



20 October 2022
CULTURE SATELLITE ACCOUNT
2018-2020

FOR EVERY 100 EUROS OF GVA GENERATED IN THE ECONOMY, ABOUT TWO EUROS AND THIRTY CENTS CORRESPOND TO CULTURAL ACTIVITIES IN 2020

Taking 2018 as a reference year and with results for the triennium 2018-2020, the new edition of the Culture Satellite Account (CSA) reveals that cultural activities accounted for around 2.4% of the Gross Value Added (GVA) in 2018 and 2019 and 2.3% in 2020. The reduction in 2020 reflected a stronger impact of the COVID 19 pandemic on these activities than that seen in the national economy, estimating that the culture GVA has decreased by 10.6%, which compares with a reduction of 5.8% in total GVA. The contraction of cultural activities in 2020 was largely associated with the strong reduction in the consumption expenditure of cultural products by households, which decreased by around 20%, representing only 2.2% of total household expenditure when, in 2018 and 2019, corresponded to 2.6%.

In 2018, culture generated a GVA close to 4.2 billion euros and covered around 133.6 thousand jobs, representing 2.8% of total employment. The average compensation of employees in cultural activities was higher (1.8%) than in the national economy.

In 2018, the most representative domain in terms of cultural units was the Performing arts (31.1%). Audiovisual & multimedia and Inter-disciplinary stood out for their relative importance in the structure of GVA (24.8%) and employment (22.5%), respectively. Dissemination / Trade was the most representative function in the distribution of cultural units (36.2%) and GVA (34.1%), while Production / Publishing took precedence in the structure of cultural employment (33.5%).

Among the six European Union countries with available and updated information, Portugal appears with the lowest relative weight of culture in the national GVA.

On the occasion of the European Statistics Day, which is celebrated on October 20, Statistics Portugal releases the second edition of the Culture Satellite Account (CSA), whose reference year, with detailed information, is 2018, and also presents information for macroeconomic aggregates GVA, external trade and household consumption expenditure for the following two years.

The current CSA differs from the previous edition (2010-2012), published in 2015, as it follows Eurostat guidelines, issued in the meantime and which essentially resulted in the expansion of the scope of products and activities to be included in this satellite account and, also, by the use of additional data sources (consult points 6 and 7 of the notes at the end of the press release).



The project was developed by Statistics Portugal, in partnership with the Office of Cultural Strategy, Planning and Assessment (GEPAC), of the Ministry of Culture, within the scope of a protocol of collaboration between these entities.

The press is organized according to the following:

1. Main results;
2. Analysis by domain;
3. Analysis by functions;
4. Main supply and use of cultural products;
5. International comparisons; and

Methodological Note.

There are also three boxes with information on: 1) Geographical distribution of units; 2) Art crafts; and 3) Fee to support the public broadcasting service.

In addition to this press release a set of tables with more information about the CSA 2018 is available on Statistics Portugal website (www.ine.pt).

1. MAIN RESULTS

In 2020, the GVA of culture decreased by 10.6% and lost relative importance in the economy (2.3% of the national GVA, when in 2018 and 2019 it represented 2.4%)

In 2018, the cultural sector generated a GVA close to 4,183 million euros, corresponding to 2.4% of the total GVA of the total economy.

The CSA presents detailed results only for 2018 and projections of macroeconomic aggregates for 2019 and 2020, as well as information from the National Accounts (NA) on the main activities and products related to culture for those years.

The estimates point to a nominal growth in the GVA of culture in 2019 (5.4%), higher than that of the national economy (4.5%). In 2020, reflecting the particularly negative effect of the pandemic on this sector, the GVA of culture will have decreased by 10.6%, largely surpassing the contraction of the national economy (5.8%). As a result, there was a stabilization of the weight of GVA of culture in the national economy between 2018 and 2019 (2.4%) and a slight decrease in 2020 (2.3%).

The consumption of cultural products by households was strongly affected by the pandemic context, registering a nominal decrease of around 20%, representing only 2.2% of total household consumption in 2020, when in 2018 and 2019 it corresponded to 2.6% of this aggregate.



Indeed, in 2020, the cultural sector activity was significantly affected by the closure, for more or less prolonged periods, of various cultural facilities, such as cinemas, concert halls, museums, etc.. Additionally, due to the nature of cultural goods and services, demand tends to be quite sensitive to the evolution of household income. Effectively, in 2020, there was a nominal reduction of 1.1% in the gross disposable income of households, thus increasing the recessive effect of the closure of establishments dedicated to cultural activities for reasons of public health protection¹.

Picture 1. Mains results of the CSA 2018 and projections for 2019 and 2020

Main results (2018-2020)		2018	2019	2020	Change rate (%)		Weight (%) in national economy		
		10 ⁶ euro	10 ⁶ euro	10 ⁶ euro	18/19	19/20	2018	2019	2020
GVA	Culture	4,183	4,408	3,940	5.4	-10.6	2.4	2.4	2.3
	National economy	177,466	185,536	174,768	4.5	-5.8			
Household expenditure	Culture	3,364	3,499	2,786	4.0	-20.4	2.6	2.6	2.2
	National economy	127,737	133,144	124,457	4.2	-6.5			
Exports	Culture	414	491	398	18.5	-18.9	0.5	0.5	0.5
	National economy	89,144	93,271	74,286	4.6	-20.4			
Imports	Culture	1,521	1,674	1,514	10.1	-9.6	1.7	1.8	1.9
	National economy	88,194	92,302	78,585	4.7	-14.9			
External balance	Culture	-1,106	-1,183	-1,115	//	//	//	//	//
	National economy	949	969	-4,299	//	//			

Source: CSA 2018 e National Accounts (Statistics Portugal)

This context will have favoured a slight decrease in the deficit of external trade in cultural goods and services in 2020, as a result of reductions of around 10% in imports and 19% in exports.

Comparing the output, imports, exports and household expenditure consumption of products considered “totally cultural”, in 2020 with 2019, the following results were found:

- Publishing services registered decreases of 9.4% in output, 17.3% in household expenditure² and 20.6% in exports;
- Household expenditure on motion picture, video and television programme; production services, sound recording and music publishing decreased by almost 54%, while output diminished 28.9% and exports declined 4.6%;
- Programming and broadcasting services registered the least intense nominal variations in terms of output and imports, although there was a 36.8% decrease in exports;

¹ Additional information in: “Impacto da pandemia nas atividades culturais em 2020” – [Culture Statistics - 2020](#).

² Since 2016, a public policy of free scholarship manuals has been adopted which, in terms of NA has been registered as transfer of consumption expenditure of publishing services from households to general government.



- Household expenditure on creative, arts and entertainment services dropped by almost 79%, while output, import and export of these services fell by 35.6%, 24.9% and 42.5%, respectively;
- Household expenditure on library, archive, museums and other cultural services also registered a reduction of more than 70%. The output of these services recorded a negative variation rate of around 14%.

Picture 2. Output, imports, exports and household expenditure of “fully cultural” products in 2019 and 2020

Products	Unit:10 ⁶ euro								Unit: change rate (%)			
	Output		Imports		Household expenditure		Exports		Output	Imports	Household expenditure	Exports
	2019	2020	2019	2020	2019	2020	2019	2020				
Publishing services ⁽¹⁾	669.2	606.3	113.5	107.6	661.9	547.4	31.4	24.9	-9.4	-5.2	-17.3	-20.6
Motion picture, video and television programme; production services, sound recording and music publishing	726.1	516.4	317.0	290.0	138.2	63.8	144.1	137.5	-28.9	-8.5	-53.9	-4.6
Programming and broadcasting services	887.2	859.5	50.1	49.9	//	//	29.6	18.7	-3.1	-0.3	//	-36.8
Creative, arts and entertainment services	794.5	511.7	82.9	62.2	295.1	62.6	78.8	45.3	-35.6	-24.9	-78.8	-42.5
Library, archive, museum and other cultural services	366.4	314.7	0.1	0.1	108.4	29.4	0.0	0.0	-14.1	-61.0	-72.9	0.0
Total	3443.4	2808.6	563.6	509.8	1203.7	703.2	284.0	226.5	-18.4	-9.5	-41.6	-20.2

Source: National Accounts (Statistics Portugal)

In 2018, the CSA reference year, culture represented 2.8% of the total national employment and 3.8% of the self-employed work

In 2018, 80,650 kind of activity units (KAU) were considered in the CSA, which generated a GVA close to 4,183 million euros, corresponding to 2.4% of the total GVA of the national economy.

These units congregated 133,636 full-time equivalents (FTE) jobs, which represented 2.8% of the economy. Of these, 17.4% (23,309) were self-employed³, corresponding to 3.8% of total national self-employed work.

The average compensation of employees in cultural activities was higher (1.8%) than in the national economy, in 2018. Compensation of employees corresponded to 59.8% of GVA, which compares with 51.6% in the Portuguese economy.

Culture represented 2.6% of total household expenditure, 2.5% of total general government expenditure, 4.2% of total expenditure by non-profit institutions serving households (NPISH) and 1.4% of the total Gross Fixed Capital Formation (GFCF).

