

Economic and Structural Position of Cultural Tourism Services in Slovakia: Evidence from the Tourism Satellite Account (2013–2023)

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<https://doi.org/10.18267/pr.2026.vol.2587.32>

Abstract: Cultural services are classified as a characteristic tourism industry within the Tourism Satellite Account framework. Despite this, their economic position is often insufficiently captured in aggregated tourism statistics. The aim of this paper is to identify the economic and structural position of cultural services within tourism in Slovakia over the period 2013–2023. The analysis is based on secondary data from the Tourism Satellite Account and applies selected economic indicators, including production, base indices, number of entities, and production per entity. The results indicate that cultural services experienced a less pronounced decline during the COVID-19 pandemic compared to tourism as a whole and demonstrated a relatively faster recovery in the post-pandemic period. At the same time, the findings reveal a long-term increase in the number of entities accompanied by a decline in average production per entity, suggesting a growing level of fragmentation and structural imbalance within the sector over time.

Keywords: cultural services, cultural tourism, Slovakia

JEL Classification codes: Z32

INTRODUCTION

Tourism is recorded in official statistical systems through the Tourism Satellite Account (TSA) methodology, which enables the quantification of its economic outputs based on uniformly defined characteristic industries. The TSA provides a framework for measuring tourism production and linking it to the system of national accounts (United Nations et al., 2010).

According to the TSA methodology, cultural services represent one of the characteristic tourism industries. They include activities related to the operation of cultural facilities, performing arts, museums, historical sites, and other cultural services provided to visitors (United Nations et al., 2010; Eurostat, 2013). Compared with other tourism industries, cultural services have a specific structure characterized by a high proportion of small and independent entities, which limits economies of scale and affects their measurable economic performance (Throsby, 2010; Pratt, 2008; Snowball, 2008). This feature is often associated with a higher level of fragmentation and limited possibilities for achieving economies of scale (Throsby, 2010; Pratt, 2008).

For this reason, an economic assessment of cultural services based solely on total production data may not sufficiently reflect their position within tourism. The literature therefore

recommends combining production indicators with structural data, particularly the number of entities and production per entity (Snowball, 2008; Throsby, 2010).

The importance of monitoring the development of individual characteristic industries became especially evident during the COVID-19 pandemic, when tourism production declined significantly. Differences in the pace of recovery highlighted the need to analyse not only the absolute level of production but also its development over time and its relationship to structural characteristics of the industries (Hall et al., 2020). In this context, cultural services represent a specific segment whose development should be assessed both in comparison with tourism as a whole and through a combination of production and structural indicators (Snowball, 2008).

Although the TSA methodology provides a standardized framework for the economic measurement of tourism (United Nations et al., 2010), empirical analyses of cultural services often focus mainly on production indicators. A systematic integration of production and structural indicators in evaluating their position within tourism remains less developed.

In this paper, cultural services are understood as one of the characteristic tourism industries defined within the Tourism Satellite Account framework. While tourism represents an aggregate of multiple industries linked to visitor consumption, cultural services constitute a specific sub-sector within this system. Therefore, tourism as a whole is used as a reference benchmark, while cultural services are analysed as a structurally distinct component within it. The aim of this paper is to identify the economic and structural position of cultural services in tourism in Slovakia in the period 2013–2023. The evaluation is based on official Tourism Satellite Account data and uses indicators of production, number of entities, and production per entity.

1 LITERATURE REVIEW

Cultural tourism has long been one of the most researched forms of tourism. In the literature, it is most commonly defined as travel motivated primarily by the desire to experience cultural heritage, history, traditions, and the way of life of destinations (Timothy & Boyd, 2003; McKercher & du Cros, 2002). In this context, culture is not merely an additional component of travel, but a key factor shaping the attractiveness of destinations (Richards, 2018)

Within cultural tourism, cultural services play an important role, as they are based on providing experiences to visitors. Authors emphasize that cultural services represent a specific part of the tourism offer characterized by a wide variety of forms (Richards, 2018; Smith, 2009). This diversity is also reflected in their economic functioning (Throsby, 2010).

