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GROWTH OF THE PROFESSIONAL, SCIENTIFIC AND TECHNICAL SECTOR AND OF THE ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES SECTOR

GROWTH OF THE PROFESSIONAL, SCIENTIFIC AND TECHNICAL SECTOR AND OF THE ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES SECTOR^{1,2}

Sandra Zerafa, Annaliese Mifsud and Joanna Borg Caruana

This article looks at developments in the two NACE sections comprising professional, scientific, technical, administrative and support service activities, which have expanded strongly in recent years and were among the main drivers of economic growth prior to the pandemic. This research outlines key trends and developments in each sector as well as in their respective sub-sectors, using various indicators, including business demographics, activity, input-output tables and sentiment indicators.³

NACE section M includes professional, scientific and technical activities, henceforth referred to as the professional sector. These consist of specialised activities that require a high degree of training and make specialised knowledge and skills available to customers. They incorporate among other, activities such as those associated with head offices, management consultancy activities as well as legal and accounting activities. NACE section N includes administrative and support service activities, henceforth referred to as the administrative sector. These consist of a variety of activities that support general business operations and unlike those found in section M do not necessarily involve the transfer of specialised knowledge.

Business structure

According to business demographics data published by the NSO, the number of business units registered to carry out professional, scientific and technical activities stood at 16,797 in 2020, while a further 10,703 entities were registered within the sector comprising administrative and support service activities. Together, they accounted for around a fifth of total registered business units in Malta that year.⁴ Nearly a quarter of these business units were classified under the sub-sector of head offices, management consultancy activities and a further 18.3% formed part of the sub-sector comprising rental and leasing activities (see Chart 1a and Chart 1b).

Over 13.0% of total registered units were included in the sub-category comprising 'other professional, scientific and technical activities' (M74) and a further tenth formed part of the legal and accounting sub-sector. Some other sub-sectors are very small though.⁵ For instance, veterinary activities (M75)

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² The cut-off date for information in this article is 30 August 2021, while that for the labour market is extended to 7 September 2021.

³ The definitions of professional, scientific and technical activities and administrative and support service activities used in this article are based on Eurostat's NACE Rev 2. Statistical classification of economic activities. Further information is available at <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>.

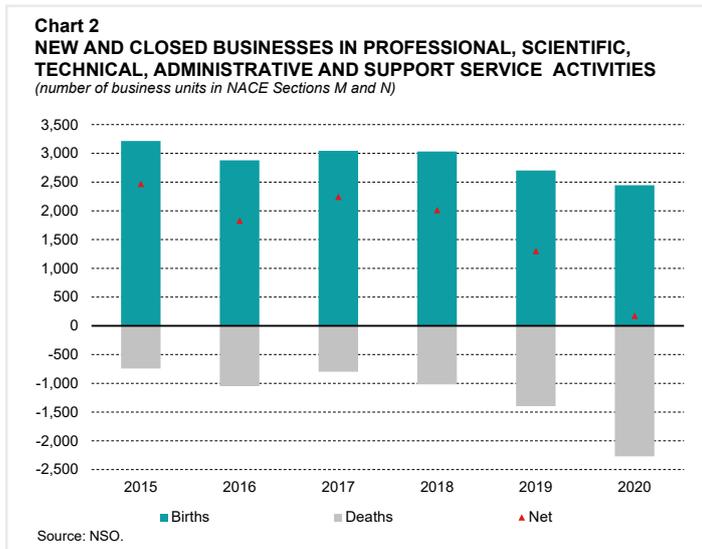
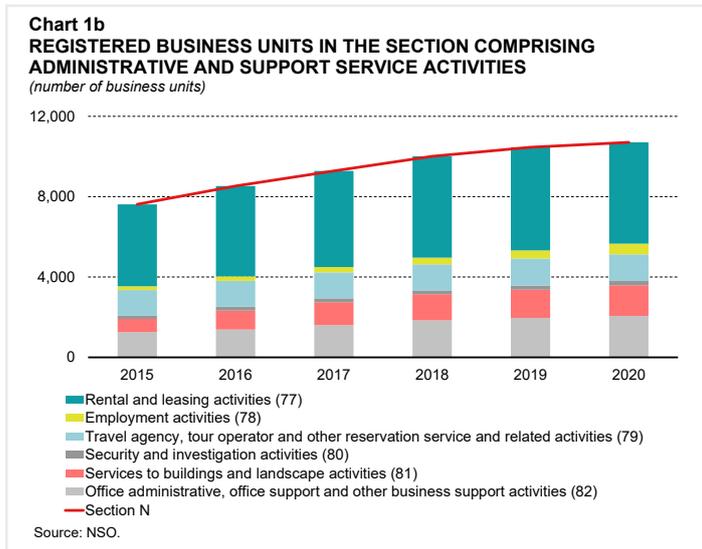
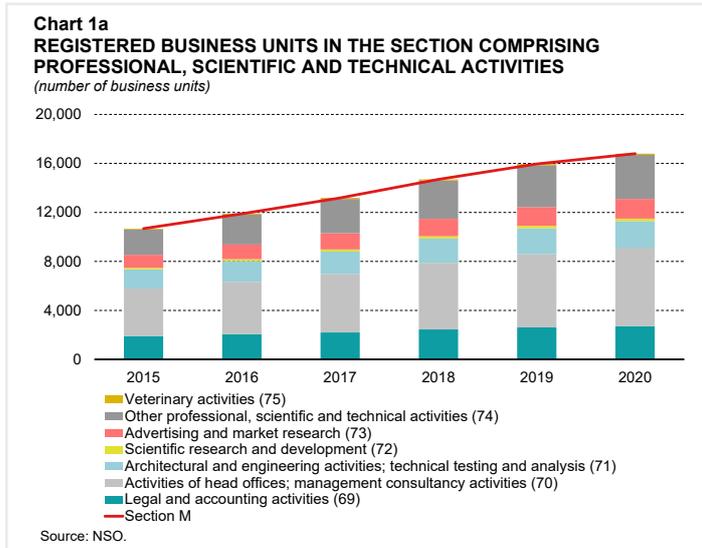
⁴ Business demographic data from 2011 exclude units whose turnover is less than €7,000, in line with Legal Notice 524 of 2010 that came into force on 1 January 2011. However, this regulation was later revoked and data from 2015 include new or re-activated registrations below this threshold, as per Legal Notice 67 of 2015. Registered units include the active business population (defined as units with positive turnover or employment during the reference period), as well as other entities such as government units, non-trading units and ship registrations. There is a significant difference between registered units and the active business population in the professional sector and the administrative sector, primarily due to the significance of non-trading units and special-purpose entities and in the case of the administrative sector the discrepancy is also attributable to ship registrations.

⁵ 'Other professional, scientific and technical activities' include specialised design activities – such as fashion design, interior decoration and graphic designers – photographic activities, translation and interpretation activities, and other services related to business and patent brokerage and security consulting.

and security and investigation activities (M80) jointly account for only around 1.0% of total registered units in the professional and the administrative sectors.