Exports accounted for 0.5% of total exports of goods and services and imports for 1.7% in 2018. The external balance in cultural goods and services was negative, contrary to what was observed in the national economy.

³ According to ESA 2010: “self-employed persons are defined as persons who are the sole owners, or joint owners, of the unincorporated enterprises in which they work, excluding those unincorporated enterprises that are classified as quasi-corporations. Persons having both an employee job and a job as a self-employed person are classified here if the self-employed job constitutes their principal activity by income.” Does not include voluntary work.



Other taxes on production amounted to 22.4 million euros, corresponding to 0.7% of the total Other taxes on production, while Other subsidies to production amounted to 96 million euros, representing 4.7% of the total of Other subsidies to production in the economy, in 2018.

Picture 3. Main results for the CSA year of reference (2018)

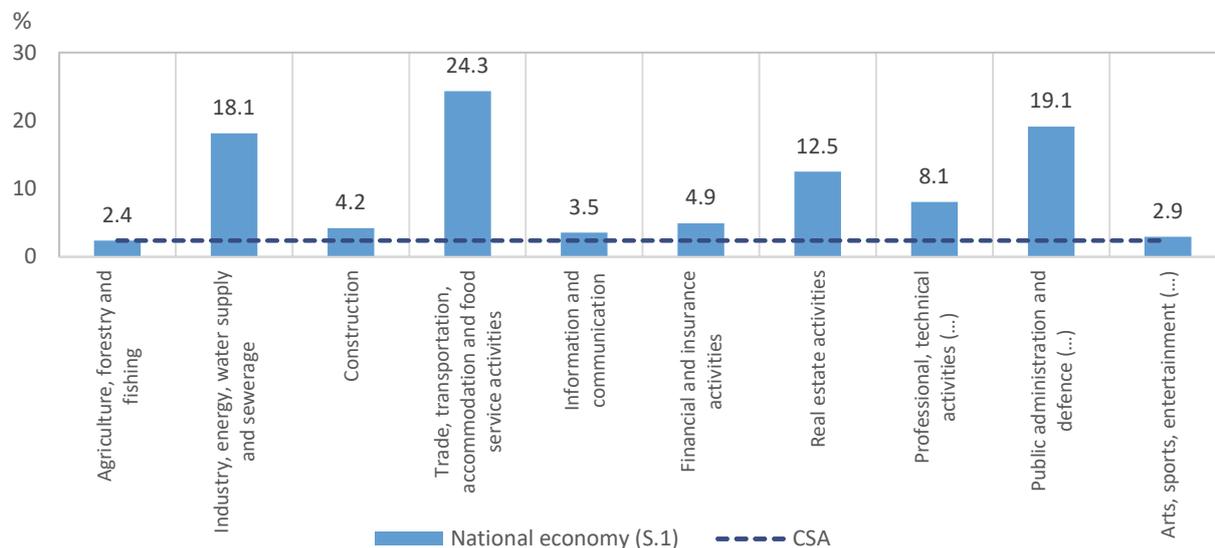
Main results (2018)	Unit	CSA	National economy	CSA weight (%) in national economy
GVA	10 ⁶ euro	4,183.4	177,465.9	2.4
Employment	FTE	133,636	4,720,439	2.8
GVA / Employment	10 ³ euro	31.3	37.6	83.3
Compensation of employees	10 ⁶ euro	2,501.4	91,633.1	2.7
Employees	FTE	110,327	4,111,162	2.7
Average compensation of employees	10 ³ euro	22.7	22.3	101.8
Compensation of employees / GVA	%	59.8	51.6	115.8
Other taxes on production	10 ³ euro	22.4	3,223.1	0.7
Other subsidies on production	10 ³ euro	96.0	2,036.3	4.7
Operating surplus, gross	10 ³ euro	1,755.5	84,646.0	2.1
Final consumption expenditure by households	10 ⁶ euro	3,363.5	127,737.4	2.6
Final consumption expenditure by general government	10 ⁶ euro	877.3	34,834.4	2.5
Final consumption expenditure by non-profit institutions serving households	10 ⁶ euro	172.1	4,133.9	4.2
GFCF	10 ⁶ euro	519.9	35,953.4	1.4
Exports	10 ⁶ euro	414.2	89,143.7	0.5
Imports	10 ⁶ euro	1,520.5	88,194.4	1.7
External balance	10 ⁶ euro	-1,106.3	949.3	//

Source: CSA 2018 (Statistics Portugal)

To portray the scale of economic relevance, compared to the industries in the National Accounts, the weight of cultural activities GVA was identical to that of agriculture, forestry and fishing (2.4%) in 2018.



Picture 4. Weight (%) of culture GVA and industries in the national economy in 2018



Source: CSA 2018 (Statistics Portugal)

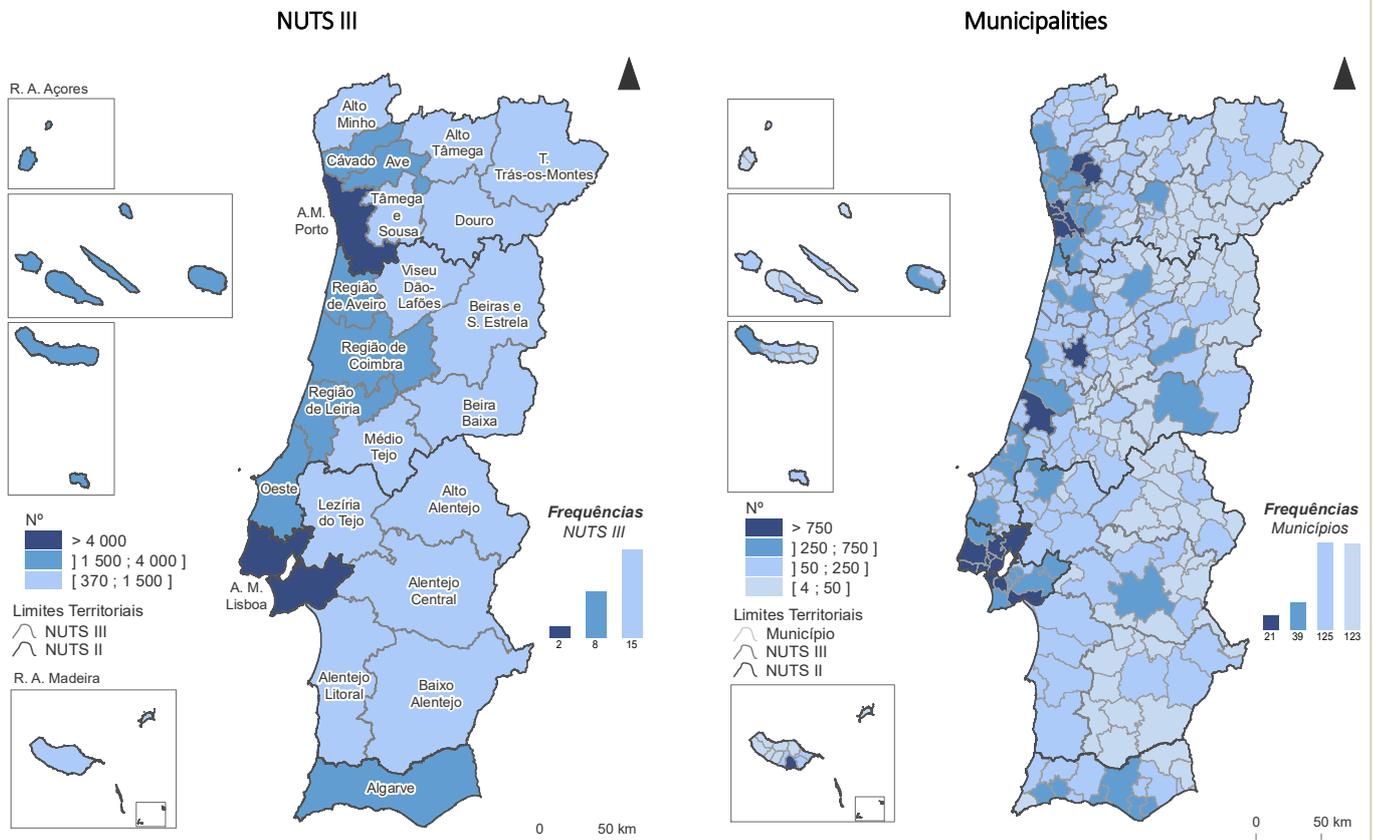
Box 1: Geographic distribution of the CSA universe

Analysing the geographic distribution by NUTS III, it is observed that the Área Metropolitana de Lisboa (AML) and the Área Metropolitana do Porto (AMP), together, concentrated more than half of the total cultural units (57.1%).

At the level of municipalities⁴, only 21 municipalities have more than 750 cultural units in their territory, of which only 8 coincide with capitals of administrative districts, namely: Braga, Guimarães, Coimbra, Leiria, Lisbon, Oporto, Setúbal and Funchal. The remaining 13 municipalities correspond to municipalities integrated in the metropolitan areas of Lisbon and Oporto.

