	2.2	0.5	1.1	27.0
<b>Arts, entertainment and recreation (R)</b>	<b>1.2</b>	<b>0.1</b>	<b>0.3</b>	<b>2.7</b>	<b>1.4</b>	<b>0.1</b>	<b>0.4</b>	<b>4.3</b>
Human health and social work activities (Q)	1.3	0.6	0.8	21.2	2.5	0.8	1.3	31.8

Sources: Debono and Cassar (2021) and Central Bank of Malta estimates.

The arts, entertainment and recreation sector has relatively high accounting multipliers compared to the other economic sectors (see Table 5). Indeed, sector R recorded the highest output multiplier compared to other sectors in the economy, exceeding slightly that estimated for the sub-sector comprising financial services activities. It ranked highest by far for the value-added multiplier. Furthermore, sector R generated the third highest income multiplier, after the sector comprising human health and social work activities, and the manufacturing sector. Meanwhile, the employment multiplier for sector R ranked at the middle of the distribution. Overall, therefore, sector R creates strong direct and indirect effects in the Maltese economy.

**Table 5**  
**ACCOUNTING MULTIPLIERS FOR SPECIFIC SECTORS OF THE ECONOMY**

*Per cent of total*

	Accounting multipliers			
	Output	Income	Value added	Employment
<b>Selected industries:</b>				
Manufacturing (C)	9.6	10.3	9.0	11.4
Wholesale and retail (G)	5.7	8.2	9.3	10.5
Accommodation and food services (I)	6.5	7.2	7.4	10.2
Information and communication services (J)	3.0	2.9	3.4	2.4
Financial service activities, except insurance and pension funding (K64)	19.8	6.9	6.2	4.5
Professional, scientific and technical activities (M)	4.0	4.7	5.3	4.3
Administration and support services activities (N)	2.3	4.1	3.6	4.9
<b>Arts, entertainment and recreation (R)</b>	<b>20.2</b>	<b>8.8</b>	<b>16.6</b>	<b>6.8</b>
Human health and social work activities (Q)	3.9	10.8	6.9	9.5

Source: Debono and Cassar (2021).

## SPECIAL FOCUS: ACTIVITY IN THE GAMING SECTOR<sup>12</sup>

The Gambling and Betting Activities sub-sector is the main driver behind the growth in GVA in recent years in Sector R. In addition, in terms of employment, this sector is also responsible for generating most of the full-time employment within this sector. This special focus provides a more in-depth analysis of this sub-sector, based on data provided in the annual reports of the Malta Gaming Authority (MGA).

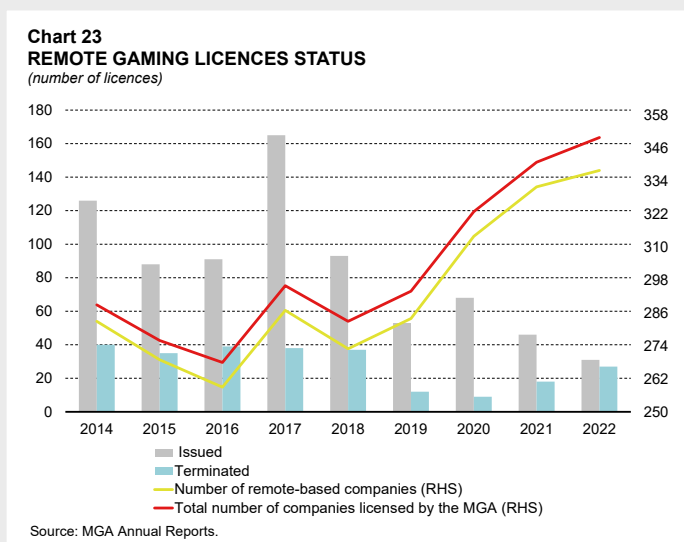
### Licensed companies

The number of companies licensed by the MGA and operating in Malta – including online and land-based entities – experienced a significant increase from 289 in 2014 to 350 in 2022, with a constant upward trend observed since 2018 (see Chart 23).<sup>13</sup> Most companies offer remote gaming services. The issuance of remote-based gaming licences varied significantly between the years 2014 and 2022. The peak years for licence issuance were 2014 and 2017, during which the MGA issued 126 and 165 licences, respectively. Issuances declined in subsequent years, reaching a low of 31 licences in 2022. The number of issuances from 2019 onwards was particularly affected by changes in the licencing regime (see below).