From an economic perspective, cultural services are closely linked to regional development and the support of local economies. According to Bille and Schulze (2006), cultural services can stimulate demand in other tourism industries and contribute to the overall attractiveness of destinations. At the same time, Throsby (2010) points out that the economic importance of cultural services cannot be assessed solely through financial indicators, as these services also generate broader social values.

Several studies indicate that the economic weight of cultural services appears relatively low in statistical data. This is mainly related to the high share of small entities, the seasonality of demand, and the presence of indirect economic effects (Snowball, 2008; Herrero et al., 2006). For this reason, the literature recommends combining data on total production with structural indicators. Such a combination makes it possible to better capture not only the economic weight of the sector, but also its internal structure and development trends over time (Snowball, 2008; Throsby, 2010).

In recent years, the development of cultural services in tourism has been significantly affected by the COVID-19 pandemic. Research confirms that tourism is among the sectors most heavily impacted by global crises (Gössling et al., 2021; Hall et al., 2020). The pandemic led to major restrictions on service provision and a decline in demand.

At the same time, it has been shown that cultural services oriented toward domestic and regional visitors experienced a milder decline and a faster recovery process (Falk et al., 2022; Sigala, 2020). This development highlights the importance of the structural characteristics of cultural services and their link to the domestic market.

For the interpretation of economic and structural indicators, it is necessary to clearly define which activities are included under the term cultural services in this paper. As the study is based on official statistical data, the definition of cultural services follows the methodology of the Tourism Satellite Account (TSA). This methodology identifies cultural services as a characteristic tourism industry based on the CPA classification and the principal activity of local units (United Nations et al., 2010; Eurostat, 2013). It should be noted that the TSA framework captures only those cultural services that are directly linked to tourism consumption. Cultural activities not associated with visitor demand are not included. As a result, the TSA-based measurement reflects only a subset of total cultural production.

Tab. 1 Definition of Cultural Services as a Characteristic Tourism Industry According to the TSA Methodology

CPA code	Name of Activity
59.14	Motion picture projection services
90.01	Performing arts
90.02	Support activities related to performing arts
90.03	Artistic creation
90.04	Operation of arts facilities
91.02	Museum services
91.03	Operation of historical sites and buildings and similar visitor attractions
91.04	Botanical and zoological garden services and nature reserve services

Source: Statistical Office of the Slovak Republic, 2026

The individual categories include various forms of cultural production and public presentation. The content of these activities is based on the statistical classifications CPA and NACE Rev. 2 (European Parliament and Council, 2008; European Parliament and Council, 2006).

- Motion picture projection services (59.14) include the operation of cinemas and the provision of film screenings to the public (European Parliament and Council, 2008),
- Performing arts (90.01) include live artistic performances such as theatre productions, concerts, or dance performances,
- Support activities related to performing arts (90.02) cover the technical and organizational support of these events,
- Artistic creation (90.03) refers to the creation of artistic outputs, including the services of authors, composers, sculptors, and other artists except performing actors, as well as original works of authors, composers, and other artists except performing actors,

painters, graphic artists, and sculptors. Subcategory 90.03.13 includes original works of painters, graphic artists, and sculptors,

- Operation of arts facilities (90.04) includes the management of theatres, concert halls, and similar venues (European Parliament and Council, 2008; European Parliament and Council, 2006).
- Museum services (91.02) include the management of collections and their presentation to the public.
- Operation of historical sites and buildings (91.03) relates to the maintenance and public access to cultural heritage sites and
- Botanical and zoological garden services and nature reserve services (91.04) include the operation of facilities providing public access to natural heritage (European Parliament and Council, 2008).

The inclusion of these activities among the characteristic tourism industries follows from the Tourism Satellite Account methodology (United Nations et al., 2010). In the Slovak context, cultural services represent a relatively small share of total tourism production, which contributes to their limited visibility in aggregated tourism statistics.

2 METHODOLOGY

The aim of this paper is to identify the economic and structural position of cultural services in tourism in Slovakia during the period 2013–2023. The study is based on the quantitative processing of secondary statistical data and applies basic economic indicators.