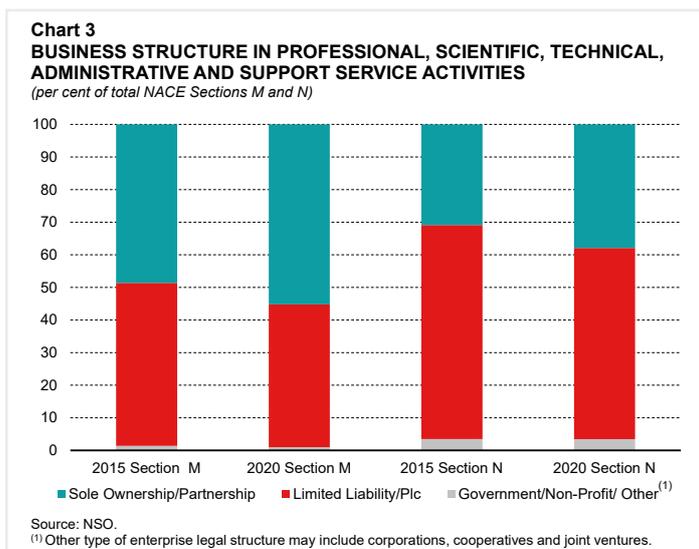
Over the period between 2015 and 2020, both sectors recorded a steady rise in the number of registered business units. Taken together this increase amounted to over 50.0%, compared with a 37.0% increase in the whole economy. The subsector incorporating activities of head offices and management consultancy activities (M70) accounted for over a quarter of the increase. Growth was also recorded in 'other professional, scientific and technical activities' (M74) and the sub-sector comprising rental and leasing activities (N77). Together these sub-sectors accounted for almost 55.0% of the increase in the number of units in the professional and the administrative sectors.

During the period under review, data on the number of births and deaths in the two sectors show that the number of newly registered businesses consistently exceeded the number of deregistered entities, but the net increase was especially significant in 2015, 2017 and 2018, when it exceeded 2,000 units (see Chart 2). The net increase in the number of businesses was however much smaller in 2020, when the number of deregistrations almost matched that of new units, giving a net increase of just 174 units. This increase was completely driven



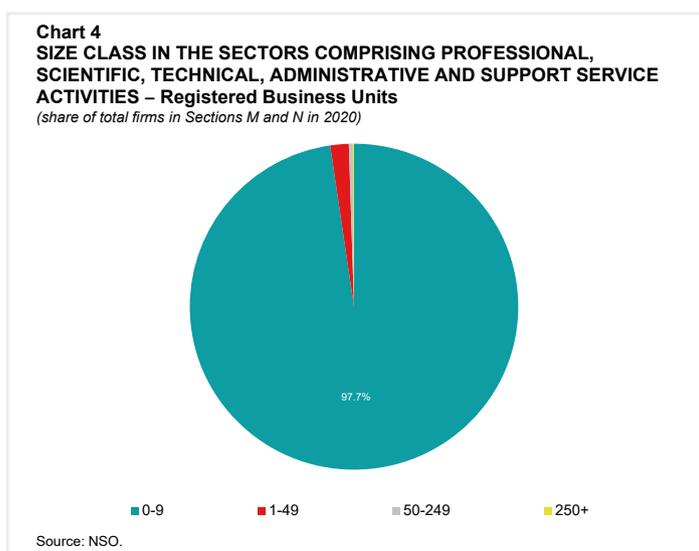
by the professional sector as in the case of the administrative sector, deregistrations exceeded new registrations.

In 2020, 55.2% of the entities in the professional sector operated as sole proprietors or partnerships, while a further 43.8% operated as limited liability companies or public limited companies (see Chart 3). Just under 1% operated under a different legal structure, such as corporation, cooperative or joint venture. The situation differs from 2015, when the share of registered companies operating as limited liability companies or public limited companies was almost equal to the share of sole proprietors or partnerships. This partly reflects the fact that growth in the fastest growing sub-segments – activities of head office and ‘other professional, scientific and technical activities’ – mostly reflected an increase in sole traders or partnerships.



In the administrative sector, the majority of entities, over 58%, operated as limited liability companies or public limited companies, in 2020. Sole traders and partnerships made up a smaller share equivalent to 37.9%. The remaining 3.4% operated under a different legal structure. Like the case in the professional sector, the share of sole ownerships and partnerships increased when compared with 2015.

The great majority (97.7%) of enterprises within the sectors comprising professional, scientific, technical, administrative and support service activities were classified as microenterprises, employing less than ten employees in 2020 (see Chart 4).⁶ The large share of microenterprises is not only a feature of the sectors comprising professional, scientific, technical, administrative and support service activities overall, but is also a characteristic of all its sub-sectors. An additional 1.8% were classified as small



⁶ 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.

enterprises with just 0.5% being classified as medium or large enterprises.

In 2020, microenterprises generated 27.7% of employment in the sectors comprising professional, scientific, technical, administrative and support service activities, with small business entities accounting for 19.2% of jobs (see Chart 5). Although less numerous, medium and large enterprises generated the remaining 53.1% of jobs in the sectors.

Activity indicators

National accounts data show that real GVA in the professional, scientific and technical sector together with the administrative sector exceeded €1,800 million in 2020, equivalent to almost 17.0% of the real GVA generated by the whole economy (see Chart 6). This is double that registered in 2014, and more than five times that generated in 2000. In fact, since 2000, this sector registered the strongest increase in real GVA when compared to the other sectors in the economy, with its share rising by around 10 percentage points (see Chart 7). Growth started to accelerate from 2014 and until 2018, where it registered double-digit growth on an annual basis. The pace of expansion moderated in 2019, but remained strong. Growth turned negative in 2020 due to the COVID-19 pandemic, although the aggregate share of the professional and the administrative sectors in the total economy remained largely intact.

Chart 5
EMPLOYMENT BY FIRM SIZE IN THE SECTORS COMPRISING PROFESSIONAL, SCIENTIFIC, TECHNICAL, ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES – Registered Business Units
(share of total employment in Sections M and N in 2020)

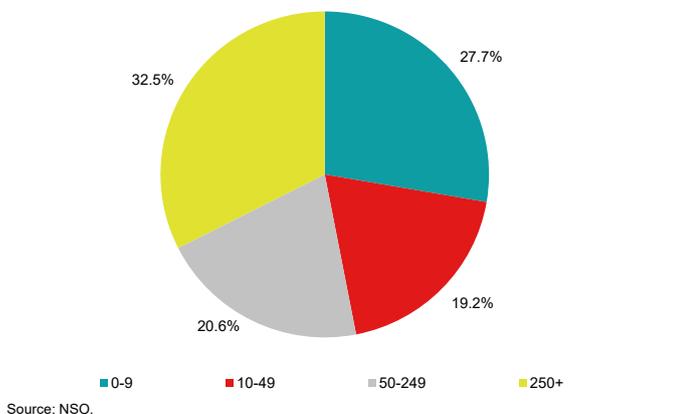


Chart 6
SHARE OF REAL GVA BY SECTOR
(as a percentage of total economy)