Additionally, the number of terminations decreased from around 40 per year between 2014 and 2018 to around ten between 2019 and 2020, before rising to 27 terminations in 2022. Overall, the profile of active remote-based companies mirrored that of total licensed entities, and displayed a clear upward trend from 2018 onwards.

In 2018, the Gaming Act introduced the concept of a corporate group licence, which allows multiple companies to be covered by one group licence. At the end of 2022, 44 companies held corporate group licences, with 134 entities forming part of the respective groups.

A new regulatory framework, implemented in 2019, introduced an operator-based licence mechanism, in which a licensed entity would operate with a single licence which covers different types of activities.<sup>14</sup> The revised system distinguishes between Business to Consumer (B2C) and Business to Business (B2B) licences. Previously, remote gaming firms operated under four separate classes of



<sup>12</sup> Prepared by Christine Borg, Economist at the Economic Analysis Department within the Central Bank of Malta.

<sup>13</sup> The annual change in the total number of licences may not equal the level of net issues, as the former also includes suspensions and/or cancellations.

<sup>14</sup> Subsidiary legislation 583.03 – Gaming Licence Fees Regulation.



licences. Between 2019 and 2022, the number of B2C licences stood broadly unchanged at just over 200. B2B licences increased from 101 in 2019 to 175 in 2022.

By June 2023 there were 325 remote active companies, while 49 online companies were operating under corporate group licences, comprising a total of 141 entities within these groups.

### Labour market characteristics

The MGA annual reports include data on the number of full-time equivalent (FTE) employees within the gaming sector. FTE employment rose from 6,193 persons in 2016 to 11,245 in 2022 (see Table 6). Growth was mostly driven by employment amongst remote-based firms, which also have the largest number of employees. The number of FTE jobs in land-based firms is less than a tenth of that in the remote segment and mostly concentrated in Maltese casinos.

As of June 2023, it is estimated that there were 10,621 FTE employees working with MGA-licensed companies, indicating a decline in employment compared to the same period in 2022. According to the 2023 MGA interim report, this decrease is attributed to increased regulatory measures across various jurisdictions in the industry. Approximately 9,729 FTE employees, representing around 92% of employment, were employed with remote-based firms.

Table 7 shows employment by gender, for specific types of gaming firms. In these companies, there has been an increase of 4,882 employees between 2016 and 2022, representing a substantial increase of 79.7%. These data corroborate administrative data, in that they confirm that employment within the gaming sector is dominated by males. This applies across different types of gaming firms, except in the commercial bingo segment, which is however, a very small segment. Although in absolute terms the number of male workers within the gaming sector has increased over time, their share in total FTE employment declined from just under 64% in 2016 to around 58%. This is due to an increasing proportion of female employees within remote-based firms in 2022.

Furthermore, the industry is heavily dependent on foreign workforce, who constitute around 70% in FTE terms (see Table 8). The share of foreign employees in FTE employment is highest in casino and remote-based gaming. Although it is significantly smaller in the

**Table 6**  
**FTE EMPLOYMENT**

*Persons*

	2016	2019	2022
<b>Total</b>	<b>6,193</b>	<b>7,417</b>	<b>11,245</b>
Remote	5,327	6,593	10,365
Land-based	866	824	880
<i>Of which: <sup>(1)</sup></i>			
Maltese casino	648	582	533
Gaming parlour	107	144	83
Commercial bingo	46	40	29

Source: MGA.

<sup>(1)</sup> Selected indicators. Totals will not add up.

