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# Economic Sustainability of Culture and Cultural Tourism

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Edited by

Daniela Angelina Jelinčić

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# **Economic Sustainability of Culture and Cultural Tourism**



# Economic Sustainability of Culture and Cultural Tourism

Editor

**Daniela Angelina Jelinčić**

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## About the Editor

### Daniela Angelina Jelinčić

Daniela Angelina Jelinčić is a senior research adviser/full professor employed by the Institute for International Relations (IRMO), Croatia. Her specific interests are cultural tourism, cultural heritage management, cultural/creative industries, cultural policy, creativity, experience economy and social innovations. She was a Fulbright visiting researcher (2019/2020) at the University of Georgia. As an adjunct professor, she teaches cultural tourism, cultural heritage management, creative industries, and creativity at the University of Zagreb, Zagreb School of Business, Edward Bernays University College in Zagreb and occasionally at the Helsinki University of Arts and at the UNESCO Chair for Cultural Heritage Management and Sustainable Development, Institute for Advanced Studies (iASK) in Kőszeg, Hungary. She has authored several scientific books (*Innovations in Culture and Development: The Culturinno Effect in Public Policy; ABC of Cultural Tourism; Culture in a Shop Window; Culture, Tourism, Interculturalism*), co-edited the book *Creating and Managing Experiences in Cultural Tourism*, and is the author of a number of scientific articles and book chapters, national/international studies and several national/local strategic documents. She served as the Council of Europe expert for cultural tourism and coordinated or participated in a number of national and international interdisciplinary research projects in the fields of cultural heritage, cultural tourism, creative industries, cultural and tourism policies.



# Preface to “Economic Sustainability of Culture and Cultural Tourism”

Lately, the economic sustainability of culture and cultural tourism has been talked about a lot, especially due to the pandemic crisis. Regardless of the crisis, sustainable growth is in the focus of a number of international organizations’ strategic documents, e.g., UN Millennium Development Goals and Europe 2020 Strategy, and substantial public and private funds have been invested in cultural and cultural tourism projects. However, it is rarely the case that the investment of funds, especially in the case of public money, is carefully planned and its feasibility and cost-effectiveness consequently measured. Ensuring the sustainability of funded cultural and cultural tourism projects should be embedded in every project plan. The case is, however, that most of the projects do well on this task in theory, when preparing a project proposal, but often fail to do so in practice, thus not being able to justify the investments. With the ever-growing need for funding for cultural and cultural tourism projects, sound and evidenced-based assessments preceding investments should become an indispensable part of every project’s plan. Cultural and cultural tourism managers are often not trained in the specific topics related to economic sustainability, mostly focusing only on safeguarding intrinsic cultural values. However, without an integrated approach to sustainability, including the economic one, it is hardly possible to ensure overall project soundness and durability over time.

Economic sustainability in cultural and cultural tourism projects refers to all management phases, from cultural/cultural tourism product development and project funding to marketing, including branding, and human resources management. Cultural and cultural tourism projects have proven to have a strong developmental potential influencing both territorial and social development. At the same time, they are specifically sensitive; their economic sustainability cannot be regarded separately from other aspects of sustainability (cultural, social and environmental); otherwise, a project may bring economic benefits but at the same time put at risk its social, cultural or environmental values.

The book “Economic Sustainability of Culture and Cultural Tourism” focuses on the economic sustainability of cultural and cultural tourism projects, but it also takes into account other aspects. It consists of eleven articles, which address cultural heritage, culture, cultural/creative industries and (cultural) tourism. Analysis in the cultural heritage-related articles deals with specific topics such as crowdfunding, cost–benefit analysis in the evaluation of cultural heritage project funding, industrial heritage/brownfields, and social assessment methods for the economic analysis of cultural heritage. Cultural work is further analyzed, offering a comparative economic sustainability analysis in the UK as well as support mechanisms for cultural/creative industries in Canada. Creative industries in the peripheral areas of Italy and Greece are also zeroed in on in the context of their sustainability. Articles focusing on (cultural) tourism address the topics of dark tourism, tourists’ willingness to pay for cultural experiences, and the relationship between COVID-19 vaccinations and the volatility of travel and leisure companies. Additionally, the role of culture and heritage in tourism resilience during the COVID-19 pandemic is explored with interesting results.

**Daniela Angelina Jelinčić**  
*Editor*





Review

# Financial Sustainability of Cultural Heritage: A Review of Crowdfunding in Europe

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**Abstract:** Most cultural heritage projects strive in ensuring financial sustainability, mainly relying on public subsidies. At the same time, they lack fund management policies which directly affects their financial sustainability. European Union heritage policies focus on sustainability but after investments have been made, there are rare cases which can boast about it. A number of heritage funding mechanisms exist which are explained in this review paper, while the focus is on crowdfunding as an alternative mechanism. The study used literature review method based on PRISMA guidelines to analyze new trends and suitability of crowdfunding for cultural heritage projects, and to detect possible factors influencing its success. The purpose was to add to the existing knowledge while offering a systematic review which can be applied in practice. Findings indicate the trend of participatory approach to heritage, which is in line with the participatory nature of crowdfunding campaigns. Further, crowdfunding suitability for cultural heritage projects was confirmed while its success factors majorly depend on the policy framework, heritage project nature and management of the campaign itself.

**Keywords:** cultural heritage; financial sustainability; crowdfunding; Europe

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## 1. Introduction

The meaning of culture has matured from representing artistic expression with no economic value to becoming a public good and a force of economic change (Manda et al. 2017). However, processes of preservation, protection, regular operating, and maintenance of cultural heritage are expensive and typically require financial resources, which are often difficult to obtain. Therefore, to increase the likelihood of funding, cultural projects need to demonstrate economic and financial sustainability (Eppich and Grinda 2019). Economic sustainability is generally defined as the “process of allocating and protecting scarce resources while ensuring positive social and environmental outcomes” as well as intergenerational equity (i.e., meeting the needs of the present generation without compromising the needs of future generations) (Doane and MacGillivray 2001, p. 16). Therefore, when applied to culture, the economic sustainability of a cultural project refers to the project’s ability to accumulate profit for the general economy. Financial sustainability generally imputes the fiscal ability to continue current policies and service delivery after the funding terminates (Subires and Bolivar 2017). In the cultural context, financial sustainability ensures the cultural project will have enough resources to meet all the financial obligations, such as operating and maintenance, even after finance incentives end (Eppich and Grinda 2019). Both economic and financial sustainability are important aspects of cultural project sustainability, but they differ in scope: economic sustainability is a macro concept and refers to the effect the project can have on the economy in general, while financial sustainability is a micro concept which determines whether the project will be sustainable in the long-term. Thus, economic sustainability is related to instrumental cultural values, while financial sustainability refers to the intrinsic values of culture per se ensuring its durability due to the available finances.



Europe 2020 Strategy put forward the concept of sustainability (European Commission 2010) for all EU funded projects as to ensure “durable effects of regional development” (Jelinčić and Tišma 2020). This also applies to cultural heritage projects which, if applying for EU funding, must demonstrate how sustainability will be ensured. The shameful practice has revealed, however, that cultural heritage projects often fail on that task after the funding ends. Sustainability has different facets (cultural, economic, environmental, and social) which may possibly put weight on cultural heritage managers to balance among all of them. As to ensure economic and financial sustainability, specific managerial knowledge is needed, alongside nurturing creative and innovative approaches to funding. While there are existing studies on financial sustainability of cultural heritage which offer some knowledge on the topic (e.g., Chiesa and Handke 2020; Eppich and Grinda 2019; Zhao and Shneor 2020), ensuring innovative funding practices in cultural heritage is not easy. This is mainly due to a number of different funding mechanism, whose effectiveness and efficiency have so far not been systematically scientifically analyzed. Rather, professional collections on the topic exist (e.g., RESTAURA 2019; Jelinčić and Glivetić 2020; UNITO 2020; Finpiemonte 2021) covering only partial overview of financial instruments and not offering a systematic (and preferably comparative) review. Due to this void, this paper first aims to provide a systematized knowledge on funding mechanisms available for cultural heritage. Since it would be an extremely demanding task to analyze all of the so far existing funding mechanisms, among the detected ones, crowdfunding has been selected for further review as to present the latest developments and trends in crowdfunding cultural heritage in Europe. The goal was to provide knowledge on the latest trends and developments in cultural heritage crowdfunding in Europe, to see its suitability for cultural heritage projects, and to detect possible factors influencing the success of crowdfunding campaigns. The review study revealed the trend of participatory approach to heritage, which is in line with the participatory nature of crowdfunding campaigns. Further, crowdfunding suitability for cultural heritage projects was confirmed while its success factors majorly depending on the policy framework, heritage project nature, and management of the campaign itself.

The structure of the paper is as follows: first, financial sustainability in cultural heritage is explained alongside conditions cultural heritage sites have to fulfil in order to achieve it. Then, an overview of usual cultural heritage funding mechanisms is presented focusing on the crowdfunding. Further, methods used for the review research are explained followed by the underlying concept and trend in cultural heritage management, including funding: participatory approach. Cultural heritage crowdfunding in several reviewed European countries is explained in search for suitability of crowdfunding for cultural heritage projects. Finally, success factors for crowdfunding campaigns are analyzed. Conclusions are drawn at the end in relation to the posed research questions.

## **2. Financial Sustainability of Cultural Heritage**

According to Eppich and Grinda (2019), financial sustainability of cultural heritage includes five categories: revenue identification, expenditure analysis, administration and reporting, strategic planning, and alignment and support of the mission. Revenue identification refers to the identification of three types of inputs into the cultural heritage site: pricing (e.g., entry tickets), donating, and subsidizing (the role of government). Expenditure analysis shows where the funds are being spent, while administration and reporting provide insight into how the funds are being spent (e.g., financial condition and cash flow). The fourth category of financial sustainability of cultural heritage, strategic planning, refers to the income and expenditure planning, as well as the risk assessment and taking advantage of the income opportunities. The final and most important category is alignment and support of the mission of the cultural heritage site, which safeguards the cultural site not to become overly commercialized. Their research showed that the majority of cultural heritage sites are not financially sustainable, they overly depend on government subsidizing, and they usually do not have effective fund management policies. For cultural heritage sites to ensure financial sustainability, they should satisfy five specific

conditions (Eppich and Grinda 2019): (1) they need to have an environment which encourages future financial planning; (2) they should provide education and knowledge about finances; (3) there should be an awareness of financial sustainability benefits which leads to a positive perception of finance; (4) the cultural heritage site has to have autonomy in decision making; and (5) public interest should be a priority through the involvement of the local community.

Cultural heritage site's economic value lays in revenues which are most often derived from cultural tourism, accounting for around 40% of European tourism (Šebová et al. 2014). However, although higher visitation leads to more revenues and better financial sustainability of tourism, it is not always as beneficial for cultural heritage sites. More tourists do not necessarily lead to more financial sustainability as excessive visitation can often be the cause of overcrowding, environmental damage, and wear-and-tear (Mourato et al. 2004) hence raising the costs of restoration and maintenance. To balance the relationship between culture and tourism and stimulate the financial sustainability of both, Loulanski and Loulanski (2011) emphasize the heritage capital approach, also known as cultural capital (Throsby 1999). The heritage capital approach is advocated as one of the main components of cultural and tourism sustainability development and planning. This approach emphasizes the importance of preservation of cultural values of the heritage site and maintenance of its cultural capital (Loulanski and Loulanski 2011), which in turn stimulate a flow of goods and services that enable income and financial sustainability of cultural heritage and cultural tourism (Throsby 1999). Additional two factors that have shown to be beneficial in creating a balance between culture and tourism are interpretation and pricing. Interpretation can be a viable tool to prevent environmental damage to the cultural heritage site if it is "place-centred, conservation-oriented, and pluralistic" while combining education and entertainment (Loulanski and Loulanski 2011, p. 849), thus also impacting both its economic and financial sustainability. Hence, using interpretation to cultivate awareness and appreciation of cultural heritage in visitors, cultural resources can be preserved. Furthermore, pricing, as a second useful tool, can help lower the risks of overcrowding and hence prevent wear-and-tear as well as improve visitor's experience (Mourato et al. 2004). Raising the prices of a heritage site or changing the prices to satisfy the management objectives can also increase revenues and decrease the dependence on the public funds, hence ensuring financial sustainability.

### *2.1. Cultural Heritage Funding Mechanisms: An Overview*

One of the most important cultural management decisions is how to secure funding for cultural projects and from whom. There are four categories of financial funding mechanisms: grants, financial instruments, market revenues, and hybrid instruments (Finpiemonte 2021).

Specifically, grants tend to be unrepayable and may be direct or indirect. Direct grants provide money for specific activities such as the restoration of a cultural heritage site, while indirect grants enable access to financial instruments. For example, the indirect grant can be money used as leverage to obtain debt or even bank loans and to pay an interest rate.

Money obtained through a financial instrument has to be repaid to the investors. There are two categories of financial instruments: debt and equity. Debt assumes a contract between the lender and the borrower under which the money is lent to the borrower and needs to be repaid within a certain time frame, while equity provides total or partial ownership of the firm by the lender while financial return depends on the profitability of the invested cultural project.

Market revenues and fees are acquired through the sale of goods and services, such as accommodation, transport, events, entry fees, rentals, etc.

Finally, hybrid instruments, a mix of different types of financial schemes, represent the optimal financial instrument cultural projects should be aiming for (Finpiemonte 2021) as they are most likely to ensure financial sustainability. This includes a recoverable grant that must be repaid if the project succeeds on previously defined parameters and if the

loaner earns enough money to repay the investment. If not, the recoverable grant does not have to be repaid and in such a case it is considered a philanthropic gift.

Other examples of hybrid instruments are forgivable loan, which turns into an unrepayable grant if the project is successful, and convertible grant that transforms into equity (i.e., the lender obtains partial or complete ownership of the cultural project if it is successful). Moreover, revenue share agreements are also a frequent hybrid instrument; when used, the lender invests money in the project and receives an agreed percentage of revenues in the future.

All of the beforementioned types of funding can be provided from the public or private sources. Public funding typically does not have to be repaid and is sometimes used to stimulate private funding. Public funding comes in the following forms: (1) grant; (2) combination of a grant and private funding (repayable funding); (3) public procurement; and (4) public budget (Finpiemonte 2021).

Although public funding tends to be an unrepayable grant, nowadays financial instruments that use financial intermediaries (banks, funds, etc.) are becoming more popular and are even replacing grants, as there is a lack of financial resources on the national level. This approach has already been taken in the EU 2014–2020 perspective for the cultural and creative sectors seeking “to change behaviour among some parts of the sector by encouraging a shift from a mentality of grants to loans, strengthening their competitiveness while reducing reliance on public funding” (EUR-Lex 2011). Furthermore, public procurement is another example of public funding which takes the pressure of the national grant budget, as this way there is an exchange of resources: for example, a cultural heritage site is rented for an event which brings revenue. Public budget (EU, national, regional, and local level) is often the main type of funding of cultural heritage sites (Manda et al. 2017) and typically, national governments provide support by assigning a part of the national budget to the cultural sector (Varbanova 2003). Although preserving cultural heritage is a duty of the national governments, the EU has developed several policies and programs with the main goal of safeguarding European heritage to enhance the sense of belonging and communality through common heritage and European identity (Lähdesmäki 2014). Such programs provide direct funding through grants and indirect funding through development of cultural policies or through financial intermediaries (i.e., combination of grants and private funding).

Private funding, which is usually provided by banks, alternative channels (funds, capital market, and crowdfunding), and philanthropic investors (Finpiemonte 2021), has been increasing in its importance. Banks and alternative channels use financial instruments and usually require repayment of the investment, while philanthropic investors provide grants and do not require repayment.

Alternative channels are an interesting option that can “strengthen the ability to access bank credit” (Finpiemonte 2021). This includes fin tech and crowdfunding. Fin tech is an example of peer-to-peer lending, where loans are given through social lending platforms at interest rates lower than those applied by the banks. However, this type of funding can be risky as it is not controlled by intermediaries. Crowdfunding is a well-used and effective method in the cultural sector, which is based on Internet obtained financial incentives from groups of people interested in the subject and can range from simple philanthropic donations to equity crowdfunding (Finpiemonte 2021). On top of that, due to the decrease of national and regional funding, the role of foundations as philanthropic investors, which combine the capital of several investors and invest it in the chosen cultural projects, has become increasingly important (Varbanova 2003).

Recently, innovative financial schemes that combine public and private agreements have been used. Impact finance, an alternative to classical donations, where an investor can invest in cultural projects with predetermined objectives and expected environmental and/or social impact can stimulate public and private partnerships inspired by a real change (Finpiemonte 2021). The public–private partnership (PPP) is a long-term collaboration between public and private entities, where each has its role in project management.

Through this type of agreement, more resources are secured while the risks are distributed. PPP, when applied to cultural heritage, should also involve local community in the management of the cultural project (RESTAURA 2019).

Public and private investments in cultural heritage and cultural tourism can produce optimal economic returns due to funds typically being used for renovations, maintenance, and new cultural projects with proven ability to attract more visitors, stimulate expenditure, and inspire an environment for job creation. This leads to more revenue, and thus financial and economic sustainability (Nijkamp 2012). Therefore, the type of financial schemes used for cultural heritage and cultural tourism and their efficiency is becoming increasingly important, as the goal of the funding is to eventually secure financial and economic sustainability of culture, with minimal public and/or private expenses.

Further on, we focus on crowdfunding, which is categorized as an alternative funding mechanism and is also used in the cultural heritage sector.

## 2.2. Crowdfunding Principles

Crowdfunding is a novel method used to collect money from a large number of people, by the means of Internet (Shneor et al. 2020). Money is generally collected to support specific projects, for which professional financing is difficult to obtain and where motivation to invest is low. This is common for cultural projects, and especially heritage (Chiesa and Handke 2020). It is no surprise then that one of the first crowdfunding platforms (ArtistShare) was specialized in cultural sector, while culture today remains one of the main areas of crowdfunding application (Rykkja et al. 2020). Although such collective funding of cultural heritage has a long history, as even the Statue of Liberty was funded through calls for donations through newspapers, nowadays the term “crowdfunding” generally refers to funding through online platforms (Chiesa and Handke 2020). Through crowdfunding and the use of digital platforms, “fundraising activities become worldwide available” instead of being bounded by geographical location of the project (Roy 2020, p. 179). This has become increasingly important, as cultural organizations are facing cuts in public funding and there is large competition for sponsors and donations, which has adverse effects on consumption of cultural expression and heritage (Rykkja et al. 2020).

The main parties involved in transactions are the fundraiser, the backer, and the platform. Fundraiser makes a public call, using a chosen platform for the financing of a specific project, while the backer is someone who answers the call by providing financial resources. Typically, platforms make revenue from campaign success fees (Shneor et al. 2020), they keep about 5–15% of the amount collected by the fundraiser (Chiesa and Handke 2020). There are four types of crowdfunding models: (1) crowdlending, when backers provide loans to fundraiser and expect repayment with interest; (2) equity crowdfunding, when backers obtain a percentage of ownership of an organization/project they are backing; (3) reward crowdfunding, when backers receive non-monetary rewards for their financial help; and (4) donation crowdfunding, when backers provide financial resources out of philanthropic reasons with no expectation of any type of return. The first two models are investment models, while reward and donation are non-investment models (Shneor et al. 2020). Out of these four models, crowdlending is the most common type of crowdfunding in the world (Roy 2020), while reward crowdfunding is popular in cultural projects with 88% of cultural campaigns using this model (Chiesa and Handke 2020; Rykkja et al. 2020).

Adamo et al. (2020) explain there are two collection models which are typically used. The first model “all or nothing”, implies that if the target of the campaign is not achieved, the whole sum needs to be returned to the backers of the campaign, while the second model “keep it all” enables the fundraiser to keep the money even if the objective is not reached. It is the fundraiser’s choice which model to use.

According to Shneor et al. (2020), crowdfunding process consists of seven stages which occur in the pre-campaign, during the campaign and in the post-campaign. Planning, creation, and review are preparatory activities which occur in the pre-campaign, management and results occur when the campaign is being executed on the chosen plat-

form, while delivery and mobilization help establish a relationship with the backers in the post-campaign. Each of these stages is explained in more detail in Table 1.

**Table 1.** The crowdfunding campaign process.

Pre-Campaign			During Campaign		Post-Campaign	
Preparation			Execution		Relationship	
Planning	Creation	Review	Management	Results	Delivery	Mobilization
○	Definition of the project’s goals.		○	Reacting timely by providing updates and replying to comments from the network.	○	Providing updates and replying to comments from the network.
○	Finding similar projects and learning from them.		○	Asking the existing network for social media promotion.	○	Delivering on campaign promises, and in case of delays or problems, letting the network know timely.
○	Selection of the platform.		○	Involving media, journalists, bloggers, experts, and influencers.	○	Getting to know the network.
○	Creation of the network through building of social media strategy, creation of mailing lists, and preparation of the existing network.		○	Follow up on promises.	○	Contribution to other campaigns.
○	Creation of content: texts, visual elements, and etc.		○	Keeping the process dynamic and campaign alive through constant engagement.	○	Promoting future campaigns in R&D discussions.
○	Collection of endorsements.					
○	Defining rewards/ returns.					
○	Showing support to other campaigns.					

Source: Shneor et al. (2020), slightly adapted by the authors.

As mentioned, crowdfunding has been categorized as an alternative method and is usually based on a one-time campaign and is thus usually used in obtaining the seed money for the project. However, according to the Shneor et al. (2020) model presented above, maintaining relationships with the backers may have impact on sustainability. A further review of the latest knowledge on cultural heritage crowdfunding was researched and presented below.

### 3. Materials and Methods

As sustainability of cultural heritage projects is in the focus of European Union policies, and it justifies the EU investments in this sector, often alternative funding mechanisms are sought. They can support projects even after the EU funding ends. Along this line, there is an increasing interest in crowdfunding in the cultural heritage sector. However, cultural heritage managers are still hesitant to apply this mechanism due to their lack of knowledge on the topic or to the uncertainty of success. A systematic review of the selected academic and professional resources has been carried out with the aim to present latest developments and trends in crowdfunding of cultural heritage in Europe thus adding to the existent knowledge on the topic.

The following research questions were posed:

- (1) What are the latest trends and developments in crowdfunding for cultural heritage in Europe?
- (2) Is crowdfunding a suitable funding mechanism for cultural heritage projects?
- (3) What factors influence the success of crowdfunding campaigns?

Answers to these questions could enhance the application of crowdfunding mechanism in the cultural heritage sector, thus adding to sustainability of individual projects.

#### 3.1. Information Sources and Eligibility Criteria

Extensive research of the Google Scholar database was conducted throughout December 2020. Google Scholar has been selected as it includes wide research across Internet in its search results, which greatly expanded our analysis of the highly narrow and (still) relatively unresearched topic of crowdfunding cultural heritage in Europe. We wanted to obtain as many academic papers available on the selected topic, but the screening narrowed down the results to peer reviewed journal articles, book chapters, reports, one Ph.D. thesis, and one M.Sc. thesis reporting on the crowdfunding and cultural heritage in Europe, and

these were included in the analysis. A Boolean approach was used, and the following search terms were applied (“crowdfunding”) AND (“cultural heritage”) AND (“Europe”). In order to decrease the number of irrelevant articles, we excluded patents and citations.

Records published in English in the year 2020 were eligible for inclusion as we wanted to see the latest developments on the topic. Geographical scope of the research focused on Europe since the starting point of the research was Europe 2020 Strategy which insisted on sustainability of the projects.

Our search found 237 results.

### 3.2. Study Selection

The study selection process is illustrated in Figure 1.

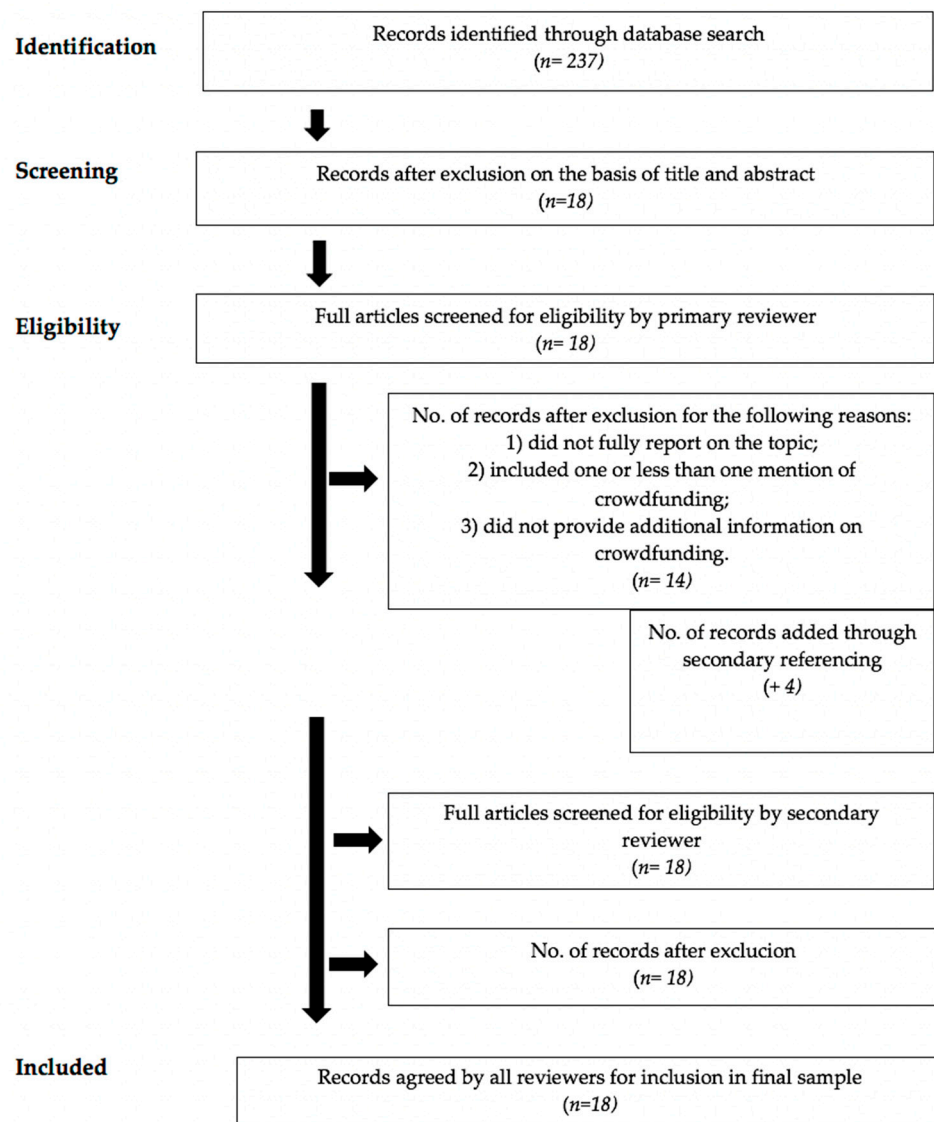


Figure 1. PRISMA flow diagram—schematic view of search strategy.

In the first stage of screening, papers were excluded based on their title and abstract, if they did not clearly report on crowdfunding of cultural heritage in Europe. However, we decided to include some papers which dealt with crowdfunding, although they did not specifically discuss cultural heritage (we explain this later). Papers were excluded on the basis of title and abstract if they were

- entirely unrelated to the topic of crowdfunding of cultural heritage in Europe or crowdfunding in general;
- not reporting on crowdfunding of cultural heritage;
- or reporting on crowdfunding of cultural heritage, but not in Europe.

Full-text files were obtained for the remaining records.

At this stage, we included papers if they:

- fully reported on the topic of our interest;
- if they included more than one mention when we searched “crowdfunding” within the text;
- if they provided additional information on crowdfunding not found in the papers that fully reported on the topic of our interest;
- if they were useful secondary references: if there was “crowdfunding” mentioned only in the citations of the paper from our search, we checked the reference to see whether that cited paper might report on the cultural heritage crowdfunding in Europe.

At the end of this stage, we had 18 academic papers which were included in our analysis.

All final sample papers were assessed by a second reviewer to reduce the risk of inclusion bias.

#### **4. Participatory Approach as the Underlying Crowdfunding Mechanism**

Faro convention is a treaty, signed in Portugal in 2005, by which European states agreed to protect cultural heritage and citizens’ right to engage and participate in that heritage. Through this treaty, governments recognize the importance of communities in cultural heritage valorization and promote culture as a common good which is shared among society. Hence, the treaty encourages participatory governance of cultural heritage in which multiple stakeholders are involved, including the government, professionals, non-governmental organizations, the voluntary sector, and local and national civil society (Kontiza et al. 2020). The value of cultural heritage remains central and it is what essentially motivates individuals and organizations to engage and protect the cultural heritage. Participation of multiple stakeholders and recognition of cultural heritage as a common good, may lead to better and more sustainable management of cultural heritage, which can eventually lead to (financial) sustainability of the local community. Crowdfunding, as a funding method which is based on the involvement of various organizations and/or individuals, is an example of the participatory approach which enables not only local, but global community to get involved in the valorization and protection of the common cultural heritage. On top of that, a hybrid model called match-funding has been used to stimulate financing from the public and private organizations. It is a type of crowdfunding in which multiple stakeholders are involved and each donation is complemented by the funds from public and/or private organizations which enhances project’s success and enables a higher amount of donations overall (Morell et al. 2020). Moreover, crowdfunding inherently relies on the interest of the organizations and individuals to donate/invest in a specific cultural heritage project which, in a sense, is valorization itself—if people are willing to donate or invest, it shows that they recognize the value of the specific heritage and want to protect it for the future generations, thus promoting its sustainability.

The process of value co-creation and enhanced community participation enables consumers to engage in the production of the product they eventually want to consume, which leads to feelings of empowerment (Massi and D’Angelo 2020). For example, Rekrei project with a global scope, focused on reproduction of the damaged or destroyed cultural heritage, enables users to actively participate through uploading images of destroyed heritage and by providing financial donations for the project, which are believed to empower and involve users even further. Rekrei project obtains its resources from multiple stakeholders through crowdfunding, which is considered a bottom-up process that “guarantees economic sustainability” (Massi and D’Angelo 2020, p. 121).

Furthermore, participation through crowdfunding enables society to choose what remains a cultural heritage and what may become one. It is the society's characteristics and interests that fuel the crowdfunding campaigns and thus have the potential to select new cultural heritage. This is especially applicable to emerging heritage such as digital games (Nylund 2020). Finally, participatory approach leads to "greater public value (Scott 2016), builds new audiences (Brown et al. 2011), enhances self-reliance and awareness (Aas et al. 2015) and leads to consensus and shared sense of ownership (Araujo and Bramwell 1999)" (cited in Nylund 2020, p. 56).

### 5. Crowdfunding in Europe: Suitability for Cultural Heritage Projects

In Europe, but also across the world, cultural heritage organizations are starting to "refashion" themselves by using new media in order to raise funds for their projects. Such organizations are seeing beyond the financial benefits of crowdfunding over Internet, and enjoying the additional perks, such as in case of museums, and higher involvement with museum collections (Oomen and Aroyo 2011). Both small as well as large famous museums engage in crowdfunding, e.g., The Louvre organized a crowdfunding campaign in order to fund a Renaissance painting by Lucas Cranach the Elder. They managed to collect a million euros, from altogether 5000 donors (Oomen and Aroyo 2011).

Formal and informal institutional characteristics are known to influence investment behavior and crowdfunding. Di Pietro and Buttice (2020) conducted a study which analyzed the influence of such characteristics on the crowdfunding development across 27 countries. Their results showed that individualistic countries compared to collectivistic ones show more crowdfunding involvement (informal characteristics). The authors attribute this trend to fewer possibilities of informal interactions between fundraisers and backers which characterizes online crowdfunding, and this is believed to attract individualistic societies, but discourage collectivistic. In the sense of formal characteristics, crowdfunding is more prevalent in countries that have business-friendly legal environment and developed economy, and it is larger in countries with higher uncertainty avoidance, while both crowdlending and equity crowdfunding are popular in countries characterized by long-term orientation (i.e., societies that do not expect immediate gratification, because relatively long time needs to pass for investors to get a financial return for their investments).

On top of formal and informal institutional country-level characteristics, other global factors could also promote or hinder crowdfunding efforts. For example, Covid-19 pandemic has forced people to move from the traditional ways of functioning "offline" and towards the usage of digital technology for interaction, buying goods, and even food delivery (Bahre et al. 2020). Hence, as people are more adapt to digital technologies, cultural heritage could use this opportunity and opt more often for online funding through crowdfunding.

Reviewed papers analyzed several European cases of cultural heritage crowdfunding as to report on the suitability of this funding mechanism for cultural heritage projects. Namely, cases from Finland, Italy, and France have been detected.

#### 5.1. Finland

Finish Museum of Games (FMG) is an example of a successful crowdfunding campaign in Europe. Although its main goal was not to raise funds but rather to promote the museum and show a need for the establishment of the game museum, a reward-based crowdfunding campaign on a Finish platform focused on the culture, Mesenaatti.me, raised €85,860 over six months from more than 1000 donors. As a reward, donors got tickets, t-shirts, invitations to VIP events, etc. (Suominen et al. 2018).

Digital games are still in the process of becoming a cultural heritage; hence, they can be defined as an emerging heritage. Suominen et al. (2018) suggest that for such an emerging heritage, it is more difficult to obtain funding (and crowdfunding) because the cultural community who could appreciate it is still developing. On the other hand, museums which exhibit cultural heritage that has a well-developed community (e.g., paintings,



sculptures, etc.), are expected to have an easier access to crowdfunding and thus raise more money. Other authors, such as Rykkja et al. (2020), suggest that it is exactly this originality (of game heritage) which might offer better market opportunities. Needless to say, not all crowdfunding campaigns are a success. For example, the Kickstarter has a success rate of up to 36%. Therefore, instead of defining success solely based on collected funds, emerging heritage, and cultural heritage in general could focus on the other benefits such as promotion and community development, which might be even more important (Suominen et al. 2018).

### 5.2. Italy

Because of the Italian bureaucracy system and high level of digital illiteracy, crowdfunding appeared in Italy in 2005, sometime after it started to be used in the other countries (Adamo et al. 2020). Today, crowdfunding is a famous method of funding Italian culture and arts. This is because Italy is known for its rich heritage: churches, monuments, and museums so people across the world are motivated to fund the campaigns in order to preserve such great cultural heritage (Bertasini 2020). Crowdfunding in Italy shows several trends: (1) loyalty, backers have become loyal to organizations instead of projects; (2) decentralization, platforms have become easier to use; (3) internalization, Italian platforms are becoming equally good as large international platforms; and (4) complementarity, crowdfunding has been used by non-profit organizations as well as profit oriented organizations (Adamo et al. 2020).

In Italy, crowdlending and equity-based crowdfunding are the most used types of crowdfunding while the majority of platforms is donation and reward based (Adamo et al. 2020). Furthermore, the most successful campaigns organized by startups involved in arts and cultural heritage, concern those that produce interactive guides to increase the visitor's museum experience (Bertasini 2020).

Compared to other European and world countries, crowdfunding seems to be the most regulated in Italy because the goal of the legislative framework was to encourage organizations to use alternative methods of funding, and thus enhance economic sustainability (Adamo et al. 2020). However, crowdfunding is a very uncertain method of funding. According to Adamo et al. (2020), fundraisers are highly uncertain of the campaign's success at the beginning of their calls, as they are not able to predict whether there will be an interest from the public to support their projects. Low interest to invest is typically associated with cultural projects, that usually do not lead to large revenues (Chiesa and Handke 2020). Thus, crowdfunding should be viewed as a supplementary, rather than alternative method of financing in order to avoid high uncertainty of the funding success (Adamo et al. 2020).

### 5.3. France

France, as one of the cultural leaders, invests 2.6% GDP on average in culture compared to other European countries that invest around 2.3%. French cultural heritage has received an envying financial support from public and private entities because of the international prestige of its museums, desire to preserve that heritage, cultural education, as well as generation of economic wealth through attraction of tourists (Pauget et al. 2020). France has three museums in the world's top 10 art museums in terms of attendance (the Louvre Museum, the Pompidou Center, and the Musée d'Orsay), which attract millions of tourists per year, and thus promote local economy development. These museums, as well as other French museums, have three characteristics in common. First, the total number of visitors has been stagnating since 2010. Second, there is a polarization of attendance to famous museums which receive more than 40% of visitors. The Louvre alone attracts more than 10 million visitors each year. Thus, less famous museums receive much less visitors. Third, there is a decrease in museum subsidies because of the economic crisis (due to COVID-19).

Because of these reasons, Pauget, Tobelem, and Bootz (Pauget et al. 2020) interviewed experts and produced three possible scenarios of French museum future in 2030. The most feasible of them suggests that museums are turning into “hybrid local institutions” that are self-sustainable through increased funding from non-governmental sources, such as crowdfunding, as well as using the museum resources (e.g., expertise and collections) “to imagine institutions combining culture, health, social, collaborative economy, and the participation of inhabitants”. A trend towards participatory approach to heritage is again confirmed here.

## 6. Determining the Success of Cultural Heritage Crowdfunding

The success of cultural heritage crowdfunding campaign is determined by the fundraiser, the backer, the campaign, and the platform (Roy 2020), and is measured by the amount of collected money or by whether campaign goals were achieved (Chiesa and Handke 2020).

The fundraiser is responsible for creating a fundraising campaign which is based on explicit communication, through texts, images, or videos, about the necessary funding, project outcomes and risks, schedule, and fund allocation. Accurate and effective communication with backers, as one of the most important factors for the success of crowdfunding campaign, leads to a perception of project quality and builds trust in backers, which increases the chances of financial backing (Roy 2020). Some studies have shown that fundraisers who used videos to communicate information about the campaign, were more successful than those who did not (Zhao and Shneur 2020). Furthermore, when using reward crowdfunding, the fundraiser needs to specify what type of rewards will be awarded upon completion of the project as well as how the funds will be used if the project goes unplanned. If a project uses equity crowdfunding, the fundraiser needs to communicate the minimum possible investment and the respective share of the project the organization offers (Roy 2020). Therefore, the fundraiser’s linguistic style is of paramount importance for the success of the crowdfunding campaign. More specifically, linguistic style using verbal references to intrinsic motivation (e.g., clear explanation of the importance of the project for the community) increases the chances of funding (Chiesa and Handke 2020). Other than that, the fundraiser’s social status may help with the success of the campaign—the larger the social network, the higher the reply to the crowdfunding calls (Zhao and Shneur 2020). Moreover, some studies have shown that female fundraisers have relatively better chances of securing funding (Chiesa and Handke 2020; Zhao and Shneur 2020).

The backer, an individual who is willing to fund a project, can be motivated by various factors including obtaining an organization/project share such as in equity crowdfunding, or to obtain a “hedonic pleasure” from funding a project which might bring social and environmental benefits as in the donation crowdfunding (Roy 2020, p. 182). Their personality, norms, geographical distance, as well as cultural distance determine their involvement in the campaign. If the cultural project is something of interest to them, if it is geographically close and culturally similar, they are more likely to invest or donate money (Roy 2020). Zhao and Shneur (2020) use self-determination theory (SDT) developed by Ryan and Deci in 2000, to explain the motivational background of crowdfunding. According to this theory of motivation, behavior is motivated either by intrinsic or extrinsic factors. Intrinsic motivation occurs when the individual inherently enjoys the activity or when the activity has some inherent meaning for the individual, which brings out the feelings of empathy, nostalgia, or sympathy. Consequently, being involved in the activity, such as crowdfunding, enhances positive emotions in the individual. On the other hand, extrinsic motivation occurs when the individual is motivated by external factors such as monetary rewards or recognition (Zhao and Shneur 2020). Hence, based on this theory we could conclude that intrinsic motivation motivates donation-based crowdfunding, while extrinsic motivation, at least to some degree, lays behind crowdlending, equity, and reward crowdfunding, as all of these modes of crowdfunding provide some type of external reward. Therefore, the backers of cultural heritage campaigns involved in donation-based crowdfunding seem to

be intrinsically motivated, as such projects typically do not entail monetary rewards. Those individuals tend to appreciate the public-good attributes of cultural heritage and are aware of the positive effect cultural projects could have for the community (Chiesa and Handke 2020). Finally, some studies have shown that backers are more likely to get involved in the cultural heritage crowdfunding campaign if the campaign is donation-based and focused on the intrinsic motivation factors (Marchegiani 2018).

The campaign needs to provide a description of the cultural heritage project for which the funds are being collected, required financing, and duration of the campaign. It should also include a number of pledges, however too many pledges can have adverse effects on the campaign (Roy 2020). The popularity of a project theme directly affects the campaign success (Van Montfort et al. 2021). Further, the study conducted by Calic and Mosakowski (2016) showed that cultural projects which were sustainability oriented, had greater funding success on the reward-based crowdfunding platforms such as Kickstarter than those that did not have social orientation.

The platform offers an environment where the campaign can be presented and seen by the backers. Therefore, the more reach the platform has, the higher the chances of financial backing (Chiesa and Handke 2020). Usage of such Internet platforms in cultural heritage to collect money from a large number of individuals has demonstrated to be beneficial, as it significantly reduces coordination and transaction costs which typically accompany the regular “offline” fundraising activities (Zhao and Shneor 2020). Furthermore, crowdfunding of cultural heritage does not bring solely financial benefits, but it also helps with promotion and audience development and engagement (Rykkja et al. 2020), as well as with the promotion of the touristic destination where the heritage is located (Lemmi 2020). Some of the most famous platforms for crowdfunding of cultural heritage and culture in general are ArtistShare, Kickstarter, and Indiegogo (Chiesa and Handke 2020).

Summary of the crowdfunding campaign success factors are presented in Table 2.

**Table 2.** The crowdfunding campaign success factors.

Policy-Related	Fundraiser-Related	Backer-Related	Campaign and Platform-Related	Heritage Project-Related
Individualistic orientation	Effective communication with backers	Strong intrinsic motivation	Required campaign elements: clear description of the project, required financing, campaign duration, reasonable no. of pledges	Popularity of a theme
Enabling business-friendly legislative framework	Linguistic style impacting backers’ intrinsic motivation	Strong extrinsic motivation	Large reach of the platform	Sustainable nature of the project
Developed economy and higher uncertainty avoidance	Strong networking abilities			
Long-term orientation				

Source: authors’ elaboration based on different studies.

## 7. Conclusions

This review research is grounded in the Eppich and Grinda’s (2019) work which claims the lack of financial sustainability for the most cultural heritage sites, their prevailing public subsidies and lack of fund management policies. Among different funding mechanisms available for cultural heritage projects, crowdfunding, theoretically categorized as an alternative funding method was further analyzed. As much as a comparative review of different cultural heritage funding mechanisms would add to the body of knowledge related to their adequacy and efficiency, it is extremely challenging as it is extremely related

to the heritage typology, nature of projects, and context. Thus, it remains a methodological challenge for research in future studies.

At the moment, individual cultural heritage funding mechanisms are reviewed, as is the case with this one. It was concluded that participatory approach to cultural heritage management which is recently strongly accentuated and advocated since it ensures a sense of ownership over the heritage resources, matches the participatory approach in heritage funding. Specifically, crowdfunding represents participation of the backers in funding a specific cultural heritage project, thus standing out as the latest trend. This trend has been specifically estimated for the future of cultural heritage in France. However, as it does not offer high levels of certainty influencing the funding success, it is rather categorized as a supplementary, and not an alternative method, when applied in cultural heritage sector.

Crowdfunding is affected by country-level and global-level characteristics. Specifically, individualistic countries and those that have business friendly economy and higher uncertainty avoidance tend to be more involved in crowdfunding than collectivistic countries. Global factors such as pandemics can also support or hinder crowdfunding efforts.

Results of the analysis in the reviewed European countries showed that crowdfunding is a suitable mechanism for cultural heritage projects. In Finland, a successful campaign has been detected in the sector of emerging heritage (Finish Museum of Games), whereas in Italy and France in the standard cultural heritage sector. However, contradictory opinions have been suggested on the suitability of crowdfunding for cultural heritage projects on the opposed sides (emerging vs. standard): while both the Finnish and the Italian case confirm that branded cultural heritage is more likely to succeed in crowdfunding campaign as it stirs backers' motivation, there are also other authors (Rykkja et al. 2020) suggesting that emerging heritage, due to its originality might also offer competitive advantage over the standard cultural heritage projects. It can also be backed by Bertasini's (2020) findings that crowdfunding campaigns had the greatest success in projects related to interactive guides increasing museum experiences which also represent novel and original aspects of heritage management. Thus, no unanimous conclusions can be drawn on the suitability of crowdfunding for specific type of cultural heritage projects. Future empirical studies may add to new knowledge in that respect. However, this shows that crowdfunding works well with cultural heritage projects in general, regardless of the type, either emerging or standard.

Some other factors, though, may influence crowdfunding campaign success; e.g., in Italy, the importance of legislative framework which regulated crowdfunding in order to entice cultural institutions/organizations has been found. Pertaining to the campaign itself, a prerequisite for success is the inclusion of basic and clearly described campaign elements: project description, required financing, campaign duration, and reasonable number of pledges. Further on, success factors are found in the accurate and effective communication with backers and specific fundraiser's linguistic style which touches on the backers' intrinsic motivation (especially linked with public benefit). Apart from that, success of a crowdfunding campaign is directly linked with the fundraiser's ability to network since larger social networks ensure higher crowdfunding response calls (Zhao and Shneur 2020). Following the same analogy, the larger reach of the platform, the greater chances of crowdfunding backing (Chiesa and Handke 2020). Both intrinsic and extrinsic motivation of the backer has impact on crowdfunding campaigns. Fundraisers may thus seek to elicit sympathy and empathy in order to stimulate bakers' intrinsic motivation for the donation-based type of crowdfunding or to offer different awards to entice extrinsic motivation. Additionally, sustainable nature of projects is a success factor in the reward-based crowdfunding. Conclusively, provided that the crowdfunding campaign contains the basic necessary elements (project description, required financing, campaign duration, reasonable number of pledges), importance of an enabling policy framework, heritage project nature and management of the campaign itself also determine its success. Campaign management does not depend on the fundraiser's skills only but are related to the backer

and the platform itself. Additionally, crowdfunding campaign success is enhanced if it is backed by match-funding.

Finally, a reflection also has to be made on the specific nature of cultural heritage projects and their intrinsic value. Thus, in most cases crowdfunding is seen as an alternative or supplementary funding scheme, whereas in cultural heritage projects it may equally work to raise heritage awareness as well as for audience development, as demonstrated by the Finnish Game Museum. It may especially be important in present times when heritage (and art) sector is struggling for audience. Loyalty of backers to organizations instead of projects confirmed in Italy, thus finds additional backing so crowdfunding campaigns may efficiently be used for long-term audience development and deepening their relationship with heritage institutions/organizations. Since COVID-19 pandemic shifted the cultural sector in the digital environment, new opportunities rise in the use of crowdfunding on digital platforms. Alongside, tourism attractiveness of a heritage site might be used in digital marketing, as it increases the success of crowdfunding campaign.

Some limitations of this review study are seen in the time-span and geographical area of the study. As mentioned, the study included only the analysis of papers published in 2020 with the rationale of detecting the latest trends in crowdfunding. Some earlier papers though might also be useful in this respect. In the same way, the goal here was to analyze cultural heritage in Europe, but a larger geographical might offer some answers to the research questions, especially those pertaining to the crowdfunding success factors. Future research might extent in those directions.

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## References

- Adamo, Rosa, Domenica Federico, Mariantonietta Intonti, Simona Mele, and Antonella Notte. 2020. Crowdfunding: The case of Italy. In *Banking and Finance*. Edited by Razali Haron, Maizaitulaidawati Md Husin and Michael Murg. London: IntechOpen.
- Bahre, Heike, Giovanni Buono, and Valerie Isabel Elss. 2020. Innovation embraces Tradition—The Technology Impact on Interpretation of Cultural Heritage. *LUMEN Proceedings* 13: 319–26. [CrossRef]
- Bertasini, Matteo. 2020. Startups Value Proposition in the Tourism and Art Sector: An Empirical Analysis of Digital and Innovative Trends. Master's thesis, Polytechnic University of Milan, Milan, Italy.
- Calic, Goran, and Elaine Mosakowski. 2016. Kicking off social entrepreneurship: How a sustainability orientation influences crowdfunding success. *Journal of Management Studies* 53: 738–67. [CrossRef]
- Chiesa, Carolina Dalla, and Christian Handke. 2020. Crowdfunding. In *the Handbook of Cultural Economics*. Edited by Ruth Towse and Trilce Navarrete Hernández. Cheltenham: Edward Elgar Publishing, pp. 158–67.
- Di Pietro, Francesca, and Vincenzo Butticiè. 2020. Institutional characteristics and the development of crowdfunding across countries. *International Review of Financial Analysis* 71: 101–543. [CrossRef]
- Doane, Deborah, and Alex MacGillivray. 2001. Economic sustainability: The business of staying in business. New Economics Foundation. New Economics Foundation. Available online: [https://www.dphu.org/uploads/attachements/books/books\\_5735\\_0.pdf](https://www.dphu.org/uploads/attachements/books/books_5735_0.pdf) (accessed on 28 January 2021).
- Eppich, Rand, and José Luis García Grinda. 2019. Sustainable financial management of tangible cultural heritage sites. *Journal of Cultural Heritage Management and Sustainable Development* 9: 282–99. [CrossRef]

- EUR-Lex. 2011. Creative Europe—A New Framework Programme for the Cultural and Creative Sectors (2014–2020). In Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Available online: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52011DC0786&from=SL> (accessed on 28 January 2021).
- European Commission. 2010. Europe 2020: A Strategy for Smart, Sustainable and Inclusive Growth. Communication from the Commission. Available online: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF> (accessed on 3 February 2020).
- Finpiemonte. 2021. Financial Instruments and Innovative Financial Schemes for Cultural Heritage. INTERREG Europe Project, Financed by the European Regional Development Fund. Available online: <https://www.interregcentral.eu/Content.Node/02.-Financial-schemes.pdf> (accessed on 28 January 2021).
- Jelinčić, Daniela Angelina, and Dragana Glivetić. 2020. Cultural Heritage and Sustainability. INTERREG Europe Project, Financed by the European Regional Development Fund. Available online: [https://www.interregeurope.eu/fileadmin/user\\_upload/txt\\_tevprojects/library/file\\_1586942702.pdf](https://www.interregeurope.eu/fileadmin/user_upload/txt_tevprojects/library/file_1586942702.pdf) (accessed on 28 January 2021).
- Jelinčić, Daniela Angelina, and Sanja Tišma. 2020. Ensuring sustainability of cultural heritage through effective public policies. *Urbani Izziv/Urban Challenge* 31: 78–87. [CrossRef]
- Kontiza, Kalliopi, Angeliki Antoniou, Abdullah Daif, Susana Reboreda-Morillo, Maddalena Bassani, Silvia González-Soutelo, Ioanna Lykourantzou, Catherine Emma Jones, Joseph Padfield, and Martín López-Nores. 2020. On How Technology-Powered Storytelling Can Contribute to Cultural Heritage Sustainability across Multiple Venues—Evidence from the CrossCult H2020 Project. *Sustainability* 12: 1666. [CrossRef]
- Lähdesmäki, Tuuli. 2014. The EU'S Explicit and Implicit Heritage Politics. *European Societies* 16: 401–21. [CrossRef]
- Lemmi, Enrica. 2020. Heritage and new communication technologies: Development perspectives on the basis of the Via Francigena experience. Paper presented at Heritage, Tourism, and Hospitality International Conference, Mendrisio, Switzerland, April 6–8.
- Loulanski, Tolina, and Vesselin Loulanski. 2011. The sustainable integration of cultural heritage and tourism: A meta-study. *Journal of Sustainable Tourism* 19: 837–62. [CrossRef]
- Manda, Cezar Corneliu, Cristina Elena Nicolescu, and Dana Mortelmans. 2017. Financing culture institutions in european context. *SEA: Practical Application of Science* 5: 179–85.
- Marchegiani, Lucia. 2018. From Mecenatism to crowdfunding: Engagement and identification in cultural-creative projects. *Journal of Heritage Tourism* 13: 143–51. [CrossRef]
- Massi, Marta, and Alfredo D'Angelo. 2020. Reversing Heritage Destruction through Digital Technology: The Rekrei Project. In *Rediscovering Heritage Through Technology*. Edited by Dylan Seychell and Alexei Dingli. Cham: Springer, pp. 109–22.
- Morell, Mayo Fuster, Enric Senabre Hidalgo, and Enrique Rodríguez. 2020. Goteo.org civic crowdfunding and match-funding data connecting Sustainable Development Goals. *Sci Data* 7: 132. [CrossRef] [PubMed]
- Mourato, Susana, Ece Ozdemiroglu, Tannis Hett, and Giles Atkinson. 2004. Pricing cultural heritage. *World Economics* 5: 95–113.
- Nijkamp, Peter. 2012. Economic Valuation of Cultural Heritage. In *The Economics of Uniqueness: Investing in Historic City Cores and Cultural Heritage Assets for Sustainable Development*. Edited by Guido Licciardi and Rana Amirtahmasebi. Washington, DC: The World Bank, pp. 75–106.
- Nylund, Niklas. 2020. Game Heritage: Digital Games in Museum Collections and Exhibitions. Ph.D. dissertation, Tampere University, Tampere, Finland.
- Oomen, Johan, and Lora Aroyo. 2011. Crowdsourcing in the cultural heritage domain: Opportunities and challenges. Paper presented at the 5th International Conference on Communities & Technologies, Brisbane, Australia, 29 June 2011 – 2 July 2011; New York: Association for Computing Machinery, pp. 138–49.
- Pauget, Bertrand, Jean-Michel Tobelem, and Jean-Philippe Bootz. 2020. The future of French museums in 2030. *Technological Forecasting and Social Change* 162: 120–384. [CrossRef]
- RESTAURA. 2019. PPP in Cultural Heritage Projects. Available online: <https://www.interreg-central.eu/Content.Node/PPP-in-heritage-revitalisation-projects-planning-and-prep-3.pdf> (accessed on 28 January 2021).
- Roy, Mousumi. 2020. *Sustainable Development Strategies: Engineering, Culture and Economics*. Oxford: Butterworth-Heinemann.
- Rykkja, Anders, Natalia Maehle, Ziaul Haque Munim, and Rotem Shneor. 2020. Crowdfunding in the Cultural Industries. In *Advances in Crowdfunding*. Edited by Rotem Shneor, Liang Zhao and Bjørn-Tore Flåten. Cham: Palgrave Macmillan, pp. 423–40.
- Šebová, Miriam, Oto Hudec Peter Džupka, and Nataša Urbancíková. 2014. Promoting and financing cultural tourism in Europe through European capitals of culture: A case study of Košice, European capital of culture 2013. *Amfiteatru Economic Journal* 16: 655–71.
- Shneor, Rotem, Liang Zhao, and Bjørn-Tore Flåten. 2020. Introduction: From Fundamentals to Advances in Crowdfunding Research and Practice. In *Advances in Crowdfunding*. Edited by Rotem Shneor, Liang Zhao and Bjørn-Tore Flåten. Cham: Palgrave Macmillan, pp. 1–18.
- Subires, María Deseada López, and Manuel Pedro Rodríguez Bolivar. 2017. Financial Sustainability in Governments. A New Concept and Measure for Meeting New Information Needs. In *Financial Sustainability in Public Administration*. Edited by Manuel Pedro Rodríguez Bolivar. Granada: Palgrave Macmillan, pp. 3–20.
- Suominen, Jaakko, Anna Sivula, and Maria B. Garda. 2018. Incorporating curator, collector and player credibilities. Special issue. *Journal of Media Studies and Popular Culture*, 174–96.

- Throsby, David. 1999. Cultural capital. *Journal of Cultural Economics* 23: 3–12. [CrossRef]
- UNITO. 2020. Living Document on Financial Instruments and Regulatory Frameworks for the Introduction of Partnership with Private Sector. FINCH Interreg Europe, Version 5. Available online: [https://www.interregeurope.eu/fileadmin/user\\_upload/tx\\_tevprojects/library/file\\_1589466334.pdf](https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1589466334.pdf) (accessed on 28 January 2021).
- Van Montfort, Kees, Vinitha Siebers, and Frank J. De Graaf. 2021. Civic Crowdfunding in Local Governments: Variables for Success in the Netherlands? *Journal of Risk and Financial Management* 14: 8. [CrossRef]
- Varbanova, Lidia. 2003. Financing Cultural Practices in South-Eastern Europe. In *Policies for Culture Publication Series*. Bucharest: ECUMEST Association/European Cultural Foundation, pp. 2–12.
- Zhao, Liang, and Rotem Shneor. 2020. Donation Crowdfunding: Principles and Donor Behaviour. In *Advances in Crowdfunding*. Edited by Rotem Shneor, Liang Zhao and Bjørn-Tore Flåten. Cham: Palgrave Macmillan, pp. 145–60.



Article

# Cost–Benefit Analysis in the Evaluation of Cultural Heritage Project Funding

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**Abstract:** Cultural heritage has, for a long time, been considered a source of wealth and well-being for economies. Currently, considerable investments have been allocated for its renewal and maintenance that often surpass the budgets of owners, local communities, and other interested users. Cultural heritage valorisation is expensive and is a great economic challenge. Infrastructural investment, i.e., conservation and restoration, are just one part of the total costs of cultural heritage preservation, while other investments relate to regular operation and maintenance. One of the most difficult decisions for those who design the cultural heritage restoration projects is how to finance them, i.e., what the most efficient financial instruments are for renewal of cultural heritage. These assumptions have instigated interest in the evaluation of services resulting from common good functions of cultural heritage, such as economic, educational, historical, technological, ecological, and climate, as well as tourism and recreational. Therefore, this article starts from the analysis of potential funding sources for cultural heritage through the European Union (EU) funds; a method of economic evaluation of the return on investments and cost–benefit analysis is suggested as a method that should be used in decision making on these interventions.

**Keywords:** cultural heritage; cultural heritage projects; EU funds; economic analysis; cost–benefit analysis

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## 1. Introduction

The consideration of culture in economic theory is still mostly based on the setting of neo-classical economic theory, especially welfare economics, with precisely defined rules ultimately directed at the research of individual and overall social well-being (Arnsperger and Varoufakis 2006). Bearing in mind the usual assumptions about *homo-economicus*—competition, individual maximisation of usefulness and profit, and minimisation of work and cost, as well as those about time preferences with some additional designations—Welfare Economics proved suitable for explaining behaviour related to the sustainable use of cultural heritage and assessing damage to that heritage caused by certain economic activities. Additional assumptions are imposed on models of general balance: maximisation of profits over time and internalisation of the social cost of using cultural heritage (Cheng 2006).

Through its core functions (selection, allocation, distribution, and information), the market plays a major role in determining the preferences of consumers and their choices, in fostering innovation, and in solving the complex problem of resource allocation. The allocation of resources in economic theory indicates the way in which scarce goods are used to meet the needs of people competing with each other. The allocation of resources can be seen from a macroeconomic point of view or from the point of view of scarce resources for which certain areas and branches of the economy, regions, states, and even departments or factories within individual enterprises are competing in their programmes of production of goods and services; then, it can be seen from the microeconomic perspective of consumers,



from the distribution of their income between consumption and savings, and, in terms of consumption, from the distribution of money spent for certain goods and services (Loulanski 2006).