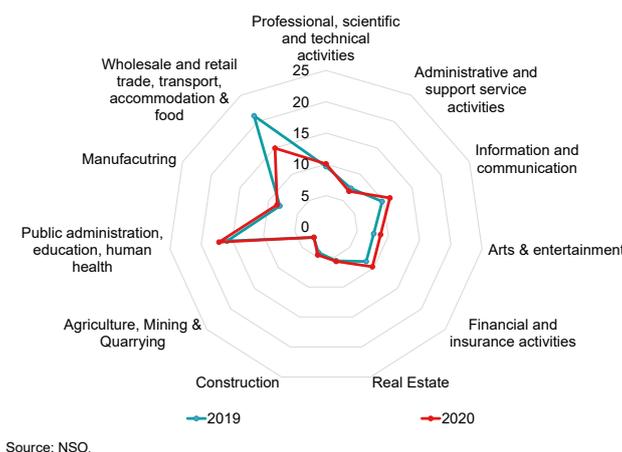
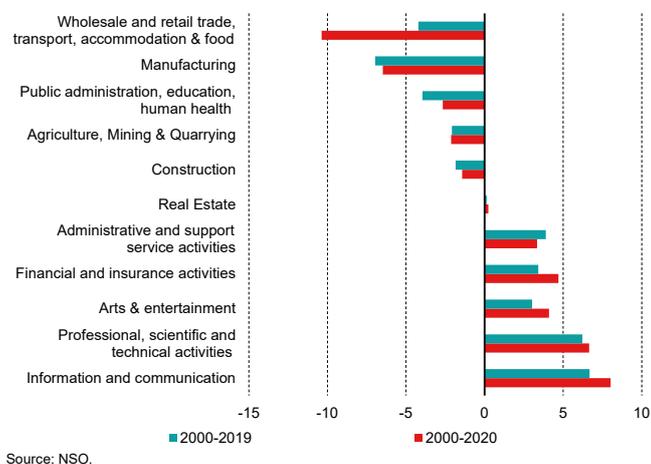


Chart 7
CHANGES IN REAL GVA FROM OVER TIME
(as a % total economy)

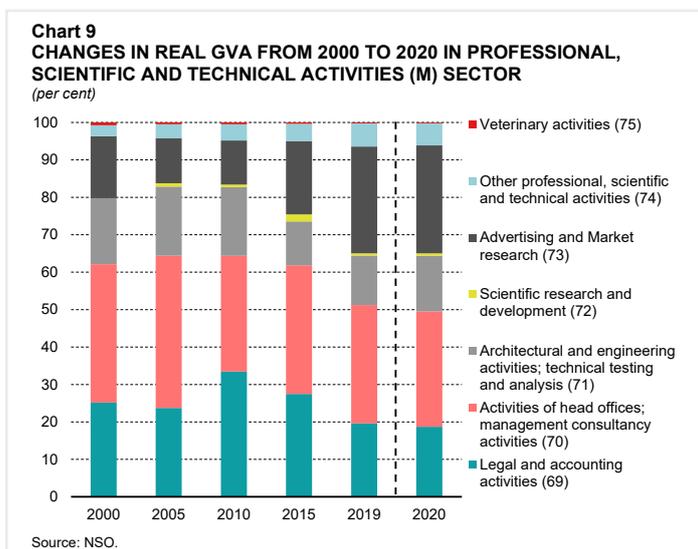
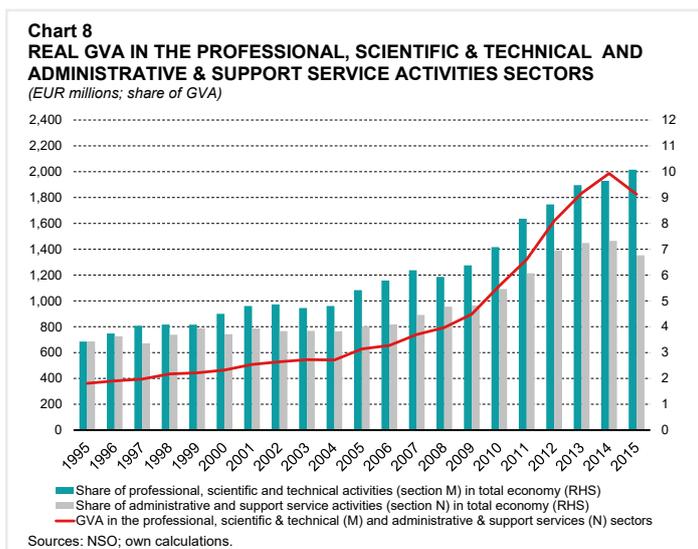


Growth was mostly underpinned by the professional sector, whose share in the economy's GVA rose from 3.4% in 2000 to 10.1% in 2020 (see Chart 8). In fact, its share in the whole economy started to rise strongly from 2010 onwards.

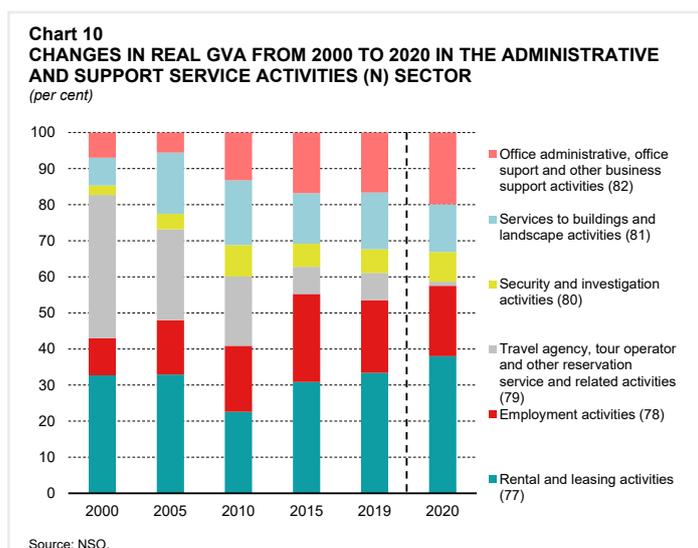
This sector also saw a substantial change in its structure in the past twenty five years, with industries that were traditionally strong losing their presence, and new industries gaining share over time. The largest increase in share was seen in the GVA of firms within the advertising and market research sub-sector. On the other hand, the GVA share of sub-sectors that include legal and accounting activities as well as that of head office activities decreased by around 6 percentage points each.

Nevertheless, by 2020, activities of head offices generated almost one third of the value added in the professional sector, closely followed by advertising and market research as well as legal and accounting activities (see Chart 9). Together, these sub-sectors generated over three-fourths of GVA in the professional sector. A further 15.0% of the output in the professional sector was generated by firms involved in architectural and engineering activities. The other three sub-components – other professional, scientific and technical activities, scientific research and development as well as veterinary activities – jointly accounted for less than 7% of the GVA in the professional sector.

The share of the administrative sector rose from around 3.4% in 2000 to 6.8% last year, primarily accelerating between 2015 and 2019 (see Chart 10). The main drivers behind this expansion were the sub-sector comprising office administrative support and other business support activities, and the sub-sector comprising employment activities. On the other hand, the sub-sector of travel-related activities started to lose some of its share from 2005 onwards, bearing a bigger hit in 2020 due to the COVID-19 pandemic, where travel was heavily restricted and its output fell to levels never recorded previously. Therefore, this category's share fell to just over 0.1% of the total GVA of the administrative sector during that particular year.