⁴ Note that: 1) there are units with only partially cultural activity; 2) the fact that the cultural units are located in a certain sub-region or municipality does not make it impossible for them to develop activities in other places, namely using itinerancy (examples of which are tours and exhibitions of creative and artistic work at events, art galleries, museums, organization of fairs, etc.). Municipalities and civil parishes are not included in the accounting of units.

Picture 5. Geographic distribution of the number of units in the CSA universe (2018)

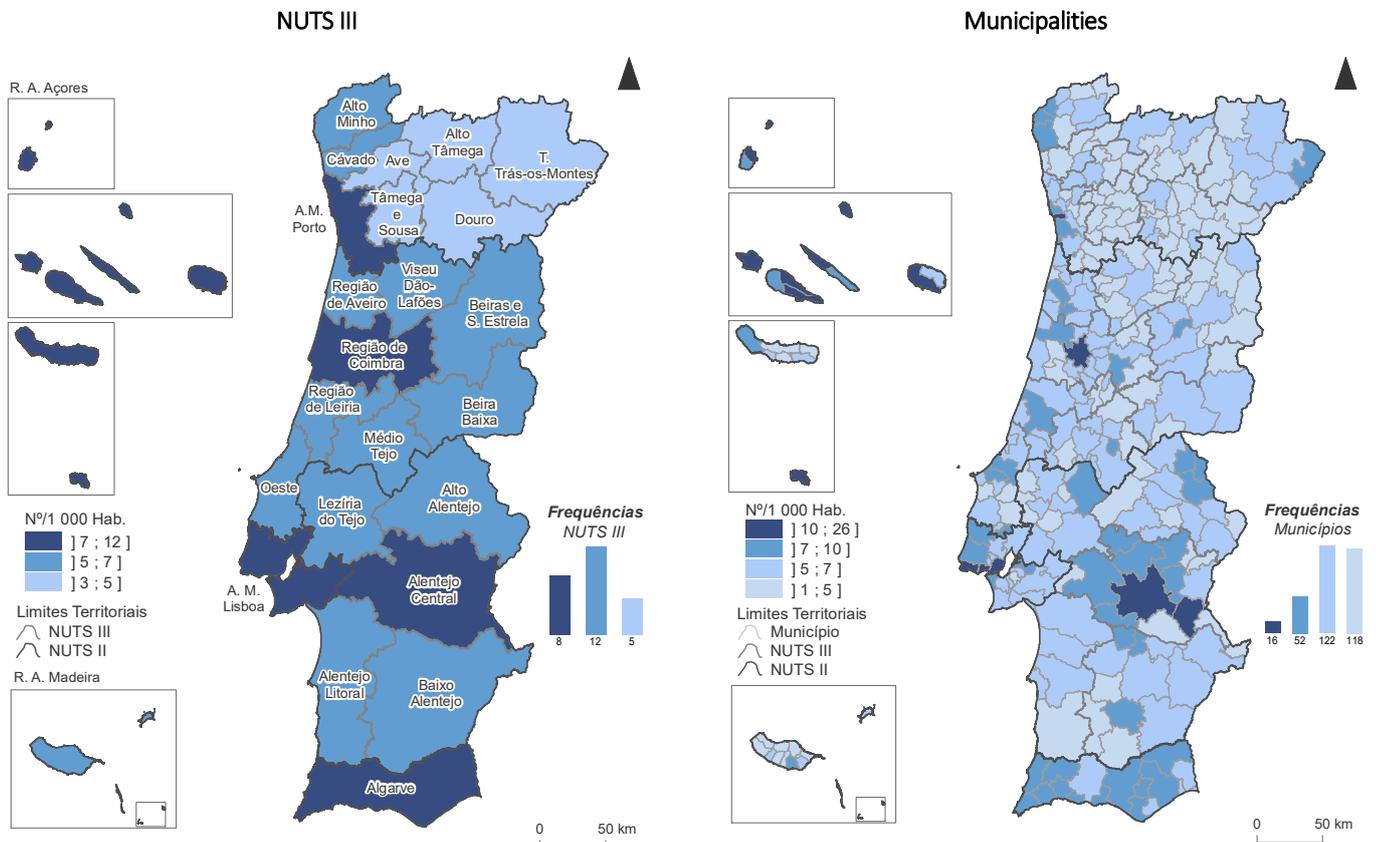


Relating the spatial distribution of the units with the respective number of inhabitants, it was observed that in addition to the AML and the AMP, another 4 NUTS III brought together 7 or more units per thousand inhabitants: Region of Coimbra, Alentejo Central, Algarve and Autonomous Region of the Azores.

At the opposite end of the distribution are five sub-regions of the Norte (North), with less than 5 cultural units per thousand inhabitants: Ave, Tâmega e Sousa, Alto Tâmega, Douro and Terras de Trás-os-Montes.

The analysis by municipality showed that only 16 municipalities concentrated 10 or more cultural units per thousand inhabitants, of which 7 were located in the mainland (Porto, Coimbra, Cascais, Lisbon, Oeiras, Évora and Reguengos de Monsaraz) and 9 were located in the Autonomous Region of Azores (Vila do Porto, Angra do Heroísmo, Santa Cruz da Graciosa, Velas, Lajes do Pico, São Roque do Pico, Horta, Santa Cruz das Flores and Corvo).

Picture 6. Distribution of the number of units in the CSA universe (2018), per thousand inhabitants



Source: CSA 2018 and Censos 2021 – Provisional results (Statistics Portugal)

2. ANALYSIS BY DOMAIN

The domain with more kind of activity units (KAU) was the Performing arts, while Audiovisual & multimedia and Inter-disciplinary stood out, respectively, in the GVA and employment structure.

In 2018, the Performing arts concentrated 31.1% of the CSA kind of activity units (KAU). The activities with the least representation were related to the domains of Heritage (1.3%), Archives (0.1%) and Libraries (0.1%).

Analysing the distribution of culture GVA by the different domains, the structure changed in relation to what was observed in the units: Audiovisual & multimedia represented 24.8% of GVA of the CSA. Another domain that also stood out for its significant weight in the GVA was Books and press (18.9%), immediately followed by the Inter-disciplinary (18.8%).



Picture 7. Main results of the CSA, by domain, in 2018

		KAU	GVA	Compensation of employees	Employment	KAU	GVA	Compensation of employees	Employment
		No.	10 ⁶ euro	10 ⁶ euro	FTE	%			
Heritage		1,028	187	147.6	6,102	1.3	4.5	5.9	4.6
Archives		68	45	28	1,226	0.1	1.1	1.1	0.9
Libraries		45	81	56.7	2,779	0.1	1.9	2.3	2.1
Books & press		9,308	792	531.7	26,439	11.5	18.9	21.3	19.8
Visual arts		10,617	225	133	10,362	13.2	5.4	5.3	7.8
Performing arts		25,076	388	230.6	16,985	31.1	9.3	9.2	12.7
Audiovisual & multimedia		4,689	1,038	460.6	16,644	5.8	24.8	18.4	12.5
Architecture		9,795	204	103.5	9,167	12.1	4.9	4.1	6.9
Advertising		5,150	437	272	13,831	6.4	10.5	10.9	10.3
Inter-disciplinary		14,874	787	537.7	30,101	18.4	18.8	21.5	22.5
Total		80,650	4,183	2 501	133,636	100.0	100.0	100.0	100.0

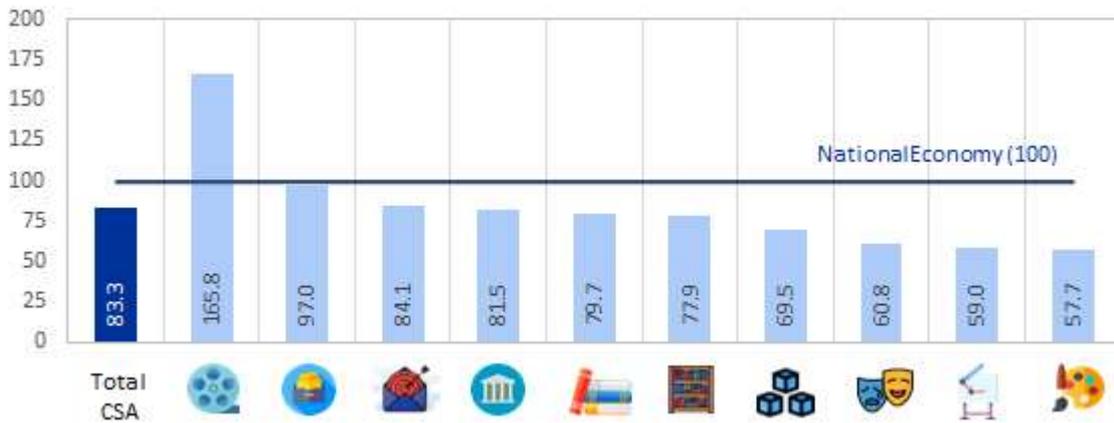
Source: CSA 2018 (Statistics Portugal)

In terms of total employment (FTE), the hierarchy of domains was slightly different from that observed in the GVA: 22.5% of CSA employment was concentrated in the Inter-disciplinary domain, followed by Books and press (19.8%).