The market is a fine regulation mechanism, leading to optimal allocation of resources, i.e., their most rational use, provided that certain assumptions on tastes, resources, technology, and forms of competition are fulfilled. However, the indivisibility of products and economies of scale are among the phenomena that prevent balance, while externalities and public goods in phenomena lead to a suboptimal balance (Klamer 2004).

Economic analysis of the explanation of sustainable use of cultural heritage is based on the inability of the market to perform the function of resource allocation (Throsby 2012). This is the case with externalities and public goods. The presence of functional interdependence among decision makers is common to all forms of externality, leading to behaviour changes of one producer (i.e., consumer) being influenced by the activities of others, although the market situation has not changed. Thus, it is obvious that in those cases, the efficiency of the market as an allocation mechanism has been significantly undermined (Augustyn et al. 2015). In order to solve this problem, it is necessary to prevent the occurrence of external effects (which is impossible for the time being) or to internalise them by determining the prices of external effects to enable their transformation into internal effects, which implies interaction between the market and planning solutions.

However, today, state intervention is considered necessary in the process of market allocation of resources in order to eliminate some market failures occurring in various aspects of discrimination, primarily in the labour market; in various aspects of barriers to competition; and in the negative effects of economic activity based on cultural heritage (Girard et al. 2019).

In the last decade, cultural heritage has come to the fore in ensuring sustainable development. While there are a number of cases worldwide proving the effectiveness of cultural heritage in ensuring sustainable development (e.g., job creation, tourism development, social cohesion, urban enhancement, citizens' well-being, etc.), the sustainability of cultural heritage has rarely been at the forefront of public policies (Crossik and Kaszynska 2016). The reason for this might lie in the complexity of valuing cultural heritage sustainability due to its various facets (economic, environmental, social, and cultural sustainability, but also sustainability of different inherent heritage values, such as aesthetic, artistic, scientific, educational, landscape, and community values) (Giraud-Labalte et al. 2021).

Therefore, this paper deals with the analysis of financial investments in cultural heritage at the EU level and with plans and possible sources in the programming period 2021–2027. The assumption is that cultural heritage will increasingly depend on the possibilities and sources of funding from the EU budget, but with a clear evaluation of sustainable use, so it is necessary to explore the possibilities for its quantitative evaluation. Namely, the value of cultural heritage, both as goods and as services, depends on the movement of supply and demand in the market, while general useful functions are mostly presented in descriptive terms.

The aim of this paper is to demonstrate how an economic analytical method, primarily cost–benefit analysis, contributes to the evaluation of investments in cultural heritage while simultaneously encouraging socio-economically and environmentally sustainable local and regional development. In the evaluation of cultural heritage, but also in the policy of instruments containing the heritage component as a resource basis for local and regional development with technological and professional solutions, there is a need for economic evaluation of its sustainable use and preservation for generations to come. We present an overview of current instruments for financing cultural heritage, financial resources and methods for evaluating investments in the reconstruction and sustainable use of cultural heritage, and the methodological appropriateness and practical utilisation of the cost–benefit method. We discuss economic evaluation primarily via cost–benefit analysis. Our conclusions include recommendations for the use of the proposed cost–benefit analysis model in the evaluation of cultural heritage sustainability.

## 2. Cultural Heritage Funding Opportunities

The European Union confirms the importance of cultural heritage by awarding financial assistance for cultural heritage projects from a number of sources. Table 1 shows cultural heritage funding opportunities within the 2014–2020 financial framework (Pasikowska-Schnass 2018).

**Table 1.** Cultural heritage funding opportunities from EU funds (2014–2020).

Area	EU Programme/Funding	Budget
	European Union Year of Cultural Heritage 2018	€8 million
	Creative Europe programme (2014–2020)	€1.46 billion (out of which €422 million for the Culture Sub-programme, and €27 million for heritage)
1.	Culture	Special actions relevant to the heritage sector, supported under the Creative Europe programme: <ul style="list-style-type: none"> <li>- European Heritage Days (EHD)</li> <li>- Joint Action with the Council of Europe (CoE)</li> <li>- European Capitals of Culture (ECOC)</li> <li>- European Heritage Label (EHL)</li> <li>- European Union Prize for Cultural Heritage/Europa Nostra Awards</li> </ul>
		European Capitals of Culture (ECOC): a grant of €1.5 million; total amounts vary between €6 and €100 million. The amounts invested in capital expenditure have ranged between €10 and €220 million, sometimes partly from the Structural Funds.
2.	Education	ERASMUS+ programme
		EU structural funds 2014–2020:
		- European Regional Development Fund
		- European Social Fund
3.	Cohesion Policy	- European Agricultural Fund for Rural Development
		- European Maritime and Fisheries Fund
		- INTERREG, URBACT, etc.
		European Maritime and Fisheries Fund: €647 million
4.	Digital Culture	EUROPEANA
		Horizon 2020 programme
		Horizon 2020 programme (H2020 Excellent Science, H2020 Industrial Leadership, H2020 Societal Challenges, H2020 Open SME Instrument Calls)
		Other initiatives:
5.	Research and Innovation	- Community of Innovators on Cultural heritage and EU R&I Ambassadors on Cultural Heritage
		- Innovation actions in Horizon 2020: large multi-stakeholder demonstration projects
		- Horizon 2020 Prizes
		- Public–Private Partnership on “Energy-efficient Buildings” and the European Construction Technology Platform
6.	Joint Research	
		COSME Programme (2014–2020) and Cultural Tourism:
		- European cultural routes
7.	Internal market, Industry, Tourism, and Entrepreneurship	- Diversification of tourism offered through synergies with creative and high-end industries
		- EDEN—European Destinations of Excellence
		Space Programme Copernicus (2014–2020)

Table 1. Cont.

	Area	EU Programme/Funding	Budget
8.	Combatting Illicit Trade of Cultural Goods	In 2017–2018, the EU financed a UNESCO-implemented action on engaging European art market stakeholders	
9.	Competition	<ul style="list-style-type: none"> <li>- Support for studies and investments associated with the maintenance, restoration, and upgrading of the cultural and natural heritage of villages, rural landscapes, and sites of high natural value, including related socio-economic aspects, as well as environmental awareness actions</li> </ul>	
10.	Common Agricultural Policy (CAP)	<ul style="list-style-type: none"> <li>- LEADER community-led local development—funds available to upgrade rural cultural heritage and improve access to cultural services in rural areas</li> <li>- Business development (start-up aid for non-agricultural activities in rural areas and related investments): business support for rural micro- and small businesses. It provides start-up money of up to €70,000 for new businesses</li> <li>- Vocational training and skills acquisition</li> </ul>	Up to €70,000 for new businesses
11.	Maritime Policy	European Fisheries Fund (EFF)	2014–2020 budget of €5.7 billion—€647 million available, including allocation for the support of projects under maritime cultural heritage
12.	Environment Policy	A whole range of initiatives focusing on environmental issues like the Natura 2000 award and the European Green Capital Award, as well as various projects supported by the LIFE programme (2014–2020) and again by the European Structural and Investment Funds contribute to enhancing and preserving cultural heritage	
13.	Citizenship	Europe for Citizens programme (2014–2020)	

Table 1. Cont.

	Area	EU Programme/Funding	Budget
	External Relations and Development	Instrument for pre-accession assistance IPA II	
	European Neighbourhood	European Neighbourhood Instrument (ENI)	€15.4 billion
	Eastern Neighbourhood	EU–Eastern Partnership Culture and Creativity 2015–2018	
14.	Southern Neighbourhood	The Media and Culture for Development in the Southern Mediterranean Programme (2013–2017) Med Culture (2014–2018) UNESCO–EU Cooperation in the Southern Mediterranean region	€2.46 million
		The Development Co-operation Instrument (DCI) (2014–2020)	
		ACP Cultures+ programme (2012–2017)	€30 million
	Rest of the World	Endangered heritage in the Northern regions of Mali: safeguarding, reconstruction, rehabilitation, restoration, and revitalisation (2014–2018)	€1.1 million
		11th European Development Fund EDF (2014–2020)	
		10th EDF Support to Culture, Tanzania (2011–2017)	€10 million
		Protecting cultural heritage and diversity in complex emergencies for stability and peace, Instrument contributing to Stability and Peace (IcSP), 2017–2018	€1070 million

Source: Authors' compilation, 2021.

Although exact data on funding for heritage projects within each of the instruments are not available, the analysis shows that a somewhat minor budget for cultural heritage activities is allocated through the culture-designated policy framework: The Creative Europe programme 2014–2020 budget earmarked €1.46 billion for cultural and media projects, out of which nearly €27 million have been dedicated to cultural-heritage-related projects (Pasikowska-Schnass 2018). Substantially larger amounts for cultural heritage are allocated from the structural funds, through which concrete conservation projects are enabled. Also, the Horizon 2020 programme offered relatively large amounts for research in areas such as heritage science, industrial leadership, and societal challenges. A number of other instruments offer funds either with a specific focus on a certain geographical area or for a topic where cultural heritage may not be the focus; nevertheless, the available resources still open doors with their funding.

The importance of cultural heritage in the EU is also evident in the opinion of citizens: more than 80% perceive cultural heritage to be very or fairly important for them personally, while 70% of respondents in every EU Member State agree that Europe's cultural heritage or cultural-heritage-related activities create jobs in the EU (European Commission 2017). This is complemented with statistics on museum attendance, wherein numbers for the five most-visited museums in a country highlight France and the U.K. (European Group on Museum Statistics 2018). While EU citizens undoubtedly confirm the importance of cultural heritage, data on participation in cultural-heritage-related activities leave room for improvement: 61% have visited a historical monument or site, 52% have attended a traditional event, and 50% have visited a museum or gallery, but there are still a number of them with no participation in a one-year period (38%, 47%, and 49%, respectively) (European Commission 2017). This points to possible obstacles.

The crisis caused by the COVID-19 pandemic has created new circumstances and urgent need for the recovery of all EU member states. Along with culture, cultural heritage

has been particularly affected, and the availability of new EU instruments and facilities, aiming at overall socioeconomic recovery, is of pivotal importance for cultural heritage. Numerous relevant and far-reaching EU policy replies are currently still under discussion, aimed at supporting recovery from this crisis in EU member states. Along with the Multiannual Financial Framework 2021–2027, the most relevant recovery instrument is the ‘NextGenerationEU’, with both of them constituting the European Recovery Plan with a budget of EUR 1835 billion (European Commission 2020a, 2020b).

The Recovery and Resilience Facility (the Facility) is the key instrument at the heart of NextGenerationEU, aimed at helping the European economies and societies to emerge more sustainable, stronger, and more resilient from the current crisis. It was proposed by the Commission on 27 May 2020 as the core of the NextGenerationEU instrument; on 21 July 2020, the European Council (European Council 2020) reached a political agreement on the instrument, including the Facility, along with the 2021–2027 long-term EU budget. This Facility, which implies large-scale financial support, will make available a significant value of €672.5 billion in loans and grants to Member States, providing them with the means to undertake key reforms and investments. Particular focus will be on the Commission’s priorities of ensuring sustainable and inclusive recovery in the long term, promoting green and digital transitions which, though to a minor extent, also relate to cultural heritage. The importance of the programme is seen in the funds available in the new Multiannual Financial Framework (MFF). The Digital Europe programme is making available EUR 7.5 billion in the new MFF (Digital Europe Programme (DIGITAL) and European Digital Innovation Hubs (EDIH) 2021). These resources will be available to Member States on the basis of prepared recovery and resilience plans that demonstrate a coherent developed package of reforms and public investment projects, which should be implemented by 2026 (European Commission 2020c). The breakdown of the NextGeneration instrument can be seen in Table 2. Among the indicated programs, Horizon Europe ReactEU and InvestEU are relevant from the point of view of cultural heritage (European Council 2020; European Parliament 2020c).

**Table 2.** EU financing for 2021–2027: the Multiannual Financial Framework (MFF), the NextGenerationEU (NGEU) recovery instrument, and new own resources—programmes relevant for cultural heritage (€ billion, 2018 prices).

Programmes Relevant for Cultural Heritage	MFF	NGEU	TOP-UPS	TOTAL
Horizon EU	75.5	5	4	84.9
Erasmus+	21.2	-	2.2	23.4
Invest EU	2.8	5.6	1	9.4
Creative Europe	1.6	-	0.6	2.2
Rights and Values	0.8		0.8	1.6
Digital Europe Programme	7.5			7.5

Source: European Parliament EU financing for 2021–2027 Political agreement on the 2021–2027 Multiannual Financial Framework (MFF), the NextGenerationEU (NGEU) recovery instrument, and new own resources (Digital Europe Programme (DIGITAL) and European Digital Innovation Hubs (EDIH) 2021).

Among the more relevant sources of funding of cultural heritage is the Creative Europe 2021–2027 programme as a stand-alone programme. It is the only program focusing exclusively on cultural and creative activities and enterprises, and it falls under the ‘Cohesion and values’ heading of the 2021–2027 financial framework. While the European Commission (EC) proposed €1.5 billion and the Council proposed €1.64 billion, the agreement provided for an additional €600 million to this programme. Its budget will therefore reach €2.2 billion for 2021–2027, an increase of more than 50% compared to that in the previous period (€1.46 billion for 2014–2020) (European Film Agency Directors 2020).

Among its specific objectives are cultural heritage and a new focus on societal resilience, cultural participation, and the strengthening of European identity and values, particularly via strong synergies between cultural heritage and education.

The previously mentioned new Horizon Europe programme will also have a visibly increased budget of around €84.9 billion for the period 2021–2027, including €5 billion from the NextGenerationEU, aiming to boost the vital process of recovery and resilience. With an additional planned reinforcement of €4 billion, it is apparent that a 30% increase of funding will be available. Consequently, the research community, as well as heritage institutions and actors, will have at their disposal meaningful new resources for enabling the necessary recovery and further development of cultural heritage (European Commission 2020b). The programme recognises cultural changes as one of the main drivers shaping contemporary society. Culture is included in the cluster “Inclusive and Secure Society” and cultural heritage is one of the areas of intervention.

In the education area, the Erasmus+ programme, with a proposed overall budget of €23.4 billion, advocates the EC vision of a European Education Area 2025, with the focus on Europe as “a continent in which people have a strong sense of their identity as Europeans, of Europe’s cultural heritage and its diversity”. Erasmus+ is among the selected key EU programmes reinforced with available MFF top-ups for 2021 as the result of the COVID-19 pandemic outbreak, with an additional €2.2 billion available (European Parliament 2020a). It is expected that in the forthcoming period the programme will be a significant complement to the Creative Europe programme.

A number of initiatives, relevant for the forthcoming period, merit mentioning. Among them, “A New European Agenda for Culture”, initiated in May 2018, sets three strategic objectives, relating to social, economic, and international aspects of cultural heritage. The social aspect, among others, puts new focus on active participation in culture and awareness of Europe’s shared cultural heritage, history, and values. The international aspect is also important for cultural heritage and its immanent interrelations with new approaches to development in Europe, leaning upon identity, citizenship, and participation. Finally, it is not possible to observe the meaning of cultural heritage separately from the economic objective—the promotion of arts, culture, and creative thinking, favourable conditions for creative and cultural industries, and access to finance. The “Rights and Values programme” has also been established as a new programme that demarcates its area of intervention based on European values with particular focus on the strengthening of cultural heritage and diversity in Europe. Finally, among other noteworthy initiatives is the Work Plan for Culture 2019–2022, with its focus on topics that increase awareness of the social and economic importance of European culture and heritage.

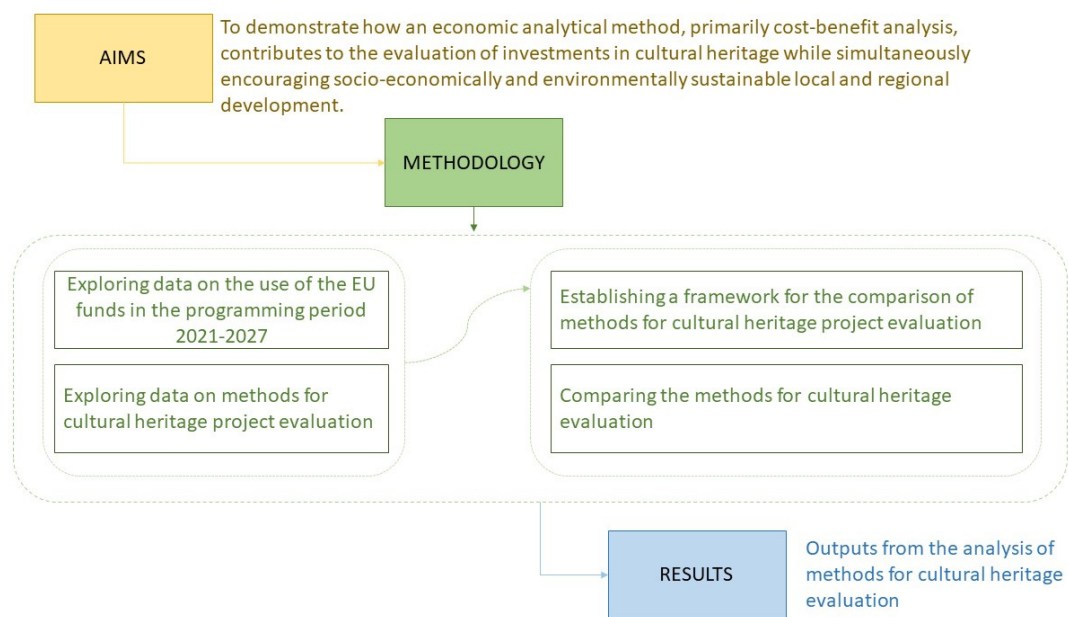
As to the main funds available for cultural heritage, based on the Parliament’s decision from December 16th, having in mind that the total allocation of the EU budget per heading “Cohesion, resilience and values” makes available €377.8 billion through the MFF, and adding to this €721.9 billion available from the NextGenerationEU instrument, it is clear that a paramount sum of €1099.7 billion is at disposal for this relevant heading in the forthcoming period. Also, within the “Single market, innovation, and digital budget” heading, also important for heritage projects, €132.8 billion will be available through the MMF with the additional €10.6 billion from NextGenerationEU. Thus, a total of €143.4 billion is foreseen for this purpose (European Parliament 2020b).

Furthermore, Table 2 indicates the availability of additional resources at disposal for some of the previously mentioned programmes relevant for heritage, based on the 2021–2027 MFF, the NextGenerationEU recovery instrument, and new own resources.

Along with Cohesion Policy (European Parliament 2020a) and other new instruments that were developed as the result of the outbreak of the 2020 crisis, there are other programs and initiatives that will make available meaningful funds for cultural heritage. In the aftermath of this unprecedented crisis, the abundant available resources are of paramount importance for cultural heritage, which is among the facets most seriously affected by the COVID-19 pandemic.

### 3. Materials and Methods

A qualitative methodology aiming to study the benefits and impacts of the chosen methods for assessing the value of cultural heritage projects, as well as the perception of opportunities for optimal use of financial resources, was used in comparing methods for the cost assessment of cultural heritage projects (Figure 1). The information used in this process was based on the results of literature overviews and publicly available documents, i.e., project newsletters, project reports, and project websites (quoted in references). Based on both theoretical and practical knowledge, an analysis of cost techniques was created. Characteristics relevant to project cost assessment were processed using a set of methods and tools selected by means of a qualitative analysis (Figure 1).

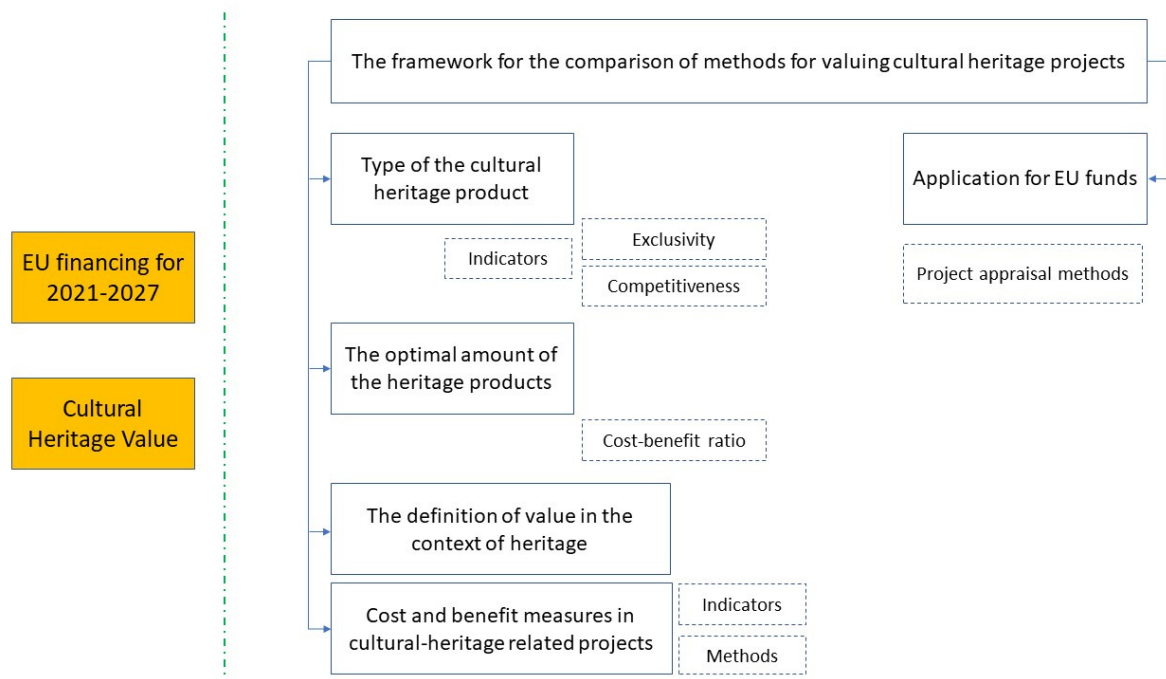


**Figure 1.** A flow chart summarising the aims–methodology–results path.

The comparison of methods for cultural heritage evaluation was made from the point of view of the use of EU funds in the programming period 2021–2027 (Figure 1). Since cultural heritage products differ from other products, a framework for the comparison of methods for cultural heritage project valuation was first established (Figure 2).

Primarily, before calculating the value of a cultural heritage project, the type of the project’s product should be determined. One of the starting indicators is exclusivity, considering the possibility to enjoy a product of heritage. Another indicator is non-competitiveness, meaning that two or more people can enjoy a heritage product without interference or preventing others from enjoying it. However, a situation that is not competitive can change when too many people enjoy a heritage product and cause interference in the enjoyment of other people. In this case, the use of billing allows the number of people enjoying a cultural heritage product to be limited so that they do not disturb each other, meaning that a situation of non-exclusivity is switched to a situation of exclusivity, i.e., the indicators have been changed. The characteristics of a non-exclusive and non-competitive heritage product are the same as the characteristics of a public good. Thus, a heritage product will behave similarly to a public good. Furthermore, we are interested in an optimal amount of heritage products. Therefore, the costs of protecting a heritage product should be calculated and compared with the benefits derived from the same heritage product. When the cost–benefit ratio is equal to 1, this means that the optimal number is reached where the cost equals the usefulness in the protection of the  $n$ -many heritage products, where  $n$  is any natural number. The costs relate to the amount necessary for the heritage preservation, restoration costs, maintenance costs, and running costs. Those costs can be

obtained from construction experts and operators of heritage products. The benefit relates to income or enjoyment that generates the value of the heritage, which forms the basis for the functioning of the methods that are commonly used for this purpose (Bakshi et al. 2014; Gisselman et al. 2017; Cronin and Cummins 2019).



**Figure 2.** The framework for the comparison of methods for valuing cultural heritage projects. Source: Authors.

The second part of the established framework for comparing the values of the cultural heritage projects refers to the rules of application for the EU funds regarding project assessment methods such as ex ante evaluation, feasibility analysis, cost–benefit analysis, cost-effectiveness analysis, environmental impact assessment, economic impact studies, and multi-criteria analysis. Furthermore, it takes into account context analysis and project objectives (socio-economic and political context), project identification, need analysis (such as a justification for the projects), feasibility and option analysis, financial analysis (such as the project’s commercial profitability and the amount of finance required), economic analysis (the contribution of the project to the welfare of the country or region, market impacts, non-market impacts, and indirect economic impacts), and risk assessment and sensitivity analysis as indicators for the evaluation of the methods to be used in cultural heritage project assessment (Figure 2).

### 3.1. The Framework for Comparing the Values of Cultural Heritage Projects: The Definition of Value in the Context of Heritage

The division of heritage value into tangible and intangible value implies a monetary form for tangible value and a non-monetary form for intangible value. The concept of total economic value (TEV) covers both value types and includes benefits generated by heritage through direct use (called the use value) as well as benefits arising from not using it (called the non-use value) (World Bank 2005). The tangible value can be direct (user benefits from direct consumption of the heritage product, i.e., it is the largest amount that a person is willing to pay for direct use of the heritage product), indirect (it comes from the benefit of secondary products and services in the form of savings in health care due to improvement of health), or an option value (for enjoying the heritage in the future, i.e., the amount a person is willing to pay to ensure the preservation of heritage products for future visits) (Crossik and Kaszynska 2016). Furthermore, the non-use value is divided into the request value (people preserve the heritage product for upcoming generations, i.e., the amount a



person is willing to pay to ensure the preservation of heritage products for the benefit of upcoming generations), altruistic value (people place the heritage product to be available for pleasure of others, i.e., the amount a person is willing to allocate for the preservation of heritage products to enable their continuous enjoyment by other people), and the value of existence (the pure use of the product for the future, i.e., the amount a person is willing to pay only to maintain the heritage product, even if it is not used).

The definition of value in the context of heritage is the largest amount of money that a person would be willing to pay to enable the heritage product to be enjoyed either personally or by others (Lim et al. 2014; Pacelli and Sica 2020).

### *3.2. The Framework for Comparing the Values of Cultural Heritage Projects: Cost and Benefit Measures in Cultural-Heritage-Related Projects*

The analysis of cultural heritage project valuation broadly considers the estimation of the economic conditions, macroeconomic variables (e.g., GDP, inflation rate), productive investments, technological innovation, interest rate, exchange rates, public debt, etc. It also assumes the identification of the projects' risks and opportunities. Such analysis may be included in the baseline for the choice of the evaluation method (Pacelli and Sica 2020).

Each method aims to calculate the total economic value of a heritage product (Throsby 2012). The most popular methods are cost–benefit analysis, the contingent valuation method, the travel cost method, and the hedonic regression model.

Indicators of the benefits of a heritage intervention are the collection of:

- Individuals' willingness to pay for the reduction or prevention of damages to cultural heritage; or
- Individuals' willingness to accept compensation to tolerate such damages (Lim et al. 2014).

Non-use values according to the hedonic pricing method can be measured through the following points:

- Individuals reveal their preferences for cultural heritage in the housing market;
- People value cultural heritage goods in terms of bundles of attributes, which may include non-market factors, like clean air or noise absence (Frey 1997);
- However, according to the travel cost method, the situation is different:
- Individuals may reveal their demand for heritage goods through their decisions to travel to specific locations;
- This technique is useful for assessing the benefits of cultural heritage places that are frequently visited by tourists (Mohamad et al. 2014).
- The contingent valuation method is based on:
- Individuals' willingness to pay for the benefits received from a change in the supply of this good;
- Individuals' willingness to accept compensation due to possible losses (Báez and Herrero 2012).

Considering individuals' willingness to pay as a suitable measure of changes in welfare provides a monetary scale for individual preferences.

#### *3.2.1. Cost–Benefit Method*

Cost–benefit analysis was introduced in 1884 by the French economist Dupuit. Besides being used in estimating cultural heritage projects, the cost–benefit method has wide applications in infrastructure projects, policy making, environmental policies, planning, and many other areas. This method measures the costs and benefits of alternative scenarios, investment plans, or development programs. It can provide monetary estimates of the value of heritage. Cost–benefit analysis generally deals with determining and comparing the present value of all expected costs and benefits of a project, in order to assess the justifiability of investing in its realisation. Ideally, based on the data obtained on costs and benefits, the net public benefit of undertaking the proposed activities within the framework of the analysed project is defined, usually as the difference or quotient between the benefits

and costs. When the indicator of net public benefits is positive or bigger than 1 (for the difference or quotient, respectively), the project should be accepted; when it is negative or less than 1, it should be rejected.

### 3.2.2. The Contingent Valuation Method

The contingent valuation method was originally proposed by the economist Davis (1963) and is now widely used in resource economy, especially in the USA. The contingent valuation method is also referred to in the literature as the technique of auction games. Based on the individual's personal attitude about the amount of money they are willing to pay to enjoy certain benefits or accept to tolerate damage, a surrogate market is formed. Data collection for analysis is conducted using a direct survey method or experimental techniques in which individuals respond to various incentives under laboratory conditions. The prerequisite for the application of this analytical technique is the prior determination of institutional frameworks. The procedure is conducted by preparing a survey on the price offered in advance of the relevant cultural heritage, and the examinee can accept or reject it. If the majority of respondents reject the offered price, it represents the maximum willingness to pay, and if the goal is to accept the offer, prices are systematically reduced until the minimum willingness to pay is achieved.

### 3.2.3. The Travel Cost Method

The travel cost method is the oldest analytical technique for the evaluation of cultural heritage goods and services. It was first used by economist Harold Hotelling in 1947 and has been formally used since 1966 by Clawson and Knetsch (Clawson and Knetsch 1966).

This method is used in travel situations to measure the amount people are willing to pay to visit a cultural heritage product (Statista 2021). It may include recreational compensation and time spent travelling as part of the total value. The travel cost method is based on an analysis of the impact of cultural heritage on the redistribution of consumer surpluses. Normally, it is used in estimating the demand for tourist services based on the utilisation of cultural heritage. The starting point is in the choice of the examinee, mainly at the level of households with similar characteristics (such as income, propensity to recreation, and distance of recreational goods). Travel costs and disposable income are simply quantitative, and the collection of data on the reasons for and propensity to travel (evaluation of the beauty of heritage, landscape, photography motifs, etc.) is carried out using the survey method, similar to the contingent valuation method.

### 3.2.4. The Hedonic Regression Model

The hedonic price estimation method is mostly used to assess heritage properties by breaking up the heritage buildings or historical sites into their constituent characteristics to obtain inferences of the value of each characteristic; this is done by calculating the price using an econometric model to show how the price would change in response to a change in the quality of the relevant attribute (Franco and Macdonald 2018). The hedonic price assessment method in the evaluation of sustainable use of cultural heritage is based on an assessment of the impact of indirect socio-economic and environmental factors on price trends in the market. This pricing method is commonly used to assess the impact of cultural heritage goods and services on the value of assets in close proximity and related to local communities. However, it can be used to assess the impact of different services created and conditioned by cultural heritage on the price of any good, provided that there is a complementary good (Lawton et al. 2020).

### 3.2.5. Indirect Assessment Procedures

Indirect evaluation procedures are usually used if the objective of the analysis is not to directly evaluate the goods and services of cultural heritage, but to define the links between the burden on visits, etc., and the consequences on heritage. The function of

damage incurred connects real physical damage with the level of heritage load; multiplied by unit price, this constitutes a function of financial damage.

Some earlier ratios have become standard indicators of certain characteristics of cultural heritage. Using the indirect assessment procedure, it is also possible to monetarily evaluate the usefulness of the introduction of a protective measure into the policy of protection and preservation of cultural heritage (Lawton et al. 2020). Multiple regression analysis is used to assess the function of physical damage and its connection with the level of pollution. Based on the calculation of the limit damage of a particular polluter, changes in emission quantity are identified by implementing a protective measure, while the avoided damage represents a useful effect of the implemented environmental policy.

#### **4. Results**

Preserving, restoring, and maintaining cultural heritage requires financial resources. The evaluation of heritage can be used to help decide which heritage should be protected and how many resources should be spent in its protection.

The decision on the most appropriate method for assessing the value of cultural heritage products depends on knowledge of what is being estimated. The heritage product is characterised by non-excludability and non-rivalry. However, the level of non-excludability and non-rivalry varies from one heritage product to the other, particularly when it changes the congestion of a product. Furthermore, the product thus loses its attractiveness to the private sector. Therefore, since there are no markets enabling the determination of the market value of a heritage product, the situation usually demands government funding. Thus, the evaluation of heritage products is important when decisions should be made on the allocation of resources, especially when deciding between the competing needs of heritage products and other public goods. The public good characteristics of a heritage product prevent its evaluation in the market as distinguished from other commodities such as retail goods (Pacelli and Sica 2020). The use or enjoyment of a heritage product by people who are interested in heritage determines the value of that product. Figure 3 shows that the concept of value in heritage is more complex. Value for a heritage product is not just a number. It is rather a combination of tangible and non-tangible value, called the total economic value (TEV), that further disaggregates into the use value and non-use value (Throsby 2012). The use value can be derived from direct use, indirect use, and the option to use. Meanwhile, the non-use value is derived from awareness of the importance of future generations' wellbeing, enabling them to enjoy the heritage, and valuing the already existing heritage. Compared to the non-use value, the use value is easier to estimate, but various studies have been conducted using different methods for valuing heritage. Depending on the kind of research, it can be determined what method is more suitable to estimate the different types of value. The commonly used methods are cost-benefit analysis, contingent valuation, travel cost, and the hedonic regression model (Figure 3).

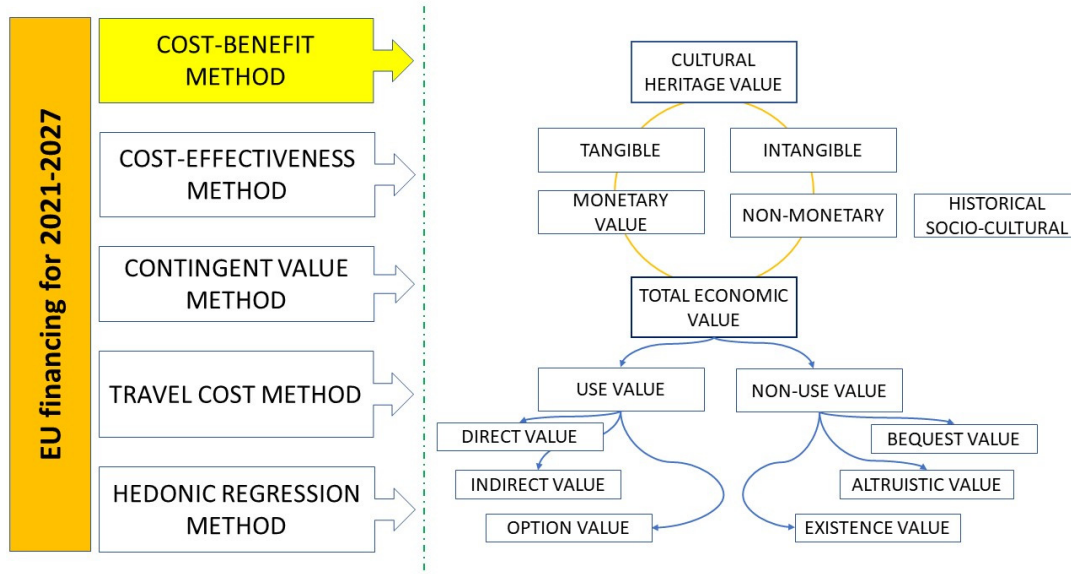


Figure 3. The commonly used methods in cultural-heritage-related project assessment. Source: Authors' compilation.

#### 4.1. Comparison of the Commonly Used Methods in Cultural-Heritage-Related Projects

Cost–benefit analysis can be partly perceived as a method that protects social interests in contrast to the utmost individualism of private interests. The important scope of this method is certainly in public investments (in transport infrastructure, education, health care, etc.), and in the past few decades it has been intensively used to assess the impact of various activities on cultural heritage. The aim of cost–benefit analysis is to collect as many factors and consequences as possible regarding a given project within the foreseen period of time. This facilitates the decision-making process on its public acceptability (Ramalhinho and Macedo 2019).

The contingent valuation method is most often used for evaluating public policies and making political decisions related to the development of local communities, especially for assessing the usefulness of conservation and protection in relation to exploitation costs for economic activities. Although it is a generally widely used analytical technique, the use of the contingent valuation method has recently been found to be questionable as to the accuracy of the results obtained (Throsby 2003). Several basic prejudices concern the application process. Strategic prejudices, better known as the problem of “free riders”, are reflected in analysts’ inability to determine with certainty the true preferences of examinees if they do not tell the truth, gain benefits, or avoid costs (Carman 2014). The main efforts of the contingent valuation method are to simulate the supply of quantitative and physically immeasurable values of cultural heritage to the local community on the real market. It is important to emphasise that this method is most often used to evaluate social factors when evaluating cultural heritage in preparation for cost–benefit studies (Pagiola 2001).

When people do not reveal the real value in expressing their willingness to pay, incorrect data are obtained. If the research is not taken seriously by the respondents or they are uninformed about the cultural site, problems occur in the use of the contingent value method. Furthermore, sampling can be a problem in the contingent value method, as non-users should be questioned as well as users in order to evaluate the existence, bequest, or option value. It has turned out to be quite difficult to establish a population of non-users and choose a representative group for survey (Kurowski et al. 2007).

The contingent valuation method can be used to assess the willingness to pay of various groups of beneficiaries, while, using the same indicator (Bakshi et al. 2014), the hedonic price regression model can examine the contribution of environmental quality as well. However, when there is a lack of data or when the prices do not reflect buyers’ and sellers’ valuation of a heritage product, the use of contingent value is more suitable (Pagiola 2001). For valuing heritage property, the hedonic regression model is the more

suitable method. The hedonic price regression models value cultural heritage products by using revealed preferences, but the case of too many variables that influence the value of the real state can be challenging (Lazrak et al. 2009).

Quantitative methods, such as cost–benefit analysis, are the best way to express the economic value of cultural heritage products due to their great credibility in presenting data in an objective form (prices) and direct influence on the business way of thinking that is important for decision makers and broadly for the whole society (De la Torre 2002).

The travel cost method also encounters several problems. The primary aim of the travel cost method is to appraise the value of the recreational services as the non-use value that the cultural site provides to visitors. The significant deficiency of this method is in the assumption that the valued site is the only purpose of the visit, while other visitor attractions are neglected (Kurowski et al. 2007; Armbrrecht 2014). It requires extensive and often costly activities of collecting and processing a large amount of data. It is assumed that the purpose of any journey to a certain cultural heritage good is only a visit to that place. If the travel is multi-purpose, then the sharing of costs according to those purposes becomes arbitrary and the method is no longer appropriate. The loss of some functions, for example, by increasing damage to the heritage due to destruction or increased visits, will result in a reduction in the number of visits and willingness to pay for a certain cultural asset (Statista 2021).

Considering the way of evaluating a cultural heritage product, the direct net impact of the cultural heritage product relies on proper identification of the main spending groups, while the indirect net impacts come from the induced effects of the direct net impacts (Alexandrakis et al. 2019).

#### 4.2. Cost–Benefit Analysis in the Cultural Heritage Context

The basic principles of cost–benefit analysis can be summarised as follows:

- The value of project consequences for an individual is the amount that he/she is willing to pay to enjoy the results concerning utility, or the amount that he/she is willing to pay to avoid consequences related to costs.
- If the consequences of the project are expressed in goods or services purchased or sold by consumers at certain prices, then the prices become a measure of value.
- In case of market imbalances or government intervention, willingness to pay may not correspond to market prices and should be corrected (accounting prices).
- If some of the effects of the project cannot be evaluated on the market, the most appropriate methods of mimicking market functions should be found.

Cost–benefit analysis can also be used to determine the target level (e.g., defining an optimal level of the quality of cultural heritage). The problem of determining an optimal quality of the cultural environment is determined by maximising net social usefulness, which is achieved when the border benefits of the quality of the cultural environment are equal to the border costs. Cost–benefit analysis usually shows the same results as maximisation of the function of social well-being, which is not surprising because it assumes that evaluation of both benefits and harms is possible, and that there is a function of social well-being. Although it is most frequently used in cultural environment protection projects and has the most solid theoretical basis, cost–benefit analysis does not offer ready solutions in decision making, nor does it call into question the predominant role of value and policy factors in this process.

#### 4.3. Cost–Benefit Method vs. Cost-Effectiveness Method

As opposed to cost–benefit analysis, using the cost-effectiveness analysis method, efforts are aimed at determining which of the proposed programmes ensures the achievement of the predetermined goal with the least possible costs. In general, it is used in cases where the result of any political process is a decision to achieve certain benefits with the sole criterion to achieve them with the least possible costs. As a rule, the benefits or objectives of the project in this analysis are not expressed in monetary units, nor are they included in

the study of the correctness of the decision taken initially. However, if there is already a decision, cost-effectiveness is an important procedure for ensuring the sustainable use of cultural heritage (Sagger et al. 2021).

Cost-effectiveness analysis becomes complex if it means simultaneously achieving several different objectives of the proposed solution. If, for example, the possibility of evaluating objectives according to monetary units is excluded in advance, the usefulness of the decision is calculated as the sum of different individual benefits. The process is identical to a cost-benefit analysis and the resulting indicators are, in fact, “prices” that reflect the relative importance of each objective. The resulting indicator of collective usefulness is related to costs through the cost-benefit ratio. However, compared to cost-benefit analysis, the fundamental difference in the analysis of multiple criteria or programming of multiple objectives is in recognising the fact that economic efficiency of cultural heritage is often not the only objective of investment.

#### *4.4. Risk-Benefit Comparison*

A risk-benefit comparison is a risk-benefit analysis; in fact, it is nothing but a cost-benefit analysis in the context of risk events. In risk-benefit analysis, particular attention should be paid to an appropriate cost measure. The analysis of the decision has developed to a great extent in the context of uncertainty about the outcome of the given activities. The simplest procedure implies the association of a certain degree of probability to expected benefits or costs. However, it is often not a problem in defining costs and benefits, but in assessing the probability of their happening in the future. Storing theory uses a payoff matrix—a matrix showing different outcomes of different choices. Payoff indicators are monetary net benefits of strategies in different cultures that can negatively or positively affect the final outcome, and the choice depends on the subjective attitude of the investor towards risk and uncertainty (risk-intolerance or risk-neutrality). However, the payoff matrix can be converted into a single indicator of net usefulness if an initial agreement is reached and an indicator of expected value is determined (Geçkil and Anderson 2009).

Simple ranking procedures represent a measurement of alternative projects compared to the reference list of criteria. Efforts are made to ensure that the selection of criteria reflects the specificity of each case and provides the possibility of judgement. The first step in the analysis is the initial ranking procedure based on alternatives that are subsequently evaluated. There are two basic ways to choose alternatives after they are ranked according to the given criteria. The simplest political approach consists of a ranking data presentation to decision makers, providing them with a choice. In a technocratic approach, analysts rank each alternative, which is an extremely comprehensive process resulting in a series of data. The starting point is to determine the relative value of criteria in a manner consistent with social preferences. The characteristic of ranking procedures, which contradicts cost-benefit analysis, is that they are particularly pragmatic and procedural and usually do not fit into any clearly defined theoretical framework.

## **5. Discussion**

### *5.1. Methods for Evaluating Cultural Heritage Projects*

Assuming that the proposed projects and development policies imply intensive use of the cultural heritage and of cost-benefit analyses, which explicitly select projects according to their efficiency, the precondition for collecting data on different consequences of the project is certainly the determination of what constitutes an improvement of the welfare of the society, i.e., the choice of the function of social well-being and the definition of the value judgement (Stolte and Fender 2007). By applying cost-benefit analysis in the evaluation of project effects, individual values defining numerous outputs, e.g., consumption or income, are introduced into the analysis. Regardless of the choice of decision-making rules in the analysis, it is necessary to determine the value criterion. Cost-benefit analysis uses prices as value indicators, and they act as guides towards increasing the well-being of society as a whole.

The cost–benefit analysis theory provides a strict explanation for the use of market prices, but it also gives reasons for the failure of market prices to provide accurate information on opportunity costs. It also enables simulation of market prices where there is no market, and usually highly valued goods can be included in the analysis from the same starting point as market goods.

In principle, almost all these methods for cultural heritage evaluation rely on a preferred public desirability scale and have much more in common with cost–benefit analysis than might seem at first sight. Their common aims are to explain the essential theoretical assumptions about consumer behaviour on the market, how to determine public desirability, and how to perform a grading.

The decision makers need an effective tool to help them in choosing which projects to finance. Cost–benefit analysis offers the possibility of choosing an optimal project using price as the main indicator.

### *5.2. Limitations on the Use of Economic Analytical Methods in the Evaluation of Cultural Heritage Projects*

In the economy of culture, the problem of irreversibility is explained by comparing the profits from conservation and development over a certain period of time. The gains from the preservation of cultural heritage can be quantitatively evaluated by one of the previously mentioned analytical methods. This indicator also represents a loss of profit from preserving cultural heritage if non-sustainable use occurs (Mason 2008). The development is ongoing on the preserved resources and on the increase in value due to their enjoyment. The exceptional care for the preservation and sustainable use of cultural heritage over the past few decades has intensified the growing willingness to pay for their preservation. One of the reasons for willingness to pay is an increase in real income, as well as an increase in the demand to enjoy preserved cultural heritage, which increases its utility value (Hanley and Craig 1991).

Economic analytical methods for evaluating the consequences of economic activities based on cultural heritage (especially the cost–benefit analysis method) are commonly used by public institutions when deciding on project financing or the justifiability of development policy measures. Although the analysis procedures imply predetermined rules in the implementation of the evaluation procedure, there is still a possibility of concealing the actual facts and adjusting the results of the analysis to unilateral decisions. If the institutions that test the projects are interested in their realisation, it is possible to adjust the values so that the project passes the test of any of the evaluation techniques used. The most sensitive areas are the choice of the discount rate and the definition of the population sample.

For example, institutions, particularly state institutions, can lobby for discount rate changes in order to accept and “pass” the project they advocate. If efforts are aimed at reducing public expenditures, by setting higher discount rates for projects financed by budget funds, fewer projects will pass the test. The selection of population samples may also affect the results. If it means a significant development improvement aimed at the protection and restoration of cultural heritage envisaged by the implementation of a particular project, the selection of the local population only requires unilateral decision-making procedures. However, if a broader choice is made, for example, at the state level, and the project is financed by budget funds, the possibility of allocating funds will also be shown, and the decision makers will gain a broader insight from the analysis by selecting a sample of the population at the local level. The fact is that many countries have shown increased sensitivity to preserving their cultural heritage, especially in the project planning phase.

General criticism of the utilisation of cost–benefit analysis within development projects starts from the understanding of fairness, resource reallocation, evaluation of usefulness, and determination and utilisation of accounting prices. In the neo-classical economy of prosperity, the economic value is determined by effective demand, i.e., readiness of payment, which must be supported by the possibility of payment, which, in reality, does not

have to be the case. The theoretical basis of cost–benefit analysis is in the modern economy of prosperity, which presupposes analysis of only ordinarily measurable preferences. However, cost–benefit analysis assumes cardinality by adding monetary measures of utility to show how much more desirable the project will ultimately be than its alternatives, rather than just ranking alternatives. Even if the measurability of usefulness was accepted and the money was accepted as a reasonable approximation of the measure, cost–benefit analysis could not allow objective selection from among the alternatives offered. There is no way to decide how to assess different individual evaluations, even when the willingness to pay is accepted as a measure of usefulness.

A further criticism of cost–benefit analysis is that it treats both gains and losses equally, and it does not deal with who actually wins and who loses. This problem was considered by Gramlich (1990), who also noted that, contrary to economic logic, society can encourage projects with negative net present values if their distributive impacts are desirable and are a more efficient way to redistribute income than the next best alternative (e.g., tax system).

Critics of cost–benefit analysis also analyse the Kaldor–Hicks criterion of resource realisation, which is desirable if the winners can compensate for the loss and still be in a better asset situation. There is no real compensation to be made at all. Over time, the use of transfers could be assumed to enable systematic redistribution resulting from the application of the Kaldor–Hicks criterion. However, if these transfers are avoided, for example, due to transaction costs, then the application of cost–benefit analysis results may lead to severe distribution errors. In addition, avoiding compensation for loss in this context may be considered morally unacceptable. Causing damage is not equal to causing good. The acceptance of moral limitations that would limit the economic system can be seen as the adoption of a rights-based philosophy. Restrictions on economic processes in recent literature are mentioned as limitations on sustainability.

With general criticism of the practical utilisation of cost–benefit analysis, emphasis is placed on those problems that are particularly relevant for its implementation in the evaluation of cultural heritage goods and services. The concept of consumer sovereignty, which is central to most of the economics of culture, is also becoming questionable. Therefore, it is more appropriate to impose some scientific and politically predetermined limitations on economic activities (e.g., the minimum level of intervention and the limitation of pressure on heritage).

With intensive scientific and research efforts aimed at understanding and solving the problem of the valuation and sustainable use of cultural heritage, economic theory and practice is moving away from analysing market values only. Efforts are directed towards finding methods for assessing the existential value of many social, historical, and similar aspects of heritage. Torrieri pointed out community maps as a wide-spread participatory tool in the assessment of the social value of cultural heritage (Torrieri et al. 2021). However, in the neo-classical utilitarian framework of the economy, with exclusively human beings with innate value, the quantitative expression of the significance of certain historical and cultural value by the cost–benefit analysis method is still questionable.

## 6. Conclusions

Although there are a number of economic methods that can be used in the evaluation of cultural heritage, depending on the specifics of the analysed project, cost–benefit analysis is the simplest and most obvious. It deals with determining and comparing the present value of all expected costs and benefits of a project, in order to assess the justifiability of investing in its realisation. Starting from the protection, conservation, and sustainable use of cultural heritage, cost–benefit analysis completes the study on the justification of development projects and is used to calculate the ratio between the costs of controlling the exploitation of the heritage and the benefits resulting from the implemented conservation and sustainable use measures.

Since most projects related to the conservation and sustainable use of cultural heritage cover benefits and costs for which there is no evident market, three procedures are usually



used to ensure monetary measures of utility: the choice of a surrogate market, the collection of data (by direct survey) on the preferences of individuals and their willingness to pay, and calculation of the ratio of pressure on the cultural heritage in relation to preservation of its cultural and ecosystem benefits.

Cost–benefit analysis is an important tool for decision making, especially when gathering information important to determining whether a particular activity is desirable or creates the loss of some functions of cultural heritage and reduces the welfare of society. Of course, this is not the only way to evaluate either the goods and services of a cultural heritage or damage to the cultural heritage. Alternatives are simple ranking procedures, cost and efficiency analysis, multiple-criteria analysis, risk–benefit analysis, decision analysis, heritage impact assessment, and some more complex economic models. However, any process of rational decision making is worth the advantages and shortcomings of a strategic decision. The ways in which these advantages and disadvantages are compared vary according to the type of decision-making rules or framework used.

Market distortions are reflected through prices that incorrectly show marginal social costs and profits. If these measures cannot be observed accurately, then there will be errors in resource allocation, resulting in efficiency loss. The goods and services of cultural heritage are most often underestimated (including the cases where they do not have any prices due to the failure of the system of rights related to private property), so it is necessary to define accounting prices. Interest groups may lobby decision-making agencies to adopt certain values for accounting prices, the discount rate, and other aspects of the project under assessment. Institutions responsible for carrying out cost–benefit analysis may design cost–benefit analysis in such a way as to lead to results that maximise their usefulness, contrary to the best outcome for society.

All methods of quantitative evaluation of investments and sustainable use of cultural heritage are limited in their applicability, even if their theoretical assumptions are met in their entirety. For example, the method of evaluating the most commonly used contingent is most effective if the analysed project considers the market good or service (where there is a possibility of exchange), which excludes many aspects of cultural heritage. The travel cost method is limited to defining certain locations and the level of heritage preservation. Indirect evaluation procedures depend on the possibilities and choice of a substitute for cultural heritage goods and services, which are often missing.

The advantages and recommendations for using cost–benefit analysis (CBA) to evaluate investments and sustainable use of cultural heritage are as follows:

- CBA promotes transparency—the results of a well-executed cost–benefit analysis can be clearly linked to the assumptions, theory, methods, and procedures used in it, which improves accountability;
- CBA takes a community-wide perspective by encouraging decision makers to take account of all the positive and negative effects of a proposal and discouraging them from making decisions based only on the impacts of a single group within the community;
- CBA promotes comparability by quantifying the impacts of proposals in a standard manner, assists in the assessment of relative priorities, and encourages consistent decision making;
- CBA is useful for decisions by governments (project selection, timing, size);
- CBA can help to select the best project alternative;
- Assumptions are important for the outcomes of CBA.

Cost–benefit analysis can help in shaping decisions by quantifying the impacts of proposed cultural heritage projects on different groups within society. The analysis of costs and benefits in evaluating cultural heritage projects would be useful, and it is recommended to establish guidelines for its implementation at the EU or national and regional levels.

The management and availability of cultural heritage goods and services, together with social and educational issues, relate to areas where collective or public values are particularly emphasised. The way individuals observe decisions on the management and use of cultural heritage differs according to the degree of connection between their

personal interests and the availability of certain cultural resources. Civic values are most relevant when deciding on heritage management. However, the cost–benefit analysis method reflects the consumer values that people put on the market before civic values. Thus, political processes, with lobbying reflecting both the direction and intensity of civil preferences, become a tool for deciding on investment in and sustainable use of cultural heritage.

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## References

- Alexandrakis, George, Constantine Manasakis, and Nikolaos A. Kampanis. 2019. Economic and societal impacts on cultural heritage sites, resulting from natural effects and climate change. *Heritage* 2: 279–305.
- Armbrecht, John. 2014. Use value of cultural experiences: A comparison of contingent valuation and travel cost. *Tourism Management* 42: 141–48. [CrossRef]
- Arnsperger, Christian, and Yanis Varoufakis. 2006. What is neoclassical economics? The three axioms responsible for its theoretical oeuvre, practical irrelevance and, thus, discursive power. *Panoeconomicus* 1: 5–18. [CrossRef]
- Augustyn, Anna Maria, Gabor Soos, Orsolya Lazanyi, Barbara Bodorkos, and Gusztav Nemes. 2015. Revealing the socio-economic potential of cultural heritage. Paper presented at the Conference of the International Association for Impact Assessment, Florence, Italy, April 20–23.
- Báez, Andrea, and Luis César Herrero. 2012. Using contingent valuation and cost-benefit analysis to design a policy for restoring cultural heritage. *Journal of Cultural Heritage* 13: 235–45. [CrossRef]
- Bakshi, Hasan, Daniel Fujiwara, Ricky Lawton, Susana Mourato, and Paul Dolan. 2014. *Measuring Economic Value in Cultural Institutions. A Report Commissioned by the Arts and Humanities, Research Council's Cultural Value Project*. Swindon: Arts and Humanities Research Council.
- Carman, John. 2014. Heritage value: Combining culture and economics. Paper presented at Cultural Value Workshop, Birmingham, UK, April 24–25; Swindon: Arts and Humanities Research Council.
- Cheng, Sao-Wen. 2006. Cultural goods creation, cultural capital formation, provision of cultural services and cultural atmosphere accumulation. *Journal of Cultural Economics*. 30: 263–86. [CrossRef]
- Clawson, Marion, and Jack L. Knetsch. 1966. *Economics of Outdoor Recreation*. Baltimore: John Hopkins Press for Resources for the Future.
- Cronin, John, and Tony Cummins. 2019. *Cultural Heritage*. EIAR Chapter 11, Cunnane Stratton Reynolds, Land Planning & Design. Cork: Longview Estates Ltd.
- Crossik, Geoffrey, and Patrycja Kaszynska. 2016. *Understanding the Value of Arts & Culture. The AHRC Cultural Value Project*. Swindon: Arts and Humanities Research Council.
- Davis, Robert Kenneth. 1963. *The Value of Outdoor Recreation: An Economic Study of the Maine Woods*. Ph.D. dissertation, Harvard University, Cambridge, MA, USA. Unpublished.
- De la Torre, Marta. 2002. *Assessing the Values of Cultural Heritage*. Research Report. Los Angeles: The Getty Conservation Institute.
- Digital Europe Programme (DIGITAL) and European Digital Innovation Hubs (EDIH). 2021. Available online: <https://eufundingoverview.be/funding/digital-europe-programme> (accessed on 6 August 2021).
- European Commission. 2017. *Cultural Heritage: Report*. Special Eurobarometer 466, October 2017. Brussels: European Union.
- European Commission. 2020a. Horizon Europe—Commission Welcomes Political Agreement on Horizon Europe, the Next EU Research and Innovation Programme. Available online: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_20\\_2345](https://ec.europa.eu/commission/presscorner/detail/en/IP_20_2345) (accessed on 6 August 2021).
- European Commission. 2020b. Recovery Plan for Europe. Available online: [https://ec.europa.eu/info/strategy/recovery-plan-europe\\_en](https://ec.europa.eu/info/strategy/recovery-plan-europe_en) (accessed on 6 August 2021).
- European Commission. 2020c. The Recovery and Resilience Facility. Available online: [https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility\\_en](https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en) (accessed on 6 August 2021).