The data source consists of official statistical data on tourism in the Slovak Republic, specifically data on tourism production by characteristic industries expressed at basic prices and data on the number of entities operating in these industries. The data cover the period from 2013 to 2023, with special attention given to the years 2019–2023, which allow the analysis of developments before the COVID-19 pandemic, the significant decline during the pandemic, and the subsequent recovery of the sector.

The subject of the analysis is cultural services as one of the characteristic tourism industries. This segment is assessed within tourism as a whole, in relation to the entire economy, and in comparison with selected tourism industries, particularly accommodation, food services, and transport. Such an approach makes it possible to evaluate its economic importance and structural position within the sector.

The economic position of cultural services is assessed using share indicators. The share of cultural services in total tourism production and in the production of the whole economy is calculated as the ratio of cultural services production to total production, expressed as a percentage. This represents a standard relative indicator commonly used to express the economic weight of a given segment:

$$Share_t = \frac{Production\ of\ cultural\ services_t}{Total\ Production_t} \times 100 \quad (1)$$

where:

- $Share_t$ represents the share of cultural services in the given year t ,
- $Production\ of\ cultural\ services_t$ is the production of cultural services in year t ,

- *Total Production_t* refers to total tourism production (or total economy production, depending on the calculation) in year t.

The development of cultural services over time is assessed using base indices. The reference year is 2019, which represents the last pre-pandemic period. The base index expresses the change in the observed value compared to this reference year:

$$Base\ index_t = \frac{Value_t}{Value_{2019}} \times 100 \quad (2)$$

where:

- *Base index_t* represents the base index in year t,
- *Value_t* is the observed value in year t,
- *Value₂₀₁₉* is the value in the reference year 2019.

The year 2019 was selected as the base year because it represents the last stable pre-pandemic period, allowing for a clear comparison of the decline during the COVID-19 crisis and the subsequent recovery.

This index makes it possible to clearly capture the decline during the pandemic and the subsequent development of cultural services in comparison with other tourism industries.

The structural development of the segment is complemented by an analysis of the number of entities operating in cultural services. To link production and structural data, the indicator of production per entity is used. This indicator expresses the average volume of production per operating unit and is calculated as:

$$Production\ per\ entity_t = \frac{Production\ of\ cultural\ services_t}{Number\ of\ entities_t} \quad (3)$$

where:

- *Production per entity_t* represents the average production per entity in year t,
- *Production of cultural services_t* is the total production of cultural services in year t,
- *Number of entities_t* refers to the number of entities operating in cultural services in year t.

The indicator of production per entity is used as an approximate measure of production intensity within the given segment and allows for comparisons over time.

The selected methodological approach makes it possible to systematically identify the economic weight, structural position, and development of cultural services in tourism in Slovakia during the observed period, based on official and commonly used statistical indicators.