The GVA generated by FTE (employment) in the cultural sector was lower than that observed in the national economy (-16.7%). However, the GVA/FTE ratio proved to be very heterogeneous: the Audiovisual & multimedia domain stood out, due to its distance from the other domains and the national average (65.8% above the national average), while at the opposite extreme were the Visual arts, Architecture and Performing arts (42.3%, 41.0% and 39.2% below the national average, respectively).



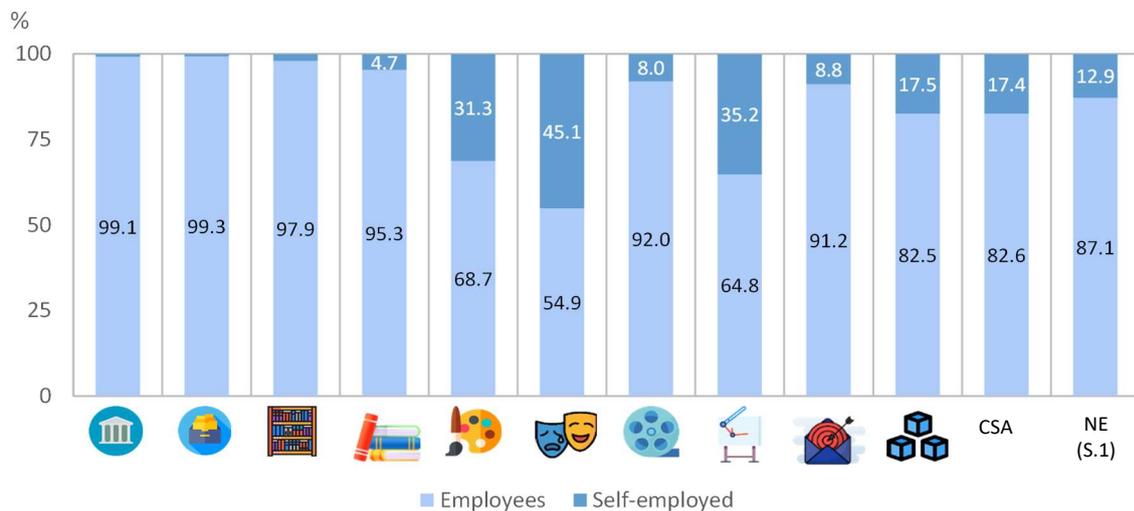
Picture 8. GVA / employment in the CSA, by domain, in 2018



Source: CSA 2018 (Statistics Portugal)

The relative weight of the self-employed in total employment, in culture, was higher than the national economy (17.4% and 12.9%, respectively). The relative importance of self-employed was higher in the Performing arts (45.1%), Architecture (35.2%) and Visual arts (31.3%).

Picture 9. Weight (%) of employees and self-employed in the CSA, by domains, in 2018



Source: CSA 2018 (Statistics Portugal)

More than 70% of cultural compensation of employees concentrated in 4 areas: Inter-disciplinary (21.5%), Books and press (21.3%), Audiovisual & multimedia (18.4%) and Advertising (10.9%).

The *per capita* compensation of employees in culture were 1.8% higher than the national average. This indicator also showed a significant dispersion by domain, with Audiovisual & multimedia recording the highest *per capita* (+35.0% than the national average). At the opposite extreme were Architecture (21.8%) and Visual arts (-16.2%).



Picture 10. *Per capita* compensation of employees, by domain, in 2018



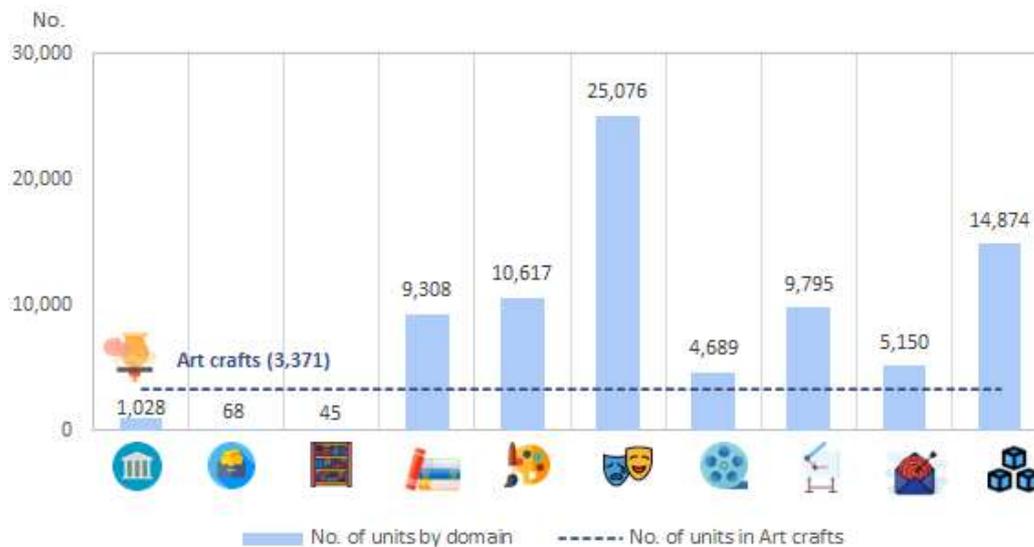
Source: CSA 2018 (Statistics Portugal)



Box 2: Art crafts

In 2018, 3,371 KAU were identified which developed activities related to Art crafts, representing about 4% of the total CSA units.

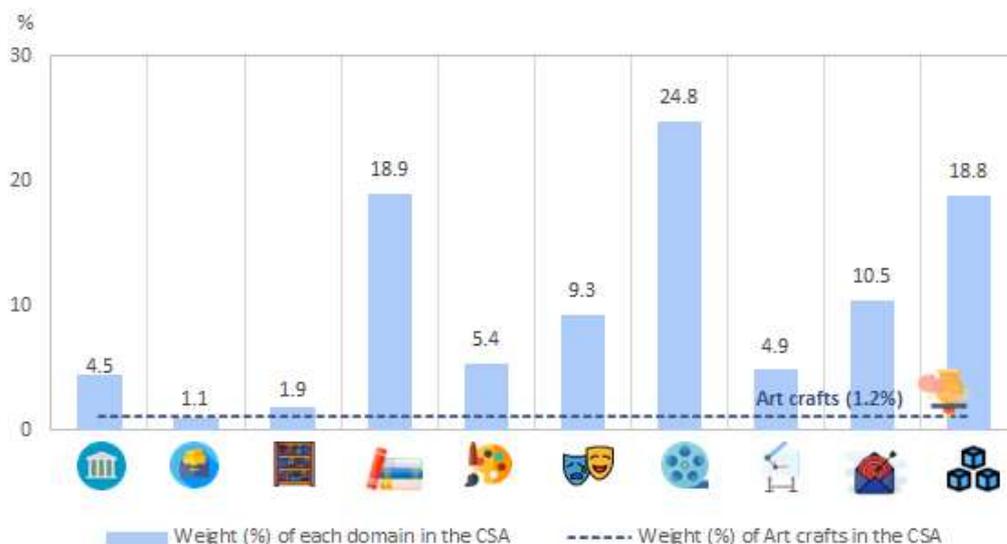
Picture 11. Distribution of CSA units, by domain and total Art crafts units, in 2018



Source: CSA 2018 (Statistics Portugal)

This set of KAU generated approximately 49 million euros of GVA in 2018, which corresponds to 1.2% of the total GVA of the CSA in the same year.

Picture 12. Weight (%) of Art crafts GVA in culture GVA, in 2018



Source: CSA 2018 (Statistics Portugal)



3. ANALYSIS BY FUNCTION

The most representative function in terms of KAU and GVA was Dissemination/ Trade, while Production/ Publishing was dominant in the structure of cultural employment.

The functions (or stages of production of cultural products) with the highest number of KAU, in 2018, were Dissemination / Trade (36.2%) and Creation (with 33.5%). The least representative functions were related to Management / Regulation (0.1%), Education (3.2%) and Preservation / Conservation (3.4%).

In terms of GVA, the hierarchy of functions changes slightly: Dissemination / Trade maintains the primacy (34.1%), followed by Production / Publishing (32.7%). These two domains accounted for about 2/3 of the total GVA of culture in 2018.