- European Council. 2020. European Council Conclusions, 17–21 July 2020. Conclusions on the Recovery Plan and Multiannual Financial Framework for 2021–2027. Available online: <https://www.consilium.europa.eu/en/press/press-releases/2020/07/21/european-council-conclusions-17-21-july-2020/> (accessed on 6 August 2021).
- European Film Agency Directors. 2020. EFAD Welcomes the Increased Budget for Creative Europe. Available online: <https://europeanfilmagencies.eu/news-publications/our-press-releases/254-efad-welcome-the-increased-budget-for-creative-europe> (accessed on 6 August 2021).
- European Group on Museum Statistics. 2018. European Group on Museum Statistics. Available online: [https://www.egmus.eu/sl/statistics/choose\\_by\\_year/](https://www.egmus.eu/sl/statistics/choose_by_year/) (accessed on 6 August 2021).
- European Parliament. 2020a. Cohesion Policy Measures in Response to the COVID-19 Pandemic, Policy Department for Structural and Cohesion Policies. Available online: [https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/652223/IPOL\\_ATA\(2020\)652223\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/652223/IPOL_ATA(2020)652223_EN.pdf) (accessed on 6 August 2021).
- European Parliament. 2020b. EU Budget 2021 Approved: Supporting the Recovery. *European Parliament News*. Available online: <https://www.europarl.europa.eu/news/en/press-room/20201211IPR93640/eu-budget-2021-approved-supporting-the-recovery> (accessed on 6 August 2021).
- European Parliament. 2020c. Parliament Approves Seven-Year EU Budget 2021–2027. Available online: <https://www.europarl.europa.eu/news/en/press-room/20201211IPR93621/parliament-approves-seven-year-eu-budget-2021-2027> (accessed on 6 August 2021).
- Franco, Sofia, and Jacob L. Macdonald. 2018. The effects of cultural heritage on residential property values: Evidence from Lisbon, Portugal. *Regional Science and Urban Economics* 70: 35–36. [CrossRef]
- Frey, Bruno S. 1997. Evaluating cultural property: The economic approach. *International Journal of Cultural Property* 6: 231–46. [CrossRef]
- Geçkil, İlhan Kubilay, and Patrick L. Anderson. 2009. *Applied Game Theory and Strategic Behavior*, 1st ed. Boca Raton: Chapman and Hall/CRC.
- Girard, Luigi Fusco, Francesca Nocca, and Antonia Gravagnuolo. 2019. Matera: City of nature, city of culture, city of regeneration. Towards a landscape-based and culture-based urban circular economy. *Aestimum* 74: 5–42.
- Giraud-Labelle, Claire, Kate Pugh, Sneška Quaedvlieg-Mihailović, Joanna Sanetra-Szeliga, Brian Smith, Aziliz Vandesande, and Clara Thys. 2021. *Cultural Heritage Counts for Europe. Project Report*. Krakow: CHCfE Consortium, International Cultural Centre.
- Gisselman, Fredrik, Scott Cole, Josefin Blanck, Matleena Kniivilä, Nora Skjeerna Hansen, and Elin Fornbacke. 2017. *Economic Values from the Natural and Cultural Heritage in the Nordic Countries*. Copenhagen: Nordic Council of Ministers.
- Gramlich, Edward M. 1990. *Guide to Benefit-Cost Analysis*. Englewood Cliffs: Prentice-Hall.
- Hanley, Nick, and Stephen Craig. 1991. Wilderness development decisions and the Krutilla-Fisher model: The case of Scotland's flow country. *Ecological Economics* 4: 145–64. [CrossRef]
- Klamer, Arjo. 2004. *Social, Cultural and Economic Values of Cultural Goods. Culture and Public Action*. Edited by Vijayendra Rao and Michael Walton. Palo Alto: Stanford University Press.
- Kurowski, Lech, Bartłomiej Rodawski, Andrzej Sztando, and Jerzy Ładysz. 2007. Selected Methods of Estimation of the Cultural Heritage Economic Value with the Special Reference to Historical Town District Adaptation. In *Urban Heritage: Research, Interpretation, Education*. Vilnius: Vilnius Gediminas Technical University Publishing House, pp. 13–18.
- Lawton, Ricky N., Daniel Fujiwara, Madeleine Arber, H. Maguire, Jack Malde, Peter O'Donovan, Abigail Lyons, and Giles Atkinson. 2020. *DCMS Rapid Evidence Assessment: Culture and Heritage Valuation Studies—Technical Report*. London: Simetrica Jacobs, p. 110.
- Lazrak, Feroek, Peter Nijkamp, Piet Rietveld, and Jan Rouwendal. 2009. *Cultural Heritage: Hedonic Prices for Non-Market Values. Research Memorandum; No. 2009-49*. Amsterdam: Faculteit der Economische Wetenschappen en Bedrijfskunde.
- Lim, Yoke Mui, Suet Leng Khoo, and Kean Siang Ch'ng. 2014. Residents' perspectives towards conservation in George Town World Heritage City: A Post-Unesco Listing scenario. *Journal of Urban and Regional Analysis* 6: 161–80.
- Loulanski, Tolina. 2006. Cultural heritage in socio-economic development: Local and global perspectives. *Environments Journal* 34: 51–69.
- Mason, Randall. 2008. Be interested and beware: Joining economic valuation and heritage conservation. *International Journal of Heritage Studies* 14: 303–18. [CrossRef]
- Mohamad, Junainah, Ismail Suriatini, and Ab Rahman Rosdi. 2014. The need to improve existing method of valuation for cultural heritage asset. Paper presented at the 4th International Conference on Heritage and Sustainable Development, Guimarães, Portugal, July 22–25; Edited by Rogério Amoêda, Sérgio Lira and Cristina Pinheiro. Barcelos: Green Lines Institute for Sustainable Development, pp. 463–72.
- Pacelli, Vincenzo, and Edgardo Sica. 2020. *The Economics and Finance of Cultural Heritage: How to Make Tourist Attractions a Regional Economic Resource*. Abingdon: Routledge.
- Pagiola, Stefano. 2001. Valuing the Benefits of Investments in Cultural Heritage: The Historic Core of Split. Paper presented at the International Conference on Economic Valuation of Cultural Heritage, Cagliari, Italy, October 19–20.

- Pasikowska-Schnass, Magdalena. 2018. Cultural Heritage in EU Policies, European Union, 2018. Available online: [https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS\\_BRI\(2018\)621876#:~:text=Cultural%20heritage%20has%20been%20taken%20into%20consideration%20in,and%20crafts%2C%20and%20thereby%20develop%20their%20cultural%20tourism](https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2018)621876#:~:text=Cultural%20heritage%20has%20been%20taken%20into%20consideration%20in,and%20crafts%2C%20and%20thereby%20develop%20their%20cultural%20tourism) (accessed on 6 August 2021).
- Ramalhinho, Ana Rita, and Filomena Maria Macedo. 2019. Cultural heritage risk analysis models: An overview. *International Journal of Conservation Science* 10: 39–58.
- Sagger, Harman, Jack Philips, and Mohammed Haque. 2021. Valuing Culture and Heritage Capital: A Framework towards Informing Decision Making. Department for Digital, Culture Media & Sport, CHC, UK. Available online: <https://www.gov.uk/government/publications/valuing-culture-and-heritage-capital-a-framework-towards-decision-making/valuing-culture-and-heritage-capital-a-framework-towards-informing-decision-making> (accessed on 6 August 2021).
- Statista. 2021. Cultural Heritage: Frequency of Visits among French 2019. Available online: <https://www.statista.com/statistics/1013209/visiting-cultural-heritage-sites-frequency-france/> (accessed on 6 August 2021).
- Stolte, John F., and Shanon Fender. 2007. Framing social values: An experimental study of culture and cognition. *Social Psychology Quarterly* 70: 59–69. [CrossRef]
- Throsby, David. 2003. Determining the value of cultural goods: How much (or how little) does contingent valuation tell us? *Journal of Cultural Economics* 27: 275–85. [CrossRef]
- Throsby, David. 2012. Heritage economics: A conceptual framework. In *The Economics of Uniqueness*. Edited by Guido Licciardi and Rana Amirtahmasebi. Washington: The World Bank Group, pp. 45–74.
- Torrieri, Francesca, Alessandra Oppio, and Marco Rossitti. 2021. Cultural heritage social value and community mapping. In *New Metropolitan Perspectives. NMP 2020. Smart Innovation, Systems and Technologies, Vol 178*. Edited by Carmelina Bevilacqua, Francesco Calabrò and Lucia Della Spina. Cham: Springer. [CrossRef]
- World Bank. 2005. *How Much Is an Ecosystem Worth? Assessing the Economic Value of Conservation*. Washington: World Bank Publications.





Article

# Overview of Social Assessment Methods for the Economic Analysis of Cultural Heritage Investments

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**Abstract:** This paper provides an overview of methods for assessing social impacts, their achievements, and possibilities of application in everyday practice for assessing the worth of investments in cultural heritage conservation, as well as its sustainable use. It gives an overview of available methods for social assessment and points to a set of interdisciplinary indicators by which those impacts can be evaluated. Possibilities to use social impact analysis in the assessment of cultural heritage are presented in this paper through two case studies in the Republic of Croatia: the implementation of social evaluation management plan for the old town of Buzet and the evaluation of social effects of investing in the museum Ivana's House of Fairy Tales. Some qualitative indicators of the collected surveys related to social effects are described, while the analysis of the availability of such indicators and the scientific basis of the collected answers are provided. In conclusion, the contribution of the methodological tools used and social impact assessments in the evaluation of cultural heritage interventions are presented, while suggestions are made for various decision-makers on those broader methods and benefits compared with the use of only financial and economic impact evaluations.

**Keywords:** heritage evaluation; sociological analytical methods; sociologic impact assessment; social performance evaluation



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## 1. Introduction

Cultural heritage (CH) is a complex concept that encompasses significant experiences of various types of human existence. In recent decades, the academic discourse on cultural heritage has increasingly questioned the very notion of what cultural heritage is, trying to put in balance its intrinsic and instrumental values for society (Winter 2013; Winter and Waterton 2013; Social Platform for Holistic Heritage Impact Assessment (SoPHIA) Consortium 2020a). The policy-oriented literature perceives heritage both as a common asset and a shared responsibility, as well as a cornerstone of sustainable development and a way to improve people's lives and living environments (Council of the European Union 2014; Council of Europe 2017; CHCfE Consortium 2015). Recognized as a strategic resource for a sustainable Europe, cultural heritage is currently being mainstreamed beyond cultural policy into other national and European policies, thus aiming at creating added value to our society. Therefore, the practice of governing, managing, and evaluating cultural heritage have been put in the spotlight of researchers and practitioners, and issues related to CH and its relationship with society, economy, and territory have been analysed, as well as current evaluation processes needed for ensuring effective sustainable and inclusive heritage policies that include facets of heritage sustainability incorporating social, cultural, economic, and environmental aspects, thus calling for the holistic approach in evaluation of heritage projects (Daldanise 2020; Cerreta and Giovane di Girasole 2020; Jelinčić and Tišma 2020; Marchiori et al. 2021).

Preserving and using cultural heritage in a sustainable manner entails significant costs and demands financial investments. However, financial studies and feasibility analyses

prepared by the public sector, which mainly disposes with such heritage, are rare and a return on financial investment is seldom expected. It is important to emphasize that financial studies and the analysis of economic evaluation alone are not enough in assessing the benefits cultural heritage sites provide to society and the local community. Thus, a broader understanding of heritage placing communities in focus and involving them in making decisions about heritage valorization have been advocated for, as well as ensuring evaluation methods that can balance the economic, social, and environmental impact of heritage (Council of Europe 2005; Cerreta and Giovene di Girasole 2020; Marchiori et al. 2021).

Therefore, social management of cultural heritage is significant for the overall economic management and sustainable growth of society. This significance implies progress toward partnerships, new administrative plans, and creative business models which handle cultural heritage in a holistic manner. The tendencies recognized via the literature target social duty and socially accountable heritage administration, heritage literacy, and the general well-being of society (Carrà 2016).

In order to ensure supportive impacts of interventions in cultural heritage on all dimensions of society, Lingayah et al. (1996) suggested that the purpose of cultural activities should be the starting point for measuring their outcomes, against which their effectiveness or impact can be estimated (Lingayah et al. 1996). Identification of the most effective instruments and tools to measure the impacts of such interventions should help cultural operators, practitioners, academics, and policy-makers to establish shared quality standards that address both the creation of policies and to direct interventions.

The Europa Nostra “Cultural Heritage Counts for Europe” report (CHCfE Consortium 2015) emphasized the relevance of a holistic approach according to the four aspects of use—social, economic, cultural, and environmental—and has introduced positive and negative impacts into the analyses of interventions, explaining the link between (policies, projects, initiatives) objectives and impact. As the impact of an intervention can be positive or negative, intended or unintended, direct or indirect, and as an observed intervention may not be the only factor contributing to the change, it is necessary to identify the cause of the observed changes as well as the project’s contribution towards the changes in question. As the practice points to the fact that the experts’ perspective mostly overrides the expertise of those who are more likely to be affected by the intervention (i.e., local stakeholders) (Mälkki and Schmidt-Thomé 2010; de la Torre 2002), this reinforces the Faro’s convention (Council of Europe 2005) focusing on “the public interest associated with elements of the cultural heritage in accordance with their importance to society” (article 5). It provides a policy framework for conceptualizing cultural heritage as a common good and points to the importance of citizens’ involvement in the process of heritage valorisation and evaluation processes in the already existing impact assessment (IA) methods that measure the relationship between strategic decisions about heritage resources and change for people and their environment.

IA could be defined as a process of identifying a measurable outcome in which some heritage intervention affects certain changes in the life of a community. Therefore, impact should assume a specific form of intervention which brings up some kind of change, while the effects of such intervention can be evaluated in regard to the purpose of the intervention as well as in regard to the potential needs of benefiting the stakeholders. It represents a distinction between what would occur anyway, and what would manifest as a consequence of a certain action or intervention (ForHeritage Project 2021; Social Platform for Holistic Heritage Impact Assessment (SoPHIA) Consortium 2021).

By means of an evaluation process using the impact assessment tool, cultural heritage institutions can collect actionable evidence that should serve heritage institutions in reviewing their current situation, using both qualitative and quantitative methods. The literature review concerning the presently used economy-focused IA methods (Social Platform for Holistic Heritage Impact Assessment (SoPHIA) Consortium 2020a) points to quantitative methods measuring impact that can include a cost–benefit analysis, cost–effectiveness analyses or, for example, the contingent valuation method, as well as often used qualitative

methods such as the focus group method, the structured interview, expert analysis (e.g., Delphi method), policy analysis, impact value chain analysis, social impact analysis, etc.

Complementing this mainstream approach to evaluations that place the main focus on economic impact, social impact evaluation includes monitoring adjustments to people's lifestyle, their local area, surroundings, political frameworks, individual property rights, well-being and prosperity, their concerns and goals, and other factors (IAIA, International Association for Impact Assessment 2015). These changes can be potentially revealed both at individual and at collective levels (in a family/household, circle of friends, government agency, community/society in general) and they can be experienced in a perceptual, cognitive, or even corporeal (bodily, physical) manner (Corvo et al. 2021).

According to Rogers (2014), the theory of change explains 'impact' as the social changes that are achieved and kept through a long time period by interacting with a given program or project (i.e., heritage intervention) as well as the changes created with other factors and conditions.

In the framework of analysing social effects of investment in cultural heritage, social impact assessment (SIA) is the most comprehensive method. In line with Frank Vanclay, SIA can be contemplated as "an umbrella or overarching framework that embodies the evaluation of all impacts on humans and on all the ways in which people and communities interact with their sociocultural, economic, and biophysical surroundings" (Vanclay 2003, p. 7). SIA covers all aspects associated with managing social issues (Vanclay 2019). The process assumes a wide range of different impacts relevant to cultural heritage projects such as: benefit sharing; community development, engagement and resilience; empowerment; immigration and the inclusion of the more vulnerable groups; ensuring the means of living in a modern time; acquiring local goods; project organized relocation; impacts on social life and well-being; work license; contributor commitment; determining key social effects and alleviating issues.

SIA deals with a wide variety of tasks (IAIA, International Association for Impact Assessment 2015) specifically targeting the synergy of the project with the local area's society. According to Takyi (2014) the phases in performing SIA involve:

- The definition of the suggested project (scoping);
- Data collection and the establishment of a baseline approach;
- The estimation and calculation of summative social outcomes;
- The establishment of substitute tasks;
- The creation of a mitigation policy.

Over the 50 years since its creation, SIA has continued to develop and its practice has improved over time (Vanclay 2019). The effective implementation of SIA requires a genuine engagement of the community—that is, a meaningful interaction and dialogue in good faith, and all interested parties must be guaranteed the possibility to influence decision-making. Despite the rhetoric of independence, SIA is usually commissioned by the project proposer and thus there is certain risk concerning co-opting the impact assessment consultants; bias in the selection of identifiers to be followed; low involvement of local stakeholders; bias in selecting members of focus groups; and most importantly, bias in interpreting and analysing results, etc.

The existing methods that could qualify as holistic, cross-domain models for evaluating cultural heritage that have been proven successful are not numerous. One such model is Impacts 08, developed initially for assessment of the Liverpool European Capital of Culture, which progressively turned into the model for assessing ECoCs in general (Phythian-Adams et al. 2008; Garcia et al. 2010).

The Impacts 08 approach has opted for an in-depth analysis of the urban context in order to ensure adequate regeneration measures, not just for the events linked to the ECoC, but for the city as a whole in general. To do so, Impacts 08 created a holistic approach that went beyond quantitative indicators, thus making the history of the local community in the city hosting the event a crucial point of the research. The Impacts 08 evaluation procedure started almost at the beginning of the project and continued even after the



ECoC's year. A practice of planning, monitoring, and (short-term and medium-term) evaluating the expected impacts was developed within the ECoC's program. Partnerships on local, national, and international levels were encouraged in order to build networks that will continue to live on even after the ECoC.

The literature recognizes the environmental impact assessment (EIA) for providing structure and content to a combined model known as the environmental and social impact assessment (ESIA) model, seeking to integrate EIA and SIA into a single process, which equally values social and environmental impacts. ESIA is widely applied by multilateral donors, international agencies, private and global credit institutions, and international agencies to guide decisions on financing development projects (Dendena and Corsi 2015). Although widely used, ESIA is much less analysed in the literature than EIA. The difference between ESIA and EIA varies and depends on the definition of "environment".

Additionally, as cultural heritage demands considerable investments for their renewal and maintenance that often surpass the budgets of owners, local communities and other interested users, the literature suggests a cost–benefit analysis (CBA) as the evaluation method quantifying the impacts of proposed cultural heritage projects on different groups within society (Tišma et al. 2021). During the CBA implementation, qualitative methods are used as well that identify and monetarily express sociological factors.

The goal of this paper is to demonstrate how existing social impact assessment methods that we have mapped within the course of the recently completed SoPHIA project (Social Platform for Holistic Heritage Impact Assessment (SoPHIA) Consortium 2020a, 2020b) contribute to the economic breakdown of contributions to cultural heritage while simultaneously encouraging a holistic view of the overall evaluation of heritage and the contribution of heritage to the local community. Using the snowballing approach, in which both academic sources and policy documents have been consulted, the research conducted focused on current trends, gaps, and opportunities of the current level of impact assessment identified in the field, as well as strategic and policy-relevant issues identified in the impact assessment-related literature.

Research questions were:

1. How are social assessment methods applicable in the analysis of the investments in cultural heritage?
2. What is the role of social assessment methods in the holistic view of the overall evaluation of cultural heritage in the local community?

Therefore, an increasingly important element is certainly social justification of such investments in cultural heritage. Their importance to the local community, well-being for the local population, interpretation of heritage, historical value, and the like are just some of the factors that are often overlooked. This is caused by insufficiently clear methods of evaluating social impacts, the scope of these methods, and data sources for analysis. Therefore, this paper provides an overview of methods of social impacts' evaluation, their achievements, and possibilities of application in everyday practice for evaluating investments in the conservation and sustainable use of cultural heritage. Besides the literature overview of available methods for social assessment, it also points to a set of interdisciplinary indicators by which such impacts can be evaluated. Specifically, the paper explores social impact assessment as a methodological tool contribution in economic analysis of investments in cultural heritage. Next, we present two case studies in the Republic of Croatia: the social evaluation management plan for the old town of Buzet and Ivana's House of Fairy Tales will be used as a test bed for the proposed social impact methods, thus providing analytical examples for the provided outcome analysis, closing comments, and suggestions for future research.

## **2. Materials and Methods**

A qualitative methodology combined with an abductive approach was used to study social assessment methods in an economic analysis of investment in cultural heritage. Logical reasoning in this research is non-deductive, with an abductive mode of argument,

because the research was guided by both the extant literature and collected data. A review of the literature on social assessment methods was conducted, including published scientific papers, conference and workshop reports, current legal documents and strategic policies, authorized statistical data, and online materials. On one hand, research results were carried out by moving from a special case to general principles. The bottom-up research approach with an inductive method was used through gathering evidence, seeking patterns, and forming conclusions. The research was conducted with observations that are specific and limited in scope. The scope of analysed methods was related to social impacts assessment, their achievements, and possibilities of application in everyday practice for evaluation of financial contributions to maintainable use of cultural heritage and its conservation (Figures 1 and 2). On the other hand, the abductive approach was used in the case studies of Ivana’s House of Fairy Tales and the Town of Buzet, while probable conclusions were made from the analysis of only the data that could be accessed because a minor part of evidence was not known.

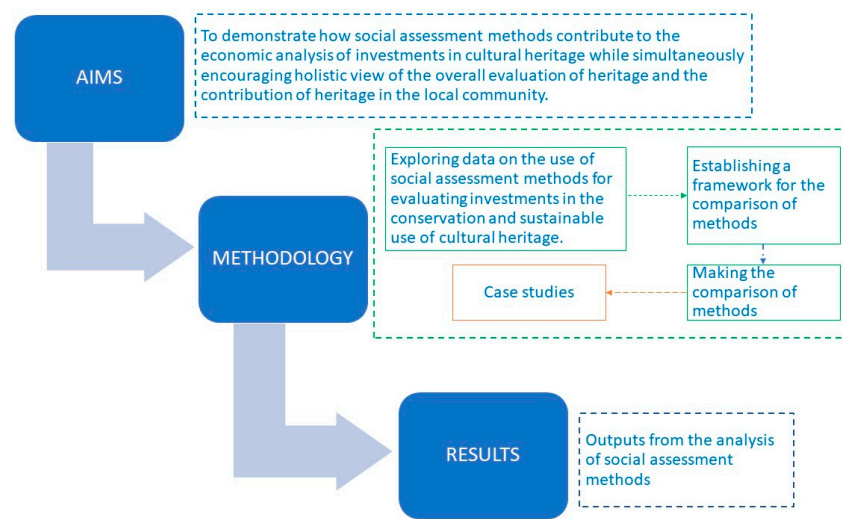


Figure 1. A flow diagram outlining the aims–methodology–results path. Source: Authors.

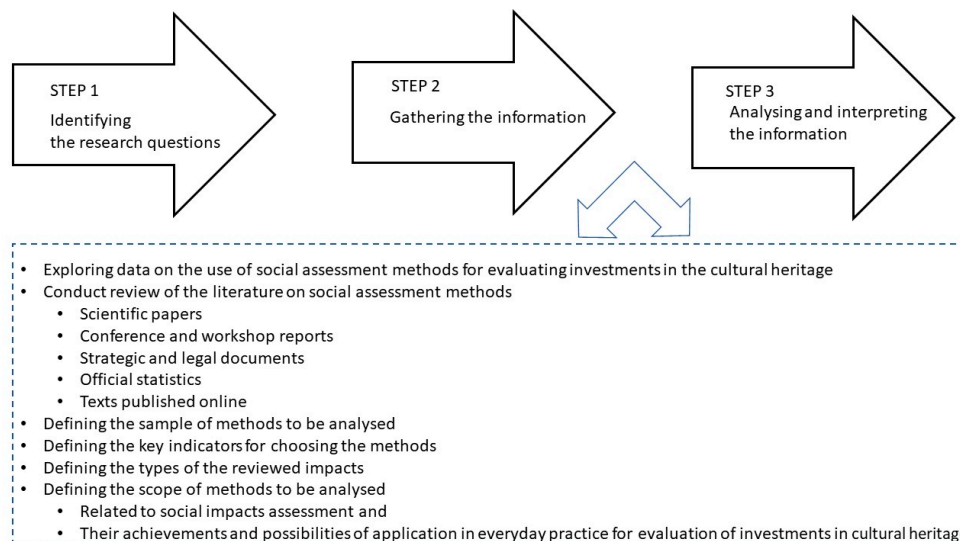


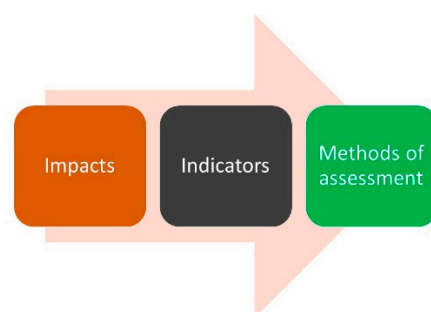
Figure 2. Main research steps. Source: Authors.

Figure 1 shows the research process flow, which began with setting the research objectives, defining the research methodology, and planning the analysis of obtained results. The focus was on the role of social methods in the evaluation of investments in cultural heritage as part of a holistic approach to the overall evaluation of financial

support to cultural heritage. For this purpose, research related to the use of social methods was conducted, and then a framework for their comparison was established, according to which the methods were compared. The results of the comparison of the methods enabled carrying out their practical application in the assessment of cultural heritage, which was shown through the case studies, rounding off the overall image of the research results and carrying out their analysis.

Figure 2 shows detailed steps in the research process, from identifying the research problem the research was conducted for, to gathering data, and their analysis and interpretation.

Research and analysis were conducted on a sample of twenty methods selected by a team of experts according to their impact on projects or cultural heritage interventions (Figure 3). Impact assessment methods have been previously studied by a wider team of 34 international team members, which the authors of this article have been participating in, within the EU-funded SoPHIA project dealing with heritage impact assessment. The types of the reviewed impacts were: social and political conflicts due to the protection of cultural heritage or consensus building; religious and spiritual meaning of cultural heritage; benefit of cultural heritage to the community and individuals; regional and local identity; and social capital cohesion. Furthermore, selected methods were compared according to type (purely quantitative, purely qualitative, or mixed), due to assessment tools such as narratives, stories, cases, indicators, physical data comparisons, standards and benchmarks; due to outputs (reports, indexes, rankings, maps); due to actors and governance (participatory, technical); due to way they work; due to relevant examples of application, due to benefits and shortcomings. In order to find methods convenient for the assessment of impacts on cultural heritage, the authors included: social and economic impact assessment (SEIA); environmental and social impact assessment (ESIA); heritage impact assessment (HIA); and Impacts 08. SWOT analysis was used to identify gaps and opportunities. These methods were selected as they correspond to the nature of heritage values and are in line with the case studies selected.



**Figure 3.** Path for reviewing selected methods of assessment. Source: Authors.

Possibilities to use broader social impact assessment in the evaluation of cultural heritage are presented through two case studies in the Republic of Croatia: the implementation of the social evaluation management plan for the old town of Buzet and the evaluation of social effects of investing in Ivana’s House of Fairy Tales. The contributions of the methodological tools used and social impact assessments in the evaluation of cultural heritage interventions were investigated. Suggestions were prepared for various decision-makers on the usefulness of such broader methods.

The following documentation has been collected and analysed: the preliminary assessment of the Integrated Built Heritage Revitalization Plan (IBHRP), documents related to the strategic development of the City of Buzet, as well as media materials and articles. All documents were provided by the city administration but are also available online (e.g., <https://www.interreg-central.eu/Content.Node/T2.4.4-IBHRP-Buzet.pdf>, accessed on 3 July 2022).

Available strategic documents were analysed for Ivana’s House of Fairy Tales, i.e., (i) strategic development documents and plans on the local level, and the (ii) strategic

development document for Ivana’s House of Fairy Tales with the accompanying action plan for the 2014–2020 period.

The available statistical data from the Croatian Bureau of Statistics as well as the data collected and monitored on a regular basis by the cities of Buzet and Ogulin and their tourist boards were collected for both case studies. These are mainly data related to demographic trends, economic growth, entrepreneurial activities, investments into cultural heritage, tourist visits, and the like. The key challenge of this exercise was the fact that the data were mainly monitored at the level of local government units of the cities of Buzet and Ogulin and that they can only partially be related to the case studies themselves.

Thus, most of available indicators were qualitative indicators representing a strong stakeholders’ perspective and collected by the survey method. Qualitative indicators of the collected surveys relate to social impacts, availability analysis of such indicators, and the scientific basis of collected answers. Qualitative indicators were collected through the interviews, but also through the book of impressions of the visitors and through the visitors’ impressions shared with a wider public on online platforms during the years while the project was being implemented.

### 3. Results

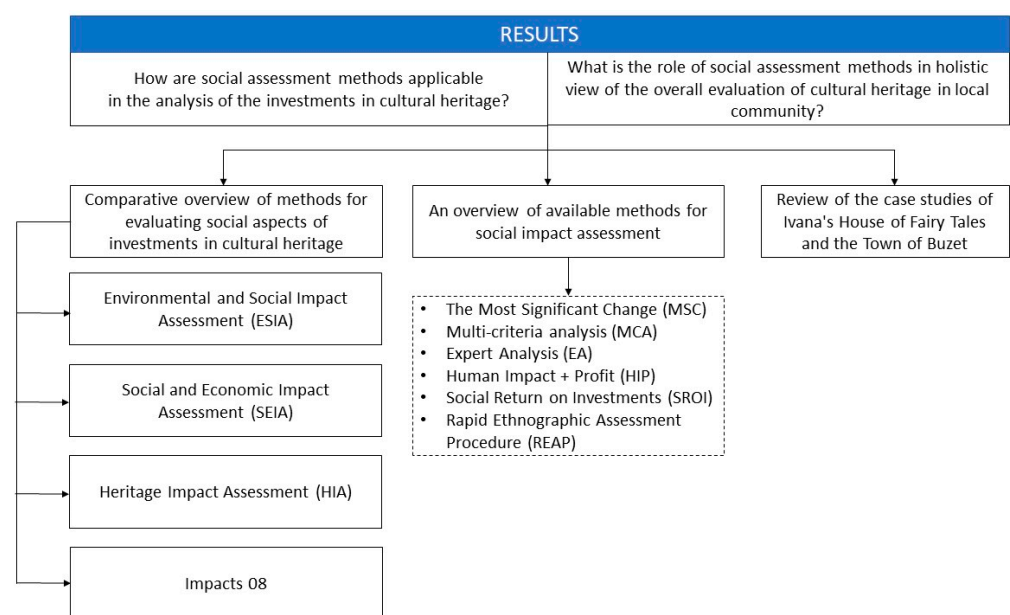
#### *3.1. Comparative Overview of Social Assessment Methods for Evaluating Investments in Cultural Heritage and Their Role in Holistic View of the Overall Evaluation of Cultural Heritage in Local Community*

The group of most used social assessment methods includes: contingent valuation method (CVM), cost–benefit analysis (CBA), cultural impact assessment (CIA), environmental impact assessment (EIA), environmental and social impact assessment (ESIA), expert analysis (EA), G4 guidelines, heritage impact assessment (HIA), Impacts 08, impact value chain (IVC), life cycle assessment (LCA), most significant change (MSC), multi-criteria analysis (MCA), policy analysis, principles for responsible investment (PRI), rapid ethnographic assessment procedure (REAP), social impact assessment (SIA), social return on investments (SROI) and (SEIA) (Table 1).

**Table 1.** Names and abbreviations of mostly used social assessment methods.

<b>Name of the Method</b>	<b>Abbreviation</b>
Contingent valuation method	CVM
Cost–benefit analysis	CBA
Cultural impact assessment	CIA
Environmental impact assessment	EIA
Environmental and social impact assessment	ESIA
Expert analysis	EA
Heritage impact assessment	HIA
Impact value chain	IVC
Life cycle assessment	LCA
Most significant change	MSC
Multi-criteria analysis	MCA
Principles for responsible investment	PRI
Rapid ethnographic assessment procedure	REAP
Social impact assessment	SIA
Social return on investments	SROI
Socioeconomic impact assessment	SEIA

Holistically looking, the importance of these methods lies in their ability to support a deeper understanding of the social environment. The assessment methods highlight potential environmental impacts and contribute to minimizing harmful effects while maximizing possible benefits. Furthermore, the results produced by these methods can be combined with the economic analysis of investments in cultural heritage. This will assist cultural operators, practitioners, academics, and policy-makers in decision-making and policy establishment (Social Platform for Holistic Heritage Impact Assessment (SoPHIA) Consortium 2021). The common characteristic of these methods is a proactive approach with a focus on conducting a structured assessment while remaining as objective as possible. The development of alternatives is always considered, and an effort is made to efficiently produce a clear, concise, and unbiased impact assessment, while simultaneously involving the public whenever possible. These methods are critical in planning and decision-making processes. The path demonstrating research results is shown in Figure 4.



**Figure 4.** A flow chart summarizing the results path. Source: Authors.

### 3.1.1.1. Environmental and Social Impact Assessment (ESIA)

The main objectives of ESIA is to establish a strong understanding of the existing environment and social environment, identify potential impacts on the environment, as well as on local communities, ensuring the model, application, process, and the following withdrawal of development are applied with minimal harmful impacts on the area and society while maximizing potential benefits (WBCSD 2015). The approach is in line with the principle of sustainable development, as set out at the UN Conference on Environment and Development (UNCED 1992) and the International Finance Corporation (IFC) execution norms on environmental and communal sustainability: the evaluation and management of natural and social risks and effects; working conditions; asset effectiveness and contamination prevention; well-being and security; land procurement and compulsory relocation; biodiversity protection and sustainable management of living natural assets; native residents and social legacy (International Finance Corporation 2012).

ESIA appears to be a potentially powerful tool founded on a combined multiple impact evaluation of projects, programs, and standard practice development. The entire ESIA process includes seven key elements of the process: review and evaluation scoping; examination of potential substitutes; finding interested parties and gathering of benchmark statistics; effect identification and evaluation; creation of activities and measures; the importance of effects and assessment of remaining impacts, and finally documenting the whole process (Therivel and Wood 2017).

The method is characterized by early involvement of all stakeholders, leading to increased stakeholder commitment, and increased transparency and accountability. Furthermore, it is represented by responding to the need to capture complex and strong mutual relations connecting the land and society. It is also known for providing opportunities to measure and manage local conflicts. Early involvement of all stakeholders leads to higher levels of ownership and engagement in the process (Mitchell et al. 1997). There are, however, potential risks for later objections during planning applications.

### 3.1.2. Social and Economic Impact Assessment (SEIA)

A similar combined assessment model identified during the literature review research is the social and economic impact assessment (SEIA) model. SEIA is “a useful tool to help understand the potential range of impacts of a proposed change, and the likely responses of those impacted if the change occurs” (Australian Government Department of the Environment and Heritage 2005, p. 5). It assesses impacts of a variety of change categories, and therefore it applies to some extent to the environmental domain (Australian Government Department of the Environment and Heritage 2005). SEIA uses appropriate indicators to assess the impacts and proposes appropriate methods for data collection. It can help in designing strategies to avoid negative effects, so as to minimize adverse effects, and maximise benefits of any alteration (Australian Government Department of the Environment and Heritage 2005). SEIA provides many opportunities for stakeholder engagement. Although it can be performed as a purely technical assessment that does not involve the community, the inclusion of stakeholders’ views holds great benefits throughout the whole SEIA.

Albeit the specific tools used in each SEIA can differ, they for the most part include some or the entirety of the following stages (Taylor et al. 1990): scoping the environment and limits of the effect evaluation; profiling present effects of the action being inspected, incorporating the historical context or present setting; developing substitutes, in which different ‘impact’ situations are created; predicting and assessing the impact of various resulting scenarios; observing real impacts; avoiding and responding to unwanted effects; review of the impact evaluation process.

The socioeconomic impact assessment evaluates the socioeconomic cost in relation to the socioeconomic benefit. An integrated methodology can give an extensive and practical outcome, providing data on possible financial impacts, as well as on significant social qualities connected to the operation that provides information on likely views and answers to the proposed change. The challenge, however, is to address potential data collection difficulties in order to comprehensively cover relevant issues.

### 3.1.3. Heritage Impact Assessment (HIA)

Heritage impact assessment (HIA) is a widely accepted methodology at international level in urban and infrastructure areas. It is used to evaluate the effect of territorial or infrastructural advancement of projects on world cultural heritage sites. UNESCO and ICOMOS use HIA as a means for preventing harmful impacts on cultural heritage of outstanding universal value (OUV) (UNESCO 2011; ICOMOS 2011).

Actually, HIA is a statement or document depicting the historical or archaeological significance of a building or landscape within a wider environment. It is used to protect legacy sites from harmful effects caused by suggested projects, and to propose effective mitigation plans to ensure balance and stability in combining conservation and development. The process follows the application of a 9-point scoring severity rating of the impacts caused by development on the site.

HIA’s strength is in a strong focus on procedure. In addition, it increases objectivity in relation to individual assessments and provides long-term improvements (Patiwael et al. 2019).

However, there are some objections that HIA is neither directly related to OUV attributes nor objective. Moreover, heritage impact assessments’ increased budgetary and time requirements can be an obstacle to their implementation.

#### 3.1.4. Impacts 08

The Impacts 08 approach engaged in the issues left out in many assessments concerning the ‘soft indicators,’ such as online networking platforms and individual stories, using a multi-method, longitudinal analysis of news portals, personal interviews, targeted surveys, and focus groups representing the community (Phythian-Adams et al. 2008; Garcia et al. 2010). Furthermore, the opinions of residents took the central place in the analysis, thus also taking into account both desirable and non-desirable effects. The method focused mainly on five areas: cultural access and engagement; finances and travel; cultural resonance and preservation; impressions and understanding; administration and delivery methods.

These objectives also agree with the European Commission recommendations on the ECoC outputs. However, there were also some shortcomings. Impacts 08 analysis cannot foresee the way the situation would develop in the case that the ECoC’s benefits were only temporary. Sustainable development should also receive more attention. The role of visitors and tourism is crucial in the evaluation process. However, it is important to avoid focusing entirely on them in order to provide a real holistic approach. Accordingly, there was no direct mention of environmental repercussions in the report, and it dwelled mostly on well-being, and environmentally related key issues. A report on realistic impact assessment of the method demands wise choice and a set of objectives. Choosing so-called “easy wins” or unachievable goals could be compromising for the evaluation procedure.

A holistic approach created by Impacts 08 exceeded quantitative indicators and made the actual lived residents’ experiences in the event host city a key point of its research. The impact of culture-led regeneration programs was also measured, aiming to ensure the city’s positive repositioning on national and international levels; to recognize the impact humanities and culture have on improving the living standard and appeal of cities; to create long-term development and durability for the city cultural sector; to encourage more visitors, and, finally, to encourage and increase participation in cultural activities (Phythian-Adams et al. 2008; Garcia et al. 2010).

#### 3.2. Research Analysis of Available Methods for Social Impact Assessment

Results on the most used methods for social impact assessment were structured according to their impact on project or cultural heritage intervention (Figure 2). As previously mentioned, the types of reviewed impacts were: social and political conflicts due to the protection of cultural heritage or consensus building; religious and spiritual meaning of cultural heritage; worth of cultural heritage for the community; regional and local identity; and social capital cohesion.

The observed methods were analysed according to the areas of impact (spot, local, regional, sectoral); type (quantitative, qualitative, mixed); main assessment tools (narratives, stories, cases, indicators, physical data, economic data, comparisons, standards, benchmarks); information sources (internal, external, third parties, independent); outputs (reports, indexes, rankings, maps); actors and governance (participatory, technical); benefits and shortcomings.

The research results showed that the best methods of assessment for the impact categorized as social and political conflicts associated with the preservation of cultural heritage or consensus building were:

- The most significant change (MSC) and the multi-criteria analysis (MCA) according to the indicator identified as the level of satisfaction with social dialogue and distribution of incomes gathered from cultural heritage;
- The most significant change (MSC), the multi-criteria analysis (MCA), the expert analysis (EA) and human impact and profit (HIP) scorecard according to the indicator identified as level of satisfaction with governance mechanisms;
- The most significant change (MSC) according to the indicator identified as the number of community-based initiatives;



- The most significant change (MSC), the multi-criteria analysis (MCA), and social return on investments (SROI) according to the indicator identified as level of participatory governance and heritage management.
- The most appropriate method of assessment for the impact of religious and spiritual meaning of cultural heritage was the rapid ethnographic assessment procedure (REAP) using the indicator number of people practicing religious and spiritual rituals in the cultural heritage.

In addition, the methods rapid ethnographic assessment procedure (REAP), human impact and profit (HIP) scorecard, and impact value chain (IVC) were recognized as best in evaluating cultural heritage for society and individuals by using the following indicators: number of participations in cultural heritage related activities and number of formal and informal learning activities to enhance personal competences.

Furthermore, the indicators' level of the sense of belonging to the place and number of activities of building of community confidence established the method multi-criteria analysis (MCA) as the most appropriate for the impact of regional local identity.

The impact of social capital cohesion was best valued with the methods most significant change (MSC) and the principles for responsible investment (PRI) by means of the following indicators: the number of workshops, round tables, and focus groups organized and evaluated positively by the participants and the number of relevant volunteering activities.

The most suitable method according to the indicators the number of new networks between different social groups and the number of connected communities through the use of digital technologies (smart specialization strategies) for the impact named development of intercultural dialogue was the most significant change (MSC) (Figure 5).

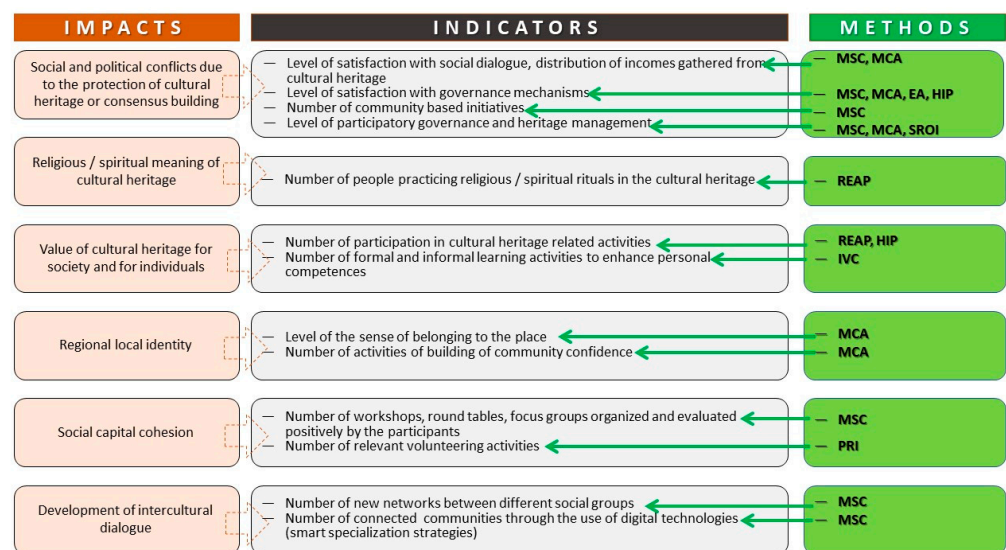


Figure 5. Methods of assessment for relevant social impacts and potential indicators. Source: Authors.

The MSC method was more suitable to some application contexts than other methods. In an easy application with easily defined effects, quantitative monitoring might also be sufficient and would in reality be much less time-intensive than MSC.

In the case of using the MCA method, each indicator must be supported through one or more measures, matching the proof base for scoring that indicator. Ideally, these are quantifiable measurements. By the nature of the MCA method, a few will involve qualitative evaluation of how directly preferences influence elements of the indicators and objectives (Australian Government, Infrastructure Australia 2021).

The HIP was recognized as the “best hope” in terms of a strategy that can methodically reveal the interrelationship between affect and profitability, which financial specialists recognized as a high concern.



The SROI is a combined (qualitative and quantitative) method that gives data specifically focused on the social value and provides roundabout experiences on financial and environmental impacts. As it is based on the theory of change, the relationship between inputs or resources is well clarified and this situation leads to a better deployment of activities and their final results (Nicholls et al. 2009).

The REAP method is mainly a qualitative lookup approach focusing on the collection and evaluation of regionally applicable data. This method evokes wealthy, descriptive data that contributes to discovering why an issue or a circumstance may be happening and how to respond in the best way (Sangaramoorthy and Kroeger 2020).

Results of the SWOT analysis showed the trends in evaluating cultural heritage: involvement of a wide group of stakeholders in valorisation, preservation, management; long-term heritage policy (evidence-based and society-based); new management schemes and innovative business models; shift from a preservation-focused (object-oriented) approach to a value-focused (subject-oriented) approach; to design cultural development strategies to boost local and regional competitions and comparative advantage; local and regional authorities should actively take part in the management of potential that cultural heritage has; defining quality in relation to interventions on cultural heritage (cultural diversity, inclusion, intangible heritage, sense-of-belonging); community-based values; capacity of cultural heritage to connect social groups.

Identified gaps and opportunities are: hard to evaluate social impact; promoting volunteering activities; use of digital technology—impact on smart specialization strategies; cultural heritage potentializing strategic resource for Europe; cross-sectoral impact and heritage—primarily social resource.

### 3.3. Review of the Case Studies of Ivana's House of Fairy Tales and the Town of Buzet

The possibility to evaluate the social impact of cultural heritage is presented in the paper through two case studies conducted in the Republic of Croatia of heritage that is locally and regionally important, and can significantly boost local development: the implementation of social evaluation management plan for the old town of Buzet—Integrated Built Heritage Revitalization Plan of the Buzet Historic Town Centre (IBHRP) and the evaluation of social effects of investing in Ivana's House of Fairy Tales (IKB/IHF) in the city of Ogulin. The analysed cases differ by their type and nature. While Ivana's House of Fairy Tales is a cultural institution, the other case refers to the urban complex of the Buzet old town core, a location for residents to live and work.

IBHRP is the development plan of the old town core of the city of Buzet, an old hilltop settlement, one of the largest and historically most important towns in the region of Central Istria, Croatia. Its implementation is envisaged for the 2017–2025 period. Thus, the analysis provides a mid-term assessment. The old town of Buzet is of crucial importance to the recognizability and visibility of the city of Buzet. The EU partially finances its restoration activities.

Ivana's House of Fairy Tales (IHF) is an investment project supported by the European Regional Development Fund, the Central Finance and Contracting Agency for EU Programs and Projects Zagreb, the Ministry of Culture of Croatia, the City of Ogulin, and the Tourist Board of the city of Ogulin. Its goal was to create a brand of the city of Ogulin, based on the intangible heritage focusing on fairy tales. This was envisaged through developing of the visitor centre; i.e., a museum based on stories and fairy tales of the famous Croatian author Ivana Brlić-Mažuranić. IHF was opened in 2013. The centre's development strategy for 2013–2020 was prepared. The strategy's implementation was tested in an evaluation after the implementation of the strategic plan of IHF.

The key topics of impact assessment in each case included: social capital, sense of place, well-being/quality of life, knowledge, strong EU and global partnerships, prosperity, attractiveness, protection, and innovation.

The IHF case study is an important example of the way local history can be a generator for a city's infrastructural and tourism development, as it shows that the visitor centre

completed the vision of Ogulin as a fairy tale town, forming a feeling of fellowship and distinctiveness among its residents. The attractiveness of the town was increased, both as a dwelling place and as an important destination of cultural tourism.

By developing IHF, it was expected that the brand ‘Ogulin—Homeland of Fairy Tales’ would bring a significant added value to the promotion of Ogulin’s intangible cultural heritage and would position Ogulin as a desirable experience destination; increasing tourism sector profits through a favourable environment for entrepreneurial activities and tourism products development as well as creating new jobs. The branding strategy also intended to increase brand presentation innovation as well as business excellence application. The establishment of Ivana’s House of Fairy Tales has proved to be a great contribution to the touristic and cultural value of the town of Ogulin, making it an attractive and distinct cultural tourism destination. It also showed the way of designing a project in order to integrate it into a wider context of the town of Ogulin’s development.

The Ivana’s House of Fairy Tales’ evaluation highlights the importance of cultural intervention and strategic planning in raising a town’s prosperity, while simultaneously raising a sense of pride and ownership of heritage among the residents of the town.

The topic of social capital is also significant in the case of Ivana’s House of Fairy Tales. The IHF evaluation showed the close relationship of the two evaluated areas—access and inclusion. Their deeper analysis should provide the answer to the question concerning the access-enabling tools for different social groups of visitors. The analysis showed that the visitor centre caters fully to persons with disabilities—having a built-in elevator for those with moving difficulties, interactive audio exhibits for blind and visually impaired persons, while persons with hearing disabilities can experience the exhibition through video exhibits and a rich visual content. All these facilities increase the social inclusion of persons with disabilities. Another benefit for persons with disabilities and difficulties is their entrance fee exemption. Thus, openness to all kinds of visitors significantly contributes to the project’s social and geographic accessibility.

The second example analysed is an intervention into urban cultural heritage that affects urban communities, and living and working spaces and cohabitation—the historic town of Buzet and the Integrated Revitalization Plan of the Buzet Historic Town Centre (IBHRP). In 2015, the city of Buzet prepared the “Development Strategy of the City of Buzet for the 2016–2020 period”, recognizing the quality of residents’ life, the importance of protecting natural and cultural heritage and increasing competitiveness of the economy as its main principles and values. Those values were the foundation of the City of Buzet’s vision as a modern city of satisfied people, with a competitive economy, attractive natural and cultural heritage, and its sustainable development stemming from traditional values. While drafting the development strategy, the local administration recognized the town’s development potential and in 2017 the Integrated Revitalization Plan of the Buzet Historic Town Centre (IBHRP) was drafted for the 2017–2025 period. The development of the IBHRP plan included both the employees of the town administration and the residents of Buzet—those residing both in the old town or in the surrounding settlements. This case study emphasized an overlapping of the issues across the evaluation themes; i.e., access, social cohesion, engagement, participation, (local/participatory) governance (and networking).

Buzet’s case shows interrelation between cultural heritage and viable growth and the importance of the process of involving different stakeholders and balancing their diverse opinions and objectives, while working towards a common vision—which in Buzet’s case was to improve the town residents’ lives, and simultaneously to turn Buzet into an attractive location for entrepreneurs and tourists. The agreed vision was based on two pillars; (a) environmental, social and economic sustainability, and (b) tourist attractiveness (Ariza-Montes et al. 2021). Eighteen interconnected programs were planned for its implementation. The case study of Buzet revealed the complexities of achieving a balance between the needs of the tourism industry while at the same time bearing in mind Buzet’s historical centre’s function as a living site intended for the life and work of its residents.

Buzet's old town core, situated on the top of a hill surrounded with vegetation, is inaccessible by public transport. This makes it difficult to access for persons with disabilities, being possibly an exclusionary obstacle to them. The lack of public transport and parking lots are infrastructure issue and are a challenge to the site's quality of services, which relates both to well-being and quality of life issues, but also to the issues of Buzet's accessibility and its tourist attractiveness. Quality of life improvement efforts through planned infrastructure developments (including cultural heritage properties' renewal through renovations, tourists' accommodation facilities that generate income) provide a positive contribution to prosperity and the livelihood of Buzet's residents. Nevertheless, the issues concerning access to the site remain an important problem to be solved, as this issue in the urban context concerns issues of social inclusion, well-being and standard of living, and relate to the value of service issues. The lack of public transport and parking lots issue is recognized by the IBHRP, but so far this problem has not been solved.

Through the analysis of the proposed topics of social impact assessment, social capital, sense of place, well-being/quality of life, knowledge, strong EU and global partnerships, prosperity, attractiveness, protection and innovation, project leaders recognized the full potential for the projects analysed and possible avenues of their future development, also recognizing the problems that will be discussed further in the article.

#### **4. Discussion**

Some issues that emerged referring to the social domain impact evaluation were: the difference between expert values or knowledge, and the peoples' everyday perspective on local and regional environments; the perception and valuation by various stakeholders, not least the public, of urban and regional environments as cultural heritage from their own perspectives should be considered; ensure that the diversity of tools matches the diversity of values identified; choosing experts and professionals able to understand and accept the methodologies and viewpoints of others; incomplete governance frameworks; inflexible rules for protection; insufficient capacity building; deficits in data and lack of concrete measures.

The testing of the assessment process on the examples of the IBHRP for the Buzet Old Town and of the establishment of the visitor centre for Ivana's House of Fairy Tales was a challenging task. The challenges concerned a lack of quantitative data (expressed as a low score in Table 2), and, in cases where data sources were available, the challenge lay in the impossibility of separating the impacts of the implemented activities of the analysed cases from the wider context. For example, there were no data sources that would allow us to separate impact of the activities in the old town from the development indicators of the entire city of Buzet. The Old Town of Buzet, a historical urban inhabited neighbourhood, can be visited free of charge, which makes it impossible to monitor the exact number of visits. The statistical data were available on the level of entire town, and not for the old town neighbourhood in particular, thus making impossible precise assessment of individual variables in the model by means of secondary data—e.g., the number of visitors, employment data, investments in culture, tourism, etc. (Table 2). The challenging issues in cultural heritage evaluation are marked as having a low, medium, or high score according to expert judgement. A low score for the challenging issues in Table 1 means that there is a crucial limitation in the social domain impact evaluation, such as lack of quantitative data. A medium score indicates that the observed data issues significantly affect social impact analysis. Issues with a high score reflect the importance of their role in the assessment of social capital.

**Table 2.** The summary on challenging issues in cultural heritage evaluation.

	IBHRP for the Buzet Old Town	Ivana’s House of Fairy Tales, Ogulin
Availability of quantitative data	1	1
Availability of qualitative data	3	3
Applicability of the social assessment methods	3	3
Stakeholders involvement	2	2
Suitability of indicators	3	3
Number of challenges and difficulties	3	2
Promoting volunteering activities	2	3
Use of digital technology—impact on smart specialization strategies	2	2
Cultural heritage potentializing strategic resource for Europe	2	2
Cross-sectoral impact	2	2
Heritage—primarily social resource	2	2

Legend: 1 (low score); 2 (medium score); 3 (high score). Source: Authors.

Including the interested parties in the social impact analysis for cultural heritage investments was very important, considering that stakeholders were the source of data one cannot find in statistical databases, the budget of the City of Buzet analysis and other available data. However, it is quite clear that it is not enough to rely predominantly on stakeholders’ insights, without any supporting data. Such an approach could be exposed to subjective interpretations—either over- or under-emphasizing certain elements in the project (Table 2).

The evaluation of the visitor centre for Ivana’s House of Fairy Tales met fewer challenges and difficulties than was the case of the IBHRP. The stakeholders considered the model appropriate for the IHF evaluation. Indicators were also considered suitable and relevant for the IHF, particularly the indicators concerning the themes of: social capital, sense of place, well-being/quality of life, knowledge, prosperity and attractiveness. However, data for some indicators were publicly available and relatively easy to find, while finding data for other indicators was more challenging. Besides quantitative data, in the evaluation of the IHF visitor centre, qualitative data were obtained through interviews with the stakeholders, confirming the findings of the quantitative data analysis. This analysis was performed seven years after the beginning of the project, thus the interviewed stakeholders referred to the successful impact the project had on the local community in that period. The success was linked to the growing number of local visitors and tourists visiting Ogulin, thus contributing to its prosperity, including raising the sentiment of pride and belonging in the local community. Therefore, the stakeholders considered the project as having long-term positive effects on the economy and community development in Ogulin (Table 2).

The applicability of the social assessment methods in the assessment of social capital is considered to be high. The theme of social capital encouraged the stakeholders to consider the development of new models of planning and management through participative planning and good governance. Thus, in this particular case, the model was quite educational for the project stakeholders who examined it (Table 2).

## 5. Conclusions

There are not many scientific articles and literature reviews exploring availability of methods for cultural heritage investment assessment from the aspect of the impacts of those investments on local community. Additionally, there is a lack of research regarding

the applicability and usability of analytic methods for social evaluation of cultural heritage. Therefore, this paper points to the insufficient exploration of the issue, at the same time pointing to the potential of different sociological methods that can be used to analyse events and changes occurring due to investments in cultural heritage in communities. Besides the overview of the available methods, examples were provided of two pilot projects—Ivana's House of Fairy Tales in Ogulin and the Integrated Built Heritage Revitalization Plan in the City of Buzet.

These examples pointed to the role and importance of cultural heritage assessment for the local communities. It has been proved that social assessment methods strongly contribute to the economic analysis of investments in cultural heritage, simultaneously encouraging a holistic view of the overall evaluation of heritage and its contribution to the local community.

The best proposed methods of assessment for the impact categorized as social and political conflicts arising from cultural heritage preservation and consensus-building were: the most significant change (MSC) and the multi-criteria analysis (MCA) according to the indicators identified as level of satisfaction with social dialogue, and distribution of incomes gathered from cultural heritage; the most significant change (MSC), the multi-criteria analysis (MCA), the expert analysis (EA), and human impact and profit (HIP) scorecard according to the indicator identified as level of satisfaction with governance mechanisms; the most significant change (MSC) according to the indicator identified as the number of community-based initiatives; and the most significant change (MSC), the multi-criteria analysis (MCA), and social return on investments (SROI) according to the indicator identified as level of participatory governance and heritage management.

The most appropriate method of assessment for the impact religious and spiritual meaning of cultural heritage was the rapid ethnographic assessment procedure (REAP) using the indicator the number of people practicing religious and spiritual rituals in cultural heritage.

The methods rapid ethnographic assessment procedure (REAP), human impact and profit (HIP) scorecard, and impact value chain (IVC) were shown to be the best in assessing the value of the impact of cultural heritage for society and individuals. The principles for responsible investment (PRI) was best suited to assessing the impact of social capital cohesion.

When observing the aspect of social assessment methods in both case studies (Ivana's House of Fairy Tales and the Town of Buzet), it could be concluded that in developing future projects and programs of this type, it would be important to clearly accentuate key indicators and the obligation of regular data collecting. In this way, the sustainability of investment in cultural heritage over time could be clearly shown, whether it is the matter of *ex ante*, *ex post*, or the longitudinal dimension.

The main identified trends in evaluating cultural heritage were:

- Involvement of a wide group of stakeholders in valorisation, preservation, management;
- Long-term heritage policy (evidence-based and society-based);
- New management schemes and innovative business models;
- Shift from a preservation-focused to a value-focused approach;
- Designing cultural development strategies to boost local and regional competitions and comparative advantage;
- Local and regional authorities should actively participate in the management potential of cultural heritage;
- Defining quality in relation to interventions on cultural heritage (cultural diversity, inclusion, intangible sense-of-belonging heritage);
- Creation of community-based values;
- Capacity of cultural heritage to connect social groups.

Identified gaps and opportunities were:

- Hard to evaluate social impact;
- Promoting volunteering activities;

- Use of digital technology—impact on smart specialization strategies;
- Cultural heritage’s potential as a strategic resource for Europe;
- Cross-sectoral impact;
- Heritage—a primarily social resource.

Evaluation of the social impact of investment in cultural heritage is a very complex process and a challenging field to be addressed in further research, especially when considering cultural heritage as a great potential strategic resource for Europe. Accordingly, it would be useful to explore methods for promoting volunteering activities. Cross-sectoral impact could also be further explored as well as digital technologies’ application. Lack of shared standards for the holistic impact assessment of cultural heritage interventions hampers deep holistic understanding of their positive or negative outcomes and the effectiveness of the investments. The recent overarching holistic model for impact assessment of interventions in cultural heritage, such as the one recently proposed by the SoPHIA project (addressed earlier in the text), encompassing four interconnected domains—social, cultural, economic, and environmental—takes on board both cross-cutting issues and the counter effects of any intervention and takes into consideration the time dimension and the people perspective. This provides a new, wider optic for both heritage practitioners and policy-makers in evaluating the value of heritage projects, thus opening a new research venue. Additionally, it calls for even further testing of heritage values to ensure its finetuning and to help recognize a standardized set of indicators, which are able to meet a minimum requirement or quality target, such as sustainability or resilience of the evaluated projects.

Promising innovative methods for assessing investments in cultural heritage, as well as innovative combinations of existing methods, are challenges for further research and understanding of how and why such assessment is crucial for the establishment of cultural heritage interventions.