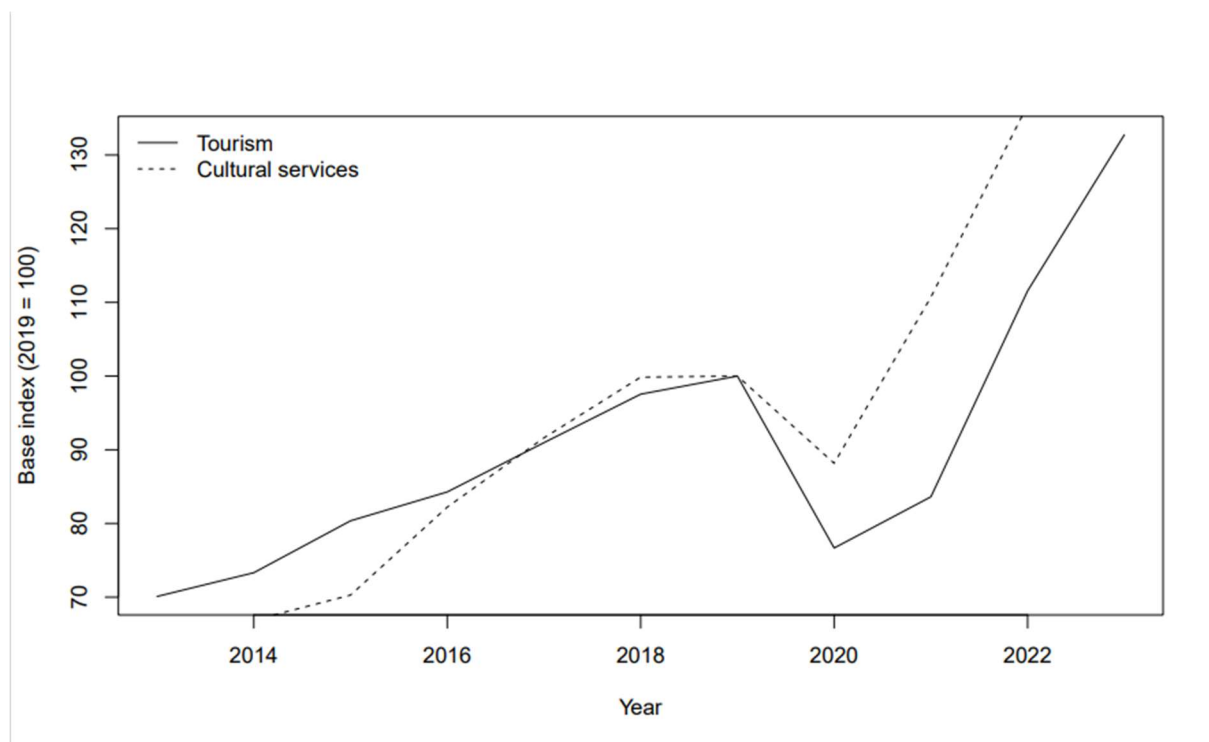
3 RESULTS AND DISCUSSION

This part of the paper presents the results of the assessment of the economic and structural position of cultural services in tourism in Slovakia during the period 2013–2023. The results are based on the analysis of official statistical data on tourism production and the number of entities operating in cultural services. Special attention is given to capturing developments before the COVID-19 pandemic, its immediate impacts, and the subsequent recovery period.

The dynamics of the development of tourism production and cultural services are illustrated using base indices, with 2019 as the reference year (2019 = 100). Figure 1 shows the development of the base index of total tourism production and cultural services during the observed period. In the pre-pandemic period, a gradual increase in production can be observed in both segments, indicating favorable development in tourism before 2019. The year 2020 represents a significant turning point, when the COVID-19 pandemic caused a sharp decline in production. The decline was more pronounced in tourism as a whole, while cultural services recorded a milder decrease.

In the period after 2020, a gradual recovery process can be observed. Figure 1 indicates that the production of cultural services recovered at a faster pace than total tourism production. In 2023, the base index of cultural services significantly exceeded the pre-pandemic level, while tourism as a whole reached a comparable increase with a certain time lag. This development points to differences in the recovery dynamics of individual tourism segments.

Fig. 1 Base indices of production in tourism and cultural services (2019 = 100)