Picture 13. Main results of the CSA, by function, in 2018

		KAU	GVA	Compensation	Employment	KAU	GVA	Compensation	Employment
		No.	10 ⁶ euro	of employees 10 ⁶ euro	FTE	%	%	%	%
Creation		26,982	638	377	27,813	33.5	15.2	15.1	20.8
Production / Publishing		19,015	1,366	833	44,720	23.6	32.7	33.3	33.5
Dissemination / Trade		29,232	1,427	669	37,261	36.2	34.1	26.7	27.9
Preservation / Conservation		2,752	252	191	8,401	3.4	6.0	7.6	6.3
Education		2,581	434	374	13,253	3.2	10.4	14.9	9.9
Management / Regulation		88	67	59	2,188	0.1	1.6	2.3	1.6
Total		80,650	4,183	2,501	133,636	100.0	100.0	100.0	100.0

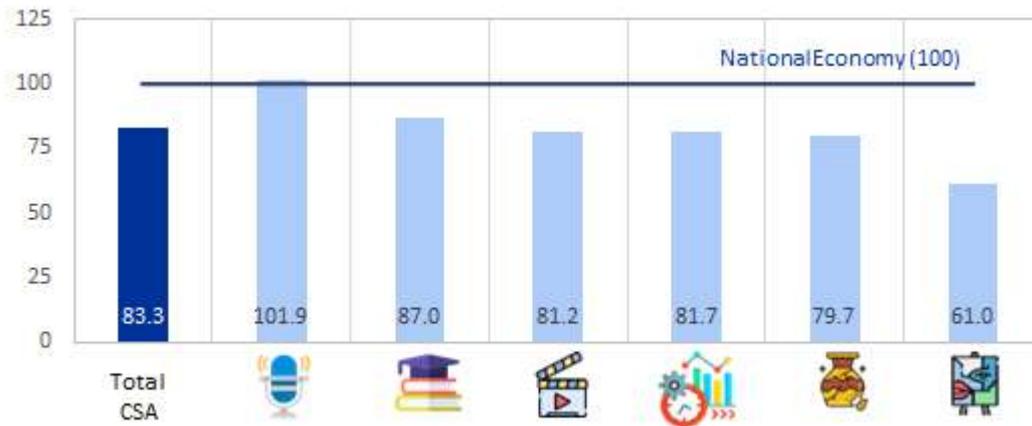
Source: CSA 2018 (Statistics Portugal)

Production / Publishing was the most relevant in terms of employment (33.5%), followed by Dissemination / Trade (27.9%) and Creation (20.8%).

As to the indicator GVA / FTE, Dissemination / Trade stood out, due to its distance from the other domains, registering even higher records than the national average (1.9%). At the opposite extreme was Creation (39% below the national average).



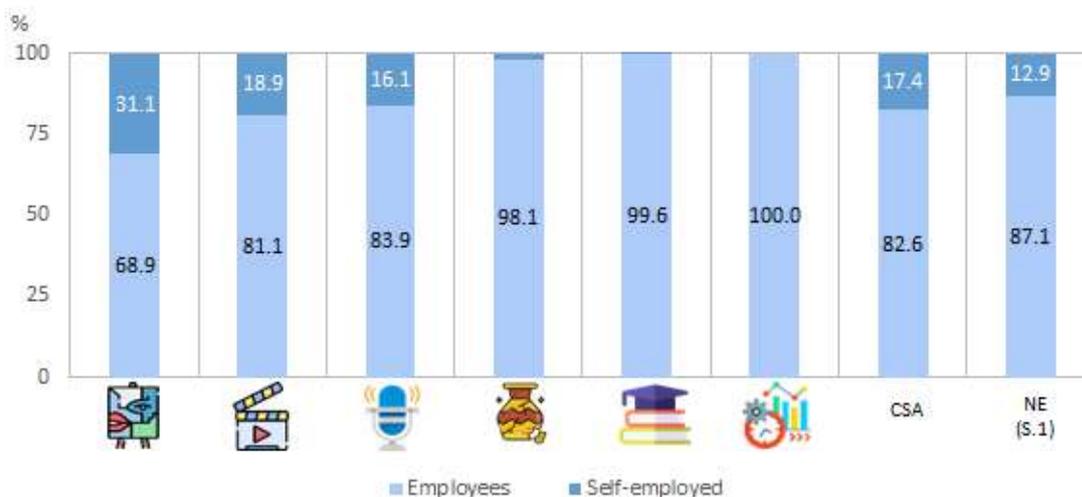
Picture 14. GVA/ employment in the CSA, by function, in 2018



Source: CSA 2018 (Statistics Portugal)

The relative importance of self-employment is higher in Creation (31.1%), in Production / Publishing (18.9.1%) and in Dissemination / Trade (16.1%).

Picture 15. Weight (%) of employees and self-employed in the CSA, by functions, in 2018



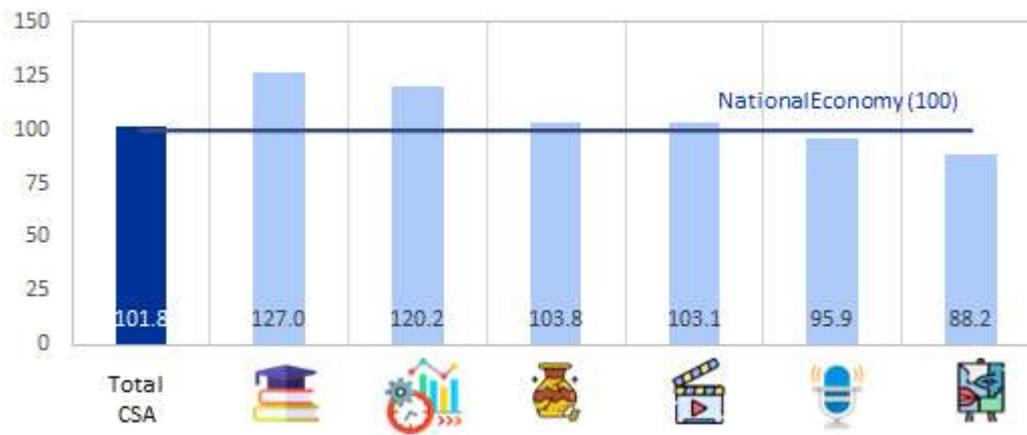
Source: CSA 2018 (Statistics Portugal)

The distribution of the compensation of employees was similar to that observed in total employment, with emphasis on Production / Publishing (33.3%) and Dissemination / Trade (26.7%), which together accounted for 60% of compensation of employees in culture, in 2018.



Education and Management/ Regulation recorded the highest *per capita* compensation of employees. At the opposite extreme were Creation and Dissemination/ Trade, both with *per capita* earnings below the national average.

Picture 16. *Per capita* compensation of employees, by function, in 2018



Source: CSA 2018 (Statistics Portugal)

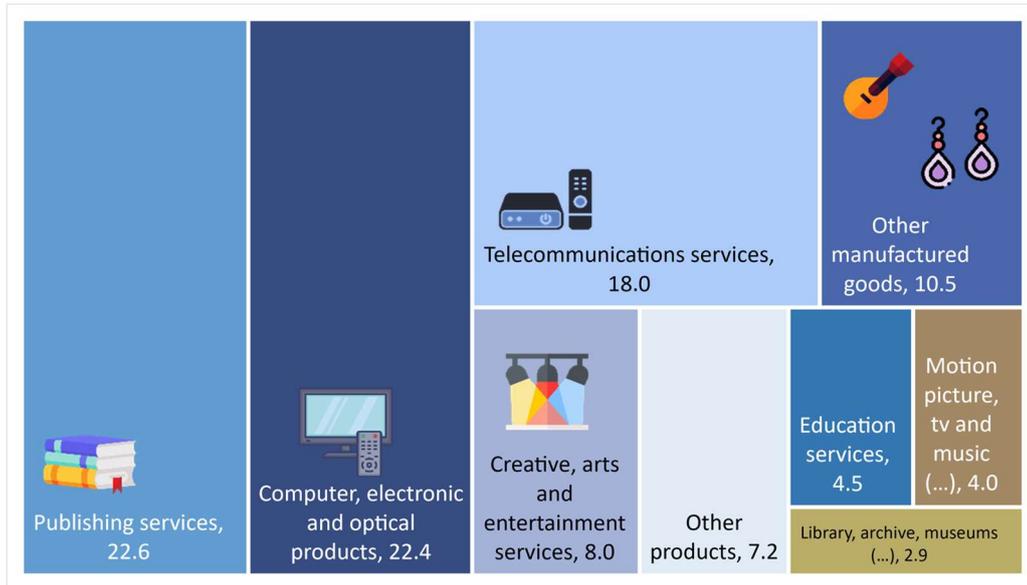
4. MAIN SUPPLY AND USES OF CULTURAL PRODUCTS

Consumption of cultural products accounted for 2.6% of total household expenditure, 2.5% of total general government expenditure and around 4% of total NPISH expenditure

Household final consumption expenditure on cultural products represented 2.6% of the national total, in 2018, and focused mainly on publishing services (22.6%), computer, electronic and optical products (22.4%) and telecommunications services (18.0%).