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## References

- Ariza-Montes, Antonio, Antonio Sianes, Vicente Fernández-Rodríguez, Carmen López-Martín, Mercedes Ruíz-Lozano, and Pilar Tirado-Valencia. 2021. Social Return on Investment (SROI) to Assess the Impacts of Tourism: A Case Study. *Sage Open* 11: 1–16. Available online: <https://journals.sagepub.com/doi/pdf/10.1177/2158244020988733> (accessed on 6 February 2022). [CrossRef]
- Australian Government Department of the Environment and Heritage. 2005. Socio-Economic Impact Assessment Toolkit. Commonwealth of Australia, Bureau of Rural Sciences. Available online: <https://parksaustralia.gov.au/marine/pub/scientific-publications/archive/nrsmpla-seia.pdf> (accessed on 6 February 2022).
- Australian Government, Infrastructure Australia. 2021. Guide to Multi-Criteria Analysis: Technical Guide of the Assessment Framework. Available online: <https://www.infrastructureaustralia.gov.au/sites/default/files/2021-07/Assessment%20Framework%202021%20Guide%20to%20multi-criteria%20analysis.pdf> (accessed on 6 February 2022).
- Carrà, Natalina. 2016. Heritage/Culture and Social Cohesion in the Project of Metropolitan City. *Procedia-Social and Behavioral Sciences* 223: 583–89. [CrossRef]
- Cerreta, Maria, and Eleonar Giovane di Girasole. 2020. Towards Heritage Community Assessment: Indicators Proposal for the Self-Evaluation in Faro Convention Network Process. *Sustainability* 12: 9862. [CrossRef]
- CHCfE Consortium. 2015. Cultural Heritage Counts for Europe. Available online: <https://www.europanostra.org/our-work/policy/cultural-heritage-counts-europe/> (accessed on 6 February 2022).

- Corvo, Luigi, Lavinia Pastore, Arianna Manti, and Daniel Iannaci. 2021. Mapping Social Impact Assessment Models: A Literature Overview for a Future Research Agenda. *Sustainability* 13: 4750. [CrossRef]
- Council of Europe. 2005. Framework Convention on the Value of Cultural Heritage for Society. *Council of Europe Treaty Series* 199. Available online: <https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treaty-num=199> (accessed on 23 May 2022).
- Council of Europe. 2017. Recommendation of the Committee of Ministers to Member States on the European Cultural Heritage Strategy for the 21st Century. Available online: <https://rm.coe.int/16806f6a03> (accessed on 23 May 2022).
- Council of the European Union. 2014. Council conclusions of 21 May 2014 on Cultural Heritage as a Strategic Resource for a Sustainable Europe. Available online: <http://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014XG0614%2808%29> (accessed on 23 May 2022).
- Daldanise, Gaia. 2020. From Place-Branding to Community-Branding: A Collaborative Decision-Making Process for Cultural Heritage Enhancement. *Sustainability* 12: 10399. [CrossRef]
- de la Torre, Marta. 2002. *Assessing the Values of Cultural Heritage: Research Report*. Los Angeles: Getty Conservation Institute, Available online: [https://www.getty.edu/conservation/publications\\_resources/pdf\\_publications/pdf/assessing.pdf](https://www.getty.edu/conservation/publications_resources/pdf_publications/pdf/assessing.pdf) (accessed on 6 February 2022).
- Dendena, Bianca, and Stefano Corsi. 2015. The Environmental and Social Impact Assessment: A further step towards an integrated assessment process. *Journal of Cleaner Production* 108: 965–77. [CrossRef]
- ForHeritage Project. 2021. Impact Assessment of Cultural Heritage Projects. *Interreg Central Europe*. Available online: <https://www.interreg-central.eu/Content.Node/ForHeritage.html> (accessed on 6 February 2022).
- Garcia, Beatriz, Ruth Melville, and Tamsin Cox. 2010. Creating an impact: Liverpool's experience as European Capital of Culture. *Liverpool: Impacts 08*. Available online: [https://www.liverpool.ac.uk/media/livacuk/impacts08/pdf/pdf/Creating\\_an\\_Impact\\_-\\_web.pdf](https://www.liverpool.ac.uk/media/livacuk/impacts08/pdf/pdf/Creating_an_Impact_-_web.pdf) (accessed on 6 February 2022).
- IAIA, International Association for Impact Assessment. 2015. Social Impact Assessment: Guidance for Assessing and Managing the Social Impact of Projects. Available online: <https://www.socialimpactassessment.com/documents/IAIA%202015%20Social%20Impact%20Assessment%20guidance%20document.pdf> (accessed on 6 February 2022).
- ICOMOS. 2011. Guidance on Heritage Impact Assessments for Cultural World Heritage Properties. Available online: <http://openarchive.icomos.org/266/> (accessed on 6 February 2022).
- International Finance Corporation. 2012. IFC Performance Standards on Environmental and Social Sustainability. Available online: [https://www.ifc.org/wps/wcm/connect/c02c2e86-e6cd-4b55-95a2-b3395d204279/IFC\\_Performance\\_Standards.pdf?MOD=AJPERES&CVID=kTjHBzk](https://www.ifc.org/wps/wcm/connect/c02c2e86-e6cd-4b55-95a2-b3395d204279/IFC_Performance_Standards.pdf?MOD=AJPERES&CVID=kTjHBzk) (accessed on 6 February 2022).
- Jelinčić, Daniela Angelina, and Sanja Tišma. 2020. Ensuring sustainability of cultural heritage through effective public policies. *Urbani Izziv* 31: 78–87. Available online: <http://www.urbaniizziv.si/Portals/urbaniizziv/Clanki/2020/urbani-izziv-en-2020-31-02-002.pdf> (accessed on 20 May 2022).
- Lingayah, Sanjiv, Alex Mac Gillivray, and Peter Raynard. 1996. *Creative Accounting; Beyond the Bottom Line*. Stroud: Comedia Publications Limited.
- Mälkki, Mikko, and Kaisa Schmidt-Thomé, eds. 2010. *Integrating Aims—Built Heritage in Social and Economic Development*. Aalto: Centre for Urban and Regional Studies Publications. Available online: <http://lib.tkk.fi/Reports/2010/isbn9789526032849.pdf> (accessed on 6 February 2022).
- Marchiori, Michela, Nicholas Anastasopoulos, Mercedes Giovinazzo, Paraic Mc Quaid, Aleksandra Uzelac, Aron Weigl, and Zipsane Henrik, eds. 2021. An Innovative Holistic Approach to Impact Assessment of Cultural Interventions: The SoPHIA Model. *Economia della Cultura, Rivista Trimestrale dell'Associazione per l'Economia della Cultura—Special Issue* 2021: 5–13. [CrossRef]
- Mitchell, Ronald K., Bradley R. Agle, and Donna J. Wood. 1997. Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *The Academy of Management Review* 22: 853–86. [CrossRef]
- Nicholls, Jeremy, Eilis Lawlor, Eva Neitzert, and Tim Goodspeed. 2009. *A Guide to Social Return on Investment. The SROI Network*. London: Office of the Third Sector, Cabinet Office.
- Patiwael, Patric, Peter Groote, and Frank Vanclay. 2019. Improving heritage impact assessment: An analytical critique of the ICOMOS guidelines. *International Journal of Heritage Studies* 25: 333–47. [CrossRef]
- Phythian-Adams, Sarah Louisa, David Sapsford, and Alan Southern. 2008. Considering the Economic Impacts of the Liverpool European Capital of Culture: A Review on the Literature Concerning “Economic Multiplier” Effects. *Impacts 08—ULMS (Oct 2008) Econ Impacts of the ECoC*. Available online: [https://www.liverpool.ac.uk/media/livacuk/impacts08/pdf/pdf/SLPhythian-Adams\\_et\\_al\\_Oct\\_2008\\_ECoC\\_Multiplier\\_Literature\\_R.pdf](https://www.liverpool.ac.uk/media/livacuk/impacts08/pdf/pdf/SLPhythian-Adams_et_al_Oct_2008_ECoC_Multiplier_Literature_R.pdf) (accessed on 6 February 2022).
- Rogers, Patricia. 2014. *Theory of Change: Methodological Briefs: Impact Evaluation* 2. Florence: UNICEF Office of Research.
- Sangaramoorthy, Thurka, and Karen A. Kroeger. 2020. *Rapid Ethnographic Assessments: A Practical Approach and Toolkit for Collaborative Community Research*. London: Routledge, Taylor and Francis Group.
- Social Platform for Holistic Heritage Impact Assessment (SoPHIA) Consortium. 2020a. Deliverable D1.1: Review of Research Literature, Policy Programmes and (Good and Bad) Practices. Available online: <https://sophiaplatform.eu/uploads/sophiaplatform-eu/2020/10/21/a4309565be807bb53b11b7ad4045f370.pdf> (accessed on 20 May 2022).

- Social Platform for Holistic Heritage Impact Assessment (SoPHIA) Consortium. 2020b. Deliverable D1.2: Concise Essay Mapping of Existing Gaps, Issues and Problems. Available online: <https://sophiaplatform.eu/uploads/sophiaplatform-eu/2021/01/20/995a57c6c8d99beb687cff39b2318435.pdf> (accessed on 3 July 2022).
- Social Platform for Holistic Heritage Impact Assessment (SoPHIA) Consortium. 2021. Introduction to the Toolkit for Stakeholders. Available online: <https://sophiaplatform.eu/en/news/introduction-toolkit-for-stakeholders> (accessed on 6 February 2022).
- Takyi, Stephen Appiah. 2014. Review of Social Impacts Assessment (SIA): Approach, Importance, Challenges and Policy Implications. *International Journal of Arts & Sciences* 7: 217–34.
- Taylor, C. Nicholas, C. Hobson Bryan, and Colin G. Goodrich. 1990. *Social Assessment: Theory, Process and Techniques*. Christchurch: Taylor Baines and Associates.
- Therivel, Riki, and Graham Wood, eds. 2017. *Methods of Environmental and Impact Assessment*. New York: Routledge.
- Tišma, Sanja, Mira Mileusnić Škrtić, Sanja Maleković, and Daniela Angelina Jelinčić. 2021. Cost-Benefit Analysis in Evaluation of Cultural Heritage Projects Funding. *Journal of Risk and Financial Management* 14: 466. [CrossRef]
- UNCED. 1992. Agenda 21 Action Plan of the 1992 Rio Declaration (UNCED). Available online: <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf> (accessed on 6 February 2022).
- UNESCO. 2011. Recommendation on the Historic Urban Landscape, Paris. November 10. Available online: <https://whc.unesco.org/uploads/activities/documents/activity-638-98.pdf> (accessed on 6 February 2022).
- Vanclay, Frank. 2003. International Principles For Social Impact Assessment. *Impact Assessment and Project Appraisal* 21: 5–12. [CrossRef]
- Vanclay, Frank. 2019. Reflections on Social Impact Assessment in the 21st century. *Impact Assessment and Project Appraisal* 38: 126–31. [CrossRef]
- WBCSD. 2015. Guidelines for Environmental and Social Impact Assessment. *Cement Sustainability Initiative (CSI)*. Available online: <https://www.wbcd.org/Sector-Projects/Cement-Sustainability-Initiative/Resources/Guidelines-for-Environmental-and-Social-Impact-Assessment-ESIA> (accessed on 6 February 2022).
- Winter, Tim. 2013. Clarifying the critical in critical heritage studies. *International Journal of Heritage Studies* 19: 532–45. [CrossRef]
- Winter, Tim, and Emma Waterton. 2013. Critical heritage studies. *International Journal of Heritage Studies* 19: 529–31. [CrossRef]





Article

# Redevelopment of Brownfields for Cultural Use from ERDF Fund—The Case of Hungary between 2014 and 2020

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**Abstract:** In the current research we aim to analyse the public redevelopment projects financed in Hungary from the Territorial and Settlement Development OP between 2014 and 2020, with special focus on cultural use. Brownfield redevelopment is a major topic in an urban development context from an urban sustainability, circularity, and creative urban/regional development point of view. Within the examined period, 39% of the brownfield redevelopment projects have cultural ties. A detailed introduction of the cases highlights the importance of landscape-oriented spatial strategies, temporary use, and mixed land use options in redevelopment for long-term viability. The original function of redevelopment projects encompasses a wide range. We could find industrial brownfields from the 19th century to agro-food facilities from the soviet era, which proves that the allocation of ERDF funds for brownfield redevelopments helped the rehabilitation of those sites which are important in showcasing Hungarian history.

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**Keywords:** brownfield redevelopment; cultural use; public funds; Hungary; post-socialist transformation; circular urban development

## 1. Introduction

Regions are subject to changes due to various often interrelated effects, such as industry shocks or development, global crises, new technologies or changes in consumer expectation, resulting in volatilizing population patterns, income differences and welfare conditions. Thereby, as (Simmie and Martin 2010) notes, regional and local development is definitely not a smooth and incremental process but rather an interrupted, sequential one (as the global financial crises in 2009 or as a result of the COVID-19 pandemic prove). Structural changes (discussed by Rostow 1959) in the economy influence the economic equity, social welfare, and natural and built environment of urban centres as well as their environment (city regions, urban–rural structures), and impact land use too. Brownfield sites are often considered as the legacy of a century of industrialization (NRTEE 2003; Czirfusz 2014; Dannert and Pirisi 2017) or socialist era (Osman et al. 2015); in parallel, their rehabilitation or remediation is favourable from the perspective of sustainable regional and urban development (Pediaditi et al. 2010; Morio et al. 2013; Kolosz et al. 2018; Loures and Vaz 2018; Song et al. 2019). Depending on their size, they represent opportunities from small-scale to large-scale urban improvements, contributing to the reduction in pressure to expand into surrounding green fields, which could contribute to achieving the EU goal of no net land take by 2050 (Science for Environment Policy 2016). The redevelopment of brownfields (depending on various factors, such as the size of the territory, the remediation cost and the social perception) is often implemented through a step-by-step process where temporary use is a viable option for fostering how the territory could be reintegrated into the urban fabric (Bardos et al. 2016; Marian-Potra et al. 2020).

As the availability of the scientific works indicates, the brownfield redevelopment phenomenon is a global research theme discussed frequently from a regional/national perspective (e.g., Visegrad Countries—Petříková et al. 2013; developing countries—Ahmad et al. 2018; China—Han et al. 2018). On the European level, brownfield redevelopment has become a major topic in urban development; however, it is more than just a phenomenon with emerging importance, but rather an ongoing challenge for the governments, regional authorities, development agencies and institutions, communities, etc. Several scientific contributions deal with the scale and nature of European brownfields by applying a case-study approach (e.g., Budapest, Hungary—Romaniak et al. 2014; Karvina, Czech Republic—Martinat et al. 2016; brownfields in Kranj, Slovenia—Cotic 2019; Lene-Voigt Park in Leipzig, Germany—Kabisch 2019; former sandpit in Southern Poland—Krzysztofik et al. 2020). From a policy perspective, it was extremely important to determine the precise content of the phenomenon (Loures and Vaz 2018; Tonin and Bonifaci 2020; Vojvodíková et al. 2021). Differing from the definition accepted in the US, the EU accepts a broad-spectrum definition (Rey et al. 2022), which is based on the concept of previously developed land (originated from the UK terminology). The definition by CABERNET (Concerted Action on Brownfield and Economic Regeneration Network), a European multi-stakeholder network that focuses on the complex issues that are raised by brownfield regeneration, reflects that broad-spectrum nature: “*Brownfields are sites that have been affected by the former uses of the site and surrounding land; are derelict and underused; may have real or perceived contamination problems; are mainly in developed urban areas; and require intervention to bring them back to beneficial use*” (CABERNET 2006). For a deeper understanding of the phenomenon, various classifications have been elaborated to determine what brownfield sites are exactly. For instance, Dannert and Pirisi (2017), referring to Orosz (2012), classify brownfields based on the former use of the area as (1) **traditional brownfields** (former industrial, military and transportation areas), (2) **transitional brownfields** (former commercial, residential and other technical infrastructure areas) and (3) **the new type of brownfields** (former social and cultural functions). Similar to this, a current publication issued in Rey et al. (2022), titled *Neighbourhoods in Transition*, highlights the diversity and richness of situations: (1) **industrial brownfields** (composed of industrial sites from the nineteenth and the first half of the twentieth centuries and large sub- or peri-urban industrial sites), (2) **railway brownfields** (abandoned railway stations, obsolete railway areas, industrial railway sites), (3) **military brownfields**, (4) **waterfront brownfields**, (5) **infrastructural brownfields** (including transport-related infrastructures, agro-food facilities, tertiary sector facilities, commercial brownfields, energy brownfields) and, finally, (6) **diverse derelict sites**. The classification of the brownfield sites is the starting point. The next question—taking into consideration the positive effects of the redevelopment—is the new function to be introduced, the related financial budget for the reclamation and the cost bearer(s). The most common types of new functions vary from the recreational or cultural through infrastructural, business or residential to complex large-scale redevelopment projects. From a financial point of view, the various redevelopment projects could be reimbursed by private funds to public/national or European Union funds (for e.g., European Capital of Culture projects, The European Regional Development Fund (ERDF)) based on the profitability of the investments.

Recognized by the Treaty, culture is one of the most important foundations of the European Community, it is the basis for integration and represents a distinct criterion as to why the EU is more than just an economic cooperation. This was underlined by the European Spatial Development Perspective (ESDP) in 1999, which stated that cultural variety is a characteristic territorial feature of the European Union (EU). Accordingly, spatial development policies have to pay attention to not unifying the heritage but to enriching it in order to increase the quality of life of its citizens through the development of local public goods (CEC 1999). Barnett (2001) points out that culture serves as a medium for the ongoing integration process, resulting in a progressive ‘governmentalization’ of culture in terms of common programmes and budgeting. The European Network of Cultural Centres (ENCC) highlights the importance of culture in forming a sense of belonging to

the European community; upholding common European values; enhancing social capital; creating spillover effects on social cohesion, solidarity and diversity; ensuring educational activities for younger generations as well as life-long-learning; supporting democracy and active citizenship; raising the level of tolerance, openness and respect of others (ENCC n.d.). As one of the European Union's priorities, direct culture-related projects represent a significant share of the budget. A recent article about the EU Funding Programmes for Culture between 2021 and 2027 lists eight programmes which have direct relation to cultural programmes: Creative Europe (EUR 2.24 billion), the Asylum and Migration Fund (EUR 8.705 billion), Citizens, Equality, Rights and Values (EUR 1.64 billion), Digital Europe (EUR 7.588 billion), Erasmus+ (EUR 23.4 billion), the European Social Fund+ (EUR 87.319 billion), Horizon Europe (EUR 79.9 billion) and Interreg (EUR 7.95 billion) (EUcalls 2021). In addition, there are the non-direct cultural development project-related programmes, which as the official website of the European Union points out, incorporate culture-related dimensions, such as many EU policies, including education, research, social policy, regional development and external relations (EU n.d.).

There are several emblematic brownfield redevelopment projects for cultural use across the EU. Due to the redevelopment of the former gas plant in Vienna (capital of Austria), the city's newest quarter has been built. The monumental building retained a new complex function, hosting a shopping centre, an event hall, a number of offices, apartments, dormitory rooms, a kindergarten, a leisure centre and the city archives (Varga 2002). Another example is the historically outstanding area of the former industrial belt in the Ruhr region, which recently became home to many cultural institutions. There is, for example, the new University district, the Ruhr Museum and Zollverein Park (Heidenreich 2015).

Nowadays, brownfield redevelopment—due to the post-socialist transformation of cities and towns—is one of the major topics in Hungarian spatial development research and practice. Despite the fact that there are many sites in Hungary associated with the brownfield phenomena, current research, such as Dannert and Pirisi (2017), primarily focuses on the capital or larger urban centres (like the city of Pécs, which was the European Capital of Culture in 2010—the first award-winning city in Hungary after the country's accession in 2004). It is important to note that larger urban centres are the hot points of spatial development, so it is not by coincidence that former studies put so much emphasis on them. Furthermore, urban studies and spatial studies may apply in-depth analysis for a given research phenomenon or a systematic approach for analysing the wider perspective. In the current study, we have chosen the second alternative as we aim to evaluate the brownfield redevelopment projects for cultural usage financed by the ERDF fund in Hungary in the previous programming period (2014 to 2020). During this period, the ERDF funds were available dominantly for six NUTS-2 regions from the seven present in Hungary (the region where the capital resides (Central Hungary) had little access to these funds because of its development status). Therefore, this study enriches the brownfield research in Hungary by two main contributions: (1) currently, there is no such scientific paper from the field of development policy which focuses on the functional redevelopment of brownfields for an entire programming period; (2) considering the NUTS-2 regions outside the capital and the region formerly referred to as Central Hungary, it supplements research which does not concentrate on the capital.

The study is structured as follows. Firstly, we provide a literature review in terms of the redevelopment of brownfields for cultural use. At the end of this section, we synthesise the literature findings and highlight the most important aspects. Secondly, we interpret the collection of data and the development of the database using the online search engine for development projects in Hungary. Thirdly, we analyse all available brownfield redevelopment projects, totalling 64, from various points of view in order to understand the importance of cultural redevelopment projects. Finally, we provide a full overview of culture-related brownfield redevelopment projects where we will see the importance of

mixed land use options, including public greenspaces and culture, sport and children's parks.

## **2. Redevelopment of Brownfields for Cultural Use**

The redevelopment of brownfields is widely discussed using CABERNET's ABC model or classification (with the later addition of category D) for the assessment of economic potential, thus, helping authorities to prioritise investment projects (Doleželová et al. 2014; Vojvodíková et al. 2021). The ABC model has two dimensions for the classification of sites: (1) land value (after reclamation) and (2) reclamation costs:

- For projects under type A, there is no need for public support or intervention, they are highly economically profitable for private investors since they are associated with low environmental risk and good position in the urban fabric, thus, with economic viability;
- For projects under type B, there is an opportunity for mixed financing since they are not profitable enough to be financed solely by the private sector; nevertheless, a Public–Private Partnership—PPP—would be a viable option since they are at the borderline of profitability due to their good position in the urban fabric on the one hand, and some associated environmental risk, higher investment cost, etc., on the other hand;
- For projects under type C, there is definitely a need for public funding since expected costs of revitalisation significantly exceed the economic benefits due to various factors such as the high level of contamination at the site, social challenges, deteriorated urban fabric, etc. (Ferber 2006; Vojvodíková et al. 2021).

Type D sites, as Vojvodíková et al. (2021) note, have a different character from the redevelopment perspective; they might be not attractive for either the private or the public sector.

As we can see, the ABC model incorporates the position of the brownfield sites into the investigation. Depending on their location in the urban fabric, the regeneration of brownfield sites is a strategic question of spatial development. Romaniak et al. (2014), examining a transitory belt in the Hungarian capital, Budapest, propose a specific urban design and landscape-oriented spatial strategy that could be applied to the fragmented site. Kabisch (2019) promotes brownfield regeneration as a possible direction for sustainable and healthy urban development, considering the case of a former railway in the city of Leipzig, Germany, where, with the involvement of a wide range of stakeholders, a successful co-creation process has been implemented. Czirfusz (2014) links brownfield regeneration to the creative city idea; the attraction of knowledge-intensive, high added-value industries definitely improves the viability of regeneration projects, while Taraba et al. (2021) emphasise the key role of urban design interventions, including industrial brownfield redevelopment in creativity-driven urban regeneration. Marian-Potra et al. (2020) also suggest the redevelopment of brownfields as creative/cultural places possibly as a temporary use of the sites.

Several scientific contributions deal with the strategic management of brownfield redevelopments. One major challenge is the question of ownership. Lorange Rall and Haase (2011) describe the case of the City of Leipzig and its 'interim-use' programme, which was dedicated to revitalise the city's declining neighbourhoods by taking over the development of private brownfields through waiving property taxes in return for a promise of regular maintenance, by which the city has vastly increased the share of public greenspace in these areas. In the case of brownfield redevelopment, either in the preparatory phase or after the redevelopment, it is worthwhile for the expectations and perception of residents to be assessed. Martinat et al. (2016) investigate how a range of brownfield re-use options are perceived by residents and visitors to the Landek area in the city of Ostrava (Czech Republic) by applying a questionnaire-based method; the results indicate that future brownfield uses such as culture, sport and children's parks are the most popular options. Morio et al. (2013) propose a multi-criteria genetic algorithm

which is meant to determine optimal land use configurations with respect to assessment criteria and given constraints on the composition of land use classes, including stakeholder preferences and financial viability aspects. They also conclude that mixed land use options are favourable for redevelopment from a societal point of view.

Zhu et al. (2015) propose an indicator-based evaluation (Information System for Brownfield Regeneration) for brownfield redevelopments, providing customised information according to stakeholders' characteristics and needs based on four dimensions (1. social and economic, 2. financial and accounting, 3. environmental and health, 4. prospective value). Turečková et al. (2021) apply an indicator method, which analysed a set of 572 existing sites recorded in the official brownfield database administered by CzechInvest, to define a set of indicators of brownfield regeneration potential by factor analysis, considering their significance in the regions of the Czech Republic on the NUTS-3 level. They concluded that the most frequent factor distinctive for brownfields is their size, while the least significant factor proved to be the indicator of former utilisation. They argue that the intervention of the public sector is well-grounded, not only by its participation in the brownfield regeneration process, but also by supporting and helping the private sector (Turečková et al. 2021). Despite the fact that the uniqueness of each brownfield may limit general approaches to its regeneration, the identification of similar and common features of brownfield sets makes it possible to boost the regeneration potential (Turečková et al. 2021).

Jamecny and Husar (2016), highlighting the complex nature of historic industrial brownfield regeneration, elaborate a new conceptual framework to improve the processes of brownfield regeneration and to develop efficient and sustainable management strategies under existing complexity, multiple actors and levels in decision making. Special attention is to be focused on the redevelopment of abandoned or underutilised cultural heritage buildings since they hold a unique niche in the urban landscape; in their case, the optional full restoration is the most favourable option since it embodies the local cultural and historic characteristics that define communities (Foster 2021). Military brownfields, due to their size and contamination, represent a special group among PDL. Peric and Miljus (2021) propose a deliberative planning approach if several institutions are the decision makers in the redevelopment of former military sites.

Rizzo et al. (2018) introduce an innovative tool called the Information System for Brownfield Regeneration (ISBR), which has been tested by stakeholders from the EU project TIMBRE case studies; the results indicate that for stakeholders, the remediation aspects, the benchmarking information (valuable to improve practices) and, finally, sustainability-related issues, are the most important aspects. This result is important from the EU perspective since there are Territorial Cooperation Programmes, such as the URBACT or Interreg, which aim to facilitate the dissemination of good practices (which could be perceived as benchmarking information). For instance, in an ongoing Interreg Europe Project, called 'Local Flavours', which aims to promote cultural heritage-based urban development in less visited regions, partners shared ideas for brownfield redevelopment, such as the regeneration of the "Caserma Piave" in Belluno, a former military barrack; the Factory in Grisu where former firefighters buildings were developed into a creative enterprises hub; the activity of associations, such as the "Friend's club of Bānītis", involving the community of local and railway enthusiasts to preserve narrow-gauge railway heritage (Interreg Europe Local Flavours n.d.).

A literature review synthesis is provided in Table 1 about the aspects for the redevelopment of brownfields. We divided the aspects into two categories: the first one highlights the interrelatedness of brownfield redevelopment with other urban and regional development policies. Brownfield regeneration has strong correlations with the sustainable, healthy and circular urban/regional development initiatives as well as with the creative city/region concept. The second one collects those criteria which contribute to the successful redevelopment projects, including special cases, such as monuments and historic buildings.

**Table 1.** Aspects for the redevelopment of brownfields.

Aspect	Solutions	Authors
Connection to development approaches	sustainable/circular regional development	Pediaditi et al. (2010); Morio et al. (2013); Kolosz et al. (2018); Loures and Vaz (2018); Song et al. (2019)
	sustainable and healthy urban development	Kabisch (2019)
	Landscape-oriented spatial strategy	Romaniak et al. (2014)
	temporary use	Bardos et al. (2016); Marian-Potra et al. (2020)
	creative city/region	Czirfusz (2014); Taraba et al. (2021); Marian-Potra et al. (2020)
Strategic management of brownfield redevelopments	type of redevelopments	Lorance Rall and Haase (2011): public greenspace Martinat et al. (2016): culture/sport and children’s park
	stakeholder involvement	Morio et al. (2013): mixed land use options Morio et al. (2013); Zhu et al. (2015); Peric and Miljus (2021) for military brownfields
	financial matters	CABERNET (2006); Vojvodíková et al. (2021)
	determinant nature of the size	Turečková et al. (2021)
	complex nature of historic industrial brownfield regeneration	Jamecny and Husar (2016); Foster (2021)
	importance of benchmarking information	Rizzo et al. (2018)

### 3. Materials and Methods

The main focus of our research is the cultural utilisation of brownfield sites. It is important to note that we comprehend the cultural use in broader terms, not just museums, libraries and archives or art galleries, but such developments that have the capacity to educate citizens on associated aspects of culture and history, such as community cultural centres. In the course of the research, we examined the Hungarian brownfield redevelopments supported during the EU from 2014–2020 programming period from the ERDF fund. Our main goal was to get an idea of what percentage of the brownfield developments in Hungary were cultural utilisation and how they were implemented. In Hungary, the application takes place on an electronic interface, and the announcement of the calls and the submission of the application also take place through an online system. The Hungarian government provides an online inventory of development projects, this is called “search engine for funded projects” (“Támogatott projektkereső” in Hungarian), which is available to the public on the following website: [https://www.palyazat.gov.hu/tamogatott\\_projektkereso#](https://www.palyazat.gov.hu/tamogatott_projektkereso#) (accessed on 30 November 2021) and contains the EU-funded projects.

Generally, the EU uses a top-down approach for the development programmes, which are called Operative Programmes. For the use of the ERDF funds, the “Regulation (EU) No. 1301/2013 of the European Parliament and of the Council of 17 December 2013, on the European Regional Development Fund and on specific provisions concerning the Investment for growth and jobs goal and repealing Regulation (EC) No. 1080/2006” is the base document. According to *Article 5*, Investment priority (6) e) is for the promotion of brownfield redevelopments: “taking action to improve the urban environment, to revitalise cities, regenerate and decontaminate brownfield sites (including conversion areas), reduce air pollution and promote noise-reduction measures”.

In the programming period between 2014 and 2020, the Hungarian Development Program (short name: ‘Széchenyi 2020’) was composed of eight Operative Programmes, from which the Territorial and Settlement Development OP (financed through the ERDF) had, accordingly, a specific call for the rehabilitation of brownfield sites (TOP-2.1.1). Generally, the programme focused on two funding priorities: (1) creating local conditions to boost economic growth and increase employment and (2) enterprise friendly and population-preserving urban development. The second priority is divided into six further interventions:

1. The development of green urban areas and the development of small-scale environmental protection infrastructure;
2. Sustainable urban transport development;
3. Improving the energy efficiency of local government buildings;
4. The development and expansion of public services;
5. The development of deprived urban areas;
6. The strengthening of local communities and cooperation (EC n.d.).

As the call for proposals has been introduced by sub-calls in Hungarian countries, we have reviewed all of these. Unfortunately, the engine does not provide the opportunity to export the projects but just list them, thereby we have built a separate database for further evaluations in MS Excel. The columns of the database describe the various attributes of the development projects and the rows of the projects themselves. With the help of the search engine, we collected the following data: the call identification number of the Territorial and Settlement Development OP, the name of the settlement housing the project, the county the settlement belongs to, the start and end of the project, the description of the project, development fund, budget, aid intensity and the date of approval. Next, we have added further attributes to the database, such as the NUTS-2 region the settlement is located in and the number of inhabitants of the settlement, which was essential to define the size category of settlements, as well as the settlement category—these data were derived from the Hungarian Central Statistical Office. For deeper understanding of the projects, we evaluated the original function with brownfield classification by Rey et al. 2022, the type of the redevelopment, the exact original function and the new functions introduced. Table 2 indicates the projects’ attributes, the attributes added to the original ones from the search engine are in bold.

**Table 2.** Development projects’ attributes.

<b>Project Identification</b>	<b>Territorial Attributes</b>	<b>Project Measures</b>	<b>Financial and Implementation</b>
Name of the settlement	County (NUTS 3)	Brownfield classification (based on Rey et al. 2022)	Development fund
Call identification number to the Territorial and Settlement Development OP	Development region (NUTS 2)	Redevelopment type	Budget
Project start	Settlement category	Original function of the brownfield sites	Aid intensity
Project end	Number of inhabitants	New functions introduced	Date of approval
Description of redevelopment project	Size category		

The database consists of 64 brownfield redevelopment projects. With the help of the database, we analysed the projects on two separate levels.

The first level is the nature and characteristics of the redevelopment project. In this discourse we have examined the following questions:

1. How many cultural redevelopment projects have been financed by the specific call?
2. What are the new functions, in general, that have been achieved by the rehabilitation projects?
3. What were the original functions of these brownfield sites?
4. What is the relation between the original functions and new functions? Which brownfields are redeveloped for cultural use prospectively?
5. How much is the budget for cultural rehabilitation?
6. What is the distribution of brownfield redevelopment projects on the regional (NUTS 2) level?



The second level of the analysis is a deeper understanding of the projects from a regional and urban development perspective. Here, we have formulated the following hypotheses based on the literature review that have to be tested:

**Hypothesis 1 (H1).** *According to Turečková et al. (2021), the former utilisation of the brownfield site is less significant from a regeneration perspective; accordingly, we assume that for the ERDF projects a large range of former functions is covered.*

**Hypothesis 2 (H2).** *Morio et al. (2013), as well as Turečková et al. (2021), emphasise the benefits of mixed land use options for ensuring financial stability and social spillovers; consequently, we assume that examined cultural redevelopment projects take into account the income regeneration potential (component 'A') and social goals (component 'B').*

**Hypothesis 3 (H3).** *According to Foster (2021), the redevelopment of cultural heritage buildings consists favourably of a full restoration; accordingly, for monument sites, we assume that the redevelopment aims at demonstrating the appearance of the building in its original state.*

**Hypothesis 4 (H4).** *For military sites—as Peric and Miljus (2021) indicate—the level of contamination is one of the greatest costs to be covered, thereby, we assume that in the case of these projects, the financial aid is primarily for remediation.*

From the project descriptions, we got a picture of the previous function of the brownfield areas, which we could categorise further. Respectively, the description also included the developments taking place within the framework of the project, based on which we were able to group the areas according to new functions.

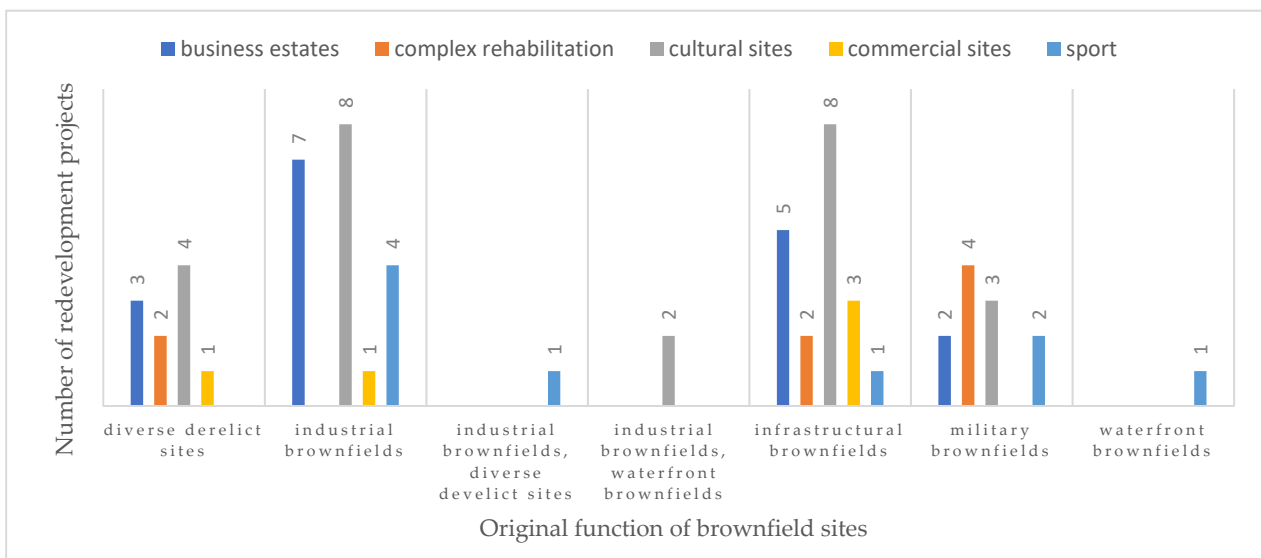
#### 4. Results

At first, we provide an overview about the brownfield redevelopment projects which have been financed within the framework of the Territorial and Settlement Development OP between 2014 and 2020 (first level analysis). There are 64 projects under the specific call for brownfield redevelopments in the Territorial and Settlement Development OP, of which 39% are cultural.

We have evaluated the redevelopment projects one by one in order to classify the new functions which have been introduced through the rehabilitations. These categories refer to the classical typology of brownfield redevelopments: cultural sites (39%), business estates (27%), sport facilities (14%), complex rehabilitations of public spaces (12%) and, finally, commercial sites such as marketplaces (8%). The redevelopment projects represent high variety in terms of the new functions, which indicates that these sites provide the opportunity for tailor-made solutions according to the development needs of each settlement.

In the project register, detailed descriptions of the redevelopment projects are available. Due to this, the original function of the projects could be assessed. We have analysed the descriptions one by one, and we have categorised the original functions according to the typology developed by Rey et al. (2022). The distribution of the original brownfield sites is as follows: industrial (31.25%), infrastructural (29.69%), military brownfields (17.19%), diverse derelict sites (15.63%), waterfront (1.56%), industrial and diverse derelict (1.56%) and, finally, industrial and waterfronts (3.13%). There were few projects which belonged to more than one category, for instance, the rehabilitation of a former mill which is situated along the riverside covers two categories.

We have examined the relation between the original function and new functions. Figure 1 represents a cross-check evaluation of the original and new functions which indicates that cultural redevelopment projects originated from various brownfields including diverse derelict sites (4 projects), industrial brownfields (8 plus 2 projects), infrastructural brownfields (8 projects) and military brownfields (3 projects).

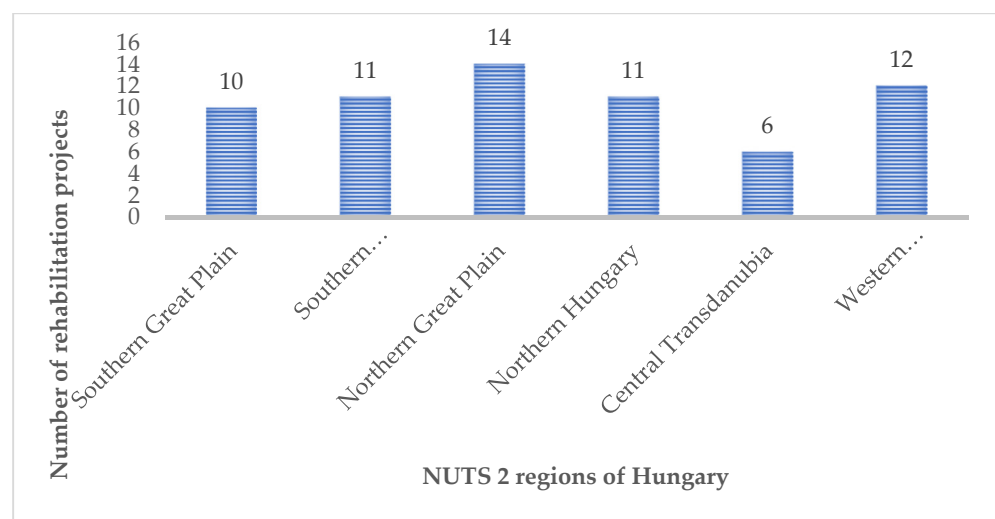


**Figure 1.** Total redevelopment projects with new functions per original functions (N = 64).

The budget allocated for cultural redevelopment projects is dominant too, it counts for 40% of the specific call for brownfield redevelopments.

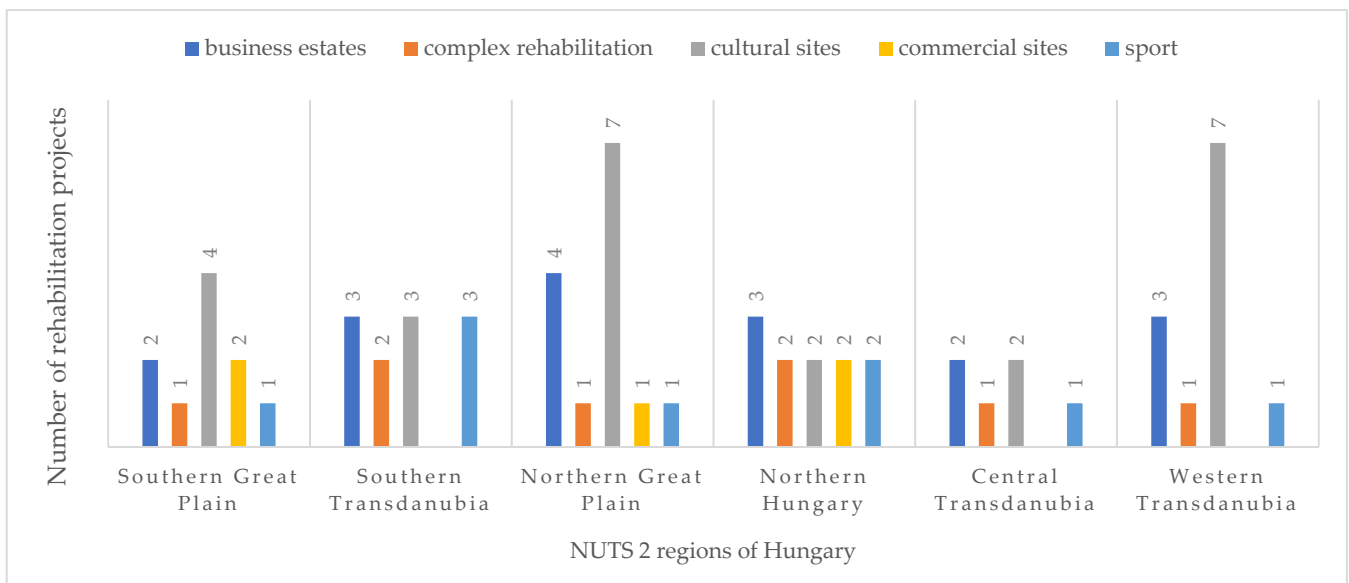
The total budget for cultural rehabilitation was approximately EUR 94 million, and the budget allocated for cultural redevelopments was almost EUR 38 million. From a financial point of view, cultural redevelopment and complex rehabilitation projects count for the majority of funds.

As the ERDF fund was mainly available for convergence NUTS 2 regions in Hungary (6 regions from the total of 7), the analysis could prove that the brownfield redevelopments financed by public funds are really important in these regions. The territorial distribution of the projects validates the necessity of the specific call since all six development regions in Hungary have been involved (Figure 2).



**Figure 2.** Total number of brownfield rehabilitation projects on NUTS 2 level (N = 64).

We have analysed the distribution of the new functions on a regional level (Figure 3). The split of redevelopment projects represents significant variance in all regions. The analysis proves that the cultural redevelopments are important in all regions resulting in direct benefits for the local communities and society.



**Figure 3.** Rehabilitation types on NUTS 2 level (N = 64).

In the course of our research, we were able to get more detailed results on the cultural redevelopment projects (second level analysis). These projects, according to the CABERNET definition, belongs to TYPE C, where public intervention is needed (CABERNET 2006). As it came out from the statistical analysis, the classification developed by Rey et al. (2022) is sufficient to categorise the projects. In this discourse, based on their typology, we develop further sub-categories within the framework. At first, we interpret the cultural redevelopment projects, secondly, we test the hypotheses.

Table 3 includes the diverse derelict sites, in our examples of downtown and urban suburbs. During the evaluation of the projects, we found an interesting case in the example of Kaposvár, where the former Nostra building was based on the former castle ruins. Rehabilitation, thus, involves exploring and preserving the memory of the past.

**Table 3.** Redevelopment projects for diverse derelict sites.

Development Region (NUTS 2)	Name of the Settlement	Type of the Derelict Site	Original Function of the Brownfield Sites	New Functions Introduced	Budget
Southern Transdanubia	Tamási	sub-urban site	Old building in the deprived urban neighbourhood	Community place for cultural and other events, meeting place for NGOs, conference room and offices	EUR 801,440
	Kaposvár	peri-urban site	The building called “Nostra” was built in 1931 in the area of the former town castle. After the regime’s change the buildings fell into disrepair	Development of green areas with facilities for cultural, sport and recreational activities	EUR 1,994,326

Table 3. Cont.

Development Region (NUTS 2)	Name of the Settlement	Type of the Derelict Site	Original Function of the Brownfield Sites	New Functions Introduced	Budget
Northern Great Plain	Vámospércs	sub-urban site	Facilities on the outskirts of the settlement	Event hall for 200 people with the development of green areas	EUR 423,237
	Szolnok	complex rehabilitation in the town	Degraded old part in Szolnok town near “Final road” (‘Végső út’ in Hungarian)	Community place for cultural, entertainment and other events, parking zone, sports facilities, tennis playgrounds	EUR 3,188,488

Table 4 highlights the redevelopment projects for industrial brownfields. Buildings from the 19th century and from the first half of the 20th century are in this range, including industrial monuments as well (e.g., Keszthely, the beer manufacturing site of Vencel Reischl). We would like to highlight one example from this set. It is Körmend, where the former shoe factory buildings in the castle park will be demolished parallel to the soil change. The main reason for this is that the previous activity caused very serious soil pollution. The majority of the development projects include green space development, and we can see that there are a few projects which include mixed land use options.

Table 5 represents the redevelopment projects for industrial brownfields and waterfront brownfields. The two examples in the following are particularly interesting for their own complexity. The rehabilitation in Mohács, a historic industrial brownfield, has been restored to previous conditions, and during the rehabilitation of the building, a charming Danube bank site was created, which has become the home of many events, including cultural events, conferences, balls and weddings. In Jászberény, the former mill factory building was also restored to its original condition, where the conference centre was converted into a loaf to commemorate its former function. In our opinion, it would also be important to take advantage of the proximity to the waterfront; however, we did not find any improvements in the project descriptions.

Table 6 contains redevelopment projects for infrastructural brownfields. In this category, a dominant share of the buildings is due to the post-soviet transformation. In a few cases, such as Karcag or Mándok, the cultural function of local marketplaces has encouraged business incentives to be developed.

The military brownfields projects in Table 7 also include a number of creative and interesting rehabilitations. The Csongrád project will be built on the site of the former barracks in the new industrial park, and a new service house will be built in its former command building, which will contain several rooms and storage rooms, as well as a conference room for 100 people.

One of the special cases in our research also fell into this group. The area of the Kecs-kemét barracks will be rehabilitated for the first time, thus, involving the city residents from the previously closed part of the city and then only in the future will they add new functions to the buildings in the area after assessing the needs of the city residents. This is a creative development that can also be considered a temporary recovery process. In the public area of the barracks, a new layer of humus will be filled up after decontamination for pollution, so that the new public area can accommodate many cultural events.

**Table 4.** Redevelopment projects for industrial brownfields.

<b>Development Region (NUTS 2)</b>	<b>Name of the Settlement</b>	<b>Type of Industrial Brownfield</b>	<b>Original Function of the Brownfield Sites</b>	<b>New Functions Introduced</b>	<b>Budget</b>
Western Transdanubia	Jánosháza	industrial sites from first half of the twentieth century	Reconstruction of a former industrial site (textile industry) in the centre of the settlement. Rehabilitation of the green area of the fishing pond	A new building for community events, programmes with parking places. Green area rehabilitation, new facilities for recreational activities	EUR 620,760
	Körmend	industrial sites from first half of the twentieth century	Former shoe production factory	The former industrial site is demolished in order to provide place for the cultural and community events next to the valuable Batthyány castle monument (originally built in Baroque style in the 18th century)	EUR 844,111
	Moson-magyaróvár	industrial sites from first half of the twentieth century	Former metal manufacturing site, called “MOFEM”	Cultural centre, community place	EUR 1,866,428
	Keszthely	industrial sites from first half of the nineteenth century	The building is one of the oldest baroque monuments in the town built in 1770; from 1844 it was the beer manufacturing site of Vencel Reischl	Reconstruction of the former building for community place for cultural and other events, commercial and service sites with green area development	EUR 2,398,420
	Szombathely	industrial sites from first half of the twentieth century	Former electronic manufacturing site, acquired later by the municipality	New multifunctional area with sport, commercial and service sites, rehabilitation of green areas, community and cultural meeting place	EUR 2,116,253
Central Transdanubia	Gárdony (Agárd)	industrial sites from first half of the twentieth century	manufacturing site	Rehabilitation and enlargement of the former industrial buildings, development of public place for community purposes	EUR 1,139,761
	Komárom	industrial sites from first half of the twentieth century	Former industrial and logistic site in the town centre	Development of green areas with open air furniture. Community place development for families, youth, offices for NGOs and place for various catering services	EUR 1,608,352
Southern Great Plain	Déaványa	industrial sites from first half of the twentieth century	Former manufacturing site	New multifunctional place for the local government, cultural activities and business	EUR 1,798,511

**Table 5.** Redevelopment projects for industrial brownfields and waterfront brownfields.

<b>Development Region (NUTS 2)</b>	<b>Name of the Settlement</b>	<b>Type of Industrial Brownfield</b>	<b>Original Function of the Brownfield Sites</b>	<b>New Functions Introduced</b>	<b>Budget</b>
Southern Transdanubia	Mohács	industrial sites from the nineteenth century	Former silk, later textile industry site	Monument rehabilitation to the original state and use for community purposes for cultural and other events	EUR 2,560,487
Northern Great Plain	Jászberény	industrial sites from the nineteenth century	Former mill and its surroundings	Conference room, premises, sports and recreational activities, public place development	EUR 2,257,336

**Table 6.** Redevelopment projects for infrastructural brownfields.

<b>Development Region (NUTS 2)</b>	<b>Name of the Settlement</b>	<b>Type of Infrastructural Brownfield</b>	<b>Original Function of the Brownfield Sites</b>	<b>New Functions Introduced</b>	<b>Budget</b>
Western Transdanubia	Pannonhalma	agro-food facilities	Former Hungarian Agricultural Cooperative site in the Socialist Era	With the renovation of the building, development of community place for cultural and other events with hospitality facilities, parking zone	EUR 846,501
				Enlargement of the parking zone, cycling centrum development, community events	EUR 843,420
Northern Hungary	Gönc	commercial brownfields	Former Hungarian Consumption Cooperative site in the Socialist Era	With the demolition of the former site, new community place for cultural and other events, shop for local products and a Craft House	EUR 1,289,503
	Tokaj			Former trading site	Urban service place and green area development
Northern Great Plain	Besenyszög	agro-food facilities	Former Hungarian Agricultural Cooperative site in the Socialist Era	Renovation of the building: sport facility, offices and event hall for cultural programmes	EUR 748,304
	Hajdú-dorog	tertiary sector facilities	Former office building of a television service provider	Renovation of the building: offices, a multifunctional conference, event hall and business premises	EUR 411,499
	Karcag	agro-food facilities	Former mill (called Rónai) and its environment	Green place rehabilitation for community purposes for cultural and other events, shop for local products, infrastructure (roads, parking places)	EUR 1,410,835
	Mándok	commercial brownfields	Abandoned business site	Community place for cultural and other events with local market	EUR 372,460

**Table 7.** Redevelopment projects for military brownfields.

Development Region (NUTS 2)	Name of the Settlement	Type of the Military Brownfield	Original Function of the Brownfield Sites	New Functions Introduced	Budget
Southern Great Plain	Csongrád	Barracks	The commandant’s office building in the former military barrack as the last building in the site which has been the new industrial park	Event and conference hall (cultural and other occasions), recreation	EUR 810,948
	Baja		The commandant’s office building with the restaurant and kitchen	Rehabilitation of the building: sport and event place	EUR 1,410,832
	Kecskemét		Former Rudolf military barracks	Rehabilitation of the monument site including green space development and construction of roads for potential educational, cultural, social and touristic institutions	EUR 4,545,711

Next, let us test the hypotheses. Table 8 lists the hypotheses and their status: accept/decline.

**Table 8.** Confirmation of the hypotheses.

Hypothesis	Accept/Decline
H1. According to Turečková et al. (2021), the former utilisation of the brownfield site is less significant from a regeneration perspective; accordingly, we assume that for the ERDF projects a large range of former functions is covered.	Accepted
H2. Morio et al. (2013), as well as Turečková et al. (2021), emphasise the benefits of mixed land use options for ensuring financial stability and social spillovers; consequently, we assume that examined cultural redevelopment projects take into account the income regeneration potential (component ‘A’) and social goals (component ‘B’).	Accepted
H3. According to Foster (2021), the redevelopment of cultural heritage buildings consists favourably of a full restoration; accordingly, for monument sites, we assume that the redevelopment aims at demonstrating the appearance of the building in its original state.	Accepted
H4. For military sites—as Peric and Miljus (2021) indicate—the level of contamination is one of the greatest costs to be covered, thereby, we assume that in the case of these projects, the financial aid is primarily for remediation.	Partially accepted

The findings of Turečková et al. (2021) for the first hypothesis, has been validated since the 64 projects represent great variety. Focusing on the cultural redevelopments, there are former functions which resemble the “broad spectrum definition” of previously developed land. The range of projects covers cases from contaminated sites to underused buildings through to monuments.

The projects which have been financed by this specific call were initiated by municipalities, thereby we could expect that both financial and social sustainability concerns have been taken into account when project design took place. A few cases from the projects serve as a good example to accept the second hypothesis: development of the community places is the heart of most of the projects and several ones take into account the potential of income regeneration with establishing conference rooms, event halls, places for catering services, shops for local products or offices. In Hungary, the municipalities are able to

receive revenue from renting, consequently, this business activity is represented in the cases.

The third hypothesis can be accepted as well. There were three monument sites in which redevelopment aims are to demonstrate the appearance of the building in its original state: the beer manufacturing site of Vencel Reischl in Keszthely, the former silk and later textile industry site in Mohács and the former Rudolf military barracks in Kecskemét. The monumental building in Jászberény (former mill) is protected and renovated as well.

The fourth hypothesis could be partially accepted. In the case of the former Rudolf military barracks in Kecskemét, the remediation cost represents a significant cost to be covered, nevertheless, in the case of Csongárd, the development is the final step of a longer rehabilitation project (utilisation of the building in the industrial park), while in the case of Baja, the redevelopment project is the first step of a longer-rehabilitation process, which does not include environmental remediation.

## **5. Discussion**

The analyses underline the importance of culture-related policy and developments within the EU. Although the ERDF is not a direct fund for culture-related projects, such as Creative Europe, the European Social Fund+ or Interreg, we can see that in the case of urban development projects where the local municipality would like to increase the number of meeting places for different social groups, cultural redevelopments are implemented. The focus on local communities can be accepted as a stakeholder-oriented strategy, which would result in better governance and collaboration. Better governance and collaboration have the potential to mobilise the various resources of the community, which are really important for resilient behaviour. The developments could provide benefits for various social groups including families, young generations and the elderly which improves the population retention capacity of the settlements. We can conclude that the availability of the territorial programmes compared to the sector-oriented ones could provide direct benefits for residents. From a programming point of view, it is quite important for regional and urban funds to be maintained, as well as sectoral ones, to enable direct changes in the living conditions of people. The projects—as we could see—have not only social benefits but environmental and economic ones too.

The redevelopment projects between 2014 and 2020 indicate the importance of the sustainable/circular urban development approach proposed by Pediaditi et al. (2010), Morio et al. (2013), Kolosz et al. (2018), Loures and Vaz (2018) and Song et al. (2019)—a dominant share of the projects had ambitions for improving the natural environment. The landscape-oriented spatial strategy proposed by Romaniak et al. (2014) is really important in the waterfront projects, which is similar to the case of Mohács. There are many cases (like Besenyőszeg, Dévaványa, Gárdony, Gönc, Hajdúdorog, Jászberény, Tamási and Tokaj) which use mixed land use options (Morio et al. 2013) in order to improve financial viability. It is important to note, that in less populated areas, a viable option for the cultural institutions is the mixed use since it could contribute to the maintenance of the establishment in the long term.

The redevelopment of the Former Rudolf military barracks is not a typical case in that it could be handled as a place for temporary use, as suggested by Bardos et al. (2016) and Marian-Potra et al. (2020): the EU fund is used for the restoration, and the concrete functions will be developed step-by-step, like a living lab.

The analysis has proven, from a redevelopment perspective, that it is not the former function but the reintegration potential of the brownfield sites into the urban fabric that is important. Settlements are living systems where the different sub-systems are interrelated with each other. Considering the funds available for the local municipalities, the strength of the local economy is a determinant, either from the viewpoint of collecting money from taxes for community purposes or attracting investors. The case of Keszthely—where the redevelopment of one of the oldest baroque monuments in the town, built in 1770, is implemented—would be a surprising case since the town is situated near Lake Balaton, one



of the most popular tourist destinations in Hungary; however, the income of the town is rather limited (despite what could be expected) due to the tourism-oriented local economy.

The question of the redevelopment of monuments and monumental buildings is always a challenge in less wealthy countries like Hungary. In concentrated urban areas, we often face the problem of the mismanagement of these sites—the economic power is stronger than the local interests, often resulting in the full/partly demolition of the buildings. In contrast, the EU/public projects could enable a better management of these sites, which could result in the full restoration of monuments since the primary focus is not on the return on investment. The redevelopment projects thereby increase the level of European public goods, not just in their physical form but from a historic perspective as well. Redevelopment projects have the potential to conserve periods from the past that are part of the national and European collective memory. A healthy, resilient society must learn from the past in order to develop better policies and make better decisions. For instance, monuments from the second half of the 19th century are memories of the Austrian-Hungarian Monarchy, a really important period in the modernisation of the country, while unused agribusiness and infrastructural sites from the second half of the 20th century are the legacy of the Soviet period.

One of the major challenges in brownfield redevelopment projects is the question of full or partial redevelopment. Favourably, the territory would be redeveloped as a whole, however, contamination matters, size, ownership questions and budget issues often do not make it possible. That is why it is important to continuously monitor the status of the brownfield sites which could help design better interventions. In these developments the ownership question was evident—the municipality as the owner was able to apply for the funds. Collaboration is really important to handle the ownership question, as there are a few cases when the owner realises that selling the building is essential for the urban development project and the owner increases the price accordingly.

The majority of the projects have a regional character, meaning that the redevelopment increases the catchment area of the settlement, for example, with a new conference room, a music hall has a larger market area. There are favourable trends which could contribute to the long-term stability of these markets, for example, there is growing popularity for weddings in the countryside, and people—as an effect of COVID-19—evaluate their neighbourhoods and seek the opportunity to spend time in green, recreational places, making smaller-distance excursions.