Although not the main driver behind the administrative sector's recent expansion, in 2020 rental and leasing activities constituted the largest sub-sector, generating close to forty percent of the GVA of the administrative sector. This was followed by firms falling under employment activities and office administration, which jointly accounted for another 40.0%. The remaining categories, which include services to buildings and landscape activities, security and investigation activities as well as travel related activities generated around a fifth of output of the administrative sector.



Linkages with the rest of the economy

The professional and the administrative sectors gained importance over time and became two of the strongest pillars of the Maltese economy in recent years, especially the professional sector. In fact, at 10.1%, the share in real GVA of this sector in 2020 was higher than that of the manufacturing sector (8.5%) and the financial and insurance sector (9.7%) (see Chart 6). It also exceeded the share of arts and entertainment sector (8.7%), which includes gaming and betting activities. The administrative sector had a higher share than the real estate (5.8%) and construction sectors (4.7%). The administrative sector, has strong linkages with other sectors of the economy. This can be seen from the latest input-output tables, which refer to 2015 data (see Table 1).⁷

To generate output worth €1,334 million, firms involved in professional, scientific and technical activities, utilised €704 million in inputs classified as intermediate consumption, and imported €305 million – mainly from foreign firms engaged in similar activities, which implies that in 2015 imports constituted over 40.0% of inputs needed to produce a unit of output (see Table 1). The rest (56.0%) were sourced domestically, principally from the industry itself, from the financial and insurance sector, and from administrative and support services, which jointly provided over 70% of domestic inputs required by the professional sector.

By comparison, the administrative sector had a slightly lower dependence on imports in 2015, importing around 35.0% of their input requirements. Similar to the professional sector, its main domestic consumption was also in the form of services, where it utilised a big portion of services from itself (almost half of inputs sourced domestically). This was followed by sectors related to tourism (accommodation and transport) and financial services.

⁷ The latest Supply, Use, Input-Output (SUIO) tables can be accessed from <https://nso.gov.mt/en/nso/Media/Salient-Points-of-Publications/Pages/Supply-Use-and-Input-Output-Tables.aspx>

Table 1
DISTRIBUTION OF INTERMEDIATE CONSUMPTION FOR SECTIONS M AND N, 2015

EUR millions

	Sector M	Sector N
Output at basic prices	1,334	879
Total Intermediate Consumption	704	394
<i>of which:</i>		
Domestic Production	397	255
Agriculture, forestry and fishing	0	3
Mining and quarrying; utilities	10	6
Manufacturing	26	6
Construction	15	12
Services	347	228
<i>of which:</i>		
Professional, scientific & technical	178	11
Financial & Insurance	71	18
Administrative & Support Services	31	124
Information & Communications	18	5
Transport	12	18
Hotels & Restaurants	10	24
Real Estate	10	4
Distribution	7	8
Arts, Entertainment & Recreation	1	12
Imported Products	305	136
Taxes less subsidies on products	2	3
GVA at basic prices	629	485

Source: NSO.

Data on the distribution of output show that around 45.0% of output generated by firms involved in professional, scientific and technical activities was distributed as intermediate demand, while slightly more than half – around 55.0% – was used for final demand, primarily exports (see Table 2). Final consumption and gross capital formation represented less than a tenth of final demand generated by the professional sector.

The share of final demand in the administrative sector – at 49% of output – was lower than that of the professional sector. Although in this case too, the largest portion of final demand was exports (67%), a significant share of final demand was also distributed as final consumption (32%), while investment was minimal.

Table 2
DISTRIBUTION OF OUTPUT OF SECTIONS M AND N IN THE ECONOMY, 2015

EUR millions

	Sector M	Sector N
Intermediate demand	599	447
Final demand	735	432
<i>of which:</i>		
Final consumption	57	139
Gross capital formation	42	2
Exports	636	291
Output at basic prices	1334	879

Source: NSO.

A study published by the Central Bank of Malta presents modelling and accounting multipliers for various industry sectors in the Maltese economy, which use the 2015 input-output framework.^{8,9} Modelling multipliers show the marginal direct and indirect effects (Type I or simple multipliers) and also the induced effects (Type II or total multipliers) resulting from an increase in the final demand to a given sector (see Table 3). Both the professional sector and the administrative sectors have output, income and value added multipliers that fall within the top half of the distribution and even exceed those of the arts and entertainment sector – which has been another key driver of economic growth in Malta in recent years. The administrative sector also has a relatively high employment multiplier, reflecting its high employment intensity and, at the same time, low labour productivity.

The modelling multipliers shown in Table 3 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 (see Table 4).

Professional, scientific and technical activities together with administrative and support service activities have relatively moderate accounting multipliers compared to the other economic sectors, though higher than those of information and communication services.

Together, the two sectors directly and indirectly contributed to around 6% of the economy's total output and less than a tenth of total income, value added and employment in 2015. When accounting for the relative size of demand, the professional sector shows higher output, income and value added accounting multipliers compared to the administrative sector. However, as suggested by the modelling multipliers, the employment multiplier of the professional sector remains below that estimated for the administrative sector also on the basis of accounting multipliers.

	Output	Income	Value Added	Employment	Output	Income	Value Added	Employment
	Type I				Type II			
Selected industries:								
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
Administrative and support service activities (N)	1.4	0.4	0.7	19.6	2.2	0.5	1.1	27.0
Arts, entertainment and recreation (R)	1.2	0.1	0.3	2.7	1.4	0.1	0.4	4.3
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); Central Bank of Malta estimates.

⁸ 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.

⁹ 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 4
ACCOUNTING MULTIPLIERS FOR SPECIFIC SECTORS OF THE ECONOMY

Per cent of total

	Output	Income	Accounting Multipliers Value Added	Employment
Selected industries:				
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
Administrative and support service activities (N)	2.3	4.1	3.6	4.9
Arts, entertainment and recreation (R)	20.2	8.8	16.6	6.8
Human health and social work activities (Q)	3.9	10.8	6.9	9.5
Selected sub-sectors of the Professional, Scientific & Technical Sector:				
Legal and accounting activities; activities of head offices; management consultancy activities (M69-70)	1.6	2.3	2.6	2.1
Architectural and engineering activities; technical testing and analysis (M71-72)	0.3	0.6	0.5	0.6
Other professional, scientific and technical activities; veterinary activities; advertising and research (M73-75)	2.0	1.7	1.9	1.4
Selected sub-sectors of the Administrative & Support Service Activities Sector:				
Rental and leasing activities (N77)	1.0	0.5	1.6	0.6
Employment activities (N78)	0.2	0.8	0.4	0.9
Travel agency, tour operator reservation service and related activities (N79)	0.8	0.7	0.6	0.8
Security and investigation activities (N80-82)	0.5	1.0	0.8	1.4

Source: Debono and Cassar (2021).

Table 4 shows that legal and accounting activities, activities of head offices and management consultancy activities as well as other professional, scientific and technical activities and advertising and research account for most of the contribution of the professional sector to economic activity and employment.