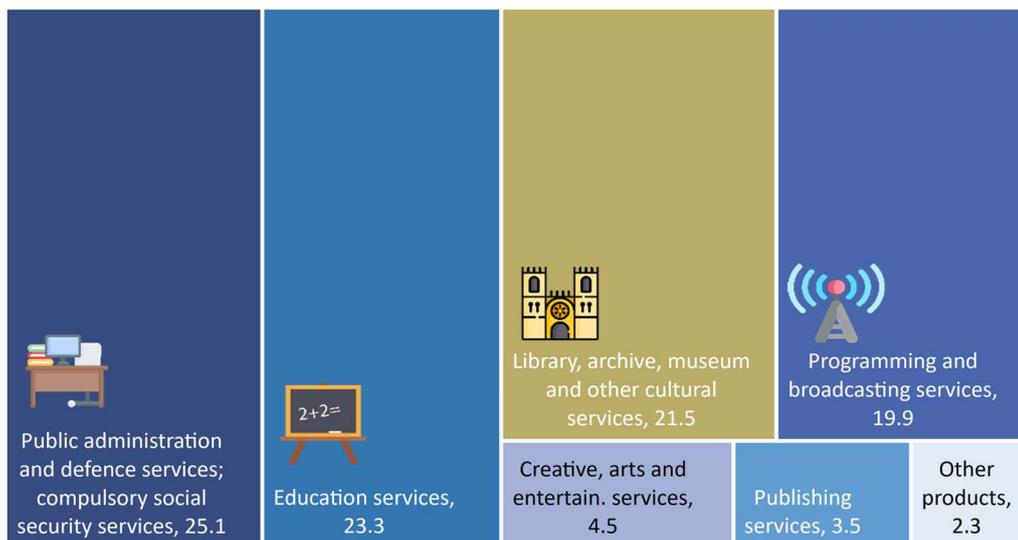
Picture 17. Distribution (%) of the main cultural products in household expenditure, in 2018



Source: CSA 2018 (Statistics Portugal)

Public consumption of cultural products accounted for 2.5% of the total expenditure of general government, with special relevance on public administration services (25.1%), education services (23.3%) and library, archive, museums and other cultural services (21.5%).

Picture 18. Distribution (%) of the main cultural products in general government expenditure, in 2018

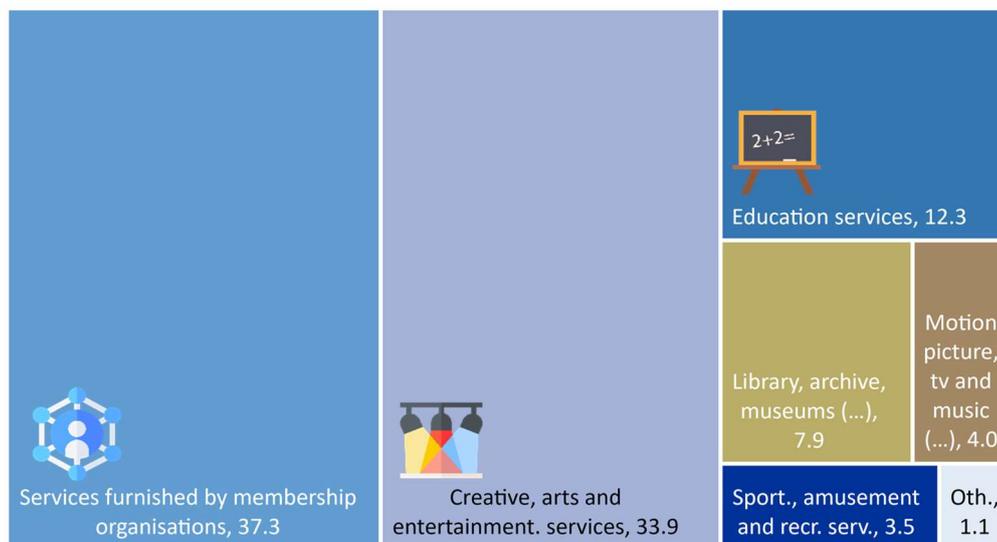


Source: CSA 2018 (Statistics Portugal)



Around 4% of the NPISH final consumption expenditure was related to cultural products, in 2018, with emphasis on services furnished by associative organizations (37.3%), creative, arts and entertainment services (33.9%) and also education services (12.3%).

Picture 19. Distribution (%) of the main cultural products in NPISH expenditure, in 2018



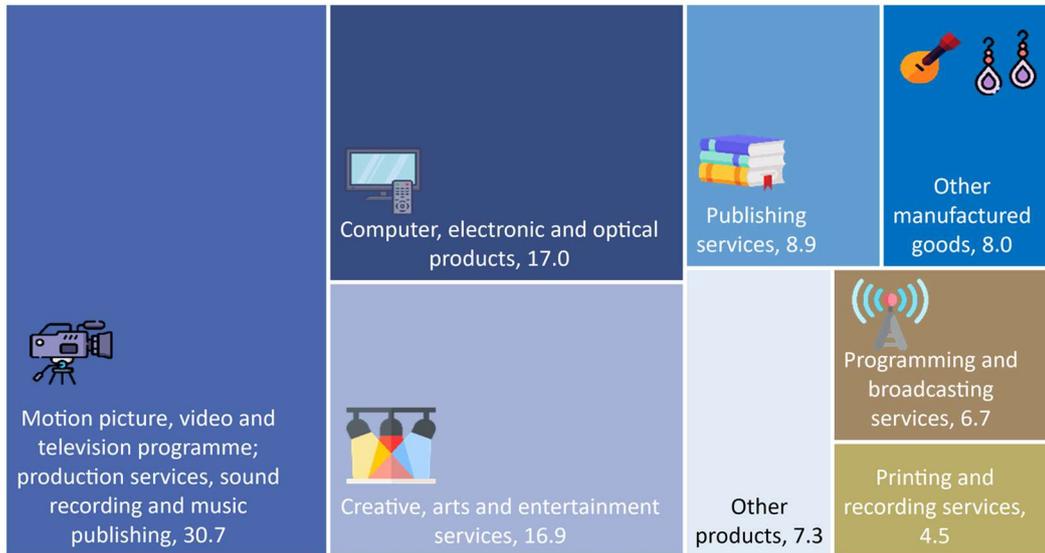
Source: CSA 2018 (Statistics Portugal)

In 2018, exports of cultural goods and services amounted to 414 million euros, representing 0.5% of total exports. Imports of cultural goods and services amounted to almost 1,521 million euros, corresponding to 1.7% of total in the same year. Consequently, the external balance in cultural products was negative by more than 1.1 billion euros, contrary to what was observed in the economy, with a positive balance of almost 950 million euros in the same year.

In terms of exports of cultural products, the most relevant items were motion picture, video and television programme; production services, sound recording and music publishing (30.7%), followed by computer, electronic and optical products (17.0%) and creative, arts and entertainment services (16.9%).



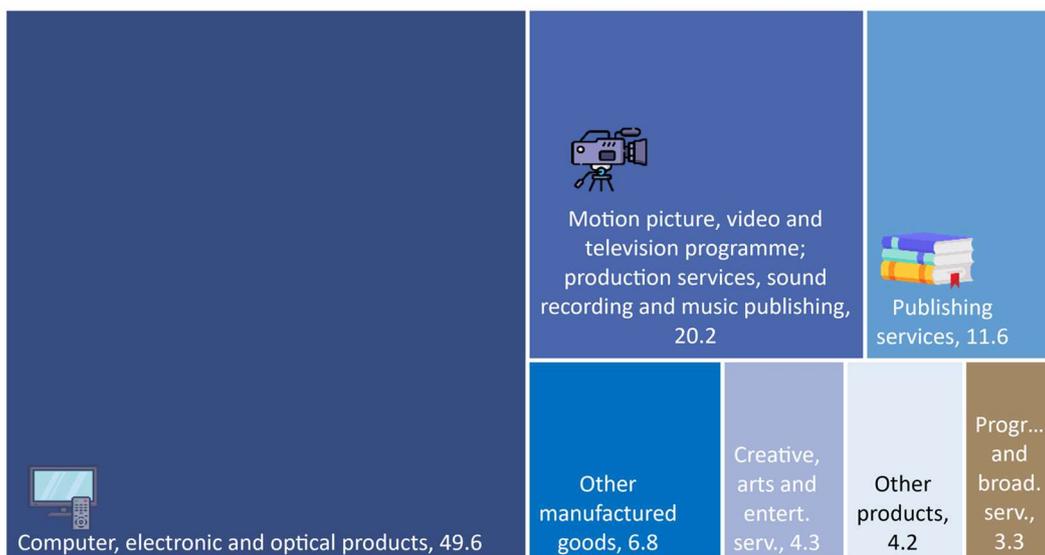
Picture 20. Structure (%) of the main cultural products exported, in 2018



Source: CSA 2018 (Statistics Portugal)

In terms of imports, it stands out the relevance of computer, electronic and optical products (49.6%), very distant from the other products, and the motion picture, video and television programme; production services, sound recording and music publishing (20.2%).

Picture 21. Structure (%) of the main cultural products imported, in 2018



Source: CSA 2018 (Statistics Portugal)



Box 3: Fee to support the public broadcasting service

The CSA scope does not include the variation in other current taxes (D.59). However, given the relevance of the fee to support the public broadcasting service, the amounts recorded in the NA are presented, which were close to 180 million euros between 2018 and 2020.

Picture 22. Evolution of the fee to support the public broadcasting service



Source: National Accounts (Statistics Portugal).