In this review, we have chosen a broader approach to comprehend the nature and complexity of brownfield areas outside the capital area. We have emphasised that this is a change in the approach since most works have a capital-focus and apply case study methodology. The wider range of the analysis, however, influences how the cases could be interpreted. In the future, it would be worth developing more comprehensive analysis on the relation of the projects with the current urban/settlement development strategies. Currently, the creative urban development in Hungary is a question of larger cities, however, on the level of settlement alliances it would be interesting to examine the cases of small- and medium-sized towns too. The data currently available is about the implementation of the redevelopments, but later, monitoring data and methods would be worth investigating the projects both in terms of result indicators, such as the number of visitors, organised events, revenue generated, renewed green spaces and satisfaction levels from stakeholder surveys.

A deeper understanding of the brownfield redevelopment processes in Hungary would be favourable for designing policy recommendations about stakeholder engagement and landscape-oriented spatial solutions for maximising the economic and social benefits of brownfield redevelopments from public sources.

## **6. Conclusions**

In this research, we have analysed public redevelopment projects financed in Hungary from the Territorial and Settlement Development OP (financed by the ERDF) between 2014

and 2020, with special focus on cultural use. These projects belong to type “C” according to the CABERNET’s model because there is a need for public funding since expected costs of revitalisation significantly exceed the economic benefits due to various factors such as the high level of contamination at the site, social challenges and deteriorated urban fabric. The analysis has two major novelties: firstly, instead of an in-depth analysis of a brownfield redevelopment case study, it provides a systematic overview of a brownfield redevelopment programme for entire EU programming with a wide variety of former industrial, agricultural, infrastructural and military sites; secondly, it enriches the brownfield redevelopment research with cases from convergence regions in Hungary. The analysis carried out shows that it is not the original function but rather the reintegration potential that is the criteria for designing brownfield redevelopment projects. The projects do not only improve the condition of the environment or the buildings of previously developed land, they also result in recreational and community-oriented public places which have the potential to generate revenues for the local municipalities. The developments take into account the stakeholders’ interests, urban–rural linkages and history. Despite the fact that ERDF is not for directly culture-related projects, these interventions initiated by the municipalities aim to provide better living environments, enhancing the standard of living, thus, they often have a culturally-related redevelopment, enriching European public goods.

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## References

- Ahmad, Naveed, Yuming Zhu, Muhammad Ibrahim, Muhammad Waqas, and Abdul Waheed. 2018. Development of a Standard Brownfield Definition, Guidelines, and Evaluation Index System for Brownfield Redevelopment in Developing Countries: The Case of Pakistan. *Sustainability* 10: 4347. [CrossRef]
- Bardos, R. Paul, Sarah Jones, Ian Stephenson, Pierre Menger, Victor Beumer, Francesca Neonato, Linda Maring Uwe Ferber, Tomas Track, and Katja Wendler. 2016. Optimising value from the soft re-use of brownfield sites. *Science of The Total Environment* 563–64: 769–82. [CrossRef] [PubMed]
- Barnett, Clive. 2001. Culture, policy, and subsidiarity in the European Union: From symbolic identity to the governmentalisation of culture. *Political Geography* 20: 405–426. [CrossRef]
- Commission of the European Communities (CEC). 1999. *European Spatial Development Perspective: Towards Balanced and Sustainable Development of the Territory of the EU*. Luxembourg: Office for Official Publications of the European Communities. Available online: [https://ec.europa.eu/regional\\_policy/sources/docoffic/official/reports/pdf/sum\\_en.pdf](https://ec.europa.eu/regional_policy/sources/docoffic/official/reports/pdf/sum_en.pdf) (accessed on 10 November 2010).
- Concerted Action on Brownfield and Economic Regeneration Network (CABERNET). 2006. Sustainable Brownfield Regeneration: CABERNET Network Report. Available online: <https://www.yumpu.com/en/document/view/43804816/sustainable-brownfield-regeneration-cabernet-network-report> (accessed on 10 November 2021).
- Cotic, Bostjan. 2019. Industrial Symbiosis in Brownfields in Kranj, Slovenia. *IOP Conference Series Materials Science and Engineering* 471: 112073. [CrossRef]
- Czirfusz, Márton. 2014. Obliterating creative capital? Urban governance of creative industries in post-socialist Budapest. *Europa XXI* 26: 85–96. [CrossRef]
- Dannert, Éva, and Gábor Pirisi. 2017. Rusty Hungary: New Insights in Brownfield Research. *European Spatial Research and Policy* 24: 5–22. [CrossRef]
- Doleželová, Lucie, Michal Hadlač, Milada Kadlecová, Stanislav Martinát, and Milan Polednik. 2014. Redevelopment potential of brownfields: A-B-C classification and its practical application. *E a M: Ekonomie a Management* 7. [CrossRef]
- EUcalls. 2021. 8 Most Important EU Funding Programmes for Culture 2021–2027. March 2. Available online: <https://eucalls.net/blog/funding-prorammes-culture> (accessed on 20 March 2022).
- European Commission (EC). n.d. Territorial and Settlement Development OP Hungary. Available online: [https://ec.europa.eu/regional\\_policy/en/atlas/programmes/2014-2020/hungary/2014hu16m2op001](https://ec.europa.eu/regional_policy/en/atlas/programmes/2014-2020/hungary/2014hu16m2op001) (accessed on 15 January 2022).

- European Network of Cultural Centres (ENCC). n.d. Supporting Culture Is Supporting Europe. Policy Paper. Available online: <https://encc.eu/resources/database/supporting-culture-supporting-europe> (accessed on 20 March 2022).
- European Union (EU). n.d. Celebrating Europe's Cultural Heritage and Diversity. Available online: [https://european-union.europa.eu/priorities-and-actions/actions-topic/culture\\_en](https://european-union.europa.eu/priorities-and-actions/actions-topic/culture_en) (accessed on 20 March 2022).
- Ferber, Uwe, ed. 2006. *Brownfields Handbook*. Ostrava: VŠB—TU Ostrava.
- Foster, Gillian. 2021. Circular economy strategies for adaptive reuse of cultural heritage buildings to reduce environmental impacts. *Resources, Conservation and Recycling* 152. [CrossRef]
- Han, Qingye, Yuming Zhu, Ginger Y. Ke, and Keith W. Hipel. 2018. An ordinal classification of brownfield remediation projects in China for the allocation of government funding. *Land Use Policy* 77: 220–30. [CrossRef]
- Heidenreich, Martin. 2015. The New Museum Folkwang in Essen. A Contribution to the Cultural and Economic Regeneration of the Ruhr Area? *European Planning Studies* 23: 817545. [CrossRef]
- Interreg Europe Local Flavours. n.d. Project Good Practices. Available online: <https://www.interregeurope.eu/localflavours/good-practices/> (accessed on 15 January 2022).
- Jamecny, Lubomir, and Milan Husar. 2016. From Planning to Smart Management of Historic Industrial Brownfield Regeneration. *Procedia Engineering* 161: 2282–89. [CrossRef]
- Kabisch, Nadja. 2019. Transformation of urban brownfields through co-creation: The multi-functional Lene-Voigt Park in Leipzig as a case in point. *Urban Transformations* 1: 2. [CrossRef]
- Kolosz, Ben W., Ioannis N. Athanasiadis, Georg Cadisch, Terence P. Dawson, Carlo Giupponi, Miroslav Honzák, Javier Martinez-Lopez, Antonino Marvuglia, Vahid Mojtahed, Keroboto. B. Z. Ogutu, and et al. 2018. Conceptual advancement of socio-ecological modelling of ecosystem services for re-evaluating Brownfield land. *Ecosystem Services* 33: 29–39. [CrossRef]
- Krzysztofik, Robert, Renata Dulias, Iwona Ikantor-Pietraga, Tomasz Spórna, and Weronika Dragan. 2020. Paths of urban planning in a post-mining area. A case study of a former sandpit in southern Poland. *Land Use Policy* 99: 104801. [CrossRef]
- Lorance Rall, Emily, and Dagmar Haase. 2011. Creative intervention in a dynamic city: A sustainability assessment of an interim use strategy for brownfields in Leipzig, Germany. *Landscape and Urban Planning* 100: 189–201. [CrossRef]
- Loures, Luis, and Eric Vaz. 2018. Exploring expert perception towards brownfield redevelopment benefits according to their typology. *Habitat International* 72. [CrossRef]
- Marian-Potra, Alexandra-Camelia, Ramona Işfănescu-Ivan, Sorin Pavel, and Cătălina Ancuța. 2020. Temporary Uses of Urban Brownfields for Creative Activities in a Post-Socialist City. Case Study: Timișoara (Romania). *Sustainability* 12: 8095. [CrossRef]
- Martinat, Stanislav, Petr Dvorak, Bohumil Frantal, Petr Klusacek, Josef Kunc, Josef Navratil, Robert Osman, Kamila Tureckova, and Matthew Reed. 2016. Sustainable urban development in a city affected by heavy industry and mining? Case study of brownfields in Karvina, Czech Republic. *Journal of Cleaner Production* 118: 78–87. [CrossRef]
- Morio, Maximilian, Sebastian Schädler, and Michael Finkel. 2013. Applying a multi-criteria genetic algorithm framework for brownfield reuse optimization: Improving redevelopment options based on stakeholder preferences. *Journal of Environmental Management* 130: 331–46. [CrossRef]
- National Round Table on the Environment and the Economy (NRTEE). 2003. *National Brownfield Redevelopment*. Strategy for Canada. Ottawa: National Round Table on the Environment and the Economy, ISBN 1-894737-05-9. Available online: [https://ocpm.qc.ca/sites/ocpm.qc.ca/files/pdf/P85/5.10.2\\_cleaning-up-the-past.pdf](https://ocpm.qc.ca/sites/ocpm.qc.ca/files/pdf/P85/5.10.2_cleaning-up-the-past.pdf) (accessed on 30 November 2021).
- Orosz, Éva. 2012. The changing interpretation of the term brownfield (in Hungarian). *Tér és Társadalom* 26: 73–87. [CrossRef]
- Osman, Robert, Bohumil Frantal, Petr Klusáček, Josef Kunc, and Stanislav Martinát. 2015. Factors affecting brownfield regeneration in post-socialist space: The case of the Czech Republic. *Land Use Policy* 48: 309–16. [CrossRef]
- Pediaditi, Kalliope, Kieron J. Doick, and Andrew J. Moffat. 2010. Monitoring and evaluation practice for brownfield, regeneration to greenspace initiatives: A meta-evaluation of assessment and monitoring tools. *Landscape and Urban Planning*, 97. [CrossRef]
- Peric, Ana, and Milutin Miljus. 2021. The regeneration of military brownfields in Serbia: Moving towards deliberative planning practice? *Land Use Policy* 102: 105222. [CrossRef]
- Petríková, Dagmar, Maroš Finka, and Vladimír Ondrejčka, eds. 2013. *Brownfield Redevelopment in the Visegrad Countries*. Ostrava-Poruba: Vysoká škola Báňská—Technická Univerzita, Fakulta Stavební, pp. 1–90. ISBN 978-80-248-3125-1.
- Rey, Emmanuel, Martine Laprise, and Sophie Lufkin. 2022. Urban Brownfields: Origin, Definition, and Diversity. In *Neighbourhoods in Transition*. The Urban Book Series; Cham: Springer. [CrossRef]
- Rizzo, Erika, Lisa Pizzol, Alex Zabeo, Elisa Giubilato, Andrea Critto, Luca Cosmo, and Antonio Marcomini. 2018. An Information System for Brownfield Regeneration: Providing customised information according to stakeholders' characteristics and needs. *Journal of Environmental Management* 217: 144–56. [CrossRef] [PubMed]
- Romaniak, Alicja, Judit Skaliczki, and Árpád Szabó. 2014. Strategies Resolving Spatial Fragmentation: Case Study in the Brownfield Zone of Budapest. *Periodica Polytechnica Architecture* 45: 67–74. [CrossRef]
- Rostow, Walt Whitman. 1959. The Stages of Economic Growth. *The Economic History Review* 12: 1–16. [CrossRef]
- Science for Environment Policy. 2016. *No Net Land Take by 2050? Future Brief 14*. Produced for the European Commission DG Environment by the Science Communication Unit. Bristol: UWE.
- Simmie, James, and Ron Martin. 2010. The economic resilience of regions: Towards and evolutionary approach. *Cambridge Journal of Regions, Economy and Society* 2010: 27–43. [CrossRef]

- Song, Yinan, Niall Kirkwood, Čedo Maksimović, Xiaodi Zheng, David O'Connor, Yuanliang Jin, and Deyi Hou. 2019. Nature based solutions for contaminated land remediation and brownfield redevelopment in cities: A review. *Science of The Total Environment* 663: 568–79. [CrossRef]
- Taraba, Judit, Claudiu Forgaci, and Arie Romein. 2021. Creativity-driven urban regeneration in the post-socialist context—The case of Csepel Works, Budapest. *Journal of Urban Design* 27: 161–180. [CrossRef]
- Tonin, Stefania, and Pietro Bonifaci. 2020. Assessment of brownfield redevelopment opportunities using a multi-tiered approach: A case in Italy. *Socio-Economic Planning Sciences* 71: 100812. [CrossRef]
- Turečková, Kamila, Jan Nevima, Danuta Duda, and Pavel Tuleja. 2021. Latent structures of brownfield regeneration: A case study of regions of the Czech Republic. *Journal of Cleaner Production* 311: 127478. [CrossRef]
- Varga, Mihály. 2002. Urban houses from gas tank—Wien, Gasometer. Available online: <https://epiteszforum.hu/gaztartalybol-varosi-hazak-becs-gasometer> (accessed on 10 January 2022). (In Hungarian).
- Vojvodíková, Barbara, Radim Fojtík, and Iva Tichá. 2021. Design and Verification of a Simple Approach to Brownfields Categorization. *Sustainability* 13: 11206. [CrossRef]
- Zhu, Yuming, Keith W. Hipel, Ginger Y. Ke, and Ye Chen. 2015. Establishment and optimization of an evaluation index system for brownfield redevelopment projects: An empirical study. *Environmental Modelling & Software* 74: 173–82. [CrossRef]





Article

# A Comparative Analysis of the Economic Sustainability of Cultural Work in the UK since the COVID-19 Pandemic and Examination of Universal Basic Income as a Solution for Cultural Workers

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**Abstract:** The COVID-19 pandemic and related lockdowns across the world have greatly affected an already vulnerable cultural economy and the structural precarity of many cultural workers. After documenting the impacts of the pandemic in the cultural sector and the effectiveness of governmental responses in the UK and in Europe, the article focuses on the visual arts and explores calls for reforms of the cultural economy. While the UK government's recovery plan went against the country's cultural policy tradition due to the plan's interventionist and financially generous nature, it disproportionately benefitted organisations rather than individuals working in the sector, especially in England. The study, conducted on visual arts workers in the UK, shows that many were unable to access these financial recovery schemes and fell through the cracks of the complex criteria set for these funds. This article informs the current debate on measures that are potentially more economically sustainable and wellbeing protective than those currently in place for cultural workers, such as Universal Basic Income. Its applicability is explored with reference to the historic French and recent Irish examples.

**Keywords:** cultural and creative industries policy; cultural workers' precarity; COVID-19 pandemic recovery plan; visual arts; UK; Ireland; France; Europe; economic sustainability; Universal Basic Income (UBI)

## 1. Introduction

The precarious nature of employment in the cultural sector is well known to industry insiders and is well documented. As early as 1980, a UNESCO report titled "Recommendation concerning the Status of the Artist" highlighted both the uncertainties associated with artistic work and the benefits that such work brings to society, recommending mitigations against these risks. More recently, a number of measures in the world have been trialled to ensure better economic sustainability for the entire sector (Menger 2014; Roy 2018).

Aggravating this context, there is now a general acceptance that the sectors that have been the most affected by the COVID-19 pandemic are the cultural and heritage ones, alongside tourism, leisure and hospitality. Such impact has been far-reaching, including risks, failing outputs, audiences and jobs losses. COVID-19 has further exposed the complexities of how individual workers generate income through freelance portfolio working and short-term contracts. In addition to freelancers, venue-based activities and related supply chains were the hardest hit. In addition to this, policies to alleviate the crisis have also been challenged by the atypical business models and forms of employment that often characterise the sector (OECD 2020; DCMS 2020; CCV 2020a, 2020b, 2022).

Additional research is needed to understand the impact of governmental emergency actions for culture, from immediate contingency support to longer term investments. This

article documents the situation in the UK, drawing on a larger context to analyse the sustainability, economic and other impacts of these actions and focuses on their capacity to limit the precarity of freelance artists and cultural workers in a context where cultural contributions to society beyond economic gains has been acknowledged again and again: “While culture and arts may not be vital to the preservation of life, they are proving increasingly vital to preserving the sense of life being lived” (Banks 2020, p. 649).

Following the economic impact of the COVID-19 pandemic on employment, UBI (Universal Basic Income) has gained support in an increasing number of countries and contexts (Nettle et al. 2021), and in the cultural sector in particular, due to particularly heightened levels of financial precarity and suffering (CCV 2020b; Pratt 2020). Recently, UBI pilot programmes have been rolled out in Finland, Netherlands and Germany (Eikhof 2020). This article aims to discuss some of the current debates and schemes connected to UBI applied to the cultural sector in France, Ireland and the UK to explore how it can ensure better financial security and wellbeing for cultural workers in the UK.

After a presentation of our sources and methods (Section 2), we introduce the context of the UK cultural sector before and since the pandemic (Section 3), discuss the government’s Culture Recovery Fund (Section 4) and its challenges through a study of visual arts workers (Section 5), and lastly we examine why and how UBI mechanisms for cultural workers have regained impetus around the world and what the UK situation currently is (Section 6).

## **2. Methods, Literature Review and Theoretical Framework**

Our interdisciplinary article relies on methods traditionally used in cultural policy: bridging history and cultural studies with economics (Throsby 2010; Towse 2005) to analyse the political economy of the arts; drawing on sociology and communication studies to study cultural work and cultural value (Belfiore 2021; Brook et al. 2020; Banks 2017; Dubois 2015) to analyse government policy documents and other grey literature, press communications, actor networks and campaigns. The interdisciplinary approach was further enhanced by the authors’ methodological expertise, having undertaken quantitative and qualitative studies in the cultural field for over twenty years (Doustaly 2022, research webpage; Roy 2022, research webpage).

A literature review for the themes is provided in each subsection of this article. However, below, we only focus on what this scoping paper adds to the current state of the arts, with our main references, and how UBI emerged as a solution by contextualizing the pandemic’s impact on cultural work. Indeed, a contextual literature review of UBI shows the dominance of philosophical or theoretical publications and little extended studies of the few existing schemes. Consequently, the increase in the number of pilot programmes, as discussed here, may allow further explorations of the topic and therefore requires to first be put into its context.

The impact of the pandemic on the cultural sector and the governmental recovery plans around the world have currently gathered academic interest (Banks 2020; Wall-Andrews et al. 2021). Within this context, several reports, policy briefings and other grey literature have analysed the specific situation in the UK (OECD 2020; CCV 2020a, 2020b, 2022). Eikhof’s contribution dedicates a section to UBI, presented as a radical but potential solution to provide a sustainable financial model to limit inequalities in cultural work (Eikhof 2020). Few academic studies, however, have questioned the current support measures’ capacity to bring economic sustainability and explore alternative options for the future.

Going beyond the immediate analysis of the current situation, we analyse the use or emergence of UBI and similar movements as socially desirable and potentially economically viable answers to both the precarity of cultural work and the complexities of financial support mechanisms, either in times of crisis, or as a permanent status. To conduct this, we draw on a number of sources, complemented by a quantitative and qualitative study of cultural workers’ views of rescue measures and their future. We offer a comparison

with EU countries such as Ireland and France, which have a more interventionist model of cultural policy, to provide our analysis with an alternative perspective on the phenomenon.

UBI is a centuries-old idea originating in Thomas Moore's *Utopia* (1516), which has been promoted in later years by a series of philosophers, social reformers and civic leaders in Europe and all over the world. Most contemporary definitions of UBI identify similar foundational concepts: an unconditional basic income that is not reliant on employment activation, household, relationship status or means-testing and guarantees a minimum income level below which no one should fall (RSA 2015, 2020a, 2020b; Social Justice Ireland 2021a, 2021b). Public support for UBI and how a country's context would be able to actually introduce it are not always aligned. The implementation of UBI in Western Europe has always implied significant changes to current systems in place, which along with the administrative, fiscal and economic feasibility of UBI-related schemes have been the object of studies. De Wispelaere produced a theoretical framework on the political dimension of UBI in the 2010s underlining its complexity and the importance of analysing four kinds of feasibilities: institutional, strategic, psychological and behavioural. Another main question theorised is around its social and economic impacts: will beneficiaries continue working (as the few studies show) or would UBI deter from work? The question of the how has sometimes eluded the question of the why, i.e., what are the political, social and administrative objectives (social justice and equality, wellbeing, administrative savings and simplifications) (De Wispelaere and Noguera 2012, p. 21).

The current debate on UBI for all has now reached political agendas in the EU. Wellbeing objectives for society, as well as a simplification of procedures allowing some public administration savings, are the reasons put forward by the European Citizens' Initiative whose online petition to "start Unconditional Basic Incomes throughout the EU" was launched in 2022. To be debated, the petition needs to reach 1 million support declarations and minimal thresholds in seven member countries. It has gathered 187,000 signatures by 1 April 2022 and has until 26 June 2022 to reach the objectives, which seems unlikely, also because of the Ukrainian war and associated economic consequences. Three countries constitute over 80% of votes (Slovenia, Germany and Spain), with France stalling at 20% (ECI 2022).

For artists and cultural workers, campaigns for a basic income have been active in the world during the 19th century (RSA 2020a). Some radical proponents of cultural UBI see it as a way of protecting the art world from the market, considering that having access to a basic income will "allow artists to escape the so-called 'arts industry' which, for artists, is a mirage, a problematic construction driven by a comparatively well-paid, managerialist class that fetishizes the artist and cannibalizes their need to create" (Pledger 2017, p. 55). Most of the arguments traditionally opposed to public funding for the arts also apply to UBI, i.e., that it would create a class of "state artists" or artists cut off from society, whose privilege would hinder them from creating free and relevant art and whose activity would distort the free market (Throsby 2010; Towse 2005).

This liberal approach is contradicted by specific systems developed to ensure financial stability for cultural workers, such as the "intermittence", which was first introduced in France in the 1930s. During the pandemic, "intermittence" support was eventually granted to live art worker recipients without the minimum threshold of 507 h of work, allowing artists to continue creating and rehearsing, alleviating stress and reducing opting out. Interviews were carried out to substantiate the grey literature (MC/MTEI 2021), which focuses on the financial framework without investigating the protective impact of this system on the live arts compared with other arts professions, such as the visual arts, or other countries, such as the UK (Doustaly 2022).

The case study on visual arts workers in the UK presented in Section 5, whose research director (V. Roy) is also the co-author of this paper, draws on a two-phased primary research study conducted through online surveys made available in English and Welsh by the consultancy Earthen Lamp.<sup>1</sup> The surveys were circulated in the UK to visual arts workers living and working in the country through established visual arts networks part of



the Visual Arts Alliance (VAA).<sup>2</sup> Phase 1 of the study was carried out in April 2020 and received 1045 completed responses, while Phase 2 in August 2021 achieved 674 completed responses from eligible respondents (Earthen Lamp 2020). Phase 1 of the study (delivered in April 2020) was a rapid action tool to understand the immediate take up and impact of the support measures announced by the UK government and related bodies to support visual arts workers. The second phase of the study, which was just over a year after the first phase was delivered in August 2021, looked at how these support measures were received to understand their impact on supporting artistic practice and livelihoods of visual arts workers (Earthen Lamp 2021).

In disseminating the research tools, a convenience sampling approach was initially adopted. However, in the sample for both surveys, the VAA member organisations assisted in ensuring that a fair geographic spread of responses was achieved as they disseminated the surveys through social media channels, newsletters, visual arts networks and email marketing. Although it is not possible to estimate the population of visual arts workers in the UK during the time of the study, the responses received for both phases were noted as fair samples for analysis. The analytical strategy adopted ensured that all responses were anonymised, which was essential given the sensitive nature of some of the responses received. Although the data offered some opportunities for longitudinal analysis, to respect the anonymity of respondents such a strategy was not implemented, and the total dataset was analysed as a composite rather than by case.

### **3. The UK Cultural Sector Context Prior to the COVID-19 Pandemic**

#### *3.1. The UK's Mixed Cultural Economy: Sizeable, Expanding, but Vulnerable*

In 2016, the cultural sector (excl. tourism) was fast-growing in the UK, representing about 1.5% of the GDP (Gross Domestic Product) (+27.1% since 2010), 2% of its workforce (+25% since 2011) and around 3.1% of total UK exports (90% driven by cinema, audio-visual and music). By 2018, the last year without COVID-19, the cultural sector contributed GBP 32.3 billion to the UK economy and accounted for 1.7% of the UK's GVA (Growth Value Added), rising faster than average and an increase of 21.9% in real terms from 2010. The creative industries, which contribute indirectly to the cultural sector's development, contributed GBP 111.7 billion or 5.8% of GVA to the UK economy (an increase of 43.2% in real terms since 2010) (DCMS 2018, pp. 1, 7–24; 2020).

The UK model of cultural policy is traditionally influenced by liberal economics. The country adopted a mixed model for culture where the role of voluntary and private funding is key, and where public funding for culture has traditionally been lower than in continental Europe. Within models of cultural policy, France and continental Europe were identified as “architect” states, working through ministries to steer more interventionist programmes, while the UK was categorised as relying on a “patron state” (similar to Canada, Australia, New Zealand and the Nordic countries), consisting of funding excellence indirectly through expert arm's-length bodies, such as the Arts Councils or English Heritage. However, these models have gradually hybridised: the UK experiencing a period of convergence with more interventionist and generous policies during the Blair–Brown Labour governments (1997–2010), approaching the model adopted in France (Doustaly 2007; Doustaly and Gray 2010).

In 2018, just before the pandemic, the budget of the Department for Digital, Culture, Media and Sport (DCMS) constituted less than 0.5% of UK government funding (0.2% for culture as defined as arts and heritage) while the same sectors received 1% in France (sports excluded). Indeed, the conservative governments in place in the UK since 2010 have implemented austerity measures in all public sectors. The cultural sector lost 17% of public funding since 2010, leading to a decrease of 35% in investment per capita between 2008 and 2018 (national, local and lottery), while local government funding fell by 43%.<sup>3</sup> During the same period, earned income increased by 47% (box office sales, venues hires and catering), creative and cultural GVA by 15% and cultural employment by 21%. Financial support from business sponsorship was down 39% between 2008 and 2013, while philanthropy

increased by 38% between 2014 and 2018 (NCA 2018). This context, with relative success in receding public funding, also explains why the government contemplated several times to scrap the DCMS budget, which would have led to cultural work being treated similarly to that of other economic sectors.

### 3.2. A Cultural Sector Already Affected by Brexit

A 2016 survey illustrated that 90% of creative professionals opposed Brexit for personal, professional and financial reasons and campaigned against it and afterwards against its negative impacts through the petition “Britain stronger in Europe” (Creative Industries Federation 2016). Even though Brexit was voted on in 2016, the withdrawal agreement, signed after much delay and complex last-minute negotiations, did not come into force until February 2020. The agreement, however, has not solved all regulatory issues that are now expected to take years to settle.<sup>4</sup> With the pandemic hitting in 2020, the full consequences of Brexit, on the cultural sector in particular, have not yet been fully measured.

That said, the financial loss for the sector can be estimated by quoting the level of direct and indirect investment received through the EU. Between 2007 and 2016, the UK CCIs received EUR 345 million in direct EU support, including about a third for the arts (EUR 118.6 m). Between 2014 and 2018, Creative Europe in the UK was given EUR 89.5 million including EUR 22.3 million for culture—distributed to 150 organisations and 144 projects for setting up both cooperation projects (EUR 18.6 m) and European platforms (EUR 3.2 m). Even after the Brexit vote, the UK was twice as successful as the average EU country in accessing such funds and was part of 44% of Europe Creative projects. It should be added that some of the EUR 5.8 billion in the 2014–2020 period from the ERDF (European Regional Development Fund) for strategic investment, notably in culture, was mainly from outside London. The EU’s role was not just about redistributing funds, but also investing in capacity building, networks and the testing of models for the sector to become more economically sustainable (Creative Europe Desk UK 2017; HC 365 2018). In October 2019, after yet another lobbying campaign from the cultural and creative sector and a Parliamentary commission, a EUR 250 million investment fund was created to mitigate the impact of Brexit—a sum that was still insufficient according to creative organisations, which continued to lobby to remain part of the Europe Creative programme post Brexit (NCA 2018; Creative Industries Federation 2016).

### 3.3. The Impact of the COVID-19 Pandemic on the UK Cultural Sector

After the hospitality sector, the cultural sector in the UK (here defined as arts, entertainment and recreation) was the second hardest hit by the pandemic: GDP decreased by 44.5% between April–June 2020 compared with the same period in 2019. Initially, workers reacted with creativity and patience, trying to reach audiences online often for free or for a small fee and continuing work on their projects, some with the financial support of the Arts Council England (ACE) or English Heritage. As time went by, anguish increased among the cultural professional, with some changing occupation or intending to do so (OECD 2020).

The CCV (Centre for Cultural Value)<sup>5</sup> carried out research on the impact of the COVID-19 pandemic on cultural organisations, the cultural sector workforce and audiences. Its conclusions were comprehensive in that they analysed the financial, artistic, social inequalities and workers’ wellbeing consequences. They concluded that:

- “The pandemic held a mirror up to a deeply unequal cultural sector;
- Its impact was not experienced evenly across the sector, with younger workers, women and workers from ethnically diverse backgrounds among the hardest hit in terms of losing work and income;
- For freelancers, who make up a significant part of the cultural workforce, the impact was major and sometimes devastating. Freelancers constituted 62% of the core-creative workforce before the pandemic and only 52% by the end of 2020;
- The most dramatic decline in the cultural industries workforce was observed in music, performing and visual arts, where the professional workforce fell by around a quarter

between March and June 2020, with no signs of significant recovery by the end of 2020, in comparison with other sectors.” (CCV 2022).

These statistics reflect the beginning of the pandemic’s impacts, and we now analyse how the UK government’s support mechanisms were refined and extended (Section 4). We then provide information on visual arts workers’ experiences of these mechanisms (Section 5) and lastly explore the debate around UBI as a way forward (Section 6).

#### **4. The UK Governmental Culture Recovery Plan to Respond to the COVID-19 Pandemic**

##### *4.1. The Culture Recovery Plan Framework*

The UK government departed from its traditional noninterventionist approach and devised an ambitious funding plan, which has now materialised in three “culture recovery funding rounds” on top of general support which could be accessed by freelancers and companies (see next section).

In July 2020, the UK government announced the creation of a “culture recovery fund” of GBP 1.57 billion (about EUR 1.7 billion) until the end of January 2021. It was described as a “rescue package” for arts, culture and heritage industries. For a similar national population, this is about half the support granted by France over the same period (EUR 3.3 billion). However, it was the highest funding allocated to the cultural sector (music, dance, theatres, museums, festivals and heritage) in the history of the UK, even though the distribution was slow and took until October 2021.

The plan was presented by Oliver Dowden, UK Minister for Culture, along the traditional lines of conservative cultural policy priorities: maintain the UK as a “cultural superpower”, rescue cultural icons, allocating, however, 70% outside the capital. Out of the GBP 880 million allocated to cultural bodies, Arts Council England (or ACE, responsible for the live arts, museum and galleries) received GBP 257 million to redistribute to cultural organisations. ACE announced its policy to suspend delivery targets in order to focus on the most vulnerable and reorient some funds towards education and civic value. Cultural organisations were also informed that honouring ongoing or promised contracts with artists and freelancers would be taken into account to access support. The Museums and Heritage bodies obtained GBP 100 million. The package also included stimulus investment of up to GBP 120 million (half of which for ACE) to carry out urgent cultural building construction and restoration projects, using the opportunity of closed venues to invest economic sustainability in the cultural sector whilst also kickstarting the construction sector. Although the plan was welcomed, it favoured organisations over workers, especially in England. Questions were also raised over the funding of private firms which were not facing liquidity issues, mainly in the creative industries, such as the Collective or Pop Brixton (creative premises) (DCMS 2020; ACE 2020; CCV 2022).

A second and third round of the plan followed, where stimulus investment and public procurement complemented immediate rescue measures more and more. By the end of June 2021, circa GBP 2 billion pounds (0.5% of the GBP 400 billion of the COVID-19 UK recovery plan) were made available as part of the Culture Recovery Fund. Overall, by January 2021 ACE had received GBP 500 million from the Culture Recovery Fund and GBP 165 million in Culture Recovery Fund payable finance (UK Government 2021). As a comparison, France planned EUR 2 billion for culture as part of the EUR 100 billion “France relance” national programme (including EUR 40 billion received from the EU) (MC 2020).

##### *4.2. Support Mechanisms for Visual Arts Workers*

During COVID-19, inequalities increased in the UK society and in the cultural sector, as access to support was not evenly spread. A number of UK economic sustainability programmes were accessible to cultural workers, most of which were not specifically targeting cultural work, hence their inherent limitations. Extended as part of the two recovery plans, the main schemes of financial support for UK workers and organisations included loans, grants, repayments and VAT (Value Added Tax) reduction:

- The Bounce Back Loan Scheme offered businesses loans of up to GBP 50,000 or 25% of turnover (April 2020–March 2021);
- The Coronavirus Job Retention Scheme allowed employers to apply for a grant that covered 80 percent of an employee’s monthly wage (up to GBP 2500 a month) (March 2020–September 2021);
- The Self-Employment Income Support Scheme (SEISS) allocated taxable grants worth 80% of someone’s average monthly trading profit, for a three-month period (March 2020–September 2021);
- New, sector-specific tax reliefs as well as a temporary VAT reduction (notably for theatres, cinemas, associations, trusts and foundations);
- Partial repayment of debts (GBP 270 million in 2020–2021) (UK Government 2020, 2021; UK Parliament 2021).

The other measures that supported financial sustainability and risk mitigation were:

- An extension to the furlough scheme for affected businesses until mass gatherings were permitted under the government’s and devolved administrations’ COVID-19 guidelines;
- Continued workforce support measures, including enhanced measures for freelancers and small companies;
- Clear, if conditional, timelines for when they will be able to reopen, and technological solutions to enable audiences to return without social distancing;
- Public investment in an uncertain economic climate (UK Parliament 2021).

A number of organisations regretted that the spread of support was uneven on the territory and that many could not demonstrate an immediate short-term financial threat to their organisation and were therefore excluded from relief funding. ACE, and a report ordered by the UK opposition leader, showed that women were more likely than men to lose their jobs and that BAME (Black, Asian and other minority ethnic) workers faced more social barriers, struggled more to access emergency funding grants and received less. Moreover, some individuals could not access both generic and cultural UK government assistance schemes: specific grants for cultural workers and artists who were ineligible for both the furlough scheme for employees (later the scheme for self-employed workers) could only be accessed from ACE with the same eligibility criteria: 50% of income had to come through self-employment (Lawrence 2020; CCV 2020a).

The pandemic therefore exposed in a broader light the underlying challenges connected to the complexity of some categories of cultural work, portfolio and career paths. The usefulness, but also the limitations of the overall governmental measures, appeared gradually through professional associations, the media, social media and direct exchanges. These included: strict qualifying conditions as seen above but also a lack of understanding of portfolio working arrangements and of clarity about application procedures and timelines. To address this, the VAA decided to commission a report into visual arts workers, the results of which are analysed in the part below.

## **5. Case Study on the Impact of COVID-19 on the Visual Arts Workers and Their Views on Support Measures**

To support cultural workers, the VAA commissioned a UK wide quantitative and qualitative study to better understand the way the governmental pandemic rescue schemes were applied and appropriated in the visual arts. The study was delivered by independent cultural research consultancy Earthen Lamp and was carried out in 2020 and repeated in 2021 to explore the impact of the COVID-19 pandemic and the related lockdowns on the livelihoods,<sup>6</sup> work conditions and production of visual arts workers in the UK. The co-author of this paper (V. Roy), as research director of Earthen Lamp, was instrumental in designing and delivering both phases of the VAA study, and this paper builds on this earlier work. Phase 1 of the study into livelihoods of visual arts workers was delivered at the start of the pandemic and the first lockdown in May 2020. Just over a year on, Phase 2 of the study in August 2021 examined the realities in comparison with the anxieties expressed

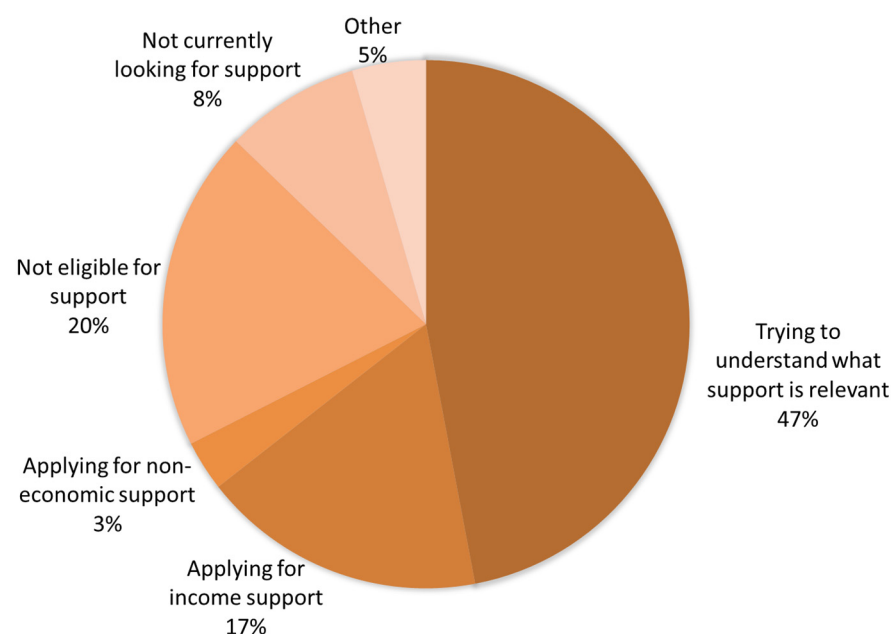
in Phase 1 and the perception of the level of usefulness of the support measures announced in May 2020.

The commissioning body VAA is made up of UK-based visual arts sector support and professional organisations. This research acted as a rapid action tool to understand primarily the position of the freelance creative workforce in the country in the visual arts sector. In addition to the impact of the lockdown, the study also investigated the response of the sector to emergency sector support measures announced by Arts Councils and Her Majesty’s Treasury. The definition of “visual arts workers” in this context includes a range of individuals who work in the visual arts sector—from artists, makers, technicians, fabricators and curators to consultants (Earthen Lamp 2020, 2021).

Phase 1 of the study was carried out in 2020, during the initial stages of the pandemic and when support measures had only recently been announced. Its results show (see Figure 1 below) that about 20% of visual arts workers found themselves ineligible for financial support packages announced thus far. It is inferred from the data that the key reasons for this ineligibility was the diversity in forms of employment and complex income sources of these individuals:

*“Two thirds of the way through the 2018/2019 tax year I went fully self-employed. Even though I have now been fully self-employed (sole trader) for 16 months I do not qualify for the scheme due to the cut-off date and the percentage of my income from employment for those years being taken into account. I also do not qualify for Universal Credit due to savings.”*

The study found that many respondents earned less than half of their income through their artistic practice, while others did not qualify for the support measures as they had only recently started their practice or become self-employed. Other forms of income such as pensions, income from another job, or income received by the respondents’ partners made them ineligible to apply towards these financial measures, many of which had fixed criteria for qualification based on previous levels of income. Where previous income levels were not a disqualifying criterion, some respondents were still ineligible due to their form of employment, e.g., being self-employed, running as a limited company, or having some form of savings.



**Figure 1.** Study 1—visual arts workers accessing sector support measures in April 2020 (Earthen Lamp).

Overall, 74% of the visual arts workers consulted during the initial stages of the pandemic declared that they were unhappy with the level of financial measures announced

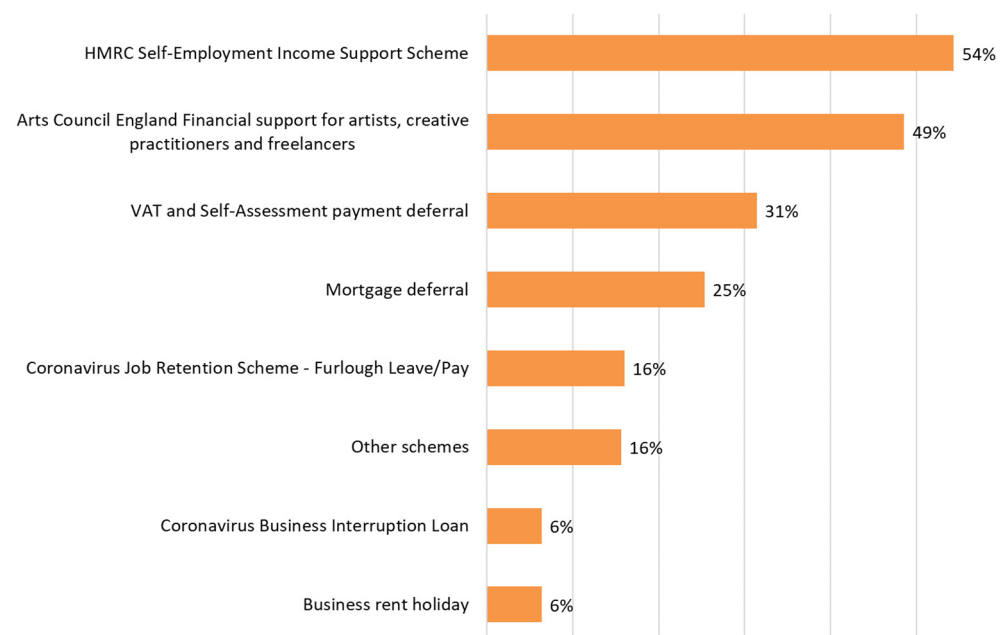
by the government and professional bodies whose role they saw was to support the work and income of cultural workers. As the pandemic progressed, the level of satisfaction with the range of support measures made available by the government increased, with 66% of the respondents in 2021 (as compared with 74% of respondents in 2020) requesting other types of support measures.

In March 2020, the UK government announced that the income of self-employed workers in the UK would be supported through a cash grant of 80% of their profits, up to GBP 2500 per month for three months. Known as the Coronavirus (COVID-19) Self-employment Income Support Scheme (SEISS), it was subsequently rolled out in four waves from March 2020 to September 2021.

During the initial stages of the VAA study, it was noted that in addition to the support awarded specifically for cultural workers, many visual arts workers were waiting to access SEISS. The study found that over half (54%) of visual arts workers accessed SEISS to support their income, which also highlights the prominent level of self-employment in this sector. Although specialist support offered through cultural bodies such as ACE and other sector support organisations was seen as a first port of call for cultural workers, this type of funding was extremely competitive to access, and many visual arts workers were not successful.

*“I find it very demoralising being in such a competitive market, putting creatives up against each other. Many of us in the main work very individually . . . isolated. Also a proven track record working in [the] public sector is divisive too, is demeaning and excludes those who strive to find alternative ways/own backing to normally make projects happen.”*

These individuals accessed other schemes to supplement their income, such as mortgage deferral (25%), VAT and self-assessment tax deferrals (31%), business interruption loans (6%) and business rent holiday (6%) (see Figure 2 below).



**Figure 2.** Study 1—awareness of economic support measures in April 2020 (Earthen Lamp).

Additionally, even in the initial stages of the pandemic, circa 2% of visual arts workers had already received governmental support through Universal Credit. When the study was repeated in 2021, it was found that at least 3% of the sample had either received Universal Credit or had applied for it, many for the first time in their careers.

As the pandemic and lack of visual arts work progressed, it became obvious that schemes such as Universal Credit were not an adequate financial measure for visual arts workers and time and again some form of universal basic income or a living wage was sought out by a large number of respondents in the study in 2021:

*“Universal basic income please, i.e., something that allows me to survive (pay rent, eat, etc.) that is not tied to some sort of public outcome that might require completely altering my entire practice.”*

Circa 12% felt the time was right to lobby the government for such a scheme or to mirror the principles of the scheme in the support made available. Other financial support which was recommended included schemes such as the Job Retention Scheme proposed by Her Majesty’s Revenue & Customs (HMRC) (whereby at least 80% of the income of respondents are secured), business grants or emergency cash grants. Visual arts workers also requested clarity and consistency of information about grants available and that the latter be accessed more easily, in a timelier manner and, to some extent, without a sense of competition between practitioners. More nuanced understanding and support was therefore requested to assist practitioners who were not able to access any of the support measures. It was also noted that not enough support measures addressed the needs of curators, producers, fabricators, or facilitators who work in the sector (Earthen Lamp 2020, 2021).

In April 2021, the study found that 28% of respondents indicated that they have successfully applied for income support, while 32% were either unsuccessful or ineligible for support. Some other interesting trends can be seen with regards to the economic support measures announced by strategic bodies for visual arts workers. Having had the economic support in 2021, respondents found it to be more useful than they originally perceived (33% in 2021 as compared with 24% in 2020).

The pandemic had a marked impact on the income of visual arts workers, with 70% indicating a drop in their income. Although the amount of loss in income varied, 28% lost between GBP 5000 and GBP 10,000, and a further third lost more than GBP 10,000 in income over the pandemic. Using the ONS (Office of National Statistics) median income in 2020 of GBP 29,900, the findings indicate that a third of visual arts workers lost about a third of their income due to the pandemic. For many, this was a lot more and a larger percentage of loss. The study in 2021 concluded that a conservative estimate of the average loss of income for a visual arts worker over the pandemic was just over GBP 7000 (Earthen Lamp 2020, 2021).

In conclusion, there were many gaps when devising economic measures for recovery for individual visual arts workers. Many of these have led to anguish, uncertainty and reduced cultural outputs from workers (Earthen Lamp 2020, 2021). The findings clearly outline the need to find more economically and culturally sustainable ways to face periods of crisis and also to work in “normal contexts” to ensure cultural workers’ precarity is mitigated so they can focus on their activities and the physical and mental brunt of it. One of the unexpected results coming from the study emerged from the unprompted responses to the open questions included in the online survey about more effective solutions for supporting the livelihoods of visual arts workers.

*“For artists and cultural workers that are working consistently and making a contribution to the cultural sector and wider society yet are not part of the few that are recipients of a financial art market, there should be state provision that could support our practices to thrive and develop by enabling access to a basic universal income. Not just in this moment—but as standard policy. This crisis has thrown us all back onto our own resources and if you don’t have access to generational wealth, family structures of economic support, homes and studio support, it is so tough to be able to see how people that are talented but super precarious . . . how they can survive this! For example, as a self-employed artist I can’t apply for Job Seekers Allowance, I have some modest savings that has been built up over 20 years as a professional artist (I don’t have a pension) therefore I can’t apply for universal credit. This crisis at my age (when the arts support is normally so focused on 20–35 age group) is extremely anxious and depressing reality.”*

*This could really destroy everything for me, keeping an open and healthy mindset in this huge uncertainty is a daily battle. [ . . . ] Most days I'm not coping at all well."*

Around 4% of the participants (in Phase 1) referred to the idea of implementation of UBI in this context. The support of these respondents towards similar schemes was clear throughout the study. In the next section, we discuss how economic support measures related to UBI have been historically implemented, from the cultural workers in France to the more recent related scheme implemented in Ireland in 2022.

## 6. Discussion: Is Cultural UBI the Solution?

The impact of the pandemic on a structurally vulnerable sector such as the cultural one has initiated calls for sustainable economic solutions to safeguard the level of activity and the quality of life of workers (Pratt 2020; Eikhof 2020). Workers who have not left the sector, especially the younger generations, aspire to improved conditions in the future: "The personal is political. COVID has changed how we think about personal and collective space, agency and consent. How do we think radically about how we navigate cultural spaces and gather together again?" (NCA 2020, Conversation 11).

One of the most radical solutions debated for the UK is UBI, already implemented in some countries and subsectors (*intermittent* in France; *Künstersozialkasse* in Germany) or tested (in Ireland). This is explored in the next two sections followed by a discussion on a potential future for UBI in the UK's visual arts sector. UBI can either be unconditional (revenues are added) or can allow individuals to reach a minimum threshold per month or year, when revenues are insufficient. A complete system offering a 10-year guaranteed salary to artists was abandoned in the Netherlands in the 1980s for its rocketing costs (Menger 2014). However, campaigns favour minimal financial safety nets to ensure physical and mental wellbeing through reassurance and stability, allowing individuals to stay in the profession and find space for creativity (RSA 2015; Deller 2016).

### 6.1. Cultural Universal Basic Income in France

In France, UBI for all is no longer at the centre of public debate, and the pandemic only briefly relaunched the idea, contrary to other countries where it has recently blossomed. Indeed, forms of UBI were supported by several candidates in France in the previous presidential election in 2017, supported by a mixture of liberal as well as socialist arguments. However, its financial cost and fiscal implementation were found to be too risky, leading French MPs to oppose the introduction of trials, similarly to Scotland, where a project for a pilot scheme was recently put on hold. The main French lobby for UBI, the MFRB (Mouvement Français pour un Revenu de Base), continues to be active but at a lower level. Many put forward the argument that other solidarity benefits exist (RSA, Revenu de Solidarité Active) and could be improved more easily instead of introducing UBI (Golla 2022; Hyafil 2016; MFRB 2022). In terms of equity, the OECD also questioned whether UBI would not disadvantage the most vulnerable when they could access targeted support through means-tested policies (OECD 2020).

In 2018, the French visual arts sector generated a EUR 23.4 billion turnover, making it the first cultural sector before music and cinema. However, public financing is not proportional. Very small businesses and freelancers have been heavily hit by the pandemic, but only received EUR 13.1 million, or about 3% of the French creation recovery fund. In 2022, a survey of 2135 artists by the French professional visual arts associations (ADAGP) concluded that 46% of visual artists had lost more than 50% of their income compared with the same month in the previous year (a condition to access the French emergency fund).<sup>7</sup>

Created in 1936, the French *intermittent* status is today accessible to only a few subsectors of the cultural profession: live arts, cinema and audio-visual artists and technicians who have discontinuous and task-related jobs benefit from a specific status and unemployment insurance system (Pôle Emploi Spectacle). The system has been reformed to limit its potential instrumentalisation to cut salaried work. It is financially balanced and has become essential to the dynamic French live arts scene. *Intermittent* workers, oscillating



between 150,000 and 275,000, currently need to work a minimum of 507 h in the year to qualify (Menger 2014; ETUI/Casse 2020). In 2020 and 2021, because of the pandemic, the benefit was allocated unconditionally. This was deemed as unfair by visual arts workers and writers who also have intermittent revenues and faced dire situations. As a result, they formed new groups to support their integration in the *intermittent* status: a campaign (La Buse), which is a working group within the communist party and a visual arts trade union (Syndicat travailleurs artistes-auteurs STAA). For Catin, a writer and UBI campaigner, the distinction, inherited from the way professions were constructed—individual “creators” relying on the market (copyright) against “cultural workers” collectively lobbying for a public safety net—does not apply to all visual arts workers or writers (Catin 2020; Ackerman 2021).

### 6.2. The Culture UBI Pilot Scheme in Ireland

In Ireland, the Irish Culture and Arts Minister since 2020, Catherine Martin (Green party, formerly an English and music teacher), announced in October 2022 a pilot scheme for Universal Basic income as part of the next budget. EUR 25 million was allocated by the Department of Tourism, Arts, Culture, Gaeltacht, Sport and Media, enough for 2000 artists and cultural workers to claim the monthly income, circa EUR 1365, in 2022 for a period of three years (Irish Government 2022).

The Report of the Arts and Culture Recovery Taskforce, which proposed the introduction of the scheme in Ireland identified it as “an unconditional state payment that each citizen receives” (Irish Government 2020, p. 17). The payment is designed to provide enough to cover the basic costs of living and provide a modicum of financial security. All other income would then be earned separately and be subject to taxation (Irish Government 2020). According to Healy (2021), the aim of the scheme is to impact two areas, namely the irregular level of activity and wellbeing of cultural workers. This is very close to the French *intermittent* system of complementing revenues.

The Irish UBI pilot was part of a host of other programmes announced by the minister to provide more sectoral and institutional support in 2022. Apart from the UBI pilot, the other measures are more applicable to institutions and cultural organisations (rather than being targeted at an individual level). Although at the time of the announcement the UBI pilot was met with some scepticism, as it did not offer any relief from the immediate financial stresses of artists, it eventually brought hope as a potential solution to alleviate the financial precarity of cultural workers in Ireland. That said, issues around eligibility are still being ironed out and there is some indication that the number of applicants could exceed the number of income awards possible. Currently, as issues of eligibility and the process by which recipients are selected are being decided, the ministry has indicated that there will be no means-testing and that the process will be noncompetitive. If the number of applicants exceeds the number of income awards available, selection will be randomised (DTCAGSM 2022; Solomon 2022).

### 6.3. The Case for a Cultural UBI in the UK

In the UK, the campaign for Basic Income has been led by the RSA<sup>8</sup>, which declared that “UBI is an old idea whose time has come” (RSA 2015) and presented models on how the scheme can be modelled on pilot studies in Netherlands, Finland, Germany and Canada. This movement has been supported by thinkers, economic researchers and politicians alike and much work in this area has taken place to lobby for the launch and implementation of such a scheme. In the UK context, the introduction of the scheme would imply a shift from tax credits and variable welfare benefits to a basic standard payment for all.

Following Eikhof’s (2020) argument, a UBI scheme in the visual arts could disrupt the link between project-based production and income from project-based employment and make working in the sector a more accessible and financially sustainable prospect for workers from currently under-represented groups. Eikhof found that “UBI schemes were more likely to benefit those in most financial need, whereas the support schemes

introduced by the UK Government were more likely to benefit workers on higher incomes” (Eikhof 2020 quoting RSA 2020a, 2020b, p. 242).

In a shift of emphasis from its traditional entrepreneurial model, the Arts Councils in the UK offered initial COVID-19 relief funds for individuals, which targeted freelance artists and creative practitioners to help cover their loss of income as a result of the crisis. Such measures included the Arts Council of Wales’ GBP 2 million Urgent Response Fund for Individuals (Arts Council of Wales 2020), the Arts Council England’s GBP 20 million Emergency Response Fund for Individuals (ACE 2020) and Creative Scotland’s GBP 2 million Bridging Bursary (Creative Scotland 2020). However, such emergency funds have now since closed and artists must apply to the re-deployment of project grants, signalling a movement back to the project-based, entrepreneurial model.

Since early 2021, almost a year into the pandemic and related lockdowns, the calls for such schemes to be introduced for creative workers in the UK have strengthened further. As the pandemic spotlighted the long-standing structural issues and associated precarity across the creative sectors, networks such as Equity<sup>9</sup> called for the government to take urgent action to protect its members. The body argued that the pandemic had “exposed the inability of the national welfare system and government support schemes to allow for the specific needs of creative, freelance and *intermittent* workers” (Equity 2021). Research undertaken by Equity (2021) showed that 40% of their members were unable to access the Self-Employed Income Support Scheme, while others were able to only partially access other schemes of financial support due to the unique portfolio careers of their members. The case for the introduction of such a scheme for cultural workers in the UK goes beyond providing financial security and wellbeing to such individuals. It is seen as one of the best schemes to stem the outflow of creative and cultural workers out of the sector. According to a study by Artist Union England (Monk and Gollan 2021) in the first year of the pandemic, “too many talented people are forced to abandon working in their creative field because they cannot afford to carry on.” From an inclusion perspective, Eikhof (2020), concludes that “UBI schemes’ potential to deliver better distributive justice makes them a particularly interesting intervention for rebuilding and reforming the cultural economy” (Eikhof 2020, p. 242).

So far, the UK government has taken a cautious stance towards introducing financial measures related to UBI in the UK, declaring a scheme such as this “prohibitively expensive” and likely to “create too many losers among the poorest families” (Whittaker 2020). Even in 2021, with major support for UBI-related initiatives across Europe and closer to the UK’s shores in Ireland, such a measure is not being viewed as “right for the nations of the UK”. In 2020, Basic Income Scotland published a report on the feasibility of UBI in the country and launched a soft pilot in August 2020 (Citizens’ Basic Income Feasibility Study Steering Group). The Steering Group recommended that a Scottish pilot should go ahead, but the devolution settlement did not allow for this (Basic Income Scotland 2020). In spite of the growing public interest and some level of political support, UBI for culture still does not seem imminent. More recently, the Cultural Renewal Task Force, set up as a response to the COVID-19 pandemic, did not provide any recommendations in support of such an initiative to secure the livelihoods of cultural workers post pandemic (UK Government 2020).

Evaluation of UBI schemes is one way forward, as noted by the Centre for Cultural Value. Quoting Greig de Peuter’s study from 2014, it summarised the four benefits that UBI could guarantee for artists, which still apply today:

1. Bridging gaps in pay for *intermittent* workers;
2. Offering compensation for artists’ often unpaid and sometimes intangible contributions to society and the creative economy;
3. Quickly eradicating poverty, of which artists are more at risk;
4. Encouraging artists to experiment with new content, forms and models of labour organisation.” (CCV 2020b, p. 20).

Therefore, although there is no clear governmental support, the case for UBI has been made clearly and sometimes vociferously at different levels from practitioners, structural agencies and ministers alike. However, before such a scheme can be implemented, more evaluation is needed, starting from the trials being set up in a postpandemic context, not just about the impacts of the schemes but also the limitations they incorporate.

## 7. Conclusions and Implications

The COVID-19 pandemic and related lockdowns across the world have greatly affected an already vulnerable cultural economy and the structural precarity of many cultural workers. After documenting the impacts of the pandemic in the cultural sector and the effectiveness of governmental responses in the UK and in some countries in Europe, this article focused on the visual arts and explored calls for reforms of the cultural public economy. We demonstrated that while the UK government's recovery plan went against the country's cultural policy tradition due to the plan's interventionist and financially generous nature, it disproportionately benefitted organisations rather than individuals working in the sector, especially in England. The study conducted on visual arts workers in the UK showed that many were unable to access these financial recovery schemes and fell through the cracks of the complex criteria set for these funds. To explore alternatives, this article then attempted to inform the current debate on measures that are potentially more economically sustainable and wellbeing protective for cultural workers, such as Universal Basic Income, than the current pandemic emergency measures. Their applicability was explored with reference to the historic French and recent Irish examples.

As often is the case with UBI, proponents of free markets economics and of more interventionist approaches were found on both sides of the argument. The former considered that freelancers' income will decrease as a result of adjusting to UBI as an extra financial source for cultural workers. In the case of the latter, UBI was described as follows by an attendee in a National Campaign for the Arts<sup>10</sup> conference: "Universal Basic Income is paying for the employers and not the employees. The revolution in thinking needs to criticise what the art infrastructure really is. The buildings aren't the infrastructure but the people, putting more value on the people but not on the space instead" (NCA 2020, Conversation 11). This clearly shows that the idea of instituting a UBI-based scheme as a way of safeguarding the livelihoods of individual cultural workers and from that the overall cultural (arts) infrastructure is still hotly debated. While UBI supporters lobby the government in the UK to introduce such schemes for cultural workers, it is clear that much more research into the existing pilots is needed, and we invite academics in the field to direct their research interests towards more nuanced research into the impacts of such measures.