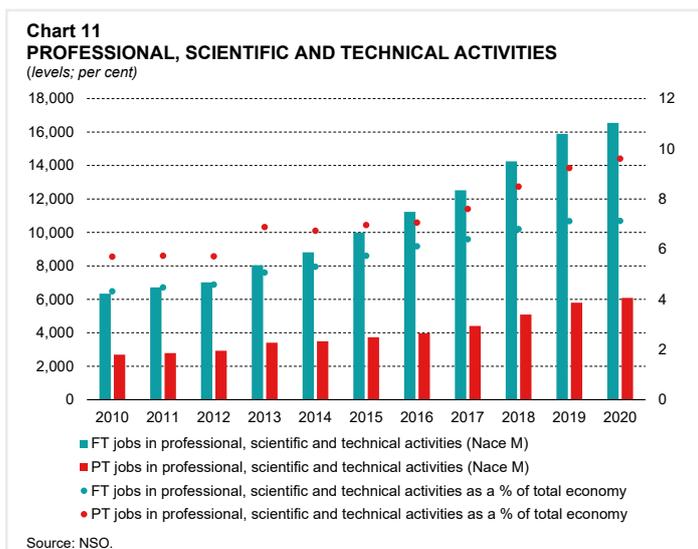
Furthermore, rental and leasing activities have a relatively higher contribution to output and value added compared to other activities classified within the administrative sector, whereas security and investigation activities have the highest income and employment multipliers within the section.

Employment and wages

Administrative data show that in 2020, there were 22,639 persons employed within the professional, scientific and technical activities sector, 16,551 of which held full-time jobs and 6,088 held part-time jobs (see Chart 11).¹⁰ This sector accounted for 7.1% and 9.6% of full-time and part-time employment in the economy, respectively. Both the share in full-time and part-time employment has increased in importance in the last decade, though in absolute terms the rise in employment was greater among those working on a full-time basis.

¹⁰ Annual data is calculated as an average for the year.

The sub-sector comprising activities of head offices, management and consultancy activities account for slightly more than a third of full-time employment in the professional sector (see Table 5). Firms involved in legal and accounting activities as well as in architecture and engineering, technical testing and analysis also accounted for a significant share of jobs in the professional sector. The smallest number of persons working full-time are reported in veterinary activities and in scientific research and development.



A similar composition may be observed in the case of part-time work. The sub-sectors consisting of activities of head offices and legal and accounting activities generated most part-time jobs in

Table 5
FULL-TIME AND PART-TIME GAINFULLY OCCUPIED POPULATION IN NACE SECTION M

Number of persons

	2010	2015	2019	2020	2020 change from 2010	2020 change from 2019
Full-time						
M Professional, scientific and technical activities	6,342	9,989	15,892	16,551	10,209	659
69 Legal and accounting activities	2,095	3,288	4,534	4,454	2,359	-80
70 Activities of head offices; management consultancy activities	1,577	2,578	5,200	5,691	4,114	491
71 Architectural and engineering activities; technical testing and analysis	1,472	1,859	2,820	3,102	1,631	282
72 Scientific research and development	37	63	77	85	48	8
73 Advertising and market research	794	1,460	2,198	2,058	1,264	-140
74 Other professional, scientific and technical activities	340	645	934	1,012	673	78
75 Veterinary activities	28	96	129	149	121	20
Part-time						
M Professional, scientific and technical activities	2,690	3,737	5,796	6,088	3,399	292
69 Legal and accounting activities	643	900	1,489	1,547	904	58
70 Activities of head offices; management consultancy activities	776	1,408	1,990	2,019	1,243	29
71 Architectural and engineering activities; technical testing and analysis	495	567	776	859	364	83
72 Scientific research and development	13	23	50	60	47	10
73 Advertising and market research	523	432	594	581	59	-13
74 Other professional, scientific and technical activities	226	384	852	971	745	119
75 Veterinary activities	14	23	45	51	37	6

Source: NSO.

2020, followed by ‘other professional, scientific and technical activities’ as well as architectural and engineering related services. By contrast, part-time employment in scientific research and development, and in veterinary activities was minimal.

Between 2010 and 2020, full-time employment in the professional, scientific and technical activities sector more than doubled. It added 10,209 persons, with the highest increases recorded among those employed in activities related to head offices, management and consultancy as well as legal and accounting. In these two sub-sectors respectively, 4,114 and 2,359 new positions were generated, contrasting with only 48 additional full-time positions in scientific research and development during this period.

While the number of part-time job holders increased across all sub-sectors, almost half of the increase in the professional sector related to activities of head offices, management and consultancy services, followed by activities related to legal and accounting services.

Employment levels were generally not adversely impacted by the COVID-19 pandemic. This may reflect the good teleworking potential in the sectors assessed. Furthermore, the Wage Supplement Scheme helped preserve jobs in a number of sub-sectors that were hit hard by the pandemic – such as rental and leasing and tour operator activities – which are classified in the administrative sector. Full-time and part-time employment in the professional, scientific and technical activities sector rose in 2020. The largest absolute increase was recorded in the sub-sector covering new jobs related to activities of head offices and management consultancy, followed by architectural and engineering activities, as well as other professional, scientific and technical activities. Smaller increases were also recorded in the remaining sub-sectors, except for legal and accounting activities and advertising and market research, where full-time employment fell compared to 2019.

In 2020 part-time employment in the professional sector increased by 292 persons, largely on account of more persons employed in the ‘other professional, scientific and technical activities’ and in the sub-sector comprising architectural and engineering services. While additional new jobs were generated in the remaining sub-sectors, the number of persons employed on a part-time basis in advertising and market research fell.

As at 2020 there were 29,064 persons employed within the administrative and support services activities sector, of which 23,744 held a full-time job and 5,320 worked part-time (see Chart 12). This sector accounted for 10.2% and 8.4% of full-time and part-time employment in the economy, respectively. While the sector’s share in full-time employment has doubled in the period under review, the share in part-time employment has fallen. The number of persons employed