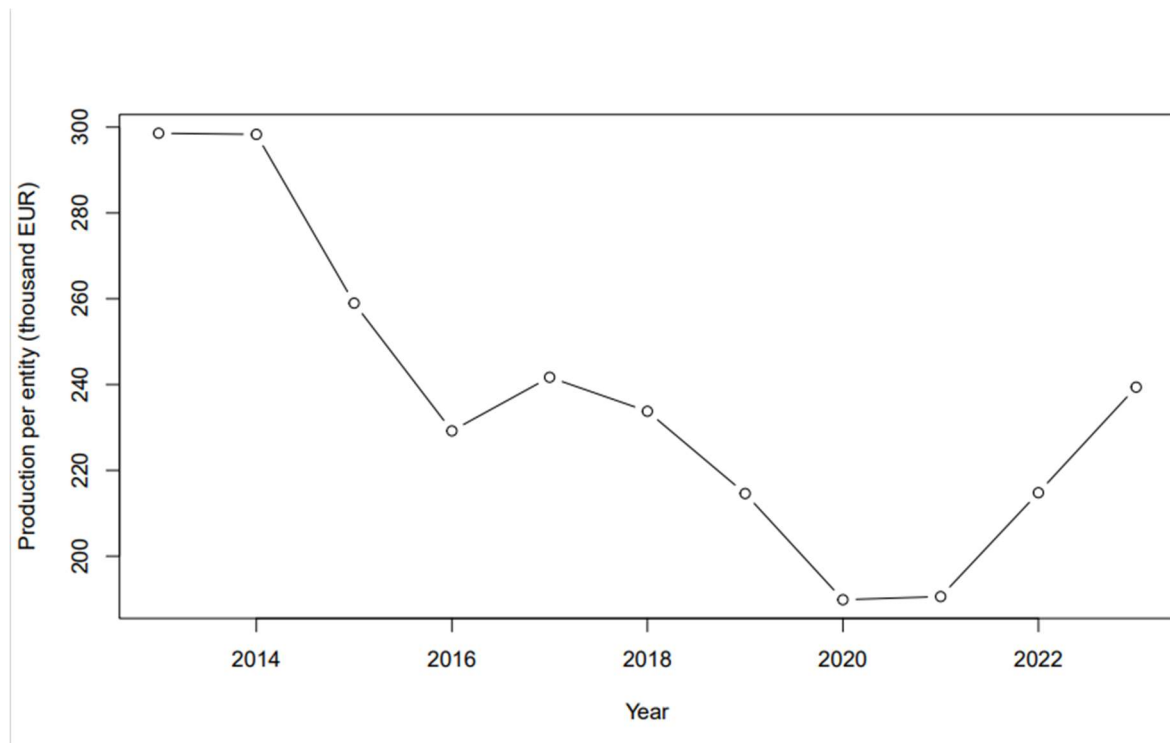
Source: Authors' own processing based on data from the Statistical Office of the Slovak Republic, 2026

The structural development of cultural services was analysed through changes in the number of entities and the indicator of production per entity. Figure 2 shows the development of production per entity in cultural services during the observed period. The results indicate that in the pre-pandemic period there was a gradual decline in production per entity, which was

related to a rapid increase in the number of entities operating in this segment. This trend suggests growing fragmentation of the sector and a decrease in the average production capacity of individual entities.

In the following years, a gradual increase in production per entity can be observed, pointing to an improvement in the economic situation and the recovery of the sector in the post-pandemic period. Since 2022, this increase has become more pronounced, indicating a partial stabilization of the sector and a recovery in the economic performance of cultural services.

Fig. 2 Development of production per entity in cultural services



Source: Authors' own processing based on data from the Statistical Office of the Slovak Republic, 2026

A more detailed overview of the development of the number of entities and production per entity is presented in Table 2. The number of entities in cultural services increased from 946 in 2013 to 2,864 in 2023. This represents more than a threefold increase over a ten-year period. The most significant growth occurred after 2016, and even the pandemic period did not lead to a decline in the number of entities.

At the same time, production per entity decreased from EUR 298.58 thousand in 2013 to EUR 214.61 thousand in 2019, reaching a minimum of EUR 189.85 thousand in 2020 during the pandemic. Although a gradual increase can be observed after 2020, the value in 2023 (EUR 239.40 thousand) still does not reach the levels recorded in 2013–2014.

Tab. 2 Production per entity in cultural services in Slovakia (2013–2023)

Year	Number of entities	Production per entity (thousand EUR)
2013	946	298.58
2014	993	298.31
2015	1 202	258.98

Year	Number of entities	Production per entity (thousand EUR)
2016	1 589	229.20
2017	1 679	241.70
2018	1 892	233.78
2019	2 064	214.61
2020	2 057	189.85
2021	2 573	190.59
2022	2 821	214.80
2023	2 864	239.40

Source: Authors' own processing based on data from the Statistical Office of the Slovak Republic, 2026

This development indicates that the growth in the number of entities was not accompanied by a proportional increase in production per entity. From a structural perspective, this means that the sector gradually expanded with new entities, while the average production volume per entity declined.