5. INTERNATIONAL COMPARISONS

Among the EU countries analysed, Portugal appears with the lowest relative weight of culture in the national economy

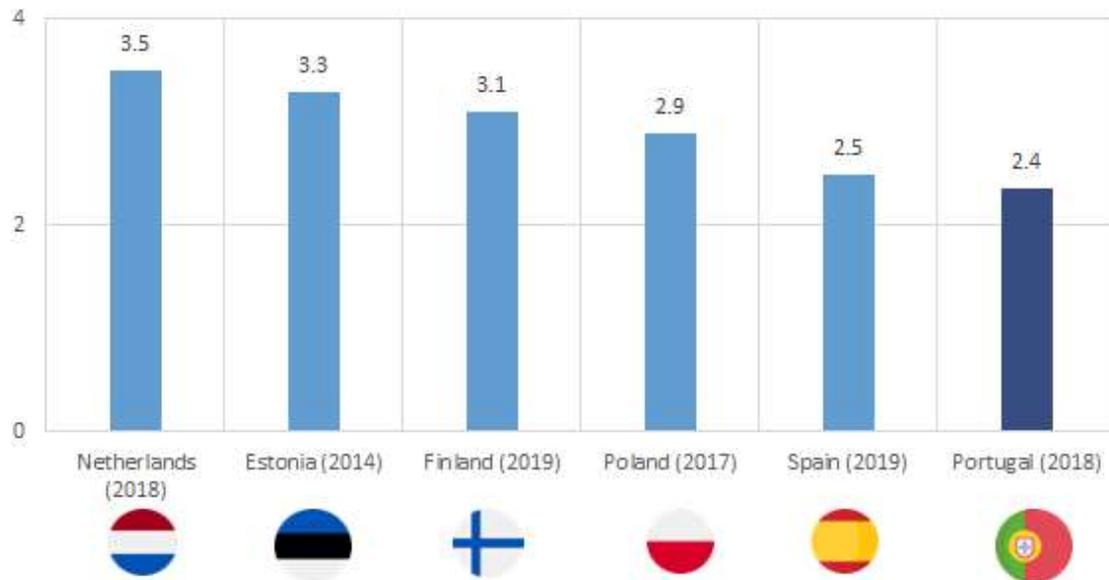
In the European Union (EU) there are not many countries which have implemented CSA, or that present regular and periodic updates of this Satellite Account.

Comparisons with countries with available information must be carried out with some caution, since there is no complete coincidence in time of the various accounts, nor a total harmonization in the activities considered or in the products included.

Among the six countries with available and updated results for 2014 and subsequent years, Portugal appears with the lowest relative weight of culture in the national GVA (2.4%), nevertheless close to the Spanish value.



Picture 23. Weight (%) of the GVA of culture in the national GVA of some European Union (EU) countries ⁵



Source: Satellite account for culture and media 2018 (Statistics Netherlands); Cultural satellite account 2014 (Statistics Estonia); Culture Satellite Accounts 2019 (Statistics Finland); Culture satellite account for 2017 (Statistics Poland); Cuenta Satélite de la Cultura en España. Revisión CNE 2019 (INE España); CSA 2018 (Statistics Portugal).

Relating the relative weight of culture in national GVA to the practice of artistic activities by citizens (at least once a week), it is possible to observe that other countries have higher levels of cultural participation, with Finland and the Netherlands standing out, with more than 20% of the population engaging in artistic practices, at least once a week, which contrasts with less than 6% of the Portuguese population.

⁵ In the case of Finland, the unit used corresponds to the weight of the GVA of culture in the national GDP ((...) “value added accounted for slightly over three per cent of GDP in 2019”). The Finnish CSA already has updated information for 2020. For comparison purposes, the methodological option was to use the values of 2019, considering that 2020 is an atypical year.



Picture 24. Weight (%) of culture GVA in the national GVA in some EU countries and frequency (%) of the practice of artistic activities: at least once a week



Source: Satellite account for culture and media 2018 (Statistics Netherlands); Cultural satellite account 2014 (Statistics Estonia); Culture Satellite Accounts 2019 (Statistics Finland); Culture satellite account for 2017 (Statistics Poland); Cuenta Satélite de la Cultura en España. Revisión CNE 2019 (INE España); CSA 2018 (Statistics Portugal); Eurostat (online data code: ilc_scp07).



METHODOLOGICAL NOTE

1. GENERAL INTRODUCTION

The Satellite Accounts aim to expand the capacity to observe specific *phenomena*, constituting more detailed extensions of the NA.

The CSA is a tool to develop an economic information system related to culture, consistent with the PNA. The choice of NA as a main reference reflects their importance, as a complete, reliable, systematized and internationally comparable representation of the economy.

The CSA prioritized the simultaneous treatment of supply and demand of cultural products. In this way, information was obtained not only for the production account (output at basic prices, intermediate consumption, GVA), but also for economic variables such as household and general government expenditure, among others.

The year 2018 is the reference year for the present edition of the CSA, for which information is available with the maximum possible degree of detail. Additionally, benefiting from the availability of final and detailed results of the annual PNA for 2019 and 2020, it was possible to estimate some macroeconomic aggregates of the CSA and also to present information from the PNA on the main activities and products related to culture for those years.

The results of the CSA are not directly comparable with the results of Culture Statistics, also compiled and published by Statistics Portugal, because: 1) the CSA is a derived statistic, that is, it crosses several sources of information (including economic information included in Culture Statistics); 2) the CSA is a satellite account of the PNA, so it uses identical sources, methodologies and principle, guided namely by the principle of exhaustiveness.

2. METHODOLOGICAL REFERENCES

The first references of Satellite Accounts are the concepts and methods of the NA, defined in the European System of National and Regional Accounts (ESA 2010).

The CSA 2018 took into account the guidelines contained in the “Guide to Eurostat culture statistics. 2018 edition”, of Eurostat, which introduces changes from the previous recommendations, namely: the inclusion of products such as electronic equipment/devices associated with cultural consumption (televisions, radios, CDs and DVDs, among others); the subscription of television services included in telecommunications packages; and, also, the inclusion of jewellery. Compared to the previous edition of the CSA (2015), these changes determined the expansion of the scope of cultural activities considered.

In addition to these new methodological guidelines, the new edition of the CSA also considers the methodological orientations included in the ESSnet-CULTURE report, 2012 (Final Report document of the ESSnet - European Statistical System Network on Culture), common to the 1st edition of the CSA (published in 2015). This document presents the main results of two years of work, with a view to the development of cultural statistics in the EU.



CSA from other EU countries were also considered as valid methodological references and, above all, as good practices. The Satellite account for culture and media (2015 and 2018) of Statistics Netherlands (CBS) deserves special mention, due to its relevance and scope.

3. CONCEPTS AND NOMENCLATURE

Culture, within the scope of the CSA, refers to the set of human activities and goods and services, based on the functions of creating, producing, disseminating, trading, preserving, educating or regulating symbolic content. Three basic characteristics were determined to define cultural activities:

- related to cultural expressions;
- based on creation and communication through symbols;
- linked to intellectual property (especially copyrights).

The ESSnet-Culture 2012 works favoured pragmatism, trying to create a definition of culture based on a list of theoretical activities, with reference to existing sources and classifications/nomenclatures (NACE, CPA, ISCO08, COICOP HBS, COFOG, etc.).

The general concepts of the CSA (ex.: GVA, compensation of employees, FTE, etc.) are those of the NA, and can be consulted in the meta-information area, on the Statistics Portugal portal.

ESSnet-Culture 2012 proposes a European statistical framework of culture organized into 10 domains (which translate a set of cultural practices, activities or products focused on expressions recognized as artistic):

1. Heritage;
2. Archives;
3. Libraries;
4. Book & Press;
5. Visual arts;
6. Performing arts;
7. Audiovisual & multimedia;
8. Architecture;
9. Advertising;
10. Art crafts.

These 10 domains were adapted to the national reality, including the “Inter-disciplinary” domain, which includes the majority of Arts crafts units and other cross-cut activities that cannot be integrated in the specific domains.

In addition, in line with the ESSnet-Culture 2012, the following functions were considered (which translate the different stages of production of cultural goods and services):



1. Creation;
2. Production / Publishing;
3. Dissemination / Trade;
4. Preservation / Conservation;
5. Education;
6. Management / Regulation.

There is no hierarchy in the domains. In terms of functions, Creation (artistic) is the central aspect of the statistical framework, with the list being presented sequentially. Creation is followed by Production / Publishing and, later, Dissemination / Trade. Preservation / Conservation, Education and Management / Regulation are supporting functions.

4. METHODOLOGY

For the selection of the statistical units integrating the CSA, the universe of PNA (Base 2016), for 2018, was used as a reference.

As with the PNA, the construction of the CSA universe was also carried out by institutional sector (that is, S.11 - Non-financial corporations; S.12 - Financial corporations; S.13 – General government; S.14 - Households; S.15 – Non-profit institutions serving households).

In a first stage, the codes of the Portuguese Classification of Economic Activities (CAE) Rev.3 were considered (related to the NACE codes provided for in ESSnet – Culture 2012, with some adaptations to national specificities, such as bullfighting).

The construction of the CSA universe based only on the CAE codes did not always prove to be sufficient. In fact, whenever it was concluded that the activity of a specific KAU in the field of culture was relevant, it was included, regardless of the CAE code.

The economic activities mentioned in the Guide to Eurostat culture statistics 2018, identified as fully or partially cultural, were also considered.

In the selection of the CSA universe, civil parishes and municipalities were not considered as counting units. However, the compilation of the account includes the expenditure of these units associated with culture, using, among other sources, the Survey on the Financing of Cultural, Creative and Sports Activities by Municipality (IFAC), from Statistics Portugal.