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**Informed Consent Statement:** Informed consent was obtained by all subjects involved in the study conducted by Earthen Lamp, UK.

**Data Availability Statement:** The data presented in this study are openly available in public reports that are cited in the bibliography.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Notes

<sup>1</sup> Earthen Lamp is an independent research-led consultancy based in the UK. <https://www.earthenlamp.com/> (accessed on 20 January 2022).

- 2 Visual Arts Alliance (VAA) comprises the following organisations in the UK: a-n The Artist Information Company; Artquest; Axis Web; Black Curators Collective; CHEAD Council for Higher Education Art & Design; Creative Space Network; Curator Space; Nine CVAN regions; ENGAGE DACS; Guild, Easy St Arts; International Curators Forum; IXIA Public Art; Plus Tate; Migrants In Culture; SCAN Scottish Contemporary Art Network; Visual Artists Ireland; Visual Arts Group Wales; We Shall Not Be Removed; RED EYE Photography Network.
- 3 This is also the result of the fact that apart from libraries, the support for culture from local authorities has always been discretionary in England.
- 4 [https://ec.europa.eu/info/strategy/relations-non-eu-countries/relations-united-kingdom/eu-uk-withdrawal-agreement\\_en](https://ec.europa.eu/info/strategy/relations-non-eu-countries/relations-united-kingdom/eu-uk-withdrawal-agreement_en) (accessed on 18 January 2022).
- 5 AHRC funded—academic expert Centre based at the University of Leeds. The Project was carried out in collaboration with The Audience Agency, the Creative Industries Policy and Evidence Centre and a national consortium of academic researchers.
- 6 The term livelihood is used here as it is in the academic and professional cultural sector “the activities, the assets and the access that jointly determine the living gained by an individual or household” (Ellis 2000).
- 7 Survey conducted in January and February 2021 (over about 14,000 members). <https://www.adagp.fr/fr/actualites/publication-l-enquete-adagp-sur-les-effets-crise-sanitaire-et-les-mesures-d-aide-pour-les> (accessed on 18 January 2022).
- 8 The Royal Society for Arts, Manufactures and Commerce (RSA) has been at the forefront of significant social impact for over 260 years, thanks to “a diverse global community of over 30,000 problem-solvers that deliver solutions for lasting change”. <https://www.thersa.org/about> (accessed on 20 January 2022).
- 9 Equity is a Trade Union with more than 47,000 performers and creative practitioners affiliated in the UK, which supports fair terms and improved conditions in the workplace. <https://www.equity.org.uk/> (accessed on 20 January 2022).
- 10 The National Campaign for the Arts (NCA) campaigns for more public investment in the arts. <https://forthearts.org.uk/> (accessed on 20 January 2022).

## References

- Ackerman, Julie. 2021. L’extension de l’intermittences aux arts visuels, un nouveau combat fédérateur? *Libération*, February 25.
- Arts Council England (ACE). 2020. Financial Support for Artists, Creative Practitioners and Freelancers. April. Available online: <https://www.artscouncil.org.uk/funding/financial-support-artists-creative-practitioners-and-freelancers#section-2> (accessed on 20 January 2022).
- Arts Council of Wales. 2020. COVID-19: Support for Individuals Urgent Response Fund. April. Available online: [https://arts.wales/sites/default/files/2020-04/Covid-19%20Support%20for%20Individuals%20-%20Urgent%20Response%20Fund\\_2.pdf](https://arts.wales/sites/default/files/2020-04/Covid-19%20Support%20for%20Individuals%20-%20Urgent%20Response%20Fund_2.pdf) (accessed on 20 January 2022).
- Banks, Mark. 2017. *Creative Justice: Cultural Industries, Work and Inequality*. London: Rowman & Littlefield.
- Banks, Mark. 2020. The work of culture and C-19. *European Journal of Cultural Studies* 23: 648–54. [CrossRef]
- Basic Income Scotland. 2020. Exploring the feasibility of a Citizens’ Basic Income Pilot in Scotland. October. Available online: <https://www.basicincome.scot/news/articles/exploring-the-feasibility-of-a-citizens-basic-income-pilot-in-scotland> (accessed on 20 January 2022).
- Belfiore, Eleonora. 2021. Is it really about the evidence? Argument, persuasion, and the power of ideas in cultural policy. *Cultural Trends*, 1–18. [CrossRef]
- Brook, Orian, Dave O’Brien, and Mark Taylor. 2020. *Culture Is Bad for You: Inequality in the Cultural and Creative Industries*. Manchester: Manchester University Press.
- Catin, Aurélien. 2020. *Notre Condition, Essai sur le Salaire au Travail Artistique*, Riot ed. Saint Etienne: Malakoff.
- Centre for Cultural Value (CCV). 2020a. *Cultural Policy Responses to COVID-19 in the UK*. Leeds: Centre for Cultural Value.
- Centre for Cultural Value (CCV). 2020b. *Policy Review: Social Security for Cultural Practitioners*. Leeds: Centre for Cultural Value.
- Centre for Cultural Value (CCV). 2022. *Culture in Crisis—Impacts of COVID-19 on the UK Cultural Sector and Where We Go from Here*. Leeds: Centre for Cultural Value. Available online: <https://www.leeds.ac.uk/news-arts-culture/news/article/5010/crisis-hit-uk-cultural-sector-at-a-crossroads> (accessed on 20 January 2022).
- Creative Europe Desk UK. 2017. *Creative Europe in the UK 2017*. London: Creative Europe Desk UK.
- Creative Industries Federation. 2016. *Brexit Report*. London: Creative Industries Federation.
- Creative Scotland. 2020. Further Support for Creative Sector during COVID-19 Outbreak. April. Available online: <https://www.creativescotland.com/what-we-do/latest-news/archive/2020/04/further-support-for-creative-sector> (accessed on 20 January 2022).
- Department for Digital, Culture, Media and Sport (DCMS). 2018. DCMS Sectors Economic Estimates. Available online: <https://www.gov.uk/government/statistics/dcms-sectors-economic-estimates-2016-trade> (accessed on 20 January 2022).
- Department for Digital, Culture, Media and Sport (DCMS). 2020. *DCMS Sectors Economic Estimates 2018 (Provisional)*: GVA. London: DCMS.
- De Wispelaere, Jurgen, and Jose Antonio Noguera. 2012. On the Political Feasibility of Universal Basic Income: An Analytic Framework. In *Basic Income Guarantee and Politics. Exploring the Basic Income Guarantee*. Edited by R. K. Caputo. New York: Palgrave Macmillan, pp. 17–37.

- Deller, Toby. 2016. The Arts World Should Look Outside Itself and Campaign for Universal Basic Income. April. Available online: [https://www.rhinegold.co.uk/classical\\_music/arts-world-look-outside-campaign-universal-basic-income/](https://www.rhinegold.co.uk/classical_music/arts-world-look-outside-campaign-universal-basic-income/) (accessed on 20 January 2022).
- Doustaly, Cécile. 2007. Les politiques de soutien à l'art en Angleterre depuis 1990: "Exception britannique", dirigisme ou modèle hybride? In *État et Culture dans les Pays Anglophones*. Directed by A. Slaby. Revue LISA. Caen: Université de Caen, vol. V-1, pp. 6–32.
- Doustaly, Cécile. 2022. Research Webpage. Available online: <https://www.cyu.fr/cecile-doustaly> (accessed on 20 January 2022).
- Doustaly, Cécile, and Clive Gray. 2010. Labour and the Arts: Managing Transformation? *Journal of Contemporary British Studies* 8: 319–38. [CrossRef]
- Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media (DTCAGSM). 2022. Minister Catherine Martin Launches Online Consultation on Pilot Basic Income for the Arts. January. Available online: <https://www.gov.ie/en/press-release/080b9-minister-catherine-martin-launches-online-consultation-on-pilot-basic-income-for-the-arts/> (accessed on 20 January 2022).
- Dubois, Vincent. 2015. *Culture as a Vocation: Sociology of Career Choices in Cultural Management*. London: Routledge.
- Earthen Lamp. 2020. Impact of COVID-19 on Visual Arts Workers—Summary of Findings. May. Available online: <https://cvansoutheast.com/wp-content/uploads/2020/05/CVANCOVID-19Summary-view.pdf> (accessed on 20 January 2022).
- Earthen Lamp. 2021. Impact of the Pandemic on the Livelihood of Visual Arts Workers. September. Available online: [https://cvan.art/wp-content/uploads/2021/11/Visual-Arts-Workers\\_full-report\\_2021\\_final.pdf](https://cvan.art/wp-content/uploads/2021/11/Visual-Arts-Workers_full-report_2021_final.pdf) (accessed on 20 January 2022).
- European Citizens' Initiative (ECI). 2022. Start Unconditional Basic Incomes throughout the EU. Available online: <https://eci.ec.europa.eu/014/public/#/screen/home/allcountries> (accessed on 1 April 2022).
- Eikhof, Doris Ruth. 2020. COVID-19, inclusion and workforce diversity in the cultural economy: What now, what next? *Cultural Trends* 29: 234–50. [CrossRef]
- Ellis, Frank. 2000. *Rural Livelihoods and Diversity in Developing Countries*. Oxford: Oxford University Press.
- Equity. 2021. The Show Can't Go On. March 16. Available online: <https://www.equity.org.uk/news/2021/march/the-show-cant-go-on-equity-demands-basic-income-guarantee-for-creative-workers/> (accessed on 20 January 2022).
- European Trade Union Institute and Christelle (ETUI)/Casse Christelle. 2020. *The Art of Managing the Intermittent Artist Status in France*. Brussels: ETUI.
- Golla, Mathilde. 2022. Pourquoi le revenu universel est sans cesse repoussé (et probablement enterré). *Novethic*, January 16.
- HC 365. 2018. *The Potential Impact of Brexit on the Creative Industries, Tourism and the Digital Single Market*. Second Report of Session 2017–19. London: House of Commons Digital, Culture, Media and Sport Committee, January 25.
- Healy, Seán. 2021. Universal Basic Income Pilot for Artists in Ireland. November. Available online: <https://basicincome.org/news/2021/11/universal-basic-income-pilot-for-artists-in-ireland/> (accessed on 20 January 2022).
- Hyafil, Jean-Eric. 2016. *Revenu de Base*. Paris: Yves Michel.
- Irish Government. 2020. Life Worth Living: The Report of the Arts and Culture Recovery Taskforce. October. Available online: <https://www.gov.ie/pdf/?file=https://assets.gov.ie/98470/16fdf28f-bb34-471d-8f9f-1ed64f4aea2f.pdf#page=null> (accessed on 20 January 2022).
- Irish Government. 2022. Programme for Government—Our Shared Future. October. Available online: <https://www.gov.ie/en/publication/7e05d-programme-for-government-our-shared-future/> (accessed on 20 January 2022).
- Lawrence, Doreen. 2020. An Avoidable Crisis: The Disproportionate Impact of COVID-19 on Black, Asian and Minority Ethnic Communities, Labour Party. Lawrence Report. Available online: [https://uploads-ssl.webflow.com/5f5bdc0f30fe4b120448a029/5f973b076be4cad5045fad3\\_An%20Avoidable%20Crisis.pdf](https://uploads-ssl.webflow.com/5f5bdc0f30fe4b120448a029/5f973b076be4cad5045fad3_An%20Avoidable%20Crisis.pdf) (accessed on 20 January 2022).
- Ministère de la Culture et France Relance (MC). 2020. Plan de relance: Un effort de 2 milliards d'euros pour la culture. September 3.
- Ministère de la Culture et Ministère du Travail (MC/MTEI). 2021. *Rapport Gauron: Situation des Intermittents du Spectacle à L'issue de L'année Blanche: Diagnostics et Propositions*. Paris: French Ministry of Culture, April 21.
- Menger, Pierre-Michel. 2014. *The Economics of Creativity. Art and Achievement under Uncertainty*. Cambridge: Harvard University Press.
- Mouvement Français pour un Revenu de Base (MFRB). 2022. Available online: <https://www.revenudebase.info/> (accessed on 20 January 2022).
- Monk, Loraine, and Martin Gollan. 2021. Artists' Union England: Amid Increasing Workplace Precariousness, Now Is the Time to Consider a Universal Basic Income. September. Available online: <https://basicincometoday.com/artists-union-england-amid-increasing-workplace-precariousness-now-is-the-time-to-consider-a-universal-basic-income/> (accessed on 20 January 2022).
- National Campaign for the Arts (NCA). 2018. *Arts Index 2007–2018*. London: NCA.
- National Campaign for the Arts (NCA). 2020. *Somewhere over the Rainbow . . . Where Next for the Arts*. Event Report from the Open Space Held on 26 June 2020. London: NCA.
- Nettle, Daniel, Elliott Johnson, Matthew Johnson, and Rebecca Saxe. 2021. Why has the COVID-19 pandemic increased support for Universal Basic Income? *Humanities and Social Sciences Communications* 8: 79. [CrossRef]
- OECD. 2020. Culture Shock: COVID-19 and the Cultural and Creative Sectors. Available online: [https://read.oecd-ilibrary.org/view/?ref=135\\_135961-nenh9f2w7a&title=Culture-shock-COVID-19-and-the-cultural-and-creative-sectors&\\_ga=2.120109835.2059683614.1626271791-1169709466.1626271791](https://read.oecd-ilibrary.org/view/?ref=135_135961-nenh9f2w7a&title=Culture-shock-COVID-19-and-the-cultural-and-creative-sectors&_ga=2.120109835.2059683614.1626271791-1169709466.1626271791) (accessed on 20 January 2022).

- Pledger, D. 2017. The dramaturgy of a Universal Basic Income. In *Views of a Universal Basic Income: Perspectives from across Australia*. Edited by Tim Hollo. Canberra: Green Institute, vol. 1, pp. 52–57. Available online: [https://www.greeninstitute.org.au/wp-content/uploads/2017/06/Views\\_of\\_a\\_UBI\\_Aust.pdf](https://www.greeninstitute.org.au/wp-content/uploads/2017/06/Views_of_a_UBI_Aust.pdf) (accessed on 20 January 2022).
- Pratt, Andy. 2020. Arts and Culture: The Need for a ‘Live’ Support System. *Creative Industries Policy & Evidence Centre*, July 6. Available online: <https://www.pec.ac.uk/blog/arts-and-culturethe-need-for-a-live-support-system> (accessed on 20 January 2022).
- Roy, Vishalakshi. 2018. Role of Artist Led Events in Translating Cultural Policy into Practice, Shifting Ground: Coventry Biennial. Available online: <https://www.coventrybiennial.com/wp-content/uploads/2018/09/Coventry-Biennial-Shifting-Ground-2018-DIGITAL.pdf> (accessed on 20 January 2022).
- Roy, Vishalakshi. 2022. Research Webpage. Available online: <https://warwick.ac.uk/fac/arts/scapvc/ccmps/staff/roy/> (accessed on 20 January 2022).
- RSA. 2015. Creative Citizen, Creative State, the Principled and Pragmatic Case for a Universal Basic Income. The Royal Society for Arts, manufactures and commerce (RSA). Available online: <https://medium.com/pathways-to-universal-basic-income/creative-citizen-creative-state-a3cef3f25775> (accessed on 20 January 2022).
- RSA. 2020a. The Case for Universal Basic Income after COVID-19. *RSA*, May 20. Available online: <https://www.thersa.org/discover/publications-and-articles/rsa-blogs/2020/05/ubibasic-income-covid> (accessed on 20 January 2022).
- RSA. 2020b. The RSA Emergency Basic Income Scheme: Cash Now for the Self-Employed. *RSA*. Available online: <https://www.thersa.org/discover/publications-and-articles/reports/emergency-basic-income-self-employed> (accessed on 20 January 2022).
- Social Justice Ireland. 2021a. Basic Income Guaranteed? August 4. Available online: <https://www.socialjustice.ie/content/policy-issues/basic-income-guaranteed> (accessed on 20 January 2022).
- Social Justice Ireland. 2021b. Delivering a Basic income Pilot. December 7. Available online: <https://www.socialjustice.ie/article/delivering-basic-income-pilot-quick-guide> (accessed on 20 January 2022).
- Solomon, Tessa. 2022. Ireland Introduces Basic Income Program for Artists and Culture Workers Impacted by the Pandemic. *Arts News*, January. Available online: <https://www.artnews.com/art-news/news/ireland-basic-income-pandemic-artists-program-1234615406/> (accessed on 20 January 2022).
- Throsby, David. 2010. *The Economics of Cultural Policy*. Cambridge: CUP.
- Towse, Ruth. 2005. Alan Peacock and Cultural Economics. *The Economic Journal* 115: F262–F276. [CrossRef]
- UK Government. 2020. Culture Secretary Announces Cultural Renewal Taskforce. May 20. Available online: <https://www.gov.uk/government/news/culture-secretary-announces-cultural-renewal-taskforce> (accessed on 20 January 2022).
- UK Government. 2021. Third Round of Culture Recovery Fund. Available online: <https://www.gov.uk/government/news/third-round-of-culture-recovery-fund-to-secure-future-of-thousands-of-organisations> (accessed on 20 January 2022).
- UK Parliament. 2021. Impact of Government Policy on the Creative Sector. Available online: <https://lordslibrary.parliament.uk/impact-of-government-policy-on-the-creative-sector/> (accessed on 20 January 2022).
- Wall-Andrews, Charlie, Emma Walker, and Wendy Cukier. 2021. Support Mechanisms for Canada’s Cultural and Creative Sectors during COVID-19. *Journal of Risk and Financial Management* 14: 595. [CrossRef]
- Whittaker, Craig. 2020. Coronavirus: Universal Basic Income. UK Member of Parliament. Available online: <https://www.craigwhittaker.org.uk/coronavirus-universal-basic-income> (accessed on 20 January 2022).





Article

# Sustainability Determinants of Cultural and Creative Industries in Peripheral Areas

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**Abstract:** Cultural and Creative Industries (CCIs) are increasingly recognized as part of the global economy and of growing importance for sustainable local development. However, the exploitation of their full potential depends on several issues concerning their entrepreneurial dimension and the context where they operate. The paper deals with these issues having the scope to investigate the main determinants of CCIs' sustainability in peripheral areas, to understand what kind of policy could better support the survival of CCIs and development in these areas, according to an end-user perspective. The research is part of an Interreg Greece-Italy project carried out from mid-2018 until the end of 2020 with specific reference to CCIs in Apulia (IT) and Western Greece (EL). A two-step mixed methodology has been used to figure out regional specializations and the specific aspects of the entrepreneurial structure and business sustainability in the cultural and creative sector (CCs). In the end, the paper shows and discusses the main determinants considered crucial for CCI sustainability, suggesting guidelines for local authorities supporting their economic development.

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**Keywords:** cultural and creative industries; sustainability; peripheral areas

## 1. Introduction

CCIs (Cultural and Creative Industries) are diverse, literature and policy setters have proposed different models to be identified, mapping activities and their potentialities (see the overview in Boffo and Chizzali 2015). Indeed, delimiting the activities falling within CCs (Cultural and Creative sector) is not an easy operation if we also consider the fact that it is a rapidly evolving sector, strongly influenced by technology and by the processes leading to content and products (on the cultural and creative industries history see O'Connor 2000, O'Connor [2007] 2010).

All around the world, the CCs is a major and growing part of the global economy. Its importance as a generator of jobs and wealth is increasingly recognized (EY 2015; United Nations/UNDP/UNESCO 2013). Indeed, the latest study of the EIF market at the European level (European Investment Fund 2019) finds that the CCs represents a significant share of the European economy which accounts for over 4% of the Union's GDP, ensuring employment to 6.7 million people, mostly young people. Furthermore, the number of CCs enterprises (CCIs) has grown by 4.3% every year since 2008, and today it represents 10% of the service sector in most European countries. Employment, which has remained stable overall since 2008, has grown by 1% annually, but in some sectors, such as audiovisual and media, it has increased by 3%. For their contribution to creativity, CCIs also have a positive impact on other sectors, including in particular consumer electronics, telecommunication services, and tourism.

Moreover, research clearly agrees on the fact that CCIs are of growing importance for sustainable urban development and inclusive growth (e.g., Hall 2000; Heebels and van Aalst 2010; Power 2003; Pratt 2010; Skoglund and Jonsson 2012; Flew 2012; Correa-Quezada et al. 2018; Lazzarotti and Vecchio 2018; UNESCO-World Bank 2021). Various studies show



a wide range of effects and spillovers that they are able to generate for the benefit of territories and society (Tom Fleming Creative Consultancy 2015; McNeilly 2018).

Thus, as far as policy-making is concerned, culture and creativity are receiving growing attention as important developmental factors. Developing CCIs has been considered an opportunity for local attractiveness, economy, and social wealth, and unlocking their potential is quickly becoming a priority of public policies, at least in Europe (Executive Agency for Small and Medium-sized Enterprises of the European Commission 2016).

Indeed, in this attempt of culture and creative instrumentalism (Gray 2007), policy-makers have turned to 'fast policy' (Peck 2005), which Pratt (2009) names 'Xerox policy making': "policies that are simply copied with little or no variation from one place to another with no acknowledgment of the different social and economic contexts, and little attention to the policy object".

Indeed, governments are putting in place strategies to promote and support the development of CCIs at the local level, which denotes such a character, as Foord's study (Foord 2008) shows. Apart from various notional and classificatory policy inconsistencies and confusion—which also other studies well put in evidence (i.e., Cunningham 2002; Hesmondhalgh and Pratt 2005; Galloway and Dunlop 2007), he identified broad categories of intervention which are similar to generic business support initiatives, mostly converging in Porterian-like business cluster strategies at the local level.

On the point, there is no lack of criticism about the main conceptual models actually inspiring the policy-making in the field, mainly Florida's creative class approach (Florida 2002, 2005) and Porter's theory of competitive advantage (Porter 1989). Sacco et al. (2014), in their meta-analytic review of the literature on culture-led development models, shed light on the typical fallacies of these approaches, remarking the opportunity to not generalize according to a linear and mono-causal scheme. Rather, they claim for fleshing a "new territorial thinking" that builds frameworks upon the diverse and interacting conditions under which "culture works as an economically effective, socially sustainable developmental factor" (Sacco et al. 2014, p. 2807).

It is well acknowledged that the capacity of CCIs "to result in economically sustainable cultural enterprises" (Kavousy et al. 2010), and thus to benefit territories, depends on several factors.

Firstly, there are important factors related to their entrepreneurial dimension which preventing them from exploiting their full potentialities and limiting the positive influence they could have on the overall economy (Executive Agency for Small and Medium-sized Enterprises of the European Commission 2016). CCIs have specific characteristics, which make them very different from enterprises operating in other sectors (Caves 2000), making challenging the policy-making in the field (Pratt 2012). Although, some other consider this emphasis on such a difference erroneous or undue (Townley et al. 2009).

In the reviewed literature (Caves 2000; Pratt 2009; HKU 2010; Borisova 2018; Lazzaro 2018; Madgerova and Kyurova 2019), these features mainly identified four broad characteristics that would demand a different order of managerial and organizational challenges: the nature of the product, the size, the organizational structure, and the entrepreneurial character.

Compared to other types of goods, cultural and creative works encompass non-utilitarian values, such as aesthetic, spiritual, social, historical, symbolic qualities (Throsby 2001, pp. 28–29). Thus, their utility depends on the consumer's coding and decoding of value (Hall 1973), and this raises uncertainty both in the process and in the market (Townley et al. 2009).

Then, the so-called 'missing middle': enterprises are either 'big players' (very large multinationals) or micro and small organizations, the latter being the majority, that may also operate in the not-for-profit form or as social enterprises, often as freelancers. These are activities that can operate in a range of formal and informal, for-profit and not-for-profit, state and commercial activities, and between production and consumption, often resulting in interdependency in their work (Pratt 2009).

Moreover, CCIs are usually provided with a temporary (i.e., not permanent) workflow (Benhamou 2003), together with a project-based prototyping structure (DeFillipi and Arthur 1998). Indeed, CCIs put in place a creative process that is shaped by the inspiration, talent, vitality, and commitment of cultural and creative workers, coming out from complex knowledge and operational flows, which make working in these enterprises highly volatile (Leadbeater and Oakley 1999). In this regard, Jeffcutt and Pratt (2002) defined CCIs as “chart businesses”, to highlight that they assume “different organizational forms at different times and for different technologies and industries”, and they are “very good at producing products and markets for novelty” (Jeffcutt and Pratt 2002, p. 8).

Finally, there is a general lack of entrepreneurial skills within all sectors of the CCIs (HKU 2010; ArtENprise 2016). Creative people lack the resources to turn their innovative ideas into viable business propositions. They often find it hard to establish trusted relationships with each other as well as with HE&R (Higher Education and Research) institutes. What is more, is that they often show inadequacy in network competency, which, instead, is a fundamental element to increase cross-sectoral expertise and to foster cross-cutting opportunities. As a result, CCIs are often isolated, facing the difficulty of developing sustainable structures and of gaining market visibility, which leads to the ultimate challenge of achieving investments.

However, to what extent these features hinder or promote the CCIs sustainability is controversial. On the one hand, the small size and precariousness of cultural workers obviously pose important sustainability challenges. On the other hand, these are determinants in forging CCIs innovativeness, thanks to the interactive learning induced by the creative workers’ mobility in various projects and teams (Falk et al. 2011), as well as the CCIs capacity to resist changes induced by economic crisis compared to the performance of other sectors (Harc et al. 2019).

Literature highlights relevant location factors acting as CCIs development drivers, as well. Because of their inherent features, CCIs normally tend to locate their business in large urban agglomerates, to the detriment of peripheral areas where they are unable to find the ideal conditions for start-up and growth. Although, according to a divergent position, the location outside the “creative hub” could sometimes bring other advantages in terms of personal attachment and social embeddedness of creative individuals, lower overhead and running costs, local networking, and support (Chapain and Comunian 2010; Comunian et al. 2010).

According to the literature review made by Gong and Hassink (2017), with an economic geography perspective, there would be three complementary location drivers in CCIs’ tendency to cluster in specific places: agglomeration economies, spin-off formations, and the institutional environment. On these drivers, it follows a summary of their main findings and related quoted literature (Gong and Hassink (2017), pp. 6–13).

As mentioned above, CCIs tend to concentrate their businesses in places offering agglomeration economies with specific characteristics or large cities and metropolises (Chapain and De Propriis 2009; Lorenzen and Frederiksen 2008), profiting from localization (Branzanti 2015; O’Connor 2004; Storper 1995; Lazzarotti et al. 2008) or urban economies (Florida 2002, 2005; Landry 2008).

In certain areas and for specific CCIs, spin-off activities conducted by Universities and Art Schools (Rantisi and Leslie 2015; Wu 2005) or other companies (Wenting 2008; De Vaan et al. 2013) are determinant spatial patterns that emphasize the importance of knowledge transfer between parent organizations and creative spin-off firms.

The CCIs concentration in certain places or regions depends on the formal and informal institutional environment, which is another location factor particularly crucial for the CCIs’ development at all scales. On a formal level, the significant forces are the existence of institutional support, the public-private partnerships and training organizations (Scott 2000; Harvey et al. 2012; Turok 2003), as well as the presence of various kinds of intermediaries (Jakob and van Heur 2015) acting as brokers in facilitating networking among CCIs. In addition, the existence of trust, and norms and values shared by community

members, a favorable institutional climate are other informal factors, which qualify the institutional environment as a driving force in the CCIs location choice (Florida 2002, 2005; Landry 2008; Wenting and Frenken 2011).

However, it is not the case for all CCIs businesses. For instance, taking into account, the internal heterogeneity of the CCs, Tomczak and Stachowiak (2015) observed two different CCIs location patterns that might coexist in the same area. On one side, the spatial behavior of production-related industries (those involved in specialized production or publishing, computer games, the production of TV programs, and video recording), which show a strong tendency to gather in some areas and form clusters, both at global and local/regional scale. On the other side, consumer-oriented or final-user industries (those closest to the consumer in the value chain: exhibition rooms and theatres, or business-related services like photography, advertising, architecture, etc.) which tend to be distributed fairly evenly in space, with a general tendency to concentrate where the population has reached a certain number making it payable to locate an activity there.

Overall, this tendency of CCIs to cluster in specific areas generates spatial disparities among regions aiming at culture-led development policies. Boal-San Miguel and Herrero-Prieto (2020) examined CCI sector location patterns in Spain from a spatial-temporal perspective showing that “areas closest to creative clusters and urban nucleuses are those that benefit most from CCI growth due to spillover effects and spatial dependence while in peripheral regions this phenomenon is not observed. This means that spatial disparities exist and are also reinforced over time, along the line of the consequences of technological gap models” (Boal-San Miguel and Herrero-Prieto 2020, p. 15). This empirical evidence highlights the risk of the so-called Xerox policy-making (Pratt 2009), suggesting that CCIs might not be engines of growth everywhere and that “the CCI(s) have a number of specific aspects that require dedicated policy-making” (Pratt 2009, p. 11; 2012).

Thus, effective policy-making aiming at supporting CCIs cannot ignore an in-depth understanding of the main determinants of their business sustainability.

This paper addressed these issues as part of a wider applied research project, namely the “TRACES–Transnational Accelerator for a Cultural and creative EcoSystem”. It is a project funded by the INTERREG GREECE-ITALY 2014–2020 program, priority axis 1–“Innovation and Competitiveness”, having the specific objective to support the incubation of innovative specialized micro and small enterprises in the Cultural and Creative Sector in Apulia (IT) and Western Greece (EL).

The overall aim of the paper is to explore the main factors that affect the CCIs capacity to result in economically sustainable enterprises in these peripheral European regions, to understand what kind of policy could better support CCIs survival and development in these areas. To this end, it used an end-user perspective, according to a participatory and tailored approach.

Thus, the main research questions addressed in the paper are: What are the main determinants, which CCIs consider crucial for their sustainability in these Regions? What kind of support do they need to survive, develop and produce benefits for territories?

The paper is structured as follows. Section 2 presents the research design and the methodology; Section 3 describes the main results, and Section 4 offers a discussion of these results according to the literature review and presents the main policy implications. In this regard, the paper contributes to a better understanding of policy-making for CCIs, suggesting the evidence-based and participatory approach as a useful methodology to customize the generic business support initiatives. Finally, Section 5 concludes the paper, pointing out that CCIs sustainability depends on several factors which contextual research could help to identify serving better policy design, being aware that CCIs present some peculiarities and that “copying” or “one size fits all” approaches might not work in this field. Future research agenda in the cultural management field is also suggested.

## **2. Materials and Methods**

As already mentioned, the research focuses on CCIs operating in Apulia, which is a region in Southern Italy, and in Western Greece, is one of the thirteen administrative units of Greece.

Both Regions share some characteristics, i.e., geographic remoteness, weak economies, out-migration, lack of control over decision-making processes, high aesthetic values, etc., and can be defined as peripheral areas, considering the distance from major dominant economic centers at the National and European levels. In addition, in the European Regional policy, both Regions are included in the Convergence Objective, which considers additional investments for Regions with per capita GDP at less than 75% of the Community average.

In this context and in consideration of the literature review, the main research aim is to identify the determinants of the CCIs sustainability in these areas according to a cross-border and participatory approach. The results inform the subsequent policy design in the investigated areas.

For the purpose of this research, the CCs perimeter has been defined according to the Italian monitoring system based on the Symbola and Unioncamere model (Symbola and Unioncamere 2013—Appendix A), and a two-step methodology has been used.

Firstly, according to the main approaches actually in use in both Countries to map CCIs, the research aims at identifying the cultural and creative specialization in both Regions, highlighting potential similarities. The research is based on an extensive collection of data provided by the Chambers of Commerce of both Regions. Data have been subjected to a prior normalization process in order to assure pertinence to the sector and comparability between the two territories. The data elaboration concerns the descriptive statistics of the CCIs population in terms of the number of companies, jobs, localization, and legal form. Further data processing has been necessary to calculate and visualize the localization index of each branch in the CCs, representing the territorial specialization according to a cross-border approach.

In the second phase, the focus groups technique was used in order to deepen specific aspects of the entrepreneurial structure and business sustainability of the mapped enterprises. Six focus groups, involving about 80 Apulian enterprises and 34 Western Greek enterprises, took place to collect relevant data, which has been subjected to a secondary analysis using a descriptive statistical approach. The sample consists of 28 companies operating in the Books and printing subsector; 15 companies operating in the Videogames and software branch; 13 organizations operating in Film, video, radio and TV subsector; 27 creative industries; 4 companies in the Music sector; 24 organizations in the Performing Arts and Heritage sector; 3 companies performing interdisciplinary activities.

Focus groups were conducted according to a semi-structured interview based on the Hogeschool vor de Kunsten Utrecht methodology (HKU 2010). Based on this methodology, a questionnaire was prepared, including eight different informative sections for a total of 78 questions for six thematic areas of investigation: access to finance; access to market; IPR instruments; entrepreneurship education, skills, and training; access to innovation; collaboration.

In the end, evidence from those two steps has been discussed with more than 400 CCIs and professionals located in various geographical zones of both Regions during 22 participatory meetings held according to the World Café methodology.

The research period goes from mid-2018 up to the end of 2019.

## **3. Results**

The mapped enterprises belong to the following sectors: Cultural industries (Publishing, Music, Film, Video, Radio and TV, and Video Games), Creative industries (Architecture, Design, and Communication and branding), Performing Arts (Theater, Dance, Recreational activities, and Event organization) and Heritage (Museums, Archives, Libraries, and related services).

The mapping and the analysis of collected data have made it possible to identify the cross-border specializations in the CCs, together with the main features of the entrepreneurial dimension of activities and the common challenges to growth.

### 3.1. Regional Specialization in the Cultural and Creative Sector

The mapped enterprises operating in the sector in both regions are 16.961: 13.602 of them are located in Apulia, while 3.359 are located in Western Greece.

The difference between CCIs in Apulia and Western Greece is not only numerical. As stated in previous studies, it also concerns their contribution to the local economy.

In Apulia, CCIs value-added amounts to €2.7 billion, namely 4.2% of the regional GDP, with an employment rate of 4.3% (59.859 employees) (Fondazione Symbola 2019). In Greece, more than 30.000 cultural and creative enterprises are located in the Attica region (Avdikos 2014). These companies produce 75.5% of the sector's GDP throughout Greece with an employment rate equal to 60.8% of the total workforce in the sector. This goes to the detriment of Western Greece, where CCIs only produce 0.6% of the Regional GDP and 1.8% of employment in the Region (Avdikos et al. 2017; Regional Development Fund of Region of Western Greece 2018).

Table 1 shows the subsector breakdown of the mapped enterprises, based on data provided by the Chambers of Commerce in both Regions.

**Table 1.** Number of the mapped enterprises in CCs in Apulia and Western Greece.

Sector/Subsector	Apulia	Western Greece
<b>Creative Industries</b>	<b>5.162</b>	<b>640</b>
<i>Architecture</i>	2.414	40
<i>Communication and branding</i>	2.058	572
<i>Design</i>	690	28
<b>Cultural Industries</b>	<b>7.552</b>	<b>2.478</b>
<i>Film, video, radio, and tv</i>	645	205
<i>Software and videogames</i>	1.282	495
<i>Music</i>	168	149
<i>Books and printing</i>	5.457	1.629
<b>Performing Arts</b>	<b>822</b>	<b>233</b>
<b>Heritage</b>	<b>66</b>	<b>8</b>
<b>Total</b>	<b>13.602</b>	<b>3.359</b>

Table 1 clearly shows how in both Regions the Cultural Industries sector was the most populated and, within it, the sub-sector Books and printing concentrates the majority of enterprises working in this sector. In second place, we found the Creative Industries sector with the Communication and branding subsector representing the main specialization in both territories. Available data did not allow for a proper representation of the Performing Arts and Heritage sectors. Based on the direct observation and personal knowledge of the authors and TRACES partners, in these sectors, most enterprises are not registered at the Chamber of Commerce, considering that they usually are public companies or operate in the form of associations without a VAT number.

It follows the description of the main location patterns emerging from the mapping of CCIs in the cultural and creative industry sectors, applying the localization index on the raw data collected from the registers of Chambers of Commerce.

#### 3.1.1. Cultural Industries in Apulia and in Western Greece

This sector includes companies operating in the following subsectors: Books and printing; Film, video, radio and TV; Music; Videogames and software.

Table 2 shows the activities that in both Regions enroll the highest number of active enterprises.

**Table 2.** Cross-border specialization in the Cultural Industries sector.

Subsectors	NACE Code	Activities
Film, video, radio, and tv	59.11	Motion picture, video, and television program production activities
	60.10	Radio broadcasting
	60.20	Television programming and broadcasting activities
Videogames and Software	58.21	Publishing of computer games
	63.12	Web portals
Book and Printing	18.14	Binding and related services
	74.30	Translation and interpretation activities

Figure 1 reports the GIS maps of the mapped enterprises in these subsectors, offering a visual representation of their localization.

From Figure 1, we can observe different location patterns across subsectors and Regions.

In relation to the subsector Film, video, radio, and TV, the areas in the Apulia Region with the greatest presence of companies are the central Adriatic ones. In particular, the area of the Metropolitan City of Bari (5) and the area of Murgia dei Trulli (7) were identified as the two geographical zones in which these activities converge, even if the Tavoliere (3) and Magna Grecia (8) areas also showed high levels of entrepreneurial concentration in this subsector. The map of Western Greece, on the other hand, showed the greatest convergence of companies in the Ileia and Aitolokarnania units, particularly Ilida (264) in the former and Amfiloxia (260) and Agrinio (257), in the latter. In Western Greece, the spatial distribution of the companies operating in this subsector also showed the tendency to gravitate around the capital city of the Region (269—Patras).

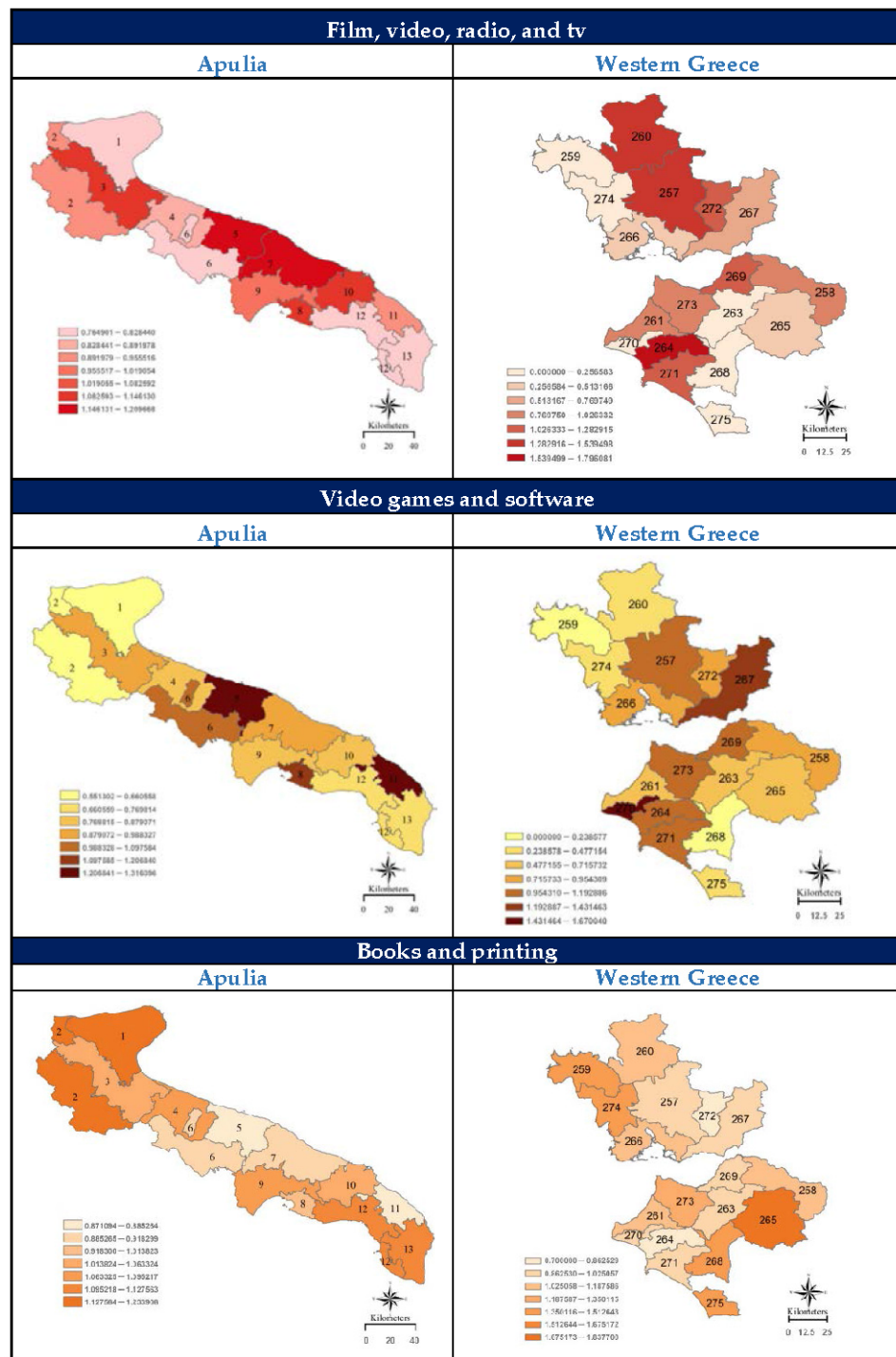
This tendency to concentrate in the central zones of both Regions or to gravitate around the capital city was more evident for companies operating in the Videogames and software subsector. In Apulia, they were concentrated in the area of the Metropolitan City of Bari (5) and in the area of Lecce (11), the latter being the second important city of the Region, behind the capital city (Bari). Again Magna Grecia (8) and Alta Murgia (6) follow these two areas. The areas of Western Greece with the highest presence of companies producing video games and software are Pineios (270) and Nafpaktia (267).

Companies in the Books and printing subsector presented a different location pattern. In Apulia, they were predominant in the extreme North of the Region and the extreme South, mainly in the territorial areas of Gargano (1) and Monti Dauni (2), Arco Ionico (12), and Serre Salentine (13). In the biggest urban agglomerates (Bari and Lecce), they presented a lower concentration. The situation was similar in Western Greece, where the companies are mainly located in the Southern areas of Kalavryta (265), Ancient Olympia (268), and Zacharo (275). Follow the northernmost areas of Aktio Vonitsa (259) and Xeromero (274).

### 3.1.2. Creative Industries in Apulia and in Western Greece

This sector includes companies operating in the following subsectors: Communication and branding; Design; Architecture.

Table 3 shows the activities that in both Regions enroll the highest number of active enterprises.



**Figure 1.** Regional specialization in the Cultural Industries sector. Apulia: 1—Gargano; 2—Monti Dauni; 3—Tavoliere; 4—Puglia Imperiale; 5—Città Metropolitana; 6—Alta Murgia; 7—Murgia Dei Trulli; 8—Magna Grecia; 9—Gravine Tarantine; 10—Brindisi; 11—Lecce; 12—Arco Ionico; 13—Serre Salentine. Western Greece—ACHAIA: 258—Aigialeia; 263—Erymanthos; 265—Kalavryta; 269—Patras; 273—West Achaea; AITOLOKARNANIA: 257—Agrinio; 259—Aktio Vonitsa; 260—Amfiloxia; 266—Mesollogi; 267—Nafpaktia; 272—Thermo; 274—Xeromero; ILEIA: 261—Andravida-Kyllini; 264—Ilida; 268—Ancient Olympia; 270—Pineios; 271—Pyrgos; 275—Zacharo. Source: TRACES D3.1 deliverable.

**Table 3.** Cross-border specialization in the Creative Industries sector.

Subsectors	NACE Code	Activities
Communication and branding	70.21	Public relations and communication activities
	73.11	Advertising agencies
Design	74.10	Specialized design activities
Architecture	71.11	Architectural activities

Figure 2 reports the GIS maps of the mapped enterprises in these subsectors, offering a visual representation of their localization.

Companies working in these subsectors in Western Greece clearly showed the tendency to concentrate around Patras (269), the capital city of the Region, the third-largest city of Greece, behind Athens and Thessaloniki, and one of the main industrial and commerce centers in Greece.

In Apulia, we observed different location patterns. While Communication and branding activities were mainly located around the biggest cities of the Region (Bari—5 and Lecce—1), the Design and Architecture activities were mainly located in the Southern and the Northern areas, respectively. Such evidence, together with the direct knowledge of the authors, suggests further investigations on the hypothesis that the localization of companies in these subsectors may depend on vocational factors rather than on a favorable institutional environment.

### 3.2. Entrepreneurial Dimension of CCIs in the Investigated Areas

Both in Apulia and Western Greece, cultural and creative companies showed common features in terms of entrepreneurial structure and challenges to operate and to develop.

CCIs were mainly small-sized enterprises in the form of individual companies (30.70%) or associations, cooperatives, and social enterprises (26.32%). The private capital company form was adopted by the 20.18% of investigated CCIs, mainly operating in the Film, Videogames and Music sectors.

In 86.84% of the observed cases, the workforce consisted of no more than 10 employees. On average, in such companies, there were no more than three permanent employees.

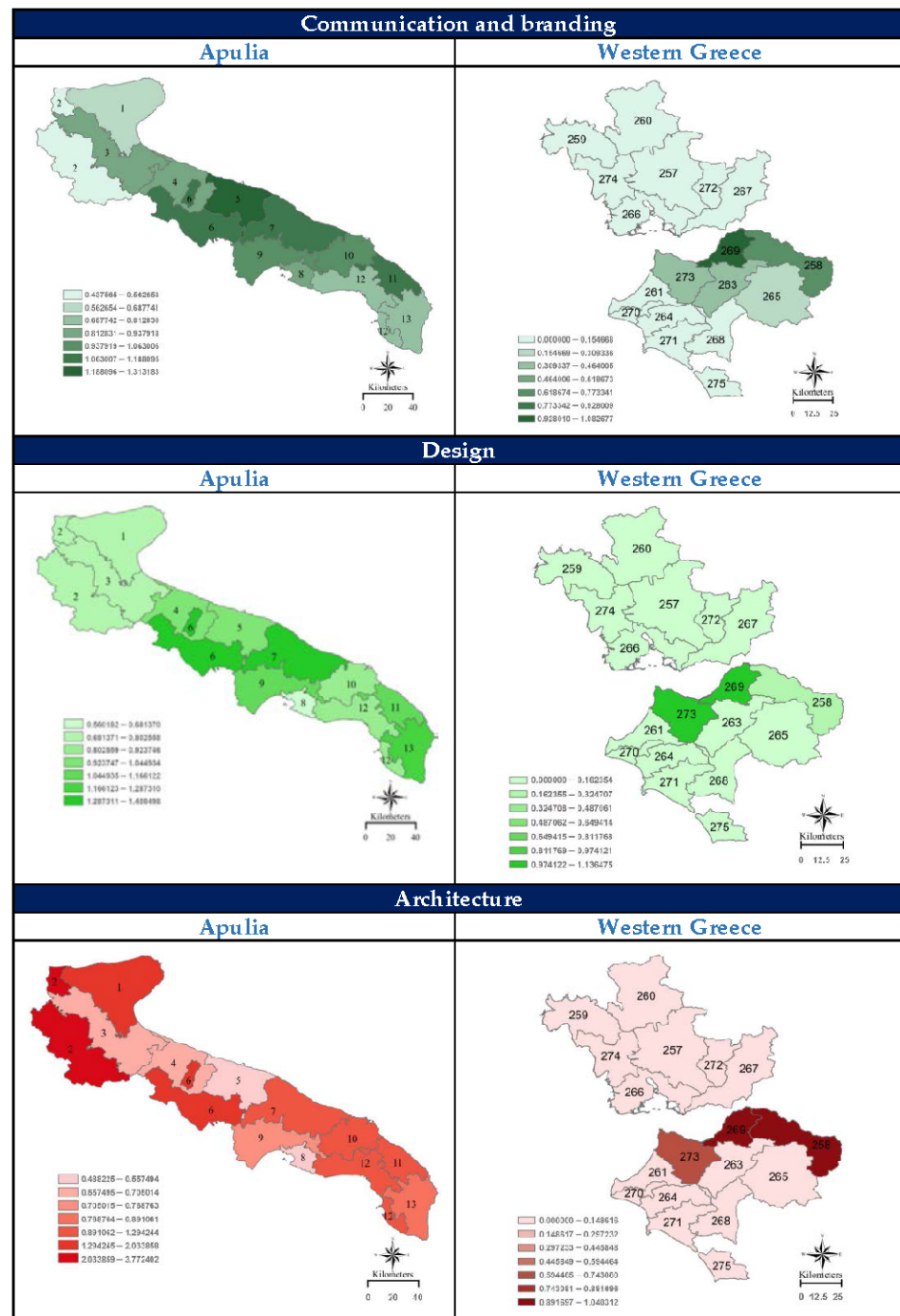
Going deeper in their entrepreneurial dimension, the following subsections showed the main relevant statistics resulting from the focus groups, organized in the six areas of investigation: access to finance, access to the market; IPR; entrepreneurial training and skills; access to innovation; cooperation. Results reflect the most common response across the subsectors<sup>1</sup>.

#### 3.2.1. Access to Finance

Focus groups highlighted that in these territories, CCIs face the major challenges of undercapitalization (72.83% of respondents—92 out of 114—declared that the share of risk capital is under 30% of the total investment, most of them not reaching the 10%) and the difficulty to obtain third party financing sources (25.60%), especially on the side of public institutions. Only 22.81% of the interviewed companies obtained public funds to finance their activity, and among them, the 80.77% for a share not exceeding the 10%; companies mainly use personal guarantees to secure their debts (42.98%). In this regard, the main obstacle to access public grants results from the time-consuming procedures for public incentives (24.64%). Another critical point lies in the difficulty of giving the banking system proof of the potential economic value that they are able to generate. In fact, the risk aversion from financial institutions is another obstacle frequently reported (16.43%).

To complete the picture, a general lack of culture and skills related to financial planning and management comes into play. The 52.63% of companies do not do any financial planning, and, among those who use planning (47.37%), 70.37% plan at one year mostly without specialist support.



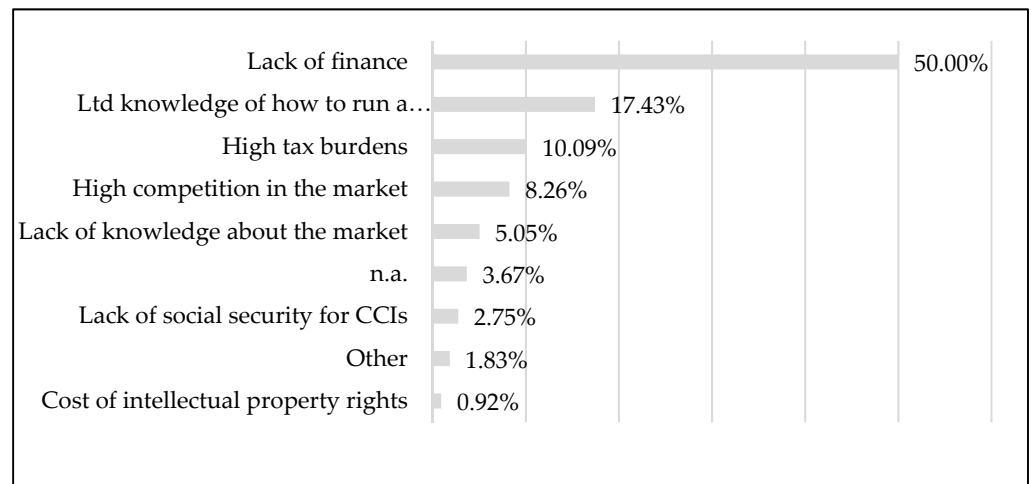


**Figure 2.** Regional specialization in the Creative Industries sector. Apulia: 1—Gargano; 2—Monti Dauni; 3—Tavoliere; 4—Puglia Imperiale; 5—Città Metropolitana; 6—Alta Murgia; 7—Murgia Dei Trulli; 8—Magna Grecia; 9—Gravine Tarantine; 10—Brindisi; 11—Lecce; 12—Arco Ionico; 13—Serre Salentine. Western Greece—ACHAIA: 258—Aigialeia; 263—Erymanthos; 265—Kalavryta; 269—Patras; 273—West Achaea; AITOLOKARNANIA: 257—Agrinio; 259—Aktio Vonitsa; 260—Amfiloxia; 266—Mesollogi; 267—Nafpaktia; 272—Thermo; 274—Xeromero; ILEIA: 261—Andravida-Kyllini; 264—Ilida; 268—Ancient Olympia; 270—Pineios; 271—Pyrgos; 275—Zacharo. Source: TRACES D3.1 deliverable.

### 3.2.2. Access to Market

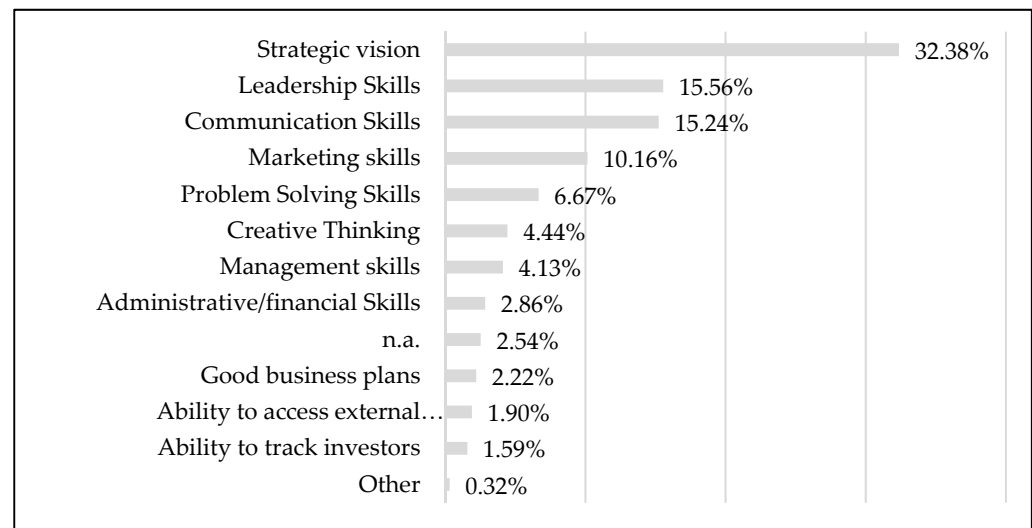
Lack of funds was the most significant issue that prevented CCIs from accessing the broad market. Limited knowledge of how to run a business comes up as well among the

main obstacles. Figure 3 shows the complete ranking results about the most important business-related challenges when starting a company in the CCs.



**Figure 3.** Business-related challenges when starting a company in the CCs. Ranking results Source: Authors elaboration on data collected and shown in TRACES D3.1 deliverable.

In this regard, it emerged that having a strategic vision, leadership, and communication skills were the most relevant managerial factors supporting the growth of the companies, as shown in Figure 4; while the cost of labor and the cost to access finance were the most relevant factors affecting it in Apulia (26.25% high relevance) and in Western Greece (32.35% high relevance), respectively.



**Figure 4.** Managerial factors that support the growth of CCIs. Ranking results Source: Authors elaboration on data collected and shown in TRACES D3.1 deliverable.

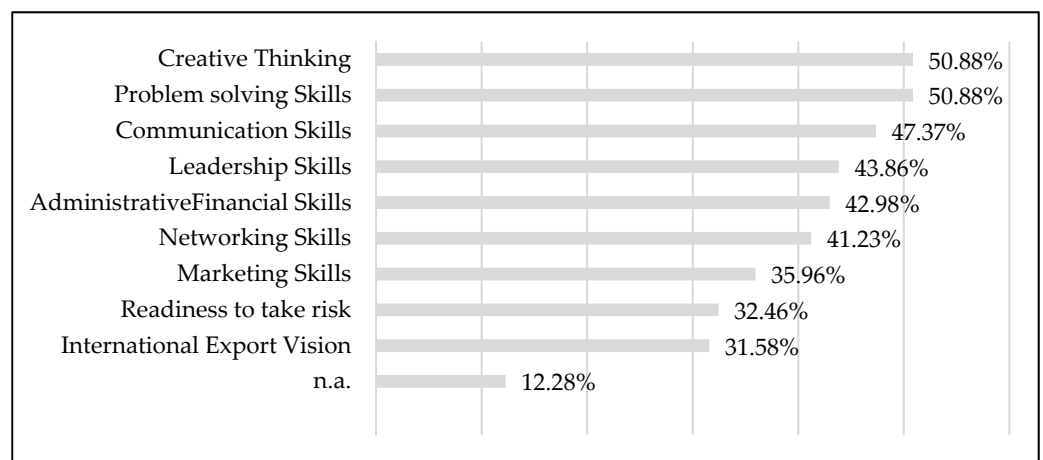
Moreover, CCIs suffered a strong price competition, which represents the most important entry barrier at the National level (45.96%) in both territories. Furthermore, it seems that they found it hard to catch opportunities related to product diversification (34.21%), while their presence on foreign markets suffers from the nature of the product (24.56%), as well as from financial impediments (11.40%) and management and control difficulties (11.40%). Talking about technological development, the collected information showed that CCIs made little use of ICT tools and solutions, as they have little knowledge on how to exploit the potential inherent in digital management for business purposes (36.84%).

### 3.2.3. IPR

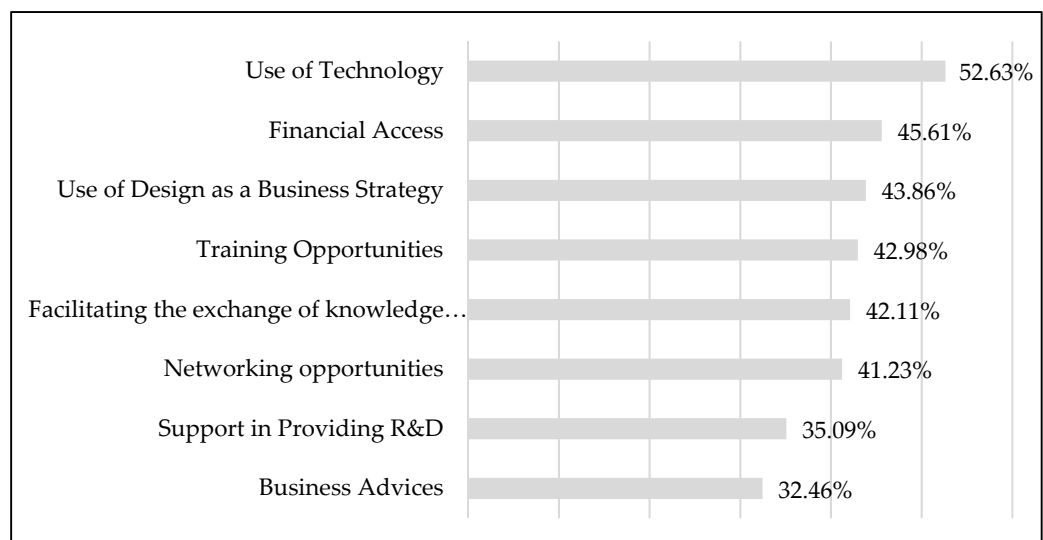
Concerning IPR (Intellectual Property Rights), only a few companies appeared keen to protect their products (21.93%). Therefore, we can infer a very poor knowledge of this subject, thus considering that 52.63% never received advice on it. Strategically, companies highlighted the need for laws and services to curb the illegitimate reuse (26.32%); improving knowledge (17.54%); allowing greater accessibility to be able to share and freely access existing contents as a means of unlocking the potential benefits that this can offer (17.54%).