**Table 7**  
**FTE EMPLOYMENT BY GENDER**

*Number of persons in specific types of firms*

	2016	2019	2022
<b>Males</b>	<b>3,904</b>	<b>4,496</b>	<b>6,415</b>
Maltese casino	350	338	341
Gaming parlour	80	93	45
Commercial bingo	12	10	7
Remote-based	3,463	4,055	6,022
<b>Females</b>	<b>2,224</b>	<b>2,863</b>	<b>4,595</b>
Maltese casino	298	244	192
Gaming parlour	27	51	38
Commercial bingo	35	30	22
Remote-based	1,864	2,538	4,343
<b>Total FTE employment for selected types of firms</b>	<b>6,128</b>	<b>7,359</b>	<b>11,010</b>

Source: MGA.

**Table 8**  
**FTE EMPLOYMENT BY NATIONALITY**

*Number of persons in specific types of firms*

	2,016	2,019	2,022
<b>Maltese</b>	<b>2,147</b>	<b>2,734</b>	<b>3,346</b>
Maltese casino	298	207	165
Gaming parlour	104	120	52
Commercial bingo	41	33	19
Remote-based	1,705	2,373	3,110
<b>Foreigners</b>	<b>3,981</b>	<b>4,625</b>	<b>7,664</b>
Maltese casino	350	375	368
Gaming parlour	3	24	31
Commercial bingo	5	7	10
Remote-based	3,622	4,220	7,256
<b>Total FTE employment for selected types of firms</b>	<b>6,128</b>	<b>7,359</b>	<b>11,010</b>

Source: MGA.

remaining segments, it has increased in recent years, reaching 33% in commercial bingo and 38% in gaming parlours.

### Gaming taxes paid to the State

The Gaming Licence Fees Regulation of 2019, brought about the consolidation of gaming taxes into a singular classification. Individuals holding licences issued by the MGA are obliged to submit a licence fee. This fee is composed of two elements: the compliance contribution, payable per licence period, and the non-refundable fixed annual licence fee. The calculation of the compliance contribution for qualifying activities is based on the gaming revenue generated from gaming services throughout the licence period.

From 2019 to 2022, gaming companies provided the MGA with an average annual contribution of around €65 million. Payments ranged from approximately €68 million in 2019, to €66 million in 2022. Most of these contributions (around 70%) came from remote gaming activities, with casinos making up most of the remaining contributions.

In addition to the compliance contribution paid to the MGA, these companies are also obligated to pay taxes to Government. According to the Treasury's *2022 Financial Report*, the value of gaming taxes in that year amounted to €68.8 million.<sup>15</sup>

## Conclusion

The arts, entertainment and recreation sector accounts for a significant share of GVA in the Maltese economy, and has been one of the key contributors to growth in recent years. At the same time, when compared with euro area countries, labour costs are relatively low, and profitability is relatively high, which could also explain why the sector has been able to grow strongly in recent years.

The vast majority of GVA in this industry is generated by firms operating in the gambling and betting activities sub-sector.

The sector deals a lot with other jurisdictions, as around three-fourths of its intermediate consumption is imported. Nevertheless, it also has close links with other domestic sectors, notably the information and communication sector, and the sector comprising professional, scientific and technical activities, which has also witnessed rapid growth in recent years.

The arts, entertainment and recreation sector also scored high accounting multipliers, indicating strong direct and indirect effects on Maltese output and income.

The level of economic activity generated by sector R is heavily dependent on foreign employees. Since 2017, the latter accounted for just over half of the number of employees in this sector. Going forward, the extent to which this sector can continue contributing towards economic growth will be heavily conditioned on the ability to retain and attract highly skilled employees without compromising its competitive edge.

## Annex

<b>ANNEX 1</b>	
<b>NACE CLASSIFICATIONS FOR SECTOR R</b>	
<b>R</b>	<b>Arts, entertainment and recreation</b>
R90	Creative, arts and entertainment activities
R91	Libraries, archives, museums and other cultural activities
R92	Gambling and betting activities
R93	Sports activities and amusement and recreation activities

<sup>15</sup> Source: [Treasury 2022 Financial Report](#).