The process of selecting and classifying the units proved to be difficult, introducing an additional complexity in the determination of the CSA universe, for multiple reasons:

- strong interrelationship between culture and other areas of the economy;



- difficult correspondence with some classifications, whose structure and detail do not allow a clear identification of the location of cultural activities;
- continuous development and evolution of culture, in particular due to the impact of new technologies, the expansion of creative activities and intellectual property and globalization (e.g., social media and podcasting; new professions, etc.).

Additional research was also needed to determine the coefficients of appropriation of the economic and financial information of units with (only) partially cultural activity, which proved to be a rather lengthy and complex process.

After defining the universe, the economic variables of the income account were compiled (Output, Intermediate consumption, GVA, Other taxes on production, Other subsidies to production, Gross Operating Surplus), by institutional sector.

Subsequently, a supply and use table was drawn up for products originating from the entities selected for the CSA, having as a reference the supply and use table of PNA (127 industries X 433 products), which made it possible to compare supply and demand and check the initial estimates.

To complete this table, it was necessary to estimate, by product, imports, exports, public expenditure, household expenditure, investment and intermediate consumption, among other aggregates. Whenever the details of the sources of information made it possible, these data were determined using detailed/specific sources, in order to minimize the use of coefficients.

Regarding education, an estimate was made for services related to the teaching of subjects/courses associated with culture. This estimate was based on a selection of higher education courses related to culture (and respective domains and functions), based on information provided by the Directorate General for Education and Science Statistics (DGEEC) (subject/course/entity/number of hours taught).

The CSA employment estimate consisted of calculating the jobs/FTE for the domains and functions considered:

- Employees: For the institutional sectors of general government (S.13) and NPISH (S.15), the compensation of employees previously estimated in the CSA (available by industry, institutional sector, domain and function) were converted into FTE using the compensation of employees' ratios *per* FTE, by industry and institutional sector, of the PNA, at the most detailed level. For these institutional sectors, only employees are to be considered, so no additional estimation is necessary.

For the institutional sectors of non-financial corporations (S.11) and households (S.14), for each domain and each function, the average compensation of employees, by industry, of the CSA entities was calculated, based on information from the PNA, which brings together several sources on the supply side - the main one being the Simplified Business Information (SBI) - which explains the fact that, in a first stage, the variable derived from employment is "jobs" and not FTE. Thus, the average compensation of employees refers to compensation of employees *per* job.

Dividing CSA compensations by those compensations by job, CSA employees' jobs were obtained. These jobs were then converted in FTE, according to the correspondent PNA ratios by industry and institutional sector. Note that these jobs, derived from compensation of employees, respect only employees' jobs.



Self-employed – as for employees, first, jobs are estimated: considering the previously estimated employees' jobs and the ratio employee/self-employed of CSA entities in the data base. Finally, jobs were converted into FTE, according to the correspondent PNA ratios by industry and institutional sector.

5. DATA SOURCES

Statistics Portugal:

- National Accounts (Base 2016);
- General File of Statistics Units;
- Culture Statistics (2018, 2019 and 2020);
- International Trade Statistics;
- Social Economy Satellite Account (2016);
- Household Budget Survey;
- Survey on the Financing of Cultural, Creative and Sports Activities by Municipality;
- Survey on commercial establishments - establishment with relevant size.

Other sources:

- Information provided by the Directorate General for Education and Science Statistics on the higher education courses related to culture (subject/course/entity/number of hours taught);
- National Arts Crafts Registry, from the Employment and Vocational Training Institute;
- Detailed analytical balance sheets of Public Administration entities (including the General State Account);
- Simplified Business Information (IES);
- Survey on National Scientific and Technological Potential;
- Ministry of Justice web portal (<https://publicacoes.mj.pt/Pesquisa.aspx>);
- KAU websites;
- KAU reports and accounts.



6. MAIN METHODOLOGICAL CHANGES COMPARING TO THE FIRST EDITION

The new edition of the CSA is consistent with the 2016 base of the PNA, while the previous one was produced according to the 2011 base. The main methodological differences compared to the previous edition are:

1. Scope:
 - i. “Guide to Eurostat culture statistics. 2018 edition” introduced some relevant methodological changes, starting to consider, for example, pay television services, traditionally associated with telecommunications packages, which were excluded by the methodology of the ESSnet Report – Culture 2012;
 - ii. Also according to this Eurostat guide, new products were included, among which were jewellery and technological equipment associated with cultural production and consumption, such as, for example, televisions and cameras, CDs, DVDs, etc., with a significant impact on external trade (especially imports);
 - iii. Comprehensive inclusion of Arts crafts units listed in the National Registry of Arts Crafts;
 - iv. Inclusion of entities from the institutional sector of financial companies (S.12) in the CSA universe, such as financial corporations, corresponding to economic groups in the publishing and audiovisual area.
2. Improvements in the estimates of some macroeconomic activities/aggregates, such as:
 - i. Change in the estimate of trade margins, in line with the methodology used in other Satellite Accounts and in PNA;
 - ii. Change in the estimate of units classified in the “Advertising” domain, using the application of coefficients for the activity considered “partially cultural”.
3. New data sources:
 - i. Use of information made available by the Directorate General for Education and Science Statistics on higher education courses related to culture (subject/course/entity/number of hours taught), which allowed the definition of some coefficients for the appropriation of economic-financial information referring to universities, faculties, etc., translating into a significant impact on the estimates of the general government sector and, specifically, on the Education function;
 - ii. Appropriation of the economic and financial information of artistic schools relating to basic and secondary education;
 - iii. The Survey on National Scientific and Technological Potential provided information on the Priority “cultural and recreational industries” and the Objective “Culture, religion and the media”, which allowed not only to identify some entities for the CSA universe, but also to define coefficients that allowed financial appropriation and to estimate some specific aggregates which contribute to the output concept in the case of the general government institutional sector.



7. COMPARISON OF MAIN AGGREGATES OF THE CSA IN THE 2011 AND 2016 BASES OF NATIONAL ACCOUNTS

Considering the change of base (following the PNA), as well as the methodological changes identified above, and also the fact that the previous edition of the CSA was a pilot exercise, the (direct) comparisons regarding the main macroeconomic aggregates of both accounts must be carried out with caution.

As can be seen in the following table, the relative weight of culture in the national economy in 2018 is significantly higher than that estimated in the last year with detailed results from the CSA of the previous series (2012), which was consistent with the 2011 base of the PNA. However, this increase is largely due to the methodological, scope and data source changes (notably with the inclusion of new activities and products, based on the latest EUROSTAT methodological guidelines) mentioned above. Indeed, considering some of the CSA variables, it is estimated that the impact of the methodological changes corresponds to around 50% of total imports, 28% of total exports and 48% of household final consumption expenditure, in the year of reference of the present edition of the CSA.

The economic situation of the three years analysed in each edition (2010-2012 vs. 2018-2020) is significantly different, despite 2020 being a totally atypical year due to the emergence of the COVID-19 pandemic, with an evident impact on economic activity, in general, and on the cultural sector, in particular.

Picture 25. Main CSA aggregates in the 2011 and 2016 bases of the National Accounts

Indicator	Unit	Base 2011			Base 2016		
		2010	2011	2012	2018	2019	2020
GVA	Value (10 ⁶ euro)	2,888	2,649	2,464	4,183	4,408	3,940
	Weight (%) in national economy	1.8	1.7	1.7	2.4	2.4	2.3
Household expenditure	Value (10 ⁶ euro)	1,874	1,657	1,494	3,364	3,499	2,786
	Weight (%) in national economy	1.6	1.4	1.3	2.6	2.6	2.2
Imports	Value (10 ⁶ euro)	868	804	784	1,521	1,674	1,514
	Weight (%) in national economy	1.3	1.2	1.3	1.7	1.8	1.9
Exports	Value (10 ⁶ euro)	362	347	403	414	491	398
	Weight (%) in national economy	0.8	0.6	0.7	0.5	0.5	0.5
Employment	Value (FTE)	94,956	88,339	82,953	133,636	x	x
	Weight (%) in national employment	1.8	1.7	1.7	2.8	//	//

Source CSA 2012 e 2018 (Statistics Portugal)



CONVENTIONAL SIGNS

//: Non applicable

x: Non available

ACRONYMS AND ABBREVIATIONS

AML	Área Metropolitana de Lisboa
AMP	Área Metropolitana do Porto
CSA	Culture Satellite Account
DGEEC	Directorate General for Education and Science Statistics
ESA 2010	European System of National and Regional Accounts 2010
EU	European Union
FTE	Full Time Equivalent
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GVA	Gross Value Added
KAU	Kind of Activity Unit(s)
NA	National Accounts
NUTS	Nomenclature of territorial units for statistics
NPISH	Non-profit Institutions servign Households
GEPAC	Office of Cultural Strategy, Planning and Assessment
p.p.	Percentual points
PNA	Portuguese National Accounts
PA	Public Administration(s)
SBI	Simplified Business Information
CBS	<i>Statistics Netherlands</i>
INE	Statistics Portugal
IFAC	Survey on the Financing of Cultural, Creative and Sports Activities by Municipality
VAT	Value Added Tax