The findings indicate that cultural services developed differently from tourism as a whole during the observed period. While production resumed its growth after the pandemic-related decline, the structural development of the sector was characterized by a significant increase in the number of entities and a decrease in average production per entity. The economic position of cultural services thus changed not only in terms of production volume, but also in terms of the sector's structure.

The findings are consistent with previous research indicating that cultural services tend to exhibit greater resilience during periods of crisis, particularly due to their stronger orientation towards domestic demand (Falk et al., 2022; Sigala, 2020). The less pronounced decline observed in cultural services compared to tourism as a whole supports this argument.

At the same time, the results confirm structural characteristics highlighted in the literature, particularly the fragmentation of the sector and the dominance of small entities (Throsby, 2010; Snowball, 2008). The increasing number of entities combined with declining production per entity reflects these structural features. However, the relatively rapid post-pandemic recovery may indicate a stronger adaptive capacity of cultural services than suggested in some studies, which represents a potential divergence requiring further investigation.

CONCLUSION

The aim of this paper was to identify the economic and structural position of cultural services in tourism in Slovakia during the period 2013–2023, based on Tourism Satellite Account data. The analysis relied on data on production and the number of entities, from which base indices and production per entity were calculated. The chosen approach made it possible to assess their economic weight within tourism and the development of the number of entities over the observed period.

The results show that cultural services represent a specific part of tourism. Their development differs from that of tourism as a whole. In the pre-pandemic period, production increased both in tourism overall and in cultural services. The year 2020 brought a significant decline due to the COVID-19 pandemic. However, the decline in cultural services was milder than in tourism

as a whole. In the post-pandemic period, the production of cultural services recovered more rapidly. By 2023, it had already exceeded the pre-pandemic level.

From a structural perspective, a long-term increase in the number of entities operating in cultural services was observed. The number of entities grew significantly during the observed period, and even the pandemic did not lead to a substantial decline. At the same time, the increase in the number of entities was accompanied by a decrease in average production per entity. This development indicates growing fragmentation of the sector and a lower average production capacity of individual entities.

Production per entity reached its lowest value in 2020. This reflects the decline in economic performance during the pandemic period. In the following years, production per entity gradually increased, pointing to a recovery of economic activity. Nevertheless, it did not reach the levels recorded at the beginning of the observed period.

The findings also show that the level of production alone does not provide a complete picture of the position of cultural services in tourism. It is important to monitor the structure of the sector as well, particularly the development of the number of entities and their average production. The combination of economic and structural indicators makes it possible to better understand the development of cultural services within tourism.

The results highlight the specific position of cultural services in tourism in Slovakia. This position is reflected mainly in the growth in the number of entities, the decline in average production per entity, and the different dynamics of decline and recovery compared with tourism as a whole.

This study has several limitations. First, the analysis is based on aggregated TSA data, which do not allow for a detailed examination of individual cultural activities. Second, the TSA framework captures only those cultural services directly linked to tourism consumption, which may underestimate the overall economic importance of the sector. Third, the use of production-based indicators does not reflect the broader social and cultural value of these services, as emphasized in the literature (Throsby, 2010). Future research could focus on a more detailed analysis of individual categories of cultural services, as well as regional differences within Slovakia. Further studies could also examine demand-side factors, particularly the role of domestic tourism and changing visitor behavior. Additionally, combining TSA data with qualitative approaches could provide a more comprehensive understanding of the economic and social role of cultural services.

Despite these limitations, the paper provides a systematic view of the economic and structural position of cultural services in tourism in Slovakia. The results confirm the importance of monitoring both economic and structural indicators when evaluating cultural services.

ACKNOWLEDGEMENT

This contribution is the result of the internal grant project A-25-102/3020-02 of the University of Economics in Bratislava for young pedagogical staff, scientific and PhD. students entitled Digital technology in tourism: Generation Z in the spotlight.

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