### 3.2.4. Entrepreneurial Training and Skills

Figures 5 and 6 show the ranking results about the relevant critical skills for success and the most important factors in supporting companies in the CCs, respectively. These data give important information about the opportunities that companies are demanding in these territories.



**Figure 5.** Critical entrepreneurial skills for CCI success. Ranking results. Source: Authors elaboration on data collected and shown in TRACES D3.1 deliverable.



**Figure 6.** Factors supporting CCI success. Source: Authors elaboration on data collected and shown in TRACES D3.1 deliverable.

The majority of the participating enterprises believe that the development of advice and support centers specifically for the creative and cultural services is quite or much needed (78.07%).

### 3.2.5. Access to Innovation

With regard to research and innovation, interviewed companies gave some important insights on how, what, and why they access innovative processes. Firstly, the most relevant sources of knowledge are individual knowledge sharing (55.43%) and open information sources (18.48%).

They stated that creativity and soft innovation are the most predominant (42.02%) followed by technological innovation (29.41%), while hidden innovation (such as innovative processes, new organizational models, or new business models) is less important (6.72%). The aim behind innovation activities was mostly to match users' demands (35.88%) and to gain efficiency in service delivery (31.30%). Innovating for social improvements came at the third level with 17.56%. In general, 68.04% of respondents (97 out of 114) had product innovation which, in the case of the Apulian companies, has been mainly developed in cooperation with other enterprises (63.64%), while it has been made by themselves in the most Greek ones (63.64%).

About the role of CCIs in being drivers of creativity and innovation in other sectors of the economy (open innovation), companies believe that it is necessary:

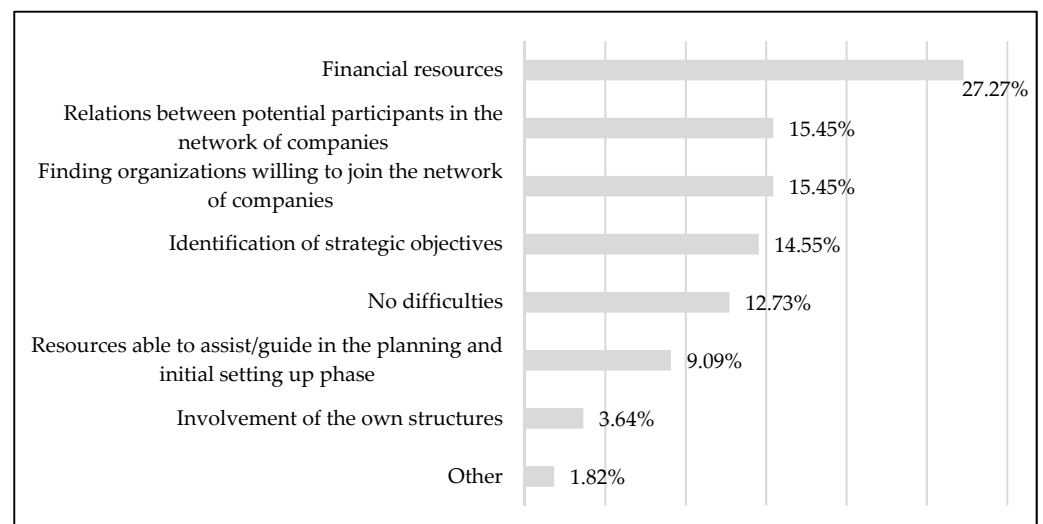
- To strengthen the links between academia, knowledge institutes, and CCIs (27.50%);
- To make use of rapid communication (24.17%);
- To strengthen the links between CCIs and businesses in other sectors (22.50%).

### 3.2.6. Cooperation

In the opinion of the interviewed companies, cooperation can mainly serve as a source of innovation through the exchange of good practices (49.28%) and to take advantage of mutually shared resources (17.87%).

The survey showed that companies do usually cooperate with other enterprises. In particular, 48.70% of the interviewed companies cooperate with enterprises operating in the same sector, while 28.70% of them cooperate with enterprises in different sectors. The type of their cooperation is based on formal (51.69%) or non-formal agreements (48.31%).

Regarding the kind of difficulties faced in operating networks, Figure 7 shows the ranking of the main collected reasons, which prevent them from starting networking.



**Figure 7.** Difficulties to join networks. Ranking results. Source: Authors elaboration on data collected and shown in TRACES D3.1 deliverable.

Finally, as far as it concerns the motivation in networking, the participation of the majority of companies was both defensive (stay on the market/contain the costs) and offensive impactful (innovation, to penetrate a new market) (58.43%), while for the 23.60% of them it had mostly an offensive aim.

### 3.3. CCI's Common Challenges to Sustainability

The preliminary understanding described in the above subsections were discussed with more than 400 CCIs and professionals from various geographical zones in both Regions during 22 thematic workshops held according to the World Café methodology in order to assess, among the different issues raised in the focus groups, the most common determinants of CCIs sustainability.

Figure 8 summarizes the common challenges to sustainability assessed by the investigated enterprises.

<p><b>Innovation &amp; Internationalization</b></p> <ul style="list-style-type: none"> <li>- Lack of qualified human capital</li> <li>- Limited access to technology</li> <li>- Ignorance of Intellectual Property (IP) rights/procedures</li> <li>- Expensiveness of and limited access to heavy equipment</li> <li>- Difficulty to access foreign markets</li> <li>- Prevalence of locally-based actions</li> <li>- No technology transfer options</li> <li>- Limited use of e-commerce platforms</li> </ul>	<p><b>Marketing &amp; Communication</b></p> <ul style="list-style-type: none"> <li>- Difficulty in organizing a sales network</li> <li>- Poor ability to understand the market and define sponsorship, co-branding, partnership and licensing activities</li> <li>- Inefficient communication plans</li> <li>- Inconsistent and unprofessional social media strategies</li> <li>- Poor digital marketing skills</li> <li>- Difficult approach to media (newspapers, magazines, journalists)</li> </ul>
<p><b>Finance and access to credit</b></p> <ul style="list-style-type: none"> <li>- Bureaucracy</li> <li>- Difficulty to provide the necessary guarantees to obtain funds from banks</li> <li>- Inability to find sponsorship</li> <li>- Difficulty to approach large corporations for socially responsible investing actions</li> <li>- Not legally recognized entities</li> <li>- Inability to raise EU/regional funds</li> </ul>	<p><b>Management and business organization</b></p> <ul style="list-style-type: none"> <li>- Lack of an entrepreneurial culture</li> <li>- Poor leadership and managerial skills</li> <li>- Inability to cooperate/coordinate</li> <li>- Difficulties in volunteers' management</li> <li>- Ignorance of fiscal/legal procedures</li> </ul>
<p><b>Spaces</b></p> <ul style="list-style-type: none"> <li>- Absence of physical and virtual spaces for creative entrepreneurs</li> <li>- Difficulty in obtaining authorization from Public Administrations (PA) to implement public actions.</li> <li>- Lack of spaces with large capacity and/ or places suitable for big events and exhibitions</li> <li>- Abundance of amateurs' atelier</li> <li>- Shortage of spaces to work and create</li> </ul>	<p><b>Public Administration (PA) and legal system</b></p> <ul style="list-style-type: none"> <li>- Lack of dialogue between cultural networks and PA</li> <li>- Precarious jobs</li> <li>- Lack of information from regional and municipal offices</li> <li>- PA representatives' old-fashioned mind set in conceiving and providing services in the cultural sector</li> <li>- No physical nor digital portal for direct communication with PA</li> <li>- Bureaucracy/ time consuming decisions</li> </ul>

Figure 8. CCIs common challenges to sustainability. Source: TRACES D3.2 and D2.5 deliverables.

## 4. Discussion

In this section, a discussion of the research results is presented in response to the main research questions addressed in the paper and in the light of the reviewed literature described in Section 1.

Regarding the first research question: *What are the main determinants, which CCIs consider crucial for their sustainability in these Regions?* It follows a summary of the main determinants, which in the investigated areas seem to obstacle the business sustainability of CCIs.

As already debated in the existing literature, both organizational and location factors can be observed, exerting mutual influence in some respects.

On the organization level, two macro determinants can be identified; both of them are closely related to the interdisciplinary and intangible nature of CCIs' activities, as well as to the cultural and creative entrepreneur mindset and attitude (Borisova 2018; Lazzaro 2018; Madgerova and Kyurova 2019).

The first macro determinant relates to CCIs capability to access finance. Even if the funding needs vary according to different parameters, ranging from the development stage, the type of sector and the working mechanisms, the type of activity, and the project-based structure (KEA European Affairs 2010), the funding mix of the interviewed companies relies predominantly on their own resources and public support. It results in the main hindrance to create a sustainable economic model for their activity in the long term. The

collected data show that the majority of companies working in the CCs in these Regions are micro and small organizations suffering the challenge of undercapitalization and the difficulty of obtaining third-party financing sources. Self-financing is the most important source of finance to start up, scale-up and access the broad markets; they thus require external funding that they find it hard to raise.

Access to external finance is difficult for different reasons.

Regarding the public funding, which is the main available source they use for cash-flow needs, from the participatory assessment, it emerges that the existing tools are often inadequate in supporting the CCIs financial needs. In this regard, the main detected reasons are:

- The administrative and legal procedures to run to obtain the grants are time-consuming, and highly bureaucracy demanding;
- The entry requirements foreclose the access to CCIs operating in the form of social enterprises or as freelancers;
- Actual grant tools do not include soft innovation as an eligible activity for funding; they usually are project-led, short-term with the disbursement of the sums after the conclusion of the financed activity, thus forcing companies to find liquidity elsewhere;
- Public micro-credit tools do not usually contemplate the CCIs NACE codes.

As far as it concerns access to private funding, such as bank credit or equity finance (i.e., business angels, venture capital, etc.), the main challenge reported during the participatory meetings with local CCIs in both Regions relates to the risk aversion from financial institutions, as well as private investors. The reluctance to finance cultural and creative entrepreneurs mainly depends on the low levels of mutual understanding. On the one hand, financial institutions lack risk assessment protocols that take in due account the specificities of the cultural and creative business structure, particularly the dependence on intangible assets providing few or no capital release as collateral for credit risk, as well as the complexity of their value chain. On the other hand, creative people lack skills for business planning and financial management and language to meet the finance sector requirements.

This latter aspect leads to discuss the second macro determinant of CCIs sustainability found in this research: CCIs entrepreneurial mindset and management capability.

In this regard, most of the responses, collected through the focus groups and the participatory meetings, deal with a general lack of entrepreneurial culture and management skills in various fields: financial management and corporate finance strategies, marketing and communication, innovation and internationalization, IPR management, networking and so on. Artists and creative people and talents do not understand, sometimes they refuse to accept, the business and market languages, and at the same time, they lack financial resources to hire qualified staffing to support them in running their activities. This leads CCIs to decision-making processes driven by passion, the symbolic value of their products, artistic expression, and short-term orientation, rather than being inspired by administrative rationality and management control tools. CCIs in the investigated areas are aware of this, and they strongly demand more training opportunities.

Both the abovementioned determinants are not a novelty in the literature, acknowledging the potential and needs of CCIs in other contexts (i.e., HKU 2010; KEA European Affairs 2010; Executive Agency for Small and Medium-sized Enterprises of the European Commission 2016). However, the in-depth knowledge of CCIs operating in these specific contexts contributes to a better understanding of the cause-effect mechanisms, upon which building up a dedicated, supportive policy.

Considering the location factors, it can be reasonably affirmed that when the focus is a peripheral area, the spatial dynamics in the distribution of CCIs in the territory do not change. At this scale, results confirm the general location patterns observed in previous studies focusing on big urban agglomerates. In the periphery, CCIs also tend to be concentrated in areas where they can find the ideal conditions for start-up and growth, generally in areas most populated or in industrial and commercial centers in the Region.

This is clearly observable for creative industries and for production-related industries such as in the Videogames and software and Film, video, radio, and TV subsectors. Some exceptions are observable too, such as the location patterns of companies specialized in book and printing activities or in design and architecture services, even if the available data do not allow to understand the factors behind the specific pattern, requiring more in-depth research.

However, regardless of the specific localization in the center or in the periphery, companies working in CCs in Apulia and in Western Greece agreed upon specific environmental factors preventing them from sustaining their businesses growing them. The lack of adequate infrastructures, such as co-working and exhibition spaces, as well as the local administrative culture, make the institutional environment not supportive of their sustainability. Figure 8 clearly shows how the relationship with the public administrations at the local level is subject to recurrent complaints in terms of lack of dialogue, inadequate competencies of public officers to deal with creative minds and services, lack of customized services and tools to support CCIs, bureaucratic mind-set. In these regions, above all in Western Greece, the actual public policies to support entrepreneurship seem more suitable for supporting traditional businesses in the industrial sectors, posing de facto important barriers to CCIs in accessing the available policy tools. In this regard, Apulia is further ahead of Western Greece, since regional public authorities started more than 15 years ago to implement dedicated policies, recognizing the potential of the sector for tourism and urban regeneration purposes and its peculiarities compared to the traditional ones. Here, the main public intervention aimed at supporting regional CCIs according to a grant approach, ensuring them the sustainability of the current operations. At the same time, another policy aim is to strengthen the visibility of the sector at the national and international level, especially in the Music, Theatre and Film branches (i.e., through the regional branches Teatro Pubblico Pugliese and Apulia Film Commission), as well as to enhance the excellence of regional interest for tourism attractiveness purposes (i.e., Fondazione Notte della Taranta, Fondazione Paolo Grassi, Lirico Sinfonica Petruzzelli)<sup>2</sup>. All in all, the interviewed CCIs expressed further needs that the existing policies do not address.

The participatory assessment of the CCIs needs to survive and grow gave important results in response to the second research question: *What kind of support do they need to survive, develop and benefit territories?*

The overall picture of CCIs sustainability emerging from this research suggests the need for dedicated local policies in Apulia and Western Greece Regions able to address the specific features and requirements of CCIs according to a tailored approach in order to support an economically sustainable operation of these enterprises and thus the local development. This does not mean that the type of interventions should be diverse compared to types of economic development support common to generic business support initiatives—providing workspace, training, networking, loans, business management skills, access to technology, and so on. The adoption of a tailored approach implies that these types of intervention should acknowledge the diverse and specific business models, operational structures, and legal forms of the various enterprises populating the CCs, in accessing the available supportive tools.

Just to mention the most debated and acknowledged features, which require different attention and treatment, compared to non-cultural-creative enterprises:

- The survival and development of CCIs imply an economic problem that is the funding needs. In particular, some types of enterprises operating in this sector, such as performing arts, cannot rely only on private contributors (Baumol and Bowen 1965). Accessing to alternative finance sources is a context depending factor, and it is impossible to define a “one size fits all” financing support model (KEA European Affairs 2010);
- Management and performance practices should be aligned to the goals and mission of CCIs (Byrnes 2009; Zan 2006), and creativity needs to be balanced to productivity. Management accounting is often accused of fostering the latter at the expense of the former (Hopper and Bui 2016).

Then, policies for developing CCIs should be designed accordingly, and public authorities should equip themselves with ad hoc information systems, grasping tailored information about local CCIs entrepreneurial dynamics, attitudes, and needs.

## 5. Conclusions

The paper had the objective to explore the main determinants that affect the CCIs capacity to result in economically sustainable enterprises in two European peripheral areas: Apulia, which is a region in Southern Italy, and in Western Greece, one of the thirteen administrative units of Greece. This exploration has been conceived as instrumental in understanding what kind of policy could better support CCIs survival and development in these areas.

To this end, we used an end-user perspective, with the support of a qualitative analysis that has been structured in order to firstly map the common regional specializations in the field and then to deepen the entrepreneurial dimension and business sustainability of the mapped enterprises. Moreover, we discussed the preliminary research results according to a participatory approach, involving more than 400 CCIs and professionals located in various geographical zones of both Regions. Thus, the results reflect the main challenges and needs which CCIs are actually facing and demanding to strive in being economically sustainable enterprises in these territories.

As far as concern local policy-making, the collected evidence suggests that public policies in place in both territories to support CCIs do not fully meet the detected needs, albeit with different degrees in Apulia and in Western Greece. Generally speaking, the type of support which CCIs are asking for does not differ from the traditional business support tools/schemes, as also Foord's study (Foord 2008) found for other territories. Rather, CCIs highlighted their inadequacy, as they are not tailored, not taking into account their organizational and business peculiarities.

From this point of view, the paper contributes to a better understanding of policy-making for CCIs, suggesting the evidence-based and participatory approach as a useful methodology to customize the generic business support initiatives. Moreover, our results strengthen Pratt's position (Pratt 2009, 2012) on the fact that CCIs require dedicated policy-making; thus, "copying" or "one-size-fits-all" schemes/approaches might not work in this field.

On the theoretical level, this paper does not claim to deal with the current scientific debate in the cultural policy or the economic geography studies addressing the topic of cultural-led development, although the paper slightly dealt with some related aspects. However, in this regard, it encourages, albeit on the basis of mere intuitions raising from the research process, to increase contextual research in peripheral areas since it can offer ground for novel insights on CCIs local patterns.

Rather, it would contribute to the cultural management literature.

As far as concerned the current debate on the addressed topic, as already mentioned in the previous section, our results outline once more how determinant is the CCIs capability to access finance and the CCIs entrepreneurial mindset and management capability, both exerting mutual influence in some respects.

These findings are not a novelty in the literature acknowledging the potential and needs of CCIs in other contexts (i.e., HKU 2010; KEA European Affairs 2010; Executive Agency for Small and Medium-sized Enterprises of the European Commission 2016). However, the in-depth knowledge of CCIs operating in the investigated areas contributes to a better understanding of some cause-effect mechanisms, suggesting directions for future research agenda. In this regard, we can outline the need for robust research at least in the following areas:

- Cash-flow dynamics in relation to different business models, also considering the current digital transformation, to identify the most adequate internal and external financial tools;



- ‘Creative’ accounting that is dedicated tools, procedures, and accounting languages which cultural and creative entrepreneurs could easily adopt for cost management control and account for investment readiness;
- ‘Creative’ managerial education and training, as far as concern the dedicated design and development of disciplinary contents and pedagogy which can better address the mindset, way of doing and learning of cultural and creative people.

From a methodological point of view, the research approach may be considered a novelty in the field in some respects. As far as we know, there is no other study focusing on the addressed geographical zone. Moreover, focusing on common cultural and creative activities across two different countries, our results are independent of the Country’s macro (institutional, political, economic, and socio-cultural)-environment influence on CCIs sustainability. Furthermore, it used the participatory approach to assess and validate the focus group’s results, so involving in the research process other CCIs located in various geographical zones of both Regions. Thus, the results can be considered to have a higher degree of robustness and generalization than other empirical studies, despite deriving from qualitative analysis and retaining the typical limitations of such research methodologies. Finally, we are aware that such type of investigation is too expensive and hardly replicable without solid financial support. Our hope is that the European Union will continue in the future to believe in the value of research to better serving policy-making and developing new knowledge and practice for the benefit of the sector.

**Author Contributions:** Conceptualization, methodology, formal analysis and writing-review and editing are the result of the joint effort of the authors. Regarding the writing-original draft preparation: F.I. contributed to Sections 1, 3.1, 3.3 and 5; R.F. contributed to Section 3.2; S.A. contributed to Section 2. R.F. and S.A. jointly contributed to Section 4. All authors have read and agreed to the published version of the manuscript.

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**Conflicts of Interest:** The author declares no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results. The collection of data was made with the collaboration of Chamber of Achaia, Hellenic Management Association and Distretto Puglia Creativa, partners of the Interreg Greece-Italy project TRACES.

## Appendix A

Sector	Subsectors	NACE Code	Activities
Cultural Industries	Film, video, radio and tv	59.11	Motion picture, video and television programme production activities
		59.12	Motion picture, video and television programme post-production activities
		59.13	Motion picture, video and television programme distribution activities
		59.14	Motion picture projection activities
		60.10	Radio broadcasting
		60.20	Television programming and broadcasting activities
		77.22	Renting of video tapes and disks
	Videogames and software	32.40	Manufacture of games and toys
		58.21	Publishing of computer games
		58.29	Other software publishing
		62.01	Computer programming activities
		63.12	Web portals
	Music	18.20	Reproduction of recorded media
		26.40	Manufacture of consumer electronics
		32.20	Manufacture of musical instruments
		47.63	Retail sale of sporting equipment in specialised stores
		59.20	Sound recording and music publishing activities
	Books and printing	18.11	Printing of newspapers
		18.12	Other printing
18.13		Pre-press and pre-media services	
18.14		Binding and related services	
47.61		Retail sale of books in specialised stores	
47.62		Retail sale of newspapers and stationery in specialised stores	
58.11		Book publishing	
58.13		Publishing of newspapers	
58.14		Publishing of journals and periodicals	
58.19		Other publishing activities	
63.91		News agency activities	
74.20		Photographic activities	
74.30	Translation and interpretation activities		
90.03	Artistic creation		
Creative Industries	Architecture	71.11	Architectural activities
	Communication and branding	70.21	Public relations and communication activities
		73.11	Advertising agencies
		73.12	Media representation
82.30	Organisation of conventions and trade shows		
Design	74.10	Specialised design activities	
Performing Arts	Performing arts, recreation activities, conventions and trade shows	85.52	Cultural education
		90.01	Performing arts
		90.02	Support activities to performing arts
		90.04	Operation of arts facilities
Heritage	Museums, Libraries, Archives, Operation of historical sites and buildings	91.01	Library and archives activities
		91.02	Museums activities
		91.03	Operation of historical sites and buildings and similar visitor attractions

**Figure A1.** Cultural and Creative Industries—Core Sector perimeter according to the Symbola’s methodology.

### Notes

- <sup>1</sup> The complete descriptive statistics and figures for each investigated Region are included in the TRACES D3.1 deliverable. The paper reports only some statistics which the authors consider relevant in relation to the research questions, the clarity of presentation and the space saving.
- <sup>2</sup> On the Apulia policies for CCIs see <https://www.regione.puglia.it/web/turismo-e-cultura> (accessed on 26 July 2021).

## References

- ArtENprise. 2016. *Entrepreneurial Competences for Artists and Cultural Operators*. European Study Report. Proj. No: 2016-1-ES01-KA202-025606. Available online: <https://www.artenprise.eu/full-report/> (accessed on 20 August 2021).
- Avdikos, Vasilis. 2014. *The Cultural and Creative Industries in Greece*. Athens: Epikendro Publications.
- Avdikos, Vasilis, Martha Michailidou, George-Michael Klimis, Lefteris Gaitanidis, Panayiotis Nikolopoulos, Panayiotis Drakakis, and Eleni Kostopoulou. 2017. *Mapping the Creative and Cultural Industries in Greece*. Athens: Regional Development Institute-Panteion University, Hellenic Republic-Ministry of Culture and Sports.
- Baumol, William J., and William G. Bowen. 1965. On the Performing arts: The Anatomy of Their Economic Problems. *The American Economic Review* 55: 495–502.
- Benhamou, Françoise. 2003. Artists' labour markets. In *A Handbook of Cultural Economics*. Edited by Ruth Towse. Cheltenham: Edward Elgar Publishing.
- Boal-San Miguel, Iván, and Luis César Herrero-Prieto. 2020. A Spatial–Temporal Analysis of Cultural and Creative Industries with Micro-Geographic Disaggregation. *Sustainability* 12: 6376. [CrossRef]
- Boffo, Marco, and Roberto Chizzali. 2015. Quali confini per il settore delle ICC? Lo stato dell'arte della modellistica a livello internazionale e in Italia. In *ACTORS Italia. Attrattori culturali per il turismo e l'occupazione nelle regioni del sud Italia*. Paris: OECD Publishing, Available online: [https://www.oecd.org/cfe/leed/D\\_ICC\\_definizione\\_e\\_classificazione\\_Boffo\\_Chizzali.pdf](https://www.oecd.org/cfe/leed/D_ICC_definizione_e_classificazione_Boffo_Chizzali.pdf) (accessed on 19 June 2018).
- Borisova, Vladia. 2018. Essential Characteristics and Market of the Creative Industries' Product. *Economic Alternatives* 1: 113–22.
- Branzanti, Caterina. 2015. Creative clusters and district economies: Towards a taxonomy to interpret the phenomenon. *European Planning Studies* 23: 1401–18. [CrossRef]
- Byrnes, William J. 2009. *Management and the Arts*. Oxford: Focal Press.
- Caves, Richard E. 2000. *Creative Industries*. Cambridge: Harvard University Press.
- Chapain, Caroline, and Roberta Comunian. 2010. Enabling and Inhibiting the Creative Economy: The Role of the Local and Regional Dimensions in England. *Regional Studies* 44: 717–34. [CrossRef]
- Chapain, Caroline, and Lisa De Propris. 2009. Drivers and processes of creative industries in cities and regions. *Creative Industries Journal* 2: 9–18. [CrossRef]
- Comunian, Roberta, Caroline Chapain, and Nick Clifton. 2010. Location, location, location: Exploring the complex relationship between creative industries and place. *Creative Industries Journal* 3: 5–10. [CrossRef]
- Correa-Quezada, Ronny, José Álvarez-García, María De la Cruz Del Río-Rama, and Claudia P. Maldonado-Erazo. 2018. Role of Creative Industries as a Regional Growth Factor. *Sustainability* 10: 1649. [CrossRef]
- Cunningham, Stuart. 2002. From Cultural to Creative Industries: Theory, Industry, and Policy Implications. *Media International Australia Incorporating Culture and Policy* 102: 54–65. [CrossRef]
- De Vaan, Mathijs, Ron Boschma, and Koen Frenken. 2013. Clustering and firm performance in project-based industries: The case of the global video game industry, 1972–2007. *Journal of Economic Geography* 13: 965–91. [CrossRef]
- DeFillipi, Robert J., and Michael B. Arthur. 1998. Paradox in project-based enterprise. *California Management Review* 40: 125–39. [CrossRef]
- Executive Agency for Small and Medium-sized Enterprises of the European Commission. 2016. *Boosting the Competitiveness of Cultural and Creative Industries for Growth and Jobs*. Luxembourg: Publications Office of the European Union.
- European Investment Fund. 2019. *Market Analysis of the CCS in Europe*. Luxemburg: EIF.
- EY. 2015. Cultural Times. The First Global Map of Cultural and Creative Industries. Study on Behalf of the International Confederation of Societies of Authors and Composers (CISAC). Available online: <https://en.unesco.org/creativity/files/culturalthetimesfirstglobalmapofculturalandcreativeindustriespdf> (accessed on 30 April 2019).
- Falk, Rahel, Hasan Bakhshi, Martin Falk, Wilhelm Geiger, Susanne Karr, Catherine Keppel, Hannes Leo, and Roland Spitzlinger. 2011. *Innovation and Competitiveness of the Creative Industries*. Vienna: Austrian Institute of Economic Research, Wifo. Available online: [https://www.wifo.ac.at/jart/prj3/wifo/resources/person\\_dokument/person\\_dokument.jart?publikationsid=41510&mime\\_type=application/pdf](https://www.wifo.ac.at/jart/prj3/wifo/resources/person_dokument/person_dokument.jart?publikationsid=41510&mime_type=application/pdf) (accessed on 20 August 2021).
- Flew, Terry. 2012. *Creative Industries and Urban Development. Creative Cities in the 21st Century*. Abingdon: Routledge.
- Florida, Richard. 2002. *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life*. New York: Basic Books.
- Florida, Richard. 2005. *Cities and the Creative Class*. London: Routledge.
- Fondazione Symbola. 2019. We are Creative in Puglia. Rapporto Sulle Imprese Culturali e Creative in Puglia. Available online: <https://www.symbola.net/ricerca/we-are-creative-in-puglia-2019/> (accessed on 15 May 2019).
- Foord, Jo. 2008. Strategies for creative industries: An international review. *Creative Industries Journal* 1: 91–113. [CrossRef]
- Galloway, Susan, and Stewart Dunlop. 2007. A Critique of Definitions of the Cultural and Creative Industries in Public Policy. *International Journal of Cultural Policy* 13: 17–31. [CrossRef]
- Gong, Huiwen, and Robert Hassink. 2017. Exploring the clustering of creative Industries. *European Planning Studies* 25: 583–600. [CrossRef]
- Gray, Clive. 2007. Commodification and instrumentality in cultural policy. *International Journal of Cultural Policy* 13: 203–15. [CrossRef]
- Hall, Stuart. 1973. *Encoding and Decoding in the Television Discourse*. Discussion Paper. Birmingham: University of Birmingham.

- Hall, Peter. 2000. Creative cities and economic development. *Urban Studies* 37: 639–49. [CrossRef]
- Harc, Martina, I. Bestvina Bukvić, and Josipa Mijoč. 2019. *Entrepreneurial and Innovative Potential of the Creative Industry*. pp. 1562–77. Available online: <https://www.bib.irb.hr/1008980> (accessed on 27 August 2021).
- Harvey, David C., Harriet Hawkins, and Nicola J. Thomas. 2012. Thinking creative clusters beyond the city: People, places and networks. *Geoforum* 43: 529–39. [CrossRef]
- Heebels, Barbara, and Irina van Aalst. 2010. Creative clusters in Berlin: Entrepreneurship and the quality of place in Prenzlauer Berg and Kreuzberg. *Geografiska Annaler Series B Human Geography* 92: 347–63. [CrossRef]
- Hesmondhalgh, David, and Andy C. Pratt. 2005. Cultural industries and cultural policy. *International Journal of Cultural Policy* 11: 1–13. [CrossRef]
- HKU. 2010. *The Entrepreneurial Dimension of the Cultural and Creative Industries*. Utrecht: Hogeschool vor de Kunsten Utrecht.
- Hopper, Trevor, and Binh Bui. 2016. Has management accounting research been critical? *Management Accounting Research* 31: 10–30. [CrossRef]
- Jakob, Doreen, and Bas van Heur. 2015. Editorial: Taking Matters into Third Hands: Intermediaries and the Organization of the Creative Economy. *Regional Studies* 49: 357–61. [CrossRef]
- Jeffcutt, Paul, and Andy C. Pratt. 2002. Managing Creativity in the Cultural Industries. *Creativity and Innovation Management* 11: 225–33. [CrossRef]
- Kavously, Esmaeil, Ali Shahhosseini, Soheila Kiasi, and Fateme T. Ardahaey. 2010. Cultural entrepreneurship strategies in Iran. *Serbian Journal of Management* 5: 227–41.
- KEA European Affairs. 2010. *Promoting Investment in the Cultural and Creative Sector: Financing Needs, Trends and Opportunities*; Report prepared for ECCE Innovation–Nantes Métropole. Brussels: KEA European Affairs. Available online: [https://www.keanet.eu/wp-content/uploads/access-to-finance-study\\_final-report\\_kea-june2010.pdf](https://www.keanet.eu/wp-content/uploads/access-to-finance-study_final-report_kea-june2010.pdf) (accessed on 16 January 2016).
- Landry, Charles. 2008. *The Creative City: A Toolkit for Urban Innovators*. London: Routledge.
- Lazzaro, Elisabetta. 2018. Cultural and creative Entrepreneurs. In *Culture, Innovation and the Economy*. Edited by Biljana Mickov and James E. Doyle. London: Routledge, pp. 33–37.
- Lazzeretti, Luciana, and Marilena Vecco. 2018. *Creative Industries and Entrepreneurship: Paradigms in Transition from a Global Perspective*. Cheltenham: Edward Elgar Publishing.
- Lazzeretti, Luciana, Rafael Boix, and Francesco Capone. 2008. Do creative industries cluster? Mapping creative local production systems in Italy and Spain. *Industry and Innovation* 15: 549–67. [CrossRef]
- Leadbeater, Charles, and Kate Oakley. 1999. *The Independents Britain's New Cultural Entrepreneurs*. London: DEMOS.
- Lorenzen, Mark, and Lars Frederiksen. 2008. Why do cultural industries cluster? Localization, urbanization, products and projects. In *Creative Cities, Cultural Clusters and Local Economic Development*. Edited by Philip Cooke and Luciana Lazzeretti. Cheltenham: Edward Elgar, pp. 155–79.
- Madgerova, Raya, and Vyara Kyurova. 2019. Specifics of entrepreneurship in the field of cultural and creative industries. *Entrepreneurship VII*: 103–23.
- McNeilly, Nicole. 2018. *Cultural and Creative Spillovers in Europe. A Follow-Up Review*. The European Research Partnership on Cultural and Creative Spillovers. Available online: [https://ccspillovers.weebly.com/uploads/1/1/8/4/118427712/ccs\\_summary\\_2018.pdf](https://ccspillovers.weebly.com/uploads/1/1/8/4/118427712/ccs_summary_2018.pdf) (accessed on 19 November 2019).
- O'Connor, Justin. 2000. The definition of the 'cultural industries'. *The European Journal of Arts Education* 2: 15–27.
- O'Connor, Justin. 2010. *The Cultural and Creative Industries: A Literature Review*, 2nd ed. Creativity, Culture and Education Series; Newcastle upon Tyne: Creativity. First published 2007.
- O'Connor, Justin. 2004. 'A special kind of city knowledge': Innovative clusters, tacit knowledge and the 'Creative City'. *Media International Australia* 112: 131–49. [CrossRef]
- Peck, Jamie. 2005. Struggling with the creative class. *International Journal of Urban and Regional Research* 29: 740–70. [CrossRef]
- Porter, Michael E. 1989. *The Competitive Advantage of Nations*. New York: The Free Press.
- Power, Dominic. 2003. The Nordic 'Cultural Industries': A Cross-National Assessment of the Place of the Cultural Industries in Denmark, Finland, Norway and Sweden. *Geografiska Annaler Series B Human Geography* 85: 167–80. [CrossRef]
- Pratt, Andy C. 2009. Policy transfer and the field of the cultural and creative industries: Learning from Europe? In *Creative Economies, Creative Cities: Asian-European Perspectives*. Edited by Lily Kong and Justin O'Connor. Heidelberg: Springer, pp. 9–23.
- Pratt, Andy C. 2010. Creative cities: Tensions within and between social, cultural and economic development: A critical reading of the UK experience. *City, Culture and Society* 1: 13–20. [CrossRef]
- Pratt, Andy C. 2012. The cultural and creative industries: Organisational and spatial challenges to their governance. *Die Erde* 143: 317–34.
- Rantisi, Norma M., and Deborah Leslie. 2015. Significance of higher educational institutions as cultural intermediaries: The case of the École nationale de cirque in Montreal, Canada. *Regional Studies* 49: 404–17. [CrossRef]
- Regional Development Fund of Region of Western Greece. 2018. *CREADIS3: Report on Territorial Diagnosis*. Regional Development Fund of Region of Western Greece. Available online: [https://www.interregeurope.eu/fileadmin/user\\_upload/tx\\_tevprojects/library/file\\_1551777107.pdf](https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1551777107.pdf) (accessed on 26 July 2021).
- Sacco, Pierluigi, Guido Ferilli, and Giorgio Tavano Blessi. 2014. Understanding culture-led local development: A critique of alternative theoretical explanations. *Urban Studies* 51: 2806–21. [CrossRef]

- Scott, Allen J. 2000. *The Cultural Economy of Cities: Essays on the Geography of Image-Producing Industries*. London: Sage.
- Skoglund, Wilhelm, and Gun Jonsson. 2012. The potential of cultural and creative industries in remote areas. *Nordisk Kulturpolitisk Tidskrift* 15: 181–91. [CrossRef]
- Storper, Michael. 1995. The Resurgence of Regional Economies, Ten Years Later: The Region as a Nexus of Untraded Interdependencies. *European Urban and Regional Studies* 2: 191–221. [CrossRef]
- Symbola, Fondazione per le qualità italiane, and Unioncamere. 2013. *Io Sono Cultura. L'Italia della Qualità e Della Bellezza Sfida la Crisi*. Roma: Copygraph sas.
- Throsby, David. 2001. *Economics and Culture*. Cambridge: Cambridge University Press.
- Tom Fleming Creative Consultancy. 2015. *Cultural and Creative Spillovers in Europe: Report on a Preliminary Evidence Review*. Available online: [https://www.artscouncil.org.uk/sites/default/files/Cultural\\_creative\\_spillovers\\_in\\_Europe\\_full\\_report.pdf](https://www.artscouncil.org.uk/sites/default/files/Cultural_creative_spillovers_in_Europe_full_report.pdf) (accessed on 12 September 2019).
- Tomczak, Paulina, and Krzysztof Stachowiak. 2015. Location patterns and location factors in the cultural and creative industries. *Quaestiones Geographicae* 34: 7–27. [CrossRef]
- Townley, Barbara, Nic Beech, and Alan McKinlay. 2009. Managing in the creative industries: Managing the motley crew. *Human Relations* 62: 939–62. [CrossRef]
- Turok, Ivan. 2003. Cities, clusters and creative industries: The case of film and television in Scotland. *European Planning Studies* 11: 549–65. [CrossRef]
- UNESCO-World Bank. 2021. *Cities, Culture, Creativity: Leveraging Culture and Creativity for Sustainable Urban Development and Inclusive Growth*. Paris: UNESCO, Washington, DC: World Bank, License: CC BY-SA 3.0 IGO. Available online: <https://openknowledge.worldbank.org/handle/10986/35621> (accessed on 7 June 2021).
- United Nations/UNDP/UNESCO. 2013. *Creative Economy Report. Widening Local Development Pathways*. Available online: <http://www.unesco.org/culture/pdf/creative-economy-report-2013.pdf> (accessed on 26 July 2021).
- Wenting, Rik. 2008. Spinoff dynamics and the spatial formation of the fashion design industry, 1858–2005. *Journal of Economic Geography* 8: 593–614. [CrossRef]
- Wenting, Rik, and Koen Frenken. 2011. Firm entry and institutional lock-in: An organizational ecology analysis of the global fashion design industry. *Industrial and Corporate Change* 20: 1031–48. [CrossRef]
- Wu, Weiping. 2005. Dynamic Cities and Creative Clusters. In *World Bank Policy Research Working Paper*. Washington, DC: World Bank Publications, p. 3509.
- Zan, Luca. 2006. *Managerial Rhetoric and Arts Organizations*. Basingstoke: Palgrave Macmillan.



Article

# Support Mechanisms for Canada's Cultural and Creative Sectors during COVID-19

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**Abstract:** The cultural and creative industries enhance the quality of life for Canadians and visitors to Canada. However, definitions of the sector vary, presenting challenges for researchers and policymakers. Government data shows that the pandemic job and revenue loss were disproportionate in the arts. The Canadian government created a range of financial tools (grants and subsidies) to support the sector during the Pandemic. This paper analyzes these financial instruments created in response to the Pandemic. This paper offers a case study on how government can support the economic and social success of the creative and cultural sector (CCS) in Canada and avoid the risk of the cultural ecosystem collapsing. In addition, the key findings may be helpful in other industries and markets when exploring ways to support the cultural and creative sectors, which are vital components of domestic and tourism activity.

**Keywords:** cultural investment; stimulate tourism; pandemic recovery; Canada; public policy; grants and financial instruments; arts management; cultural policy

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## 1. Introduction

Globally, the cultural and creative sectors (CCS) play an essential role in the affairs of any nation. Particularly in Canada, these industries are one of the leading drivers of economic growth and development. Going by numbers released by Statistics Canada, the direct economic impact of initiatives in the CCS was estimated to be \$58.9 billion in 2017, which is 2.8% of the national gross domestic product (GDP) or \$1611 per capita (Canadian Art 2019; Jeannotte 2021). It is important to note that these numbers did not include revenue generated by government-run organizations and education/training businesses within the sector. Those impacts are placed at \$7.6 billion for government-run organizations and \$3.7 billion for education and training businesses. Besides the direct economic contribution of cultural industries to Canadian society, there are also social benefits. Music tourism (which is a sub-sector of culture), for instance, helps Canadian artists showcase their talents and promote their work. Culturally prosperous communities also boost competitiveness by attracting businesses and top talents.

However, all these benefits are facing a shaky future. COVID-19 has rapidly spread globally throughout the past year, progressing quickly from a public health crisis into an entire financial and economic crisis. Culture and heritage industries were not only affected but were among the worst hit by the Pandemic. Although some industry experts observed that the arts, culture, heritage and sports sectors were already on shaky economic ground before the pandemic, the arrival of COVID-19 further worsened the situation.

To alleviate the pain in the industry, the Canadian government introduced a series of monetary and financial measures to help offset income losses culture workers and organizations suffered as a result of the Pandemic.

The core objective of this study is to identify the various emergency monetary policies the Canadian government put in place to help its cultural workers and businesses recover

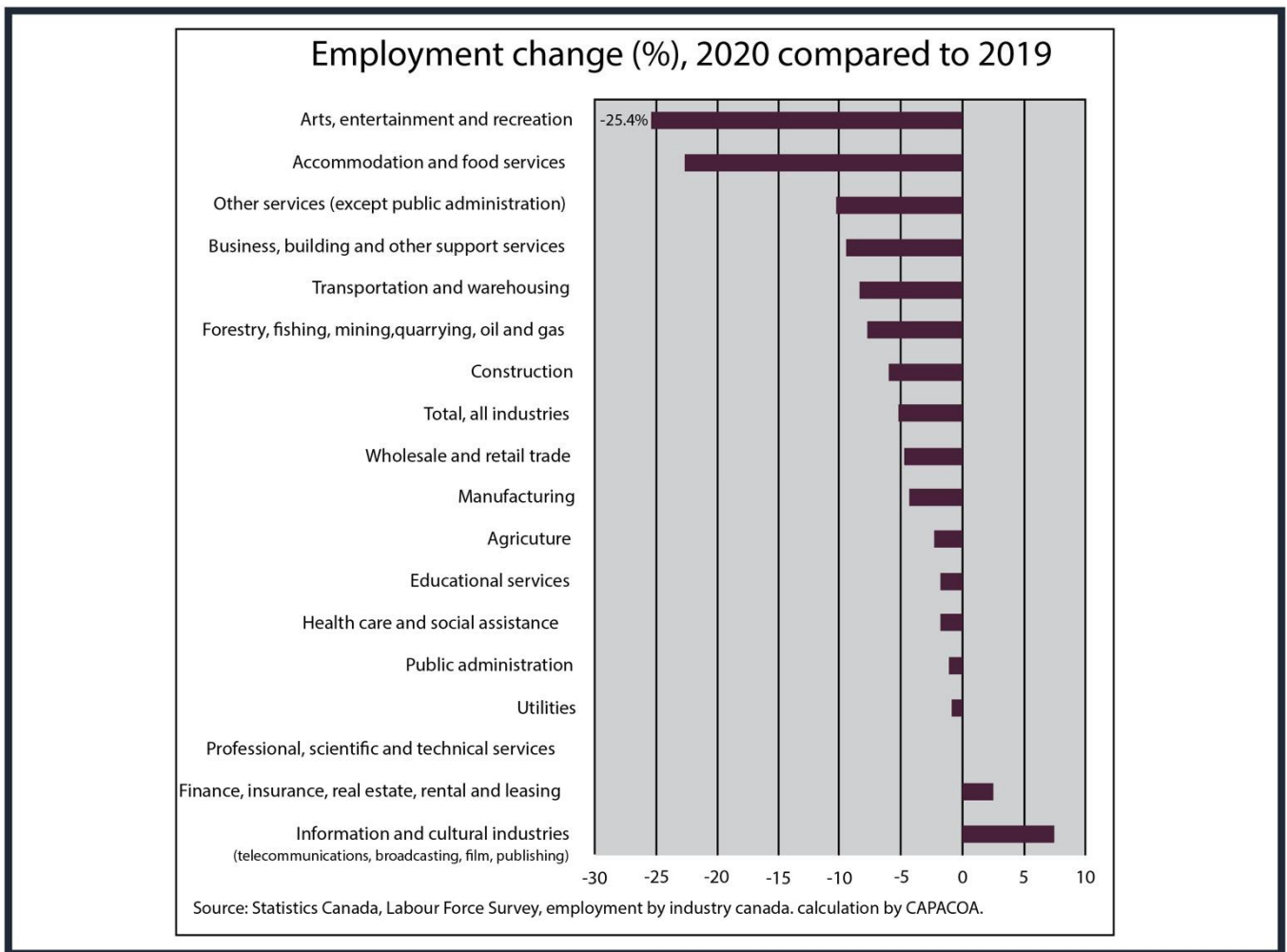
from the financial impacts of the Pandemic. However, to gain an understanding of what drives these policies, this research paper also delves into:

1. The contribution of the cultural and creative sectors to Canadian society.
2. The economic impact of the COVID-19 crisis on the country's creative industries.
3. The reason why many culture workers suffered more than most and could not access earlier federal benefits. The section covering this also explains how the government later resolved this issue.
4. How crucial government financial support is to the sector.

## **2. Literature Review**

Cultural industries contribute to the country's economic wellbeing and prosperity. They also underpin the social fabric of communities and are a great source of civic pride. These sectors highly impact export earnings, job creation, and income generation; they stimulate innovation across society and supply ideas to other industries through business linkages and technological cross-overs. For instance, the famous "serious games" (SGs) were adapted as training tools for medical students and airline pilots; and therapeutic tools for slowing cognitive decline in Alzheimer patients. The tools and formats used for these games were developed and had their roots in the culture sector (OECD 2020; Bontchev 2015).

When COVID-19 struck full force in Canada in 2020 and the whole country went into lockdown for months, many industries suffered financially, resulting in a massive loss of jobs and income. Businesses in the cultural and creative field were among the worst hit in the country due to the cancellation of events and the closure of public spaces. Although some sectors in culture, such as the online content platform niche, benefited from the increased streaming of cultural content during the lockdown, many of those who gained more from this additional demand were the industry's big companies (OECD 2020). Furthermore, while one would expect that CCS subsectors offering digital products would benefit from the large influx of consumers to online platforms, the harsh reality is that many micro-businesses—especially those in product design and software development—experienced low demand for their digital solutions as clients cut their marketing budgets and held back on already scheduled projects. See Figure 1:



**Figure 1.** Employment change (in percentage) 2020 compared to 2019. (As the above chart shows, CCS lost more jobs than any other sector in 2020. The only other sector that experienced a similar loss is accommodation and food service) Source: (CAPACOA 2020a).

### 3. Methodology

The methodology of this descriptive paper is to compile data about programs and financial instruments used to sustain and support the creative and cultural sectors in Canada. The data gathered is government data and reports from nonprofit organizations, financial advisors in the nonprofit sector and cultural workers through research and data collected online via the internet. Given the rapid response to support the creative and cultural sectors and the vulnerability to the industry, we believe it is essential to summarize the various programs in Canada, which may serve as a case study for future research directors and provide context for comparative analysis with other markets. The intent is to build on this research once Statistics Canada or government agencies makes the data and impact of these programs publically available.

#### Culture industries in Canada: Definition and structure of the subsectors

The definition of cultural and creative industries may differ across individuals, regions, and countries. In its simplest form, cultural industries consist of businesses that create, produce, and distribute cultural goods and services (Liang and Wang 2020; UNCTAD 2008; OECD 2020).

However, in the 2011 Canadian framework for Culture Statistics, the creative economy is classified into six core domains, sub-domains, and ancillary sub-domains, illustrated in the graphic below (StatCan 2015). See Table 1. The framework defined the ancillary culture sub-domains as those sectors:



*“that produce goods and services that are the result of creative artistic activity, but whose primary purpose is not the transmission of an intellectual or culture concept.” The explanation further added that “The final products (of ancillary culture sub-domains) primarily have a practical purpose (e.g., a landscape, a building, an advertisement), that are not covered by the Framework definition of culture.” (StatCan 2015)*

**Table 1.** Culture domains and sub-domains in Canada.

Culture Domains					
A. Heritage and libraries	B. Live Performance	C. Visual and applied arts	D. Written and published works	E. Auto-visual and interactive media	F. Sound recording
Core culture Sub-domains					
<ul style="list-style-type: none"> <li>Archives</li> <li>Libraries</li> <li>Cultural heritage</li> <li>Natural heritage</li> </ul>	<ul style="list-style-type: none"> <li>Performing arts</li> <li>Festivals and celebrations</li> </ul>	<ul style="list-style-type: none"> <li>Original visual art</li> <li>Art reproduction</li> <li>Photography</li> <li>Crafts</li> </ul>	<ul style="list-style-type: none"> <li>Books</li> <li>Periodicals</li> <li>Newspapers</li> <li>Other published works</li> </ul>	<ul style="list-style-type: none"> <li>Film and video</li> <li>Broadcasting</li> <li>Interactive media</li> </ul>	<ul style="list-style-type: none"> <li>Sound recording</li> <li>Music publishing</li> </ul>
Ancillary Culture Sub-domains					
		<ul style="list-style-type: none"> <li>Advertising</li> <li>Architecture</li> <li>Design</li> </ul>	<ul style="list-style-type: none"> <li>Collected information</li> </ul>		

(The Canadian Framework for culture statistics divides culture into six main domains, six sub-domains and two ancillary sub-domains) **Source:** (StatCan 2015).

For this study, various terms were used interchangeably to represent the cultural and creative industries, including cultural and creative sectors (CCS), creative economy, culture, cultural industries, creative industries, and creative sectors. Moreover, to simplify things, below are the subsectors (and occupations) in Canada’s CCS. They include but are not limited to (See Table 2):

**Table 2.** Subsectors and occupations in Canada’s cultural and creative sector.

Performing Arts	Visual Arts	Heritage Sector	Media	Creative Services
<ul style="list-style-type: none"> <li>Music</li> <li>Theatre</li> <li>Circus</li> <li>Dance</li> <li>Actors &amp; comedians</li> </ul>	<ul style="list-style-type: none"> <li>Painting</li> <li>Sculpture</li> <li>Photography</li> <li>Media arts</li> </ul>	<ul style="list-style-type: none"> <li>Craft fairs</li> <li>Heritage days</li> <li>Literary festivals</li> <li>Cultural sites</li> <li>Museums</li> <li>Exhibitions</li> <li>Libraries</li> </ul>	<ul style="list-style-type: none"> <li>Publishing</li> <li>Printed media</li> <li>Audiovisual media—(e.g., video, film, and new media)</li> <li>Video games</li> <li>Television</li> <li>Advertising</li> </ul>	<ul style="list-style-type: none"> <li>Cultural tourism</li> <li>Design</li> <li>Fashion</li> <li>Recreation</li> <li>Architect</li> <li>Authors &amp; writers</li> <li>Artisans &amp; craftspersons</li> <li>Patternmakers—leather, textile, &amp; fur product</li> <li>Related research</li> </ul>

(Subsectors and occupations in Canada’s CCS) **Source:** (Toronto Artscape 2015).

So anywhere the cultural sector is mentioned in this research, these are the broad range of jobs, workers, and businesses we are referring to.

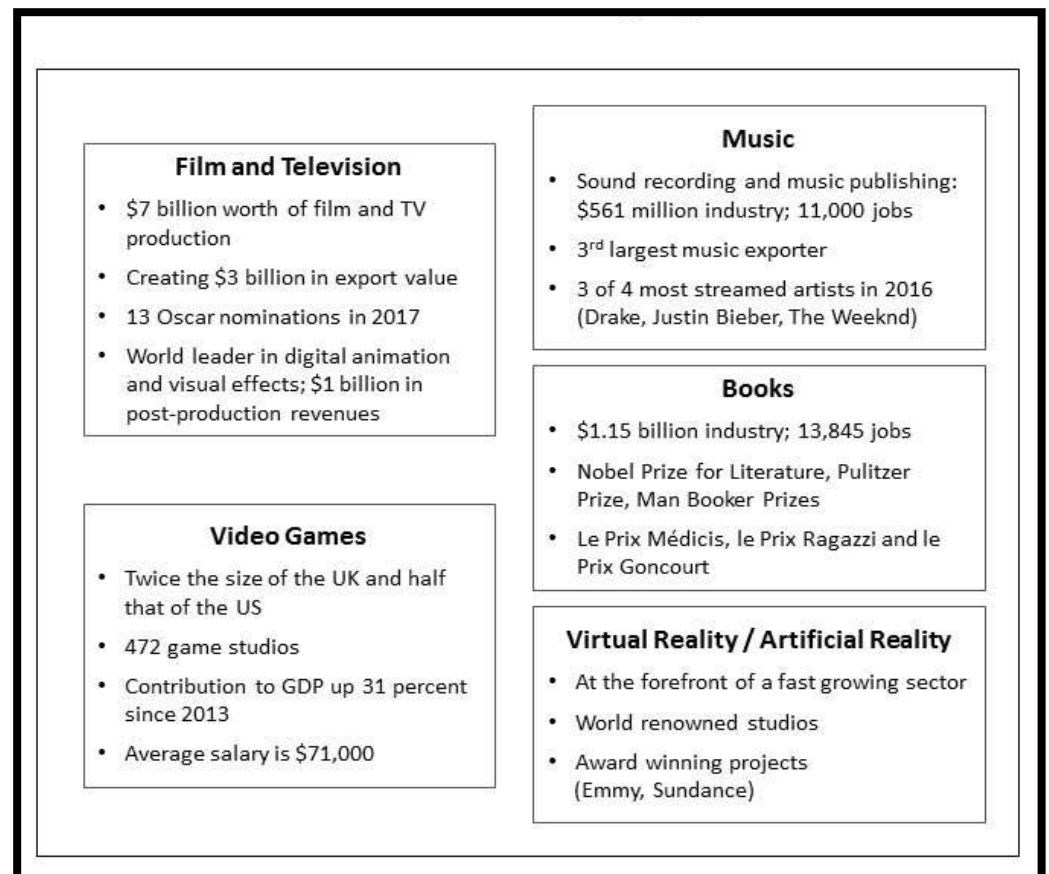
**Contribution of cultural and creative industries to Canada**

The cultural and creative sectors have contributed immensely to the growth and development of Canada. Their impacts include both economic and non-economic effects (Liang and Wang 2020). Economically, the sectors are one of the key contributors to Canada’s rising GDP. In 2017, estimates provided by Statistics Canada showed that culture

contributed a total of \$59 billion to the nation’s GDP and 715,400 direct jobs or 3.8% of all the jobs in the country (Hill Strategies 2019). Moreover, between 2010 and 2017, the value of several culture products (e.g., music, film, entertainment, etc.) increased significantly, which positively impacted the earnings of the owners and employees: sound recording (33%), privately-owned heritage and libraries (47%), visual and applied arts (20%), live performance (26%), and audio-visual and interactive media (25%) (Hill Strategies 2019; Singh 2004).

Besides revenue generation and job provision, culture industries attract talents and investors to the country and help strengthen the country’s standing and competitive advantage on the international trade scene (Bhatiasevi and Dutot 2014). For the non-economic impacts, cultural experiences and events such as festivals and fairs bring people together. Furthermore, they foster social inclusion, solidarity, and tolerance, revitalizing local communities and the nation (Emilia and Monica 2008).

From data provided by Creative Canada, here is the economic impact of CCS for Canadians (See Figure 2):



**Figure 2.** Contribution of the creative industries to Canada. (Contribution and critical figures of CCS) Source: (Government of Canada 2017).

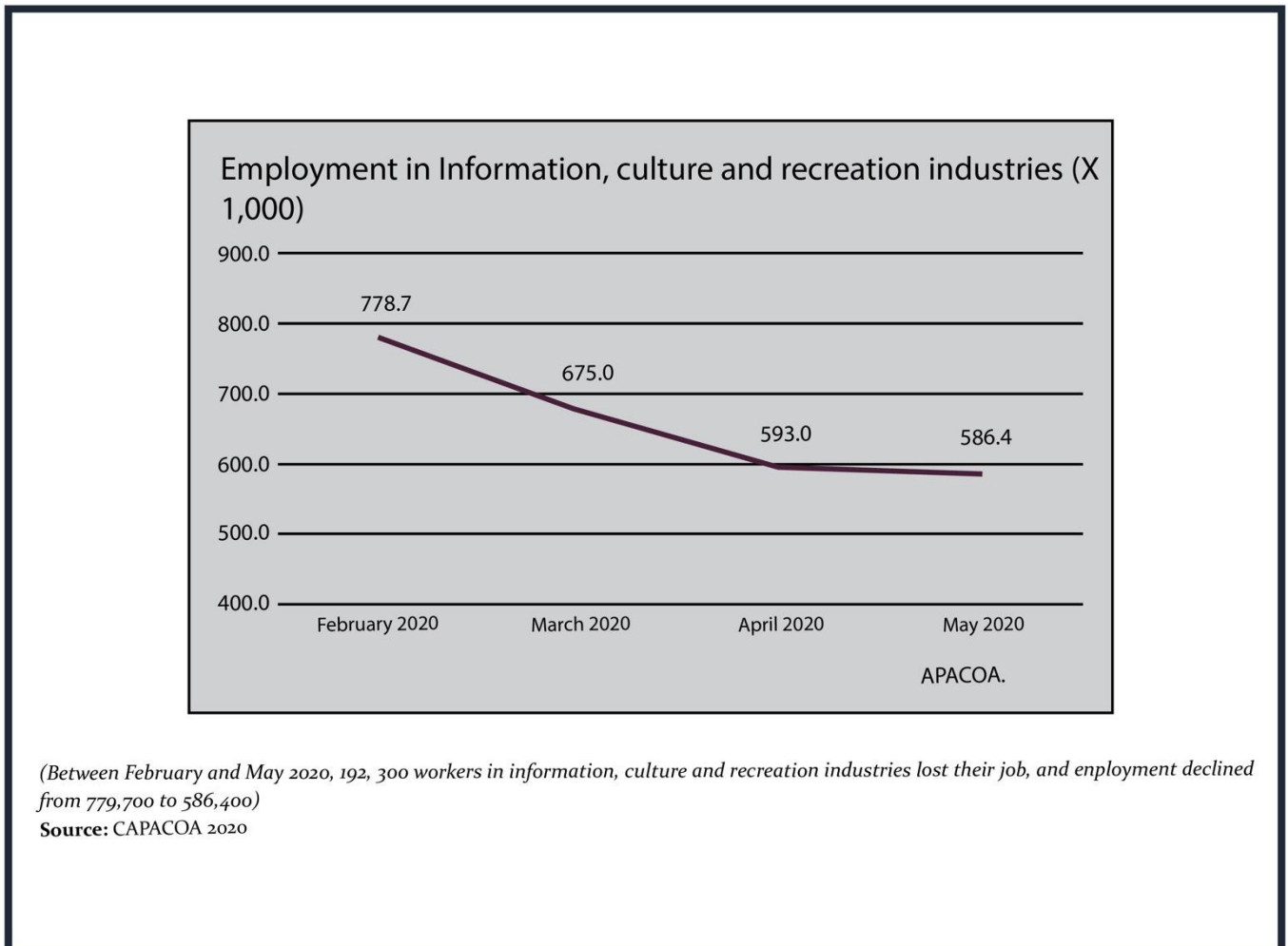
**Economic consequences of the coronavirus on the Canadian cultural and creative sectors:**

**Tourism businesses shut down, cultural events were cancelled, and widespread layoffs of workers.**

Each subsector of the Canadian creative sector sustained heavy losses; the impact of those losses varies. For instance, the venue-based niche (e.g., cinema, museums, festivals, live music, and performing arts) and their related supply chain were hit the hardest by the quarantine and social distancing measures (OECD 2020). Cultural tourism also came to a grinding halt as countries and states placed restrictions on domestic and international

travel. Art and recreational centers such as theatres and performing arts centres, museums, galleries, parks, and libraries were mandated to close shop, which led to the cancellation of several performances and events. As a result, widespread layoffs left many performers, writers, journalists, and library and museum personnel without a source of income.