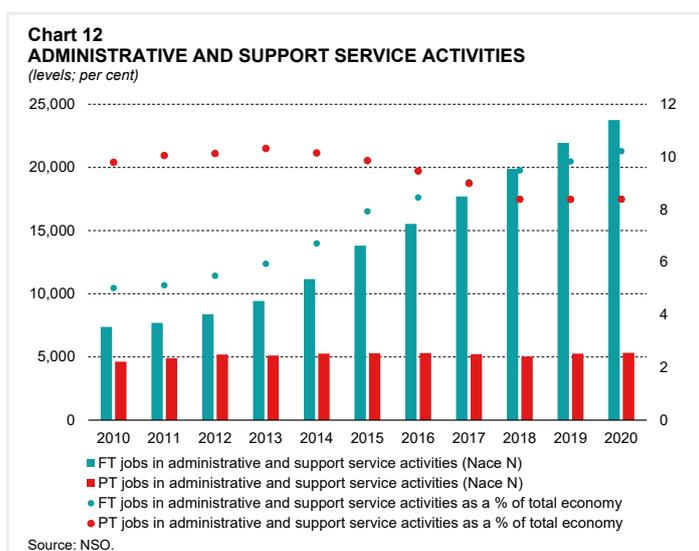


Table 6
FULL-TIME AND PART-TIME GAINFULLY OCCUPIED POPULATION IN NACE SECTION N

Number of persons

	2010	2015	2019	2020	2020 change from 2010	2020 change from 2019
Full-time						
N Administrative and support service activities	7,373	13,808	21,944	23,744	16,371	1,800
77 Rental and leasing activities	1,131	1,218	1,640	1,658	527	18
78 Employment activities	1,580	3,304	5,078	6,164	4,584	1,086
79 Travel agency, tour operator and other reservation service and related activities	1,155	1,227	1,354	1,336	181	-18
80 Security and investigation activities	1,152	2,024	3,286	2,984	1,832	-302
81 Services to buildings and landscape activities	1,071	3,428	6,297	6,970	5,899	673
82 Office administrative, office support and other business support activities	1,285	2,607	4,289	4,632	3,348	343
Part-time						
N Administrative and support service activities	4,622	5,293	5,266	5,320	698	54
77 Rental and leasing activities	476	488	599	571	95	-28
78 Employment activities	1,409	1,281	638	632	-777	-6
79 Travel agency, tour operator and other reservation service and related activities	566	487	609	582	17	-27
80 Security and investigation activities	761	1,231	1,251	1,240	479	-11
81 Services to buildings and landscape activities	918	1,150	1,073	1,017	99	-56
82 Office administrative, office support and other business support activities	493	656	1,096	1,278	785	182

Source: NSO.

on a full-time basis in this sector rose by 16,371, while those on a part-time basis increased by only 698 persons.

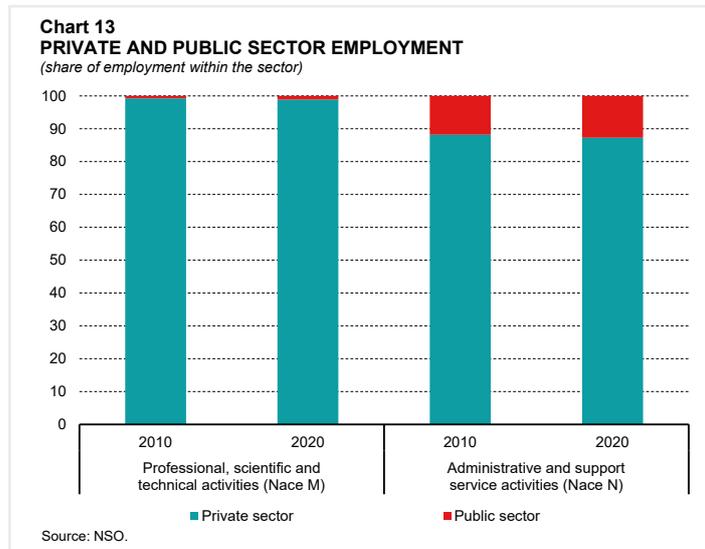
Taken together employment activities and the sub-sector comprising of services to buildings and landscape made up 55.3% of full-time employment in the administrative sector in 2020 (see Table 6). Persons employed on a full-time basis in the office administrative, support and other business support activities were also significant, accounting for almost a fifth of those employed in this sector.

A slightly different ranking is observed in terms of part-time jobs, with the sub-sectors comprising office administrative and other business support activities, security and investigation and services to buildings and landscaping jointly accounting for around two-thirds of part-time employment in the administrative sector. The remaining part-time jobs were broadly distributed across other sub-sectors.

Between 2010 and 2020, full-time employment in the administrative and support service activities sector more than doubled. It rose by 16,371 persons. The largest increases were those in the sub-sectors related to services to buildings and landscape, employment activities as well as those offering office administrative, office support and other business support activities. Together, these made up around 85.0% of the new jobs generated in the administrative sector.

Meanwhile, part-time employment rose by 698 persons, a much smaller increase when compared to the number of new part-time jobs created in the professional sector. Although part-time jobs increased in most sectors within the administrative sector, the increase was concentrated in the sub-sectors comprising office administrative and other business support activities as well as security and investigation activities. Meanwhile, part-time workers classified in employment activities broadly halved.

In 2020, part-time employment in the administrative sector rose only marginally, while persons in full-time employment increased significantly. Employment on a full-time basis rose by 1,800 persons while those employed part-time rose by only 54 persons. In the case of full-time employment, the increase was largely due to higher employment in the employment activities and the services to buildings and landscape activities sub-sectors, while those in security and investigation and to a smaller extent, rental and leasing, fell. Meanwhile, persons employed on a part-time basis contracted across all sub-sectors, except the office administrative, office support and other business support activities sub-sector, where it added 182 persons.

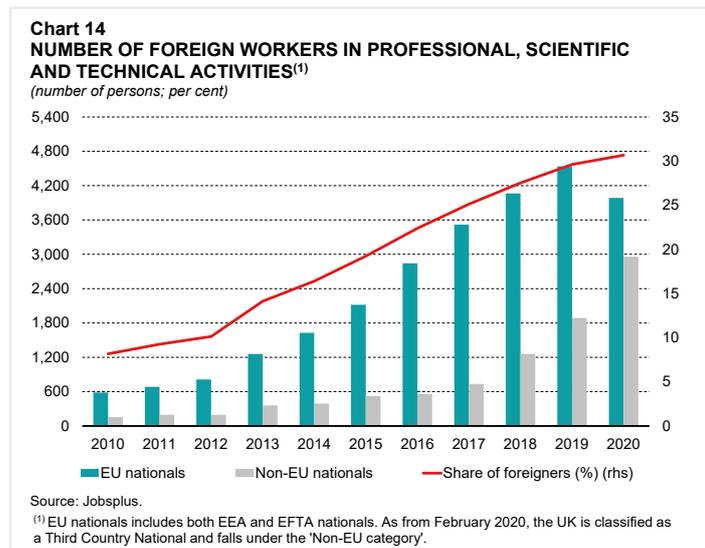


The private sector accounts for the larger part of full-time employment in the sectors under review (see Chart 13). In 2020, 98.9% of the gainfully occupied in the professional, scientific and technical activities sector were employed in the private sector. By contrast, the public sector is somewhat more important within the administrative and support service activities – with this share rising slightly between 2010 and 2020. The highest incidence of public sector jobs is in employment activities and to a lesser extent, in the sub-sectors that provide services to buildings and landscape activities, office administrative and other business support.

Foreign workers

In line with developments in other sectors of the economy the professional, scientific and technical activities, and administrative sectors have increased their reliance on foreign workers in recent years. In 2020, the number of foreigners employed within these sectors was almost ten times its level in 2010.

Jobsplus data show that by 2020, foreign nationals made up almost a third of all employment in the professional sector (see Chart 14). In recent years, most foreign workers employed in this sector were EU nationals, who also accounted for most of the overall increase.



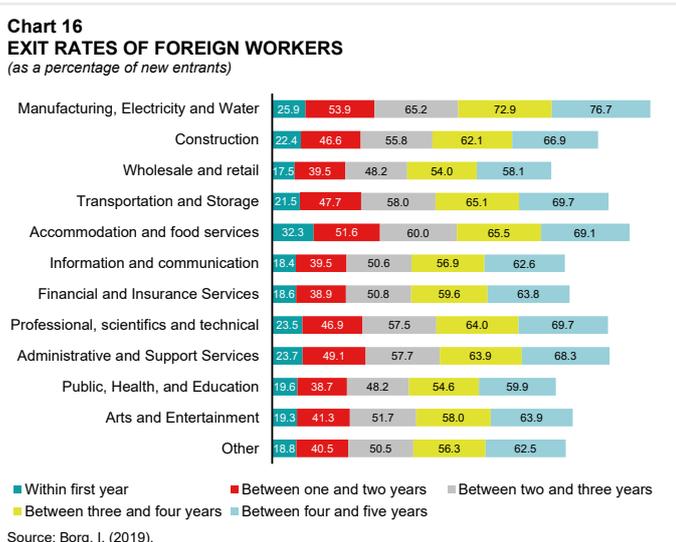
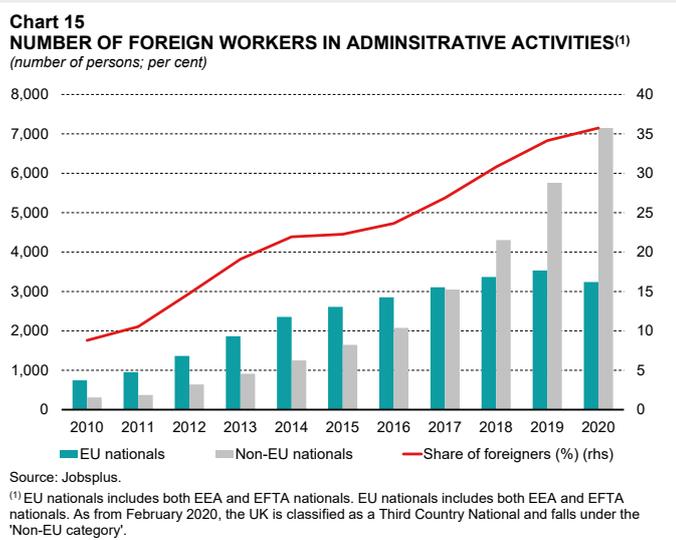
In the administrative and support services sector, the share of foreign nationals in employment was even higher, at almost 36.0% in 2020 (see Chart 15). In contrast to the professional sector, the increase in foreign workers in the administrative sector was driven by non-EU nationals, with the composition now showing a strong dominance of the latter.

A study by the Central Bank of Malta on the length of stay of foreign workers in Malta indicates differences in the exit rates of foreign workers between sectors.¹¹ The exit rates for the professional, scientific and technical activities and administrative and support services sectors within the first year are among the highest compared to other sectors in the economy, as around 24% of foreign workers in the sectors under review exit the workforce within the first year (see Chart 16). Higher exit rates in the first year were only found in the accommodation and food services sector, and the manufacturing, electricity and water sectors, at 32.3% and 25.9%, respectively. Almost 70% of foreign workers in the professional, scientific and technical activities and administrative and support services sectors exit the work force after four or five years. These rates are also among the highest estimated for all sectors.

Labour costs

According to the Labour Cost Survey, the labour cost per hour in the professional, scientific and technical activities sector stood at €20.9 in 2020 (see Chart 17).

The labour cost per hour in the administrative sector was broadly half of this, at €11.1 per hour in 2020 (see Chart 18). In both sectors, the cost per hour in Malta was less than half of that paid in the top paying countries and closer to that paid in a number of Southern Mediterranean and Central and Eastern European economies, which suggests that labour costs paid out in these



¹¹ This study was published in Borg, I. (2019), "The Length of Stay of Foreign Workers in Malta", *Policy Note* January 2019, Central Bank of Malta.

sectors are still relatively competitive when compared with other European countries.

In 2020 labour cost per hour in the professional, scientific and technical activities sector was the fourth highest across sectors of the Maltese economy, hovering just below that paid out in the information and communication and financial and insurance activities sectors, and slightly above that in arts, entertainment and recreation sector, which includes gaming (see Chart 19).

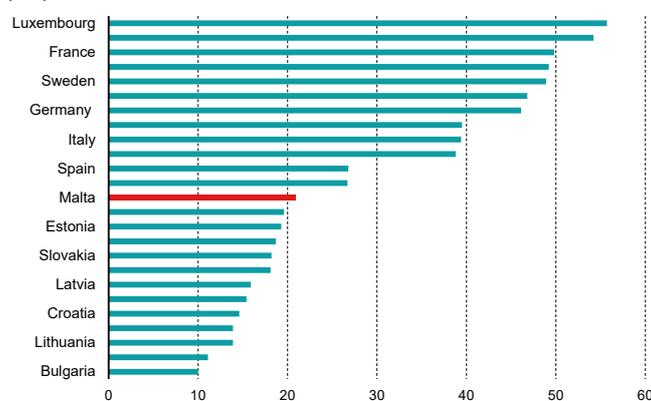
By contrast, hourly labour costs in the administrative and support service activities were on the lower end of the spectrum, the hourly rate comparable to that paid in construction and in accommodation and food services activities.

Confidence indicators and factors limiting business

Given that the largest sub-sector in terms of GVA in the professional, scientific and technical activities sector is activities of head offices and management consultancy activities, this section takes a closer look at developments in the confidence indicator of this sub-sector.¹²

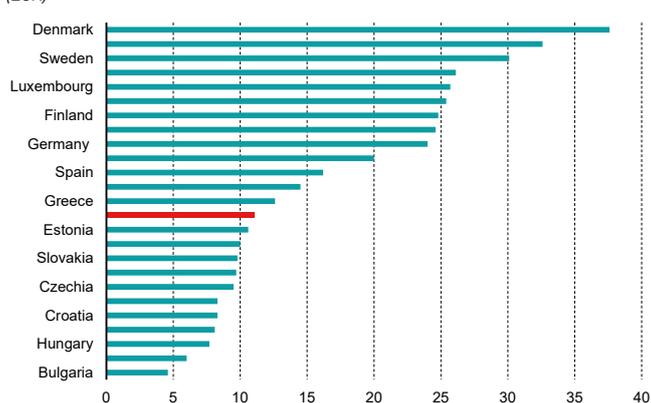
The business confidence survey carried out by the European Commission indicates that before the pandemic hit, confidence was positive in most years, barring 2009, 2014 and 2019.

Chart 17
AVERAGE LABOUR COST PER HOUR IN PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES (NACE M)
(EUR)



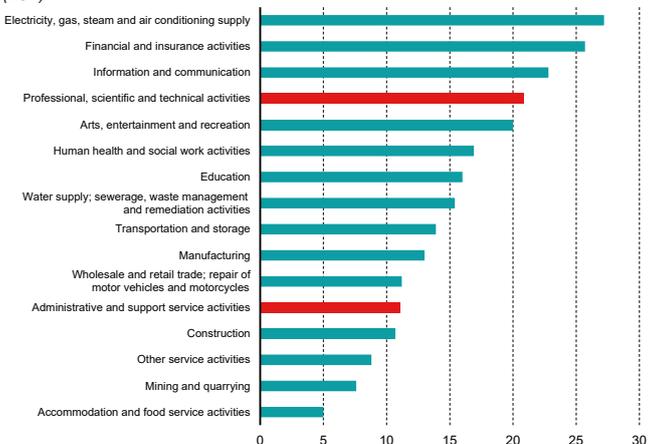
Source: Eurostat.
Data for Cyprus and the Netherlands were not available.

Chart 18
AVERAGE LABOUR COST PER HOUR IN ADMINISTRATIVE SERVICES (NACE N)
(EUR)



Source: Eurostat.
Data for Cyprus and the Netherlands were not available.

Chart 19
LABOUR COST PER HOUR (2020)
(EUR)



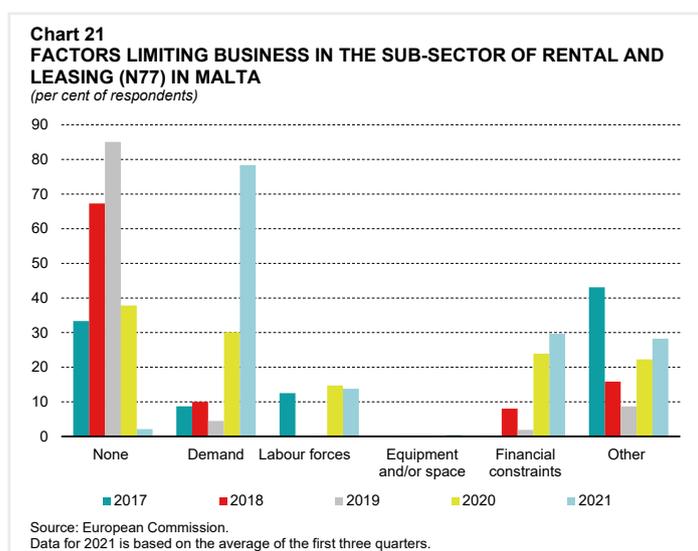
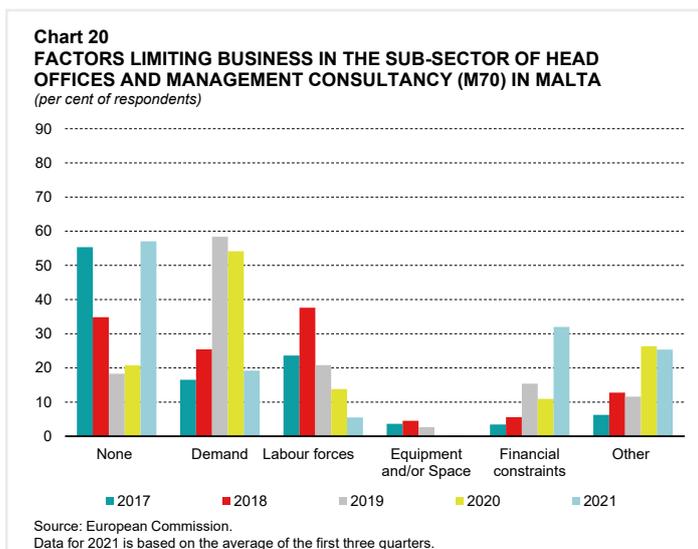
Source: Eurostat.

¹² Data is not available for the the professional sector and the administrative sector as a whole, hence the need to focus on sub-sectors.

In 2019 and 2020, the majority of firms active locally in this sub-sector claimed that insufficient demand was the main factor hindering business activity (see Chart 20). The share of respondents mentioning ‘other factors’ more than doubled in 2020, reaching 26.3%. Labour shortages peaked in 2018 but became less of a pressing factor in the past two years, while 10.9% said that financial constraints limited business activity in 2020. Meanwhile, just over one-fifth of respondents felt that there were no factors hindering business. However, in the first three quarters of 2021, the share rose to over 50%. The share of those reporting financial constraints as a limiting factor also increased significantly compared to 2020.

In the administrative sector, confidence in the rental and leasing sub-sector (the largest in GVA terms) was negative between 2009 and 2012 but regained ground thereafter before turning strongly negative in 2020.

In 2020, 37.8% of respondents active in this sub-sector claimed that there were no factors limiting their business activity. While this remained the most cited response, it was markedly less prevalent than in 2019 (see Chart 21). Most of the other limiting factors all increased in importance, while the effect from lack of equipment and space remained negligible. In the first three quarters of 2021, insufficient demand was by far the most mentioned factor limiting business activity followed by financial constraints and ‘other factors.’ Meanwhile, the share of respondents that felt there were no factors limiting their business decreased to an all-time low.



Conclusion

The sectors comprising professional, scientific and technical activities, and administrative and support services have grown strongly over the last two decades, with the sub-sectors of activities

of head office and management consultancy activities (M70), as well as rental and leasing activities (N77) emerging as the largest sub-sectors within these two sectors in terms of GVA.

Between 2010 and 2020, the largest increases in full-time employment in the professional, scientific and technical activities sector and the administrative and support services sector were generated by activities of head office (M70) and services to buildings and landscape activities (N81) sub-sectors, respectively. Meanwhile a significant number of part-time jobs were created in activities of head office (M70) and employment activities (N78). As with other sectors in the economy, the sections' reliance on foreign workers has increased over time. Labour costs remain competitive compared to the EU member states, staying well below the EU average in both segments. However, over time, the fastest growing sub-sectors within the two sectors under review have been more likely than before to flag insufficient demand as a limiting factor, with this trend amplified by the pandemic. Financial constraints, while not the most pressing issue, have also gained in importance in recent years.

Activity showed a degree of resilience during the pandemic, which suggests that these activities should remain important economic pillars in the recovery phase. At the same time, there were diverse impacts at sub-sector level. For example, the architectural and engineering activities (M71) continued to register strong growth in the past year, as did the sub-sector of security and investigation services (N80). On the other hand, GVA fell strongly in the sub-sector comprising travel agencies and tour operator activities (N79) as well as in services to buildings (N81) and employment activities (N78). This reflects the containment measures introduced in the beginning of the pandemic in order to reduce the risk of spreading the virus across borders, but may also reflect other impediments to growth notably labour shortages and financial constraints. These impediments may not have been evident in the initial development phase but may have become somewhat binding after an extended period of rapid growth, and more rigorous implementation of financial regulations affecting certain sectors.

ANNEX 1

NACE CLASSIFICATION FOR SECTIONS M AND N

- M Professional, Scientific and Technical Activities
- M69 Legal and accounting activities
- M70 Activities of head office; management consultancy activities
- M71 Architectural and engineering activities; technical testing and analysis
- M72 Scientific research and development
- M73 Advertising and market research
- M74 Other professional, scientific and technical activities
- M75 Veterinary activities

- N Administrative and Support Service Activities
- N77 Rental and leasing activities
- N78 Employment activities
- N79 Travel agency, tour operator and other reservation service and related activities
- N80 Security and investigation activities
- N81 Services to buildings and landscape activities
- N82 Office administrative, office support and other business support activities