**About 192,300 CCS workers lost their jobs, and employment dropped 24% from 778,700 in February 2020 to 586,400 in May 2020—(CAPACOA 2020b). See Figure 3:**



**Figure 3.** Employment in information, culture and creative industries (2020). According to the Canadian Survey on Business Conditions, culture was one of the top three industries most severely affected by the Pandemic on all survey indicators in the country (**Source:** Hahmann et al. 2020). See Table 3.

**Table 3.** Percentage of businesses that reported layoffs to staff and laid off 80% or more of their workforce, by sector, Canada, March 2020.

	%
All sectors	45.2
Agriculture, forestry, fishing and hunting	23.6
Mining, quarrying, and oil and gas extraction	26.9
Utilities	26.7
Construction	41.6
Manufacturing	29.4
Wholesale trade	24.6

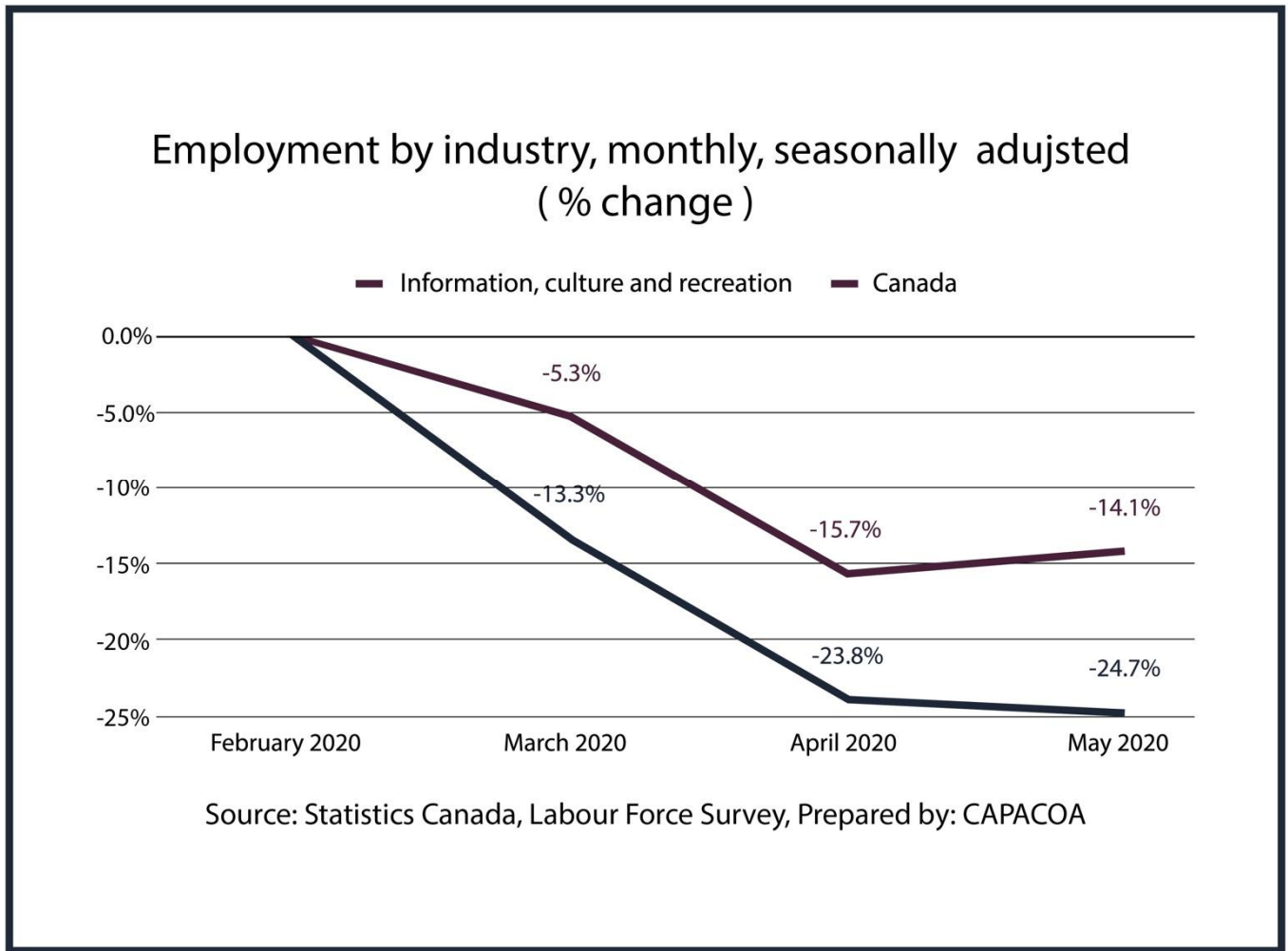
**Table 3.** *Cont.*

	%
Retail trade	51.2
Transportation and warehousing	19.3
Information and cultural industries	19.2
Finance and insurance	12.4
Real estate and rental and leasing	19.3
Professional, scientific and technical services	24.6
Management of companies and enterprises	21.9
Administrative and support, waste management and remediation services	18.6
Education services	46.4
Health care and social assistance	64.2
Arts, entertainment and recreation	61.7
Accommodation and food services	69.0
Other services (except public administration)	46.3
Public administration	16.6

As the table above shows, next to the healthcare sector (64.2%) and accommodation sector (69%), the cultural sector, at 61.7%, is the third most affected industry in Canada (Source: Statistics Canada 2020).

**While many sectors experienced an appreciable rebound two months into the lockdown, employment in the cultural sector declined again by 2.9% and shed an additional 6600 workers.**

While the overall Canadian economy grew by 4.5% and 17 out of Canada’s 20 sectors experienced a rebound in May 2020, culture slipped further down to 2.9%. For instance, that May, accommodation and food services recovered by 24.2%, retail trade 16.6%, repairs 18.9%, and construction experienced a 17.6% growth. Likewise, when general employment rose by 1.8% during that same period, culture shed a further 1.1% in workers. (Deloitte 2020). Even the accommodation and food industries that topped culture in job loss at the onset of the COVID-19 crisis saw a rebound of 6.8% in May 2020. See Figure 4:

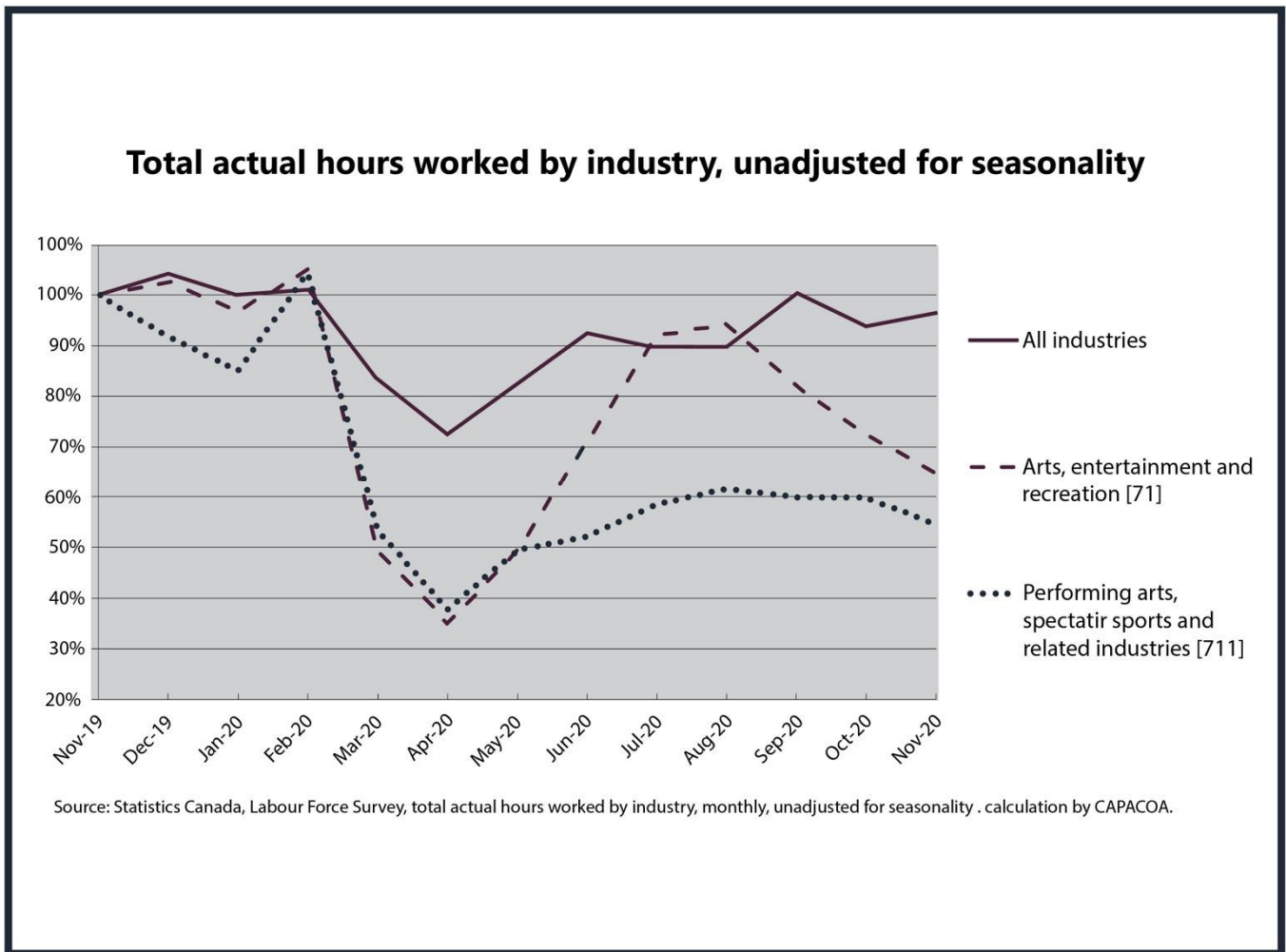


**Figure 4.** Employment in Information, Culture and Recreation in Canada (February–May 2020). (Although the general economy saw a rebound of 1.8% in May 2020, culture experienced further loss in the same month) **Source:** (CAPACOA 2020c).

**Total hours worked in culture dipped by 37.1% between February–May 2020 and was still over 10% further away from recovery as of November 2020.**

By May 2020, the total number of hours worked by CCS employees dropped 37.1%. By July 2020, when the Pandemic was in full swing, cumulative hours worked in the cultural and creative sector was 40.7% lower than what was observed in July 2019, and it is far below the 9.9% all-industries average hours drop comparing July 2019 to July 2020 (Jeannotte 2021).

Moreover, even with the slight increase in the CCS recorded in July 2020, the total hours worked in the art sector were considerably lower than all other sectors, including the low-performing accommodation and food niche (−23.1%). By November 2020, when cumulative hours worked across Canada’s 20 sectors increased 2.7% (still 3.5% lower than the same period in 2019), CCS at −35.2% was 10% farther from recovery and the lowest for all industries (CAPACOA 2020c). This decline is not surprising since CCS were among the first businesses to shut down and the last to return to everyday activities (many still not having returned at the time of publication). See Figure 5:



**Figure 5.** Total hours worked by industry (November 2019–November 2020). Compared to other sectors in the country, the total hours worked in culture experienced a sharper decline and slower recovery. Of the two culture subsectors shown above, the Arts, entertainment, and recreation industry improved significantly from April to August 2020. Even with the decline in September 2020, the Arts sector is still ahead of the performing arts and sports industry during the same period  
**Source:** (CAPACOA 2020c).

**Sources of funding for Canada’s creative economy takes a hit due to COVID-19.**

Beyond reducing the total hours worked in the cultural and creative sectors, the COVID-19 crisis also caused a drop in investment into the industry. As the organizers cancelled trade fairs, festivals, and other cultural events, investors working with writers, software designers, artists, and filmmakers had to suspend deals for many ongoing and future projects. Even artists selling digital products were not spared as a reduction in consumers’ purchasing power led to low demand for CCS products and services. This combined investment and demand shock put a significant strain on the earned income of creative professionals. The situation was further compounded as donations from philanthropic organizations and individuals reduced significantly. This certainly was not universal as many donors were more generous, but just like how the unexpected economic crisis affected the finances of many other establishments and individuals, the same happened to philanthropic organizations, which caused these donors to reassess their ability to give (I Lost My Gig 2021). Those charitable foundations that still had funds to provide were faced with the difficult choice of either meeting the needs of high-risk communities severely affected by the COVID-19 crisis or supporting nonprofit cultural establishments to ensure their financial sustainability. Moreover, the Pandemic caused economic pressures for businesses, combined with fewer public art presentations, creating

fewer resources for sponsorships and donations from corporations to support cultural programming. Many companies were faced with layoffs and scaling back resources to survive during the Pandemic themselves.

**The Irregular Work Arrangement In CCS: A significant deterrent to many culture workers qualifying for government aid.**

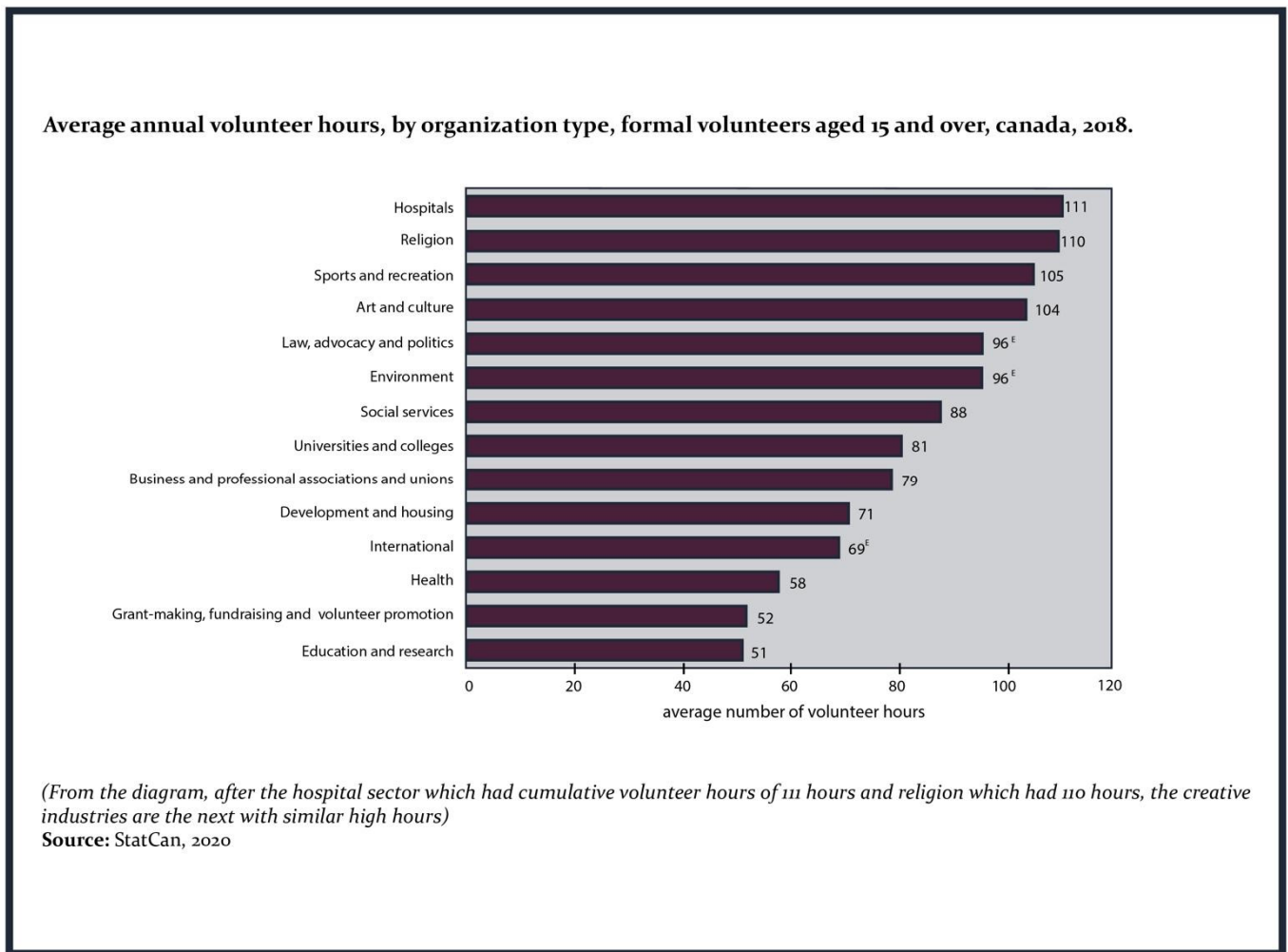
Before delving into the various programs the government employed to support CCS during the COVID-19 Pandemic, it is essential to understand why many workers in the sector could not access the earlier benefits. The moment it became apparent that the lockdown would be prolonged, the government introduced several financial benefits to assist affected workers nationwide. However, many of these programs were designed to meet the needs of traditional sectors targeting incorporated businesses with employees, not those, like CCS, which rely heavily on contract work or self-employment.

Typically, a CCS worker is more likely to be self-employed or have a short-term work arrangement than the average worker in the overall labour force. Most self-employed or short-term employees often find it hard to access income replacement benefits due to their distinctive social security contributions (OECD 2020; ILO 2021). Data from the National Household Survey (NHS) estimated that 51% of artists are in self-employed, a number three times more than the percentage of the national average (15%) (Hill Strategies 2014). A more recent study conducted by the Cultural Human Resource Council (CHRC) 2019 showed the self-employment rate for cultural workers to be 28%—more than twice the rate for the rest of the economy (12%). For artists, the rate of self-employment is 41% in the CHRC 2019 survey (CHRC 2019). From these figures, it can be seen why a disproportionate number of Canadian CCS workers could not meet the minimum qualifying conditions of many of the national employment-based emergency relief programs provided by the federal government.

Furthermore, the creative field is filled with workers like writers who receive royalties, artists who receive commissions when their recording or artwork is sold, and independent contractors who do not earn regularly. The remuneration of these individuals is highly irregular, fluctuates widely and depends significantly on demand for their work. Due to this, most of these earning types do not pay into Canada's Employment Insurance program, thus, preventing many artists from having access to standard employment insurance mechanisms at the start of the Pandemic.

Another reason creatives have challenges qualifying for public financial benefits is the predominance of part-time and volunteer workers. Many CCS workers invest a significant amount of time in offering free labour to charity culture organizations. In the industry, this period is aptly tagged as the "hidden or unrecognized" work time. Employment records usually do not recognize these hours of free labour, which could reduce the total earning income of artists. Moreover, social protection systems do not take into account such work when setting minimum earning thresholds. The unfortunate outcome for this sector is that they cannot contribute adequately to social security or comply with the requirements needed to secure certain benefits.

At first glance it may not be apparent how prevalent volunteer work is in the Canadian creative sectors. However, statistics reveal the enormity of it. Volunteering surveys in Canada have shown that culture workers engage in more volunteer gigs than workers in other sectors. The hours they put in are also higher than the national average (Hill Strategies 2013). For example, cultural volunteers in the book reading niche were 42%, performing arts 48%, Art gallery 50%, and movies 41%. Another survey conducted by Statistics Canada in 2018 showed that after hospitals and religion sectors, culture has the highest number of volunteer hours. Formal volunteers in the sector dedicated over 100 h on average to the sector in 2018 (StatCan 2021). The survey defined formal volunteers to be people who work without pay for a group or an organization such as schools, religious organizations, sports, and community associations (Hahmann et al. 2020). See Figure 6:



**Figure 6.** Average annual volunteer hours, by organization type (2020).

Most public surveys do not consider these volunteer workers or “invisible” workers, as industry experts call them. They also do not take into account creatives who have a primary job in the non-cultural field while at the same time maintaining a second cultural occupation (Hill Strategies 2013). The first outcome of these oversights is that official statistics contain underestimated results that do not accurately show how the cultural sector operates. The second consequence is that since public policies are formed based on these data, the unique circumstances of non-standard CCS professionals are not given full consideration. Hence, these workers, mainly self-employed contract workers, freelancers, and part-time workers, despite being highly educated and contributing economically to society, often lack access to financial safety nets that make them less vulnerable to sudden or anticipated economic shocks.

#### **Understanding the impact of government financial assistance on culture**

Over the years, the culture sector in Canada has been supported by what industry insiders call the “mixed” or “balanced” model (Wilhelm 2019; Miller 2009). The term “mixed model” implies that the sector sustains itself by relying on a combination of public, private, and earned-income sources (Klamer and Petrova 2007). Financial support from the private sector usually comes from donations, foundation grants, philanthropic giving, patronage, and corporate sponsorships. However, unlike places like the United States, which get more from philanthropic foundations and individual donors (Public 6.7%, private 38.2%, earned 40.7%), CCS in Canada is mainly funded by the government (Wilhelm 2019).



For decades now, the government has been the primary source of funding to the Canadian cultural sector, both at the regional (municipal and provincial) and national levels. In the early 2000s, grants from the government often reached as high as 75% to 95% of the revenue of CCS businesses, while private funding was 25% (Marsland 2013).

However, recent research into the revenue sources for 75 artist-run establishments revealed the current ratio to be 73% for government, 16% for private contributions, and 11% for earned (Wilhelm 2019; CADAC 2017). These artist-run centers are professional nonprofit organizations under the definition used by the Canadian Council for the Arts. See Figure 7 and Table 4:

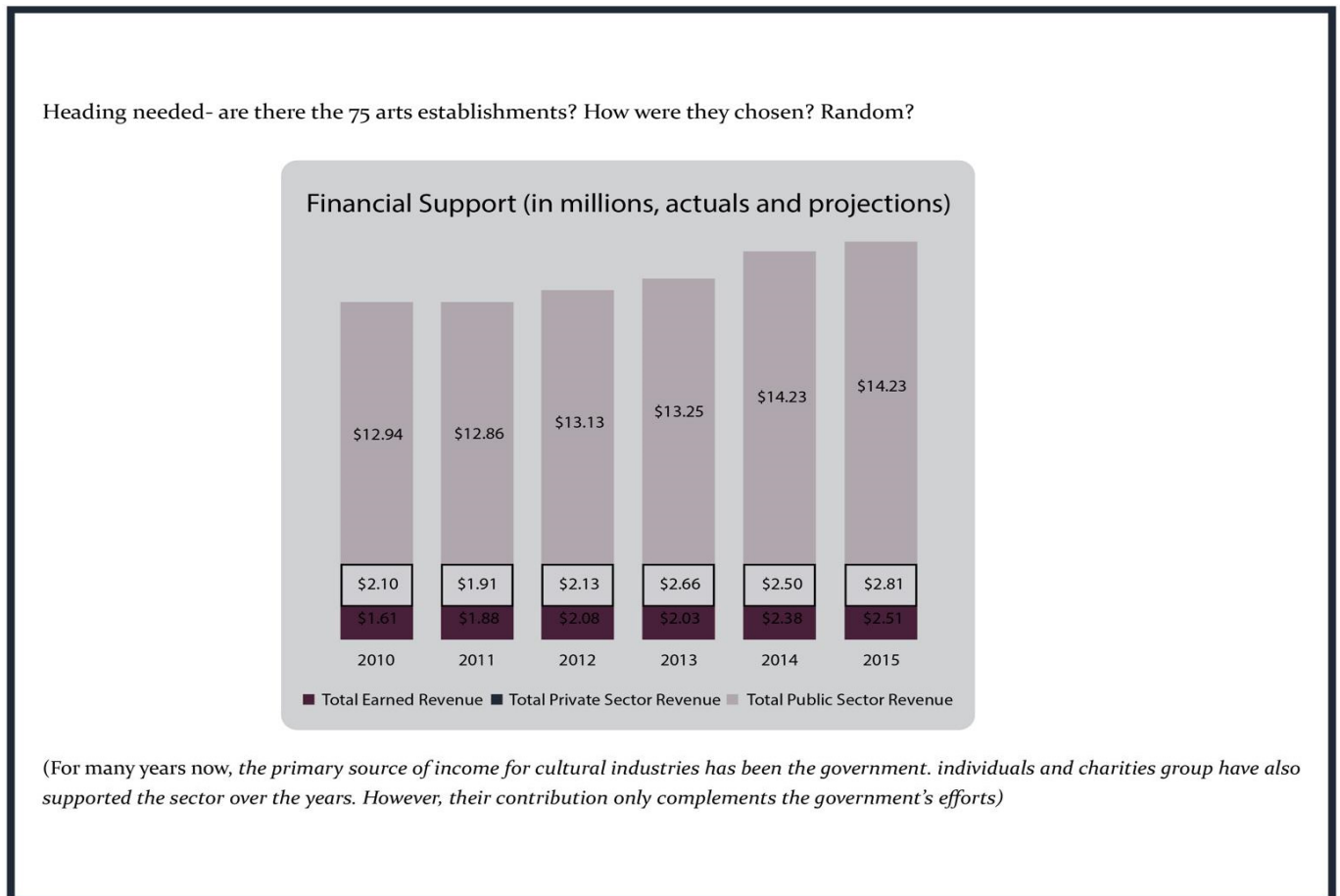


Figure 7. Sources of funding for 75 artist-run centres from 2010–2015 (actual amount).

Table 4. Revenue sources for the 75 artist-run centres from 2010–2015 (in percentages).

% of Total Revenues	2010	2011	2012	2013	2014	2015
Total Earned Revenue	10%	11%	12%	11%	12%	13%
Total Private Sector Revenue	13%	11%	12%	15%	13%	14%
Total Public Sector Revenue	77%	77%	75%	73%	74%	73%
Total Canada Council Revenue	49%	51%	48%	46%	43%	42%

From the official data of funding sources of the culture sector, it is clear that the government is the “sole financial lifeline” for culture businesses and workers. This was why the government needed to step up efforts to fund the industry during the crisis period.

**OVERVIEW OF FEDERAL GOVERNMENT PROGRAMS: Monetary and Fiscal Policy Responses to Support Canadian Cultural Industries Through the Pandemic**

The Canadian government created several support programs to enable its cultural workers and businesses to ride the Pandemic wave while minimizing stress. Some of these programs are specific to the CCS, and others are available to all qualifying companies nationwide. The major programs are discussed briefly below:

### **General relief programs that were beneficial to CCS**

These are relief measures the government put for all businesses and individuals in the country, not only applicable to people in the culture sector. From early 2020 to mid-2020, the number of available general relief packages was far more than measures exclusively directed at CSS. However, as we speak, the government has made conscientious efforts to ween off the general economic stimulus. Besides the economy-wide stimulus, more funds have been allocated directly to the CCS. The general COVID-19 recovery packages that creative workers benefited from included the Employment Insurance (EI) program, the nationwide tax payment extension, CEBA loan, CEWS, CERB, and CRB benefits (Canadian Heritage 2020).

### **TWS, CRHP, and CEWS**

The Temporary Wage Subsidy was one of the first nationwide programs to launch when the Pandemic hit. It offered a 10% savings on all wages paid to staff for three months from 18 March to 19 June 2020. The 10% subsidy was deducted from the payroll remittances filed to the Canada Revenue Agency (usually monthly or quarterly), resulting in a reasonably immediate cash flow effect, as less money left participating entities. However, it quickly became apparent that 10% was not enough, and the Canadian Emergency Wage Subsidy (CEWS) was created.

One of the longest-running COVID-19 funding programs, CEWS, launched and was backdated to 15 March 2020, ended 23 October 2021 (BDO Canada 2021). The program evolved through several iterations. The beginning parameters required entities to prove a 30% revenue drop compared to the same month of the previous year or the average of January and February 2020 to receive 75% in subsidies on the wages paid to each employee still employed based on the average weekly earnings of the employee for the 12 weeks pre-pandemic. Later it evolved to allow subsidies for new hires and employees returning from leave. The early edition also did not prevent employers from lowering working schedules to 75% pre-pandemic rates and using the subsidy to pay for 100% of the outgoing wages (Government of Canada 2021a). After four months, the program was adjusted to pay subsidies proportionately to the revenue drop experienced by the entity and based on continued payment of wages, not historical earnings. The percentage paid declined over the life of the program.

One special consideration of CEWS for the CCS was that the revenue calculations did not include public funding. So if an entity was predominantly funded by government funding and funding was sustained or increased during the Pandemic, they could still qualify. Furthermore, if non-government revenue sources were a small portion of the budget and dropped a large percentage of a small amount, the entity would still be eligible. For example, if an entity receives 90% of revenue from grants and 10% from donations, and in June 2019 received \$1000 in donations, and in June 2020 received \$700 in donations, they would have experienced the 30% revenue drop needed to qualify for the full 75% subsidy in June 2020. Given that wages are often the most considerable expense of many businesses, many Charitable entities could claim far more in subsidies than they lost in revenues.

One considerable drawback for CEWS for many businesses, including CCS enterprises (in particular), is that it does not consider seasonal or biennial programming. In the arts, many festivals and other types of organizations are highly seasonal in their programming, and the entire year's work can build up to a single month's activity. Depending on the revenue flow of the organization, they may only experience a revenue drop in the one month of activity and therefore miss out on the subsidy for 11 months of the year. Alternatively, biennial programmers were either greatly benefited by CEWS or were largely ineligible. Some organizations with 2019 programs and 2020 as the off-year qualified for

CEWS without having large employment plans for the year. Organizations with biennial events cancelled in 2020 had put two years of work and up-front and sunk costs into the cancelled festival and then could not qualify because they did not have a revenue drop from the off-year of programming.

The Canadian Recovery Hiring Program (CRHP) was introduced in June 2021 and is scheduled to continue at publication until 20 November 2021 (FBC 2021). Entities can either apply for CEWS or CRHP but not both, based on which program is most financially beneficial in any claim period. Unlike CEWS, CRHP is not based on requiring a revenue drop but is based on increased pay in any subsidy period compared to wages paid from 14 March to 10 April 2021.

### **The Employment Insurance (EI) Scheme and CERB**

The Employment Insurance (EI) program, also called Unemployment Insurance (UI), is an unemployment benefit designed to provide short-term income support to unemployed workers. To accommodate the large influx of applicants seeking financial assistance, the government made temporary changes to the program (Government of Canada 2021b). By September 2020, the program was paying nothing less than \$500 weekly to eligible candidates (Government of Canada 2020b). Eligibility for CERB was also extended to Canadians without traditional employment situations who had not paid into the country's Employment Insurance program in the past. As long as the applicant had at least \$5000 in income from any source in 2019 and was not making more than \$1000 in 14 consecutive days, they were eligible for CERB. These eligibility criteria were far more accessible to many cultural workers than traditional EI eligibility criteria, which required traditional employment paying into the EI program for at least 600 h in the year leading up to the start of unemployment.

### **Temporary tax relief and filing extensions**

The government instituted nationwide tax deadline extension measure in 2020. Due to these measures, many businesses and individuals could file their taxes later than the standing annual due date and defer tax owing payments interest-free, creating a defacto short term loan. For individuals, the Canadian Revenue Agency (CRA) deferred the deadline to 31 August 2020, instead of 30 April 2020 (KPMG 2021). Furthermore, the deadline for annual information returns by Charities, were universally extended to December 31, 2020, instead of the deadline of 6 months after their fiscal year-end, allowing charities to focus on their programming at the beginning of the pandemic.

### **The CEBA loan Program**

The Canada Emergency Business Account (CEBA) initiative is a \$25 billion investment that provides up to \$60,000 interest-free loans to SMEs and not-for-profit organizations. The program started in March with \$40,000 loan funds for eligible participants. Later, it was expanded to \$60,000. One of the advantages of this loan benefit is that individuals who pay back the loan on or before 31 December 2022, will be granted loan forgiveness for as much as \$20,000 (Government of Canada 2020b).

### **CERS and CECRA**

The Canada Emergency Commercial Rent Assistance (CECRA) program for businesses was a program developed in partners with ten all ten provinces, where tenants were given a 75% reduction in rent – 25% covered by the federal government, 25% covered by the province and 25% covered by the landowner. The cooperation of all ten regions and the federal government was needed to put the program in place, requiring notable negotiation. The downside was that landowners had to agree to participate. So, if landowners could not afford the 25% loss or wanted to evict their tenant for non-payment or any other reason, it created an easy roadblock for tenant participation. CECRA began in July 2020 and ended in October 2020 (Elliot and ICLG 2020). It was replaced by the Canada Emergency Rent Subsidy (CERS) program from 27 September 2020, to 23 October 2021. Like CEWS, the

CERS program required the applying entity to experience a revenue drop to receive a proportionate subsidy on rent fees. Additionally, CERS applicants in a region of Canada with a government (municipal or provincial) Public Health lockdown mandate were eligible for additional coverage over the base subsidy rate. Unlike CECRA, CERS could also cover property tax, property insurance, and interest on commercial mortgages for building owners.

### CCS Specific Funding

The \$500 million COVID-19 Emergency Support Fund for Cultural, Heritage, and Sport Organizations—The recipients of this initiative include magazines and community newspapers, third-language producers, small broadcasters, organizations in live music, and local news organizations. When disbursing the \$500 million, the money did not go directly from government coffers into the hands of CCS firms. Instead, it was administered through different industry associations, and the sharing formula is tabled below:

- \$198.3 million was given to arts and culture organizations
- \$72 million to the sport sector
- \$53 million to support museums and other heritage firms and capital purchases of digitization equipment for arts and heritage organizations.
- \$3.5 million for the Digital Citizen Initiative
- \$115.8 million to support Canadian audio-visual companies. (Specifically, \$88.8 million was distributed to members of the Canada Media Fund while Telefilm Canada members got \$27 million) (Government of Canada 2020a).

**The creation of the Support for Workers in Live Arts and Music Sectors Fund** encompassed a \$181.5 investment, which was launched in March 2021 to increase short-term contracting work opportunities for unemployed individuals in the live events sector. For the first phase, the government dispersed \$40 million through the Department of Canadian Heritage to Canada's CCS workers—\$5 million for local festivals, \$20 million for the Canada Art Presentation fund, and \$15 million for the Canada Music Fund (Tétrault 2021).

**\$55 million for members of the Canada Council for the Art (CADAC 2020a).** Precisely, \$7.8 million of the fund went to deaf and disabled, indigenous, culturally diverse, and minority groups. Canada Council Grant recipients received an additional 30% payment of their average grant amount received over the prior three years. Then in October 2021, the council's operating funding beneficiaries were again given an additional 20% to assist with reopening efforts. New grants were also created to support digitization efforts.

Furthermore, funds due to be paid to cultural organizations at the end of the year were accelerated. As a result, by March 2020, the government via the Canada Council for the Arts had already delivered 1100 cultural organizations an advance funding of \$60 million (35% of their annual grant). Since the lockdown resulted in the cancellation of cultural events and public spaces, the revenue of these businesses stopped. Hence, with the aid of the advance payment, CCS businesses can pay off outstanding wages owed to employees and suppliers (CADAC 2020b). It also facilitated refunds to customers who purchased subscriptions and tickets in advance, or advanced payments.

### Waiving Licensing Fees

Since the Pandemic began, the government exempted broadcasters who experienced a revenue reduction of 25% from paying license fees. For many radio and television operators, the lockdown caused a significant decrease in their advertising revenues. The government decided to waive broadcasters' fees to the Radio-television and Telecommunications Commission (CRTC) with this understanding. In the first phase of license fee waiving in 2020, cable, IPTV, and satellite providers were exempted from paying license fees. However, during the second phase, which was announced in November 2020, these operators were not exempt. The reason given for this was that the revenue of these operators does not depend on advertising. Altogether, the fees waived for the TV-radio

broadcasting sector were estimated to provide financial relief worth \$50 million to the operators (Canadian Heritage 2020).

### **Regional support**

The focus of this paper is Federal support programs. However, it is essential to note that many CCS organizations were also able to benefit from provincial and municipal government support programs, many of which had a profound financial impact on eligible organizations.

## **4. Results and Discussion**

In 2020, when all indicators showed that the virus outbreak would be more prolonged than anticipated and restriction on human movement would go beyond weeks, the Canadian government had to find ways to help its citizens survive the sustained economic suppression of the Pandemic. In terms of the financial crisis, various funding tools and policy interventions were deployed to provide direct financial support for Canadians when more than half of the country's population was unable to work. Public support measures created ranged from short-term funds to provide liquidity for people and businesses to long-term funding tools aimed at helping society get back on its feet and recover from financial losses incurred during the period of complete lockdowns.

Unlike grants issued before the Pandemic, which were hard to obtain and took time to process, the pandemic response funds had much more flexible requirements. The funds were invested as a temporary relief for the financial pressures facing many groups and organizations in arts and sports. In addition, they provide affected CCS contract workers and businesses with quick access to the cash they need to pay staff and keep their business running.

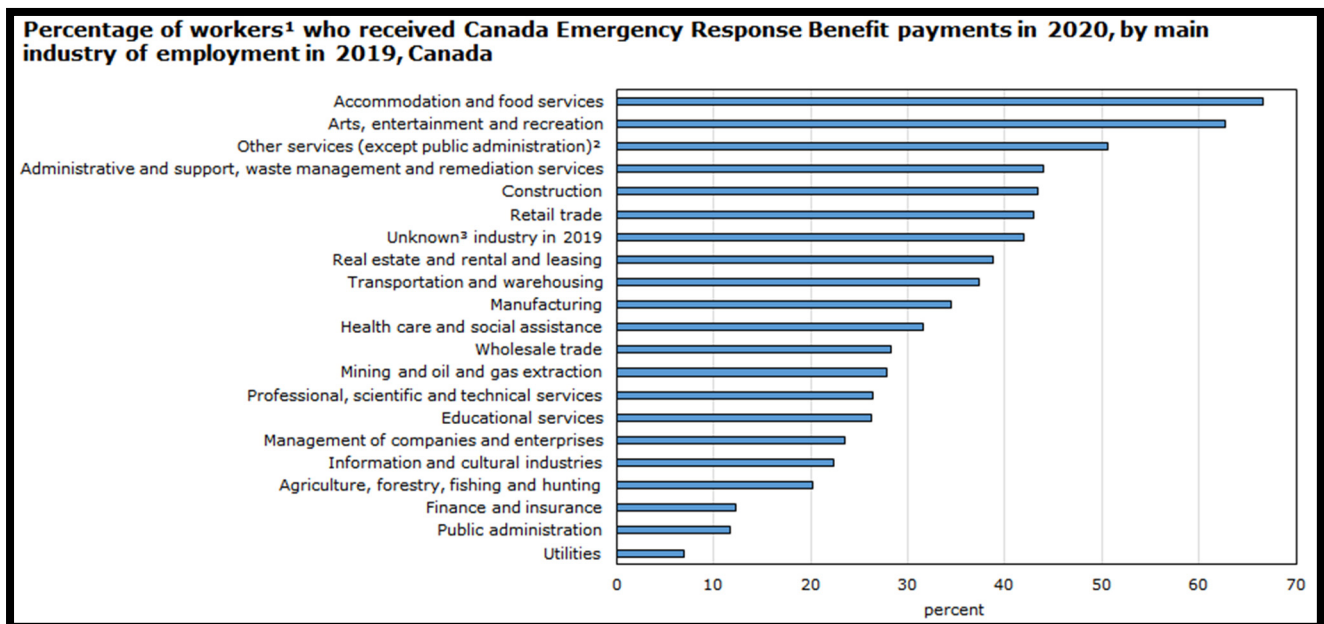
At the beginning of the lockdowns, most measures were aimed at workers across all economic sectors. However, as the lockdown proceeded and complaints poured in about how the eligibility criteria for many of the general reliefs do not accommodate the unconventional work arrangement of most culture workers and firms, the government developed more relief programs targeted explicitly at CSS. Similarly, the qualifying conditions for some broad economy stimulus packages were lowered not only to benefit creative workers and businesses but also other sole proprietors and tiny startups in other sectors that were equally hard hit by the COVID-19 outbreak (Dunne and CBC 2020).

Due to the peculiar nature of employment in CCS, where many professionals are self-employed or doing more contract jobs, the government had to make different provisions for this set of people. For instance, the government employed two strategies to enable the culture of part-time and self-employed workers and freelancers to qualify for several benefits. The first strategy entails lowering the criteria and qualifying conditions of specific social protection schemes to adapt to the realities of culture workers (ILO 2021). However, this was only implemented after complaints were made that many CCS workers could not access most general schemes.

Another example is the interest-free CEBA loan program. To qualify for the loan, an enterprise is required to have paid salaries of at least \$50,000 the previous year, a condition many SMEs with a small staff and equally low payroll cannot meet. Fortunately, after repeated calls from the public and concerned associations (e.g., The Canadian Federation of Independent Businesses, CFIB) to eliminate the payroll criteria, the government adjusted the loan terms so that applicants without payroll and micro-businesses with payroll less than \$20,000 could apply for CEBA (Government of Canada 2020b). With the new modified requirements, CSS businesses with as little as two to four workers or an assistant or run solely by the owner have a better chance of getting the much-needed emergency funds.

March 2020 was a pivotal month. The federal government responded to the Pandemic by introducing the Canada Emergency Response Fund (CERB). When introduced, many culture workers could not meet CERB's requirements, but some of the terms were revised to allow more artists to qualify for the benefit. By September, CERB was replaced with the Canada Recovery Benefit (CRB). Both CERB and CRB provided financial help to employed

and self-employed workers. A total 62.7% of arts, entertainment and recreation workers received CERB payments in 2020 (Statistics Canada 2021). See Figure 8:



**Figure 8.** Percentage of workers who received CERB payments in 2020, by industry. <sup>1</sup> The chart shows workers who earned at least \$5000 and above in 2019. <sup>2</sup> The services not covered in other sectors include repairing and maintaining machinery or automobiles, laundry, personal care services, funeral services, and organizing and promoting religious activities. <sup>3</sup> Lastly, the chart did not include about 14.6% of workers because their industry was unavailable for their business or employer. **Source:** (Statistics Canada 2021) (Emergency and recovery benefits from March 2020 to September 2020).

On the other hand, CRB provided relief for individuals directly impacted by the Pandemic but who did not qualify for Employment Insurance (EI) benefits. However, the impact of this program on micro-enterprise, freelancers, and self-employed was still limited. As an illustration, earlier this year, at a panel hosted by an Ontario-based advocacy group supporting the need for a national basic income plan, an artist narrated how she could not qualify for CERB and its successor, the Canada Recovery Benefit (CRB). In 2019, her earnings were small, and according to the eligibility criteria, recipients must have experienced 50% or more loss of income. In 2020, the artist earned a small amount, which made her unable to meet the 50% revenue loss requirement. She said she was only able to get by financially by moving back in with her parents. Her experience is not an isolated case. Many artists have continued some work online with earnings that cannot adequately cover even food and rent, let alone studio space or art materials. Unfortunately, their attempt to work, coupled with their previous small earnings, made them ineligible for beneficial government aids when they were in dire need of such support. This situation is one of many challenges culture workers face, which necessitated the development of industry-specific relief programs during the Pandemic (Pacheco 2021).

Finally, many large-scale sector-specific support initiatives were distributed through the same channels as standard government arts sector support—from arts councils to presenting and producing arts organizations. The assumption was that the funds would trickle down the supply chain for the CCS sustaining the whole industry. However, as work was not happening, much of the supply chain was not in use. Many suppliers to the sector like rental venues and other service organizations tailoring to the CCS were not eligible for sector-specific support even though they were as hard-hit as the eligible sector-specific organizations. Organizations that received sector-specific funding had no impetus to fund usual suppliers who were not completing work prevented by the Pandemic, and funded organizations were motivated to be highly conservative in spending as the length and the

total impact of the Pandemic could not be estimated. As a result, the sector-specific funding did not impact many businesses in the CCS. The supply chains for work that continued during the Pandemic were completely different, and funding did not trickle down to the same businesses proportionately to pre-pandemic spending patterns.

## 5. Conclusions and Implications

It is not within the scope of this paper to discuss the economic impact of these programs because the Pandemic is not over, nor are these programs complete, nor is the data available on the post-pandemic effect of these programs. This is an overview of what the government did as of the present time. Future papers will likely study the economic impact of these programs. This paper can serve as a reference for framing various supports by the Canadian government available to organizations in the creative and cultural sector. Future studies can leverage Statistics Canada data in 2022 to measure the impact of the programs in 2021.

The precarious nature of employment in the cultural and creative sectors is well known to industry insiders and well documented (OECD 2020). While the Canadian creative workforce in full-time employment finds it marginally easier to access vital benefits like unemployment benefits, sick pay and benefits, social security, and other support packages, their counterparts in non-standard work arrangements have a more challenging time accessing these social protection schemes. The Pandemic emphasized existing problems creative workers have been struggling with. It is a well-known fact that the irregular nature of employment of creative workers is one of the key reasons they are not eligible for many beneficial support programs. Moreover, the most vulnerable groups in the sector are the contract workers, freelancers, self-employed persons, and the entrepreneurs. Knowing these two facts, how best can the government structure future financial support measures right from the start of the programs so that the vulnerable CCS workers would not be left out? Or alternatively, how best can the government structure non-emergency, standing support measure to protect CCS works? These question presents a good starting point for further research.

Moreover, as explained by the European Commission report of Mapping The Creative Value chain, we know that funding in the sector often trickles down various phases: creation, production, dissemination, and exhibition as core pillars before the output of cultural institutions and finally reaching the consumer. There is a value chain supported at meso and micro levels due to government financial support—how can the entire value chain be preserved with emergency funding models that rely on trickle-down mechanisms?

There are limitations in comparing international countries without subsidy programs or these subsidy programs to others—Canada's CCS funding models are unique globally. Our heavy reliance on government funding puts us in a different financial structure pre-pandemic compared to the USA and other places worldwide. Thus the impact of the pandemic loss of earned and private revenues will have very different effects on organizations with higher and lower reliance on those revenues in their standard funding models.

The creative sectors are a mixture of different subsectors with varied needs. By utilizing various financial tools from grants to loans to income reimbursements, the Canadian government increased the chances of workers or businesses having access to support packages during the Pandemic. Even with this, access to these supports within the CCS is far from equitable and not based on the financial impact of the Pandemic on the entity. Many independent cultural workers and micro-businesses are falling through the cracks of these support programs. To further complement this study, future research might examine ways to rectify and ensure vulnerable culture workers get the adequate support they need.

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## References

- BDO Canada. 2021. Final Details Announced for the Canada Emergency Wage Subsidy Program. BDO Canada. Available online: <https://www.bdo.ca/en-ca/insights/tax/tax-alerts/government-extends-and-modifies-the-canada-emergency-wage-subsidy-program/> (accessed on 12 November 2021).
- Bhatiasevi, Veera, and Vincent Dutot. 2014. Creative industries and their role in the creative value chain—A comparative study of SMEs in Canada and Thailand. *International Journal of Entrepreneurship and Innovation Management* 18: 466. [CrossRef]
- Bontchev, Boyan. 2015. Available online: [https://www.researchgate.net/publication/301285825\\_Serious\\_Games\\_for\\_and\\_as\\_Cultural\\_Heritage](https://www.researchgate.net/publication/301285825_Serious_Games_for_and_as_Cultural_Heritage) (accessed on 12 November 2021).
- CADAC. 2017. Arts Facts Using CADAC Data: 18 Opera Organizations. Canada Council for the Arts. Available online: <https://canadacouncil.ca/research/research-library/2019/05/arts-facts-using-cadac-data-18-opera-organizations> (accessed on 12 November 2021).
- CADAC. 2020a. COVID-19 Prompts Advance Funding to Stabilize Arts Sector. Canada Council for the Arts. Available online: <https://canadacouncil.ca/press/2020/03/advance-funding> (accessed on 12 November 2021).
- CADAC. 2020b. Spotlight | Additional Federal Support for the Arts. Canada Council for the Arts. Available online: <https://canadacouncil.ca/spotlight/2020/05/additional-federal-support-for-the-arts> (accessed on 12 November 2021).
- Canadian Art. 2019. Culture Industries Have \$58.9 Billion Impact in Canada. Canadian Art. Available online: <https://canadianart.ca/news/culture-industries-have-58-9-billion-impact-in-canada/> (accessed on 12 November 2021).
- Canadian Heritage. 2020. COVID-19: Government of Canada Provides Additional Relief to the Broadcasting Sector—Canada.ca. Available online: <https://www.canada.ca/en/canadian-heritage/news/2020/12/covid-19-government-of-canada-provides-additional-relief-to-the-broadcasting-sector.html> (accessed on 12 November 2021).
- CAPACOA. 2020a. Employment in Arts and Culture Industries. Available online: <https://capacoa.ca/en/2020/08/employment-in-arts-and-culture-july-2020/> (accessed on 12 November 2021).
- CAPACOA. 2020b. Employment Rebounds, but Culture Workers Aren't Seeing Signs of Recovery just Yet—Canadian Association for the Performing Arts. Canadian Association for the Performing Arts. Available online: <https://capacoa.ca/en/2020/06/employment-rebounds-but-culture-workers-arent-seeing-signs-of-recovery/> (accessed on 12 November 2021).
- CAPACOA. 2020c. Employment in Arts and Culture Industries, November 2020—Canadian Association for the Performing Arts. Canadian Association for the Performing Arts. Available online: <https://capacoa.ca/en/2020/12/employment-in-arts-and-culture-november-2020/> (accessed on 12 November 2021).
- CHRC. 2019. Culturalhrc.ca. Available online: <https://www.culturalhrc.ca/sites/default/files/research/LMI2019/LMI%202019%20Report.pdf> (accessed on 12 November 2021).
- Deloitte. 2020. Canadian Economy Stages Strong Rebound in May with Momentum Continuing in June | Deloitte Canada. Deloitte Canada. Available online: <https://www2.deloitte.com/ca/en/blog/economic-insights/2020/ca-economy-stages-strong-rebound-may-with-momentum-continuing-june.html> (accessed on 12 November 2021).
- Dunne, James, and CBC. 2020. Meet the Small Business Owners Who Don't Qualify for Emergency COVID-19 Loans | CBC News. Available online: <https://www.cbc.ca/news/business/small-business-loans-ceba-1.5526549> (accessed on 12 November 2021).
- Elliot, Stikeman, and International Comparative Legal Guides (ICLG). 2020. The Canada Emergency Commercial Rent Assistance Program: An Overview | ICLG.com Briefings. [online] International Comparative Legal Guides International Business Reports. Available online: <https://iclg.com/briefing/13255-the-canada-emergency-commercial-rent-assistance-program-an-overview> (accessed on 12 November 2021).
- Emilia, Vergil, and Todose Monica. 2008. (PDF) The Impact of Cultural-Creative Industries on the Economic Growth—A Quantitative Approach. Available online: [https://www.researchgate.net/publication/46533589\\_The\\_Impact\\_Of\\_Cultural-Creative\\_Industries\\_On\\_The\\_Economic\\_Growth\\_-\\_A\\_Quantitative\\_Approach](https://www.researchgate.net/publication/46533589_The_Impact_Of_Cultural-Creative_Industries_On_The_Economic_Growth_-_A_Quantitative_Approach) (accessed on 12 November 2021).
- FBC. 2021. The New Canada Recovery Hiring Program (CRHP)—FBC. Available online: <https://fbc.ca/blog/the-new-canada-recovery-hiring-program-crhp/> (accessed on 12 November 2021).
- Government of Canada. 2017. The Daily—Provincial and Territorial Culture Indicators. Available online: <https://www150.statcan.gc.ca/n1/daily-quotidien/190425/dq190425b-eng.htm> (accessed on 12 November 2021).
- Government of Canada. 2020a. Emergency Support Fund for Cultural, Heritage and Sport Organizations—Canada.ca. Available online: <https://www.canada.ca/en/canadian-heritage/services/funding/information-covid-19/emergency-support-fund.html#:~:text=The%20%24500%20million%20Emergency%20Support,by%20the%20COVID%2D19%20pandemic> (accessed on 12 November 2021).



- Government of Canada. 2020b. More Small Businesses Can Soon Access the Canada Emergency Business Account—Canada.ca. Available online: <https://www.canada.ca/en/department-finance/news/2020/06/more-small-businesses-can-soon-access-the-canada-emergency-business-account.html> (accessed on 12 November 2021).
- Government of Canada. 2021a. Canada Emergency Wage Subsidy (CEWS). Available online: <https://www.canada.ca/en/revenue-agency/services/subsidy/emergency-wage-subsidy/cews-how-subsidy-calculated.html> (accessed on 12 November 2021).
- Government of Canada. 2021b. Employment Insurance (EI)—Canada.ca. Available online: <https://www.canada.ca/en/employment-social-development/programs/ei.html> (accessed on 12 November 2021).
- Hahmann, Tara, Valérie du Plessis, and Patric Fournier-Savard. 2020. Alternative format—Portable Document Format (PDF). Available online: <https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00037-eng.pdf> (accessed on 12 November 2021).
- Hill Strategies. 2013. Volunteers and Donors in Arts and Culture Organizations in Canada in 2010—Hill Strategies Research Inc. Available online: <https://hillstrategies.com/resource/volunteers-and-donors-in-arts-and-culture-organizations-in-canada-in-2010/> (accessed on 12 November 2021).
- Hill Strategies. 2014. A Statistical Profile of Artists and Cultural Workers in Canada—Hill Strategies Research Inc. Available online: <https://hillstrategies.com/resource/a-statistical-profile-of-artists-and-cultural-workers-in-canada/> (accessed on 12 November 2021).
- Hill Strategies. 2019. A Statistical Profile of Artists in Canada in 2016 (With Summary Information about Cultural Workers) | Hill Strategies Research Inc. Available online: <http://hillstrategies.com/resource/statistical-profile-of-artists-in-canada-in-2016/> (accessed on 12 November 2021).
- I Lost My Gig. 2021. COVID-19 Impact Survey Preview. Available online: <https://ilostmygig.ca/2020/04/07/covid-19-impact-survey-preview/> (accessed on 12 November 2021).
- International Labour Organisation (ILO). 2021. ilo.org. Available online: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---soc\\_sec/documents/publication/wcms\\_791676.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---soc_sec/documents/publication/wcms_791676.pdf) (accessed on 12 November 2021).
- Jeannotte, M. Sharon. 2021. When the gigs are gone: Valuing arts, culture, and media in the COVID-19 Pandemic. *Social Sciences & Humanities Open* 3: 100097.
- Klamer, Arjo, and Lyudmila Petrova. 2007. Financing the Arts: The Consequences of Interaction among Artists, Financial Support, and Creativity Motivation. *The Journal of Arts Management, Law, and Society* 37: 245–56. [CrossRef]
- KPMG. 2021. Canada: Tax Developments in Response to COVID-19. KPMG. Available online: <https://home.kpmg/xx/en/home/insights/2020/04/canada-tax-developments-in-response-to-covid-19.html> (accessed on 12 November 2021).
- Liang, Sisi, and Qingfang Wang. 2020. Cultural and Creative Industries and Urban (Re)Development in China. *Journal of Planning Literature* 35: 54–70. [CrossRef]
- Marsland, Jane. 2013. Ontariopresents.ca. Available online: <https://ontariopresents.ca/sites/default/files/resources/Shared-Platforms-and-CVOs.pdf> (accessed on 12 November 2021).
- Miller, Toby. 2009. From Creative To Cultural Industries. *Cultural Studies* 23: 88–99. [CrossRef]
- OECD. 2020. Available online: [https://read.oecd-ilibrary.org/view/?ref=135\\_135961-nenh9f2w7a&title=Culture-shock-COVID-19-and-the-cultural-and-creative-sectors&\\_ga=2.120109835.2059683614.1626271791-1169709466.1626271791](https://read.oecd-ilibrary.org/view/?ref=135_135961-nenh9f2w7a&title=Culture-shock-COVID-19-and-the-cultural-and-creative-sectors&_ga=2.120109835.2059683614.1626271791-1169709466.1626271791) (accessed on 12 November 2021).
- Pacheco, Paloma. 2021. Canadian Artists Testify on the Dire Need for Basic Income | The Tyee. Available online: <https://thetyee.ca/Culture/2021/02/02/Canadian-Artists-Testify-Dire-Need-Basic-Income/> (accessed on 12 November 2021).
- Singh, Vik. 2004. Economic Contribution of Culture in Canada—Archived. Available online: <https://www150.statcan.gc.ca/n1/pub/81-595-m/81-595-m2004023-eng.pdf> (accessed on 12 November 2021).
- StatCan. 2015. The Creative Chain. Available online: <https://www150.statcan.gc.ca/n1/pub/87-542-x/2011001/section/s5-eng.htm> (accessed on 12 November 2021).
- Statista Canada (StatCan). 2021. Workers Receiving Payments from the Canada Emergency Response Benefit Program in 2020. Available online: <https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00021-eng.htm> (accessed on 12 November 2021).
- Statistics Canada. 2020. Percentage of Businesses That Reported Layoffs to Staff and Laid off 80% or More of Their Workforce, by Sector, Canada, March. Available online: <https://www150.statcan.gc.ca/n1/daily-quotidien/200429/t001a-eng.htm> (accessed on 12 November 2021).
- Statistics Canada. 2021. How did the COVID-19 Pandemic Affect the Hours Worked in Canada? An Analysis by Industry, Province, and Firm Size. Available online: <https://www150.statcan.gc.ca/n1/pub/36-28-0001/2021001/article/00005-eng.htm> (accessed on 12 November 2021).
- Tétrault, McCarthy. 2021. COVID-19: Economic Relief Measures Announced to Date. Available online: <https://www.mccarthy.ca/en/insights/articles/covid-19-economic-relief-measures-announced-date> (accessed on 12 November 2021).
- Toronto Artscape. 2015. Artscape.ca. Available online: [https://www.artscape.ca/wp-content/uploads/2017/06/Arts-and-Culture-Statistics\\_Vol\\_I.pdf](https://www.artscape.ca/wp-content/uploads/2017/06/Arts-and-Culture-Statistics_Vol_I.pdf) (accessed on 12 November 2021).
- United Nations (UNCTAD). 2008. Unctad.org. Available online: [https://unctad.org/en/docs/ditc20082cer\\_en.pdf](https://unctad.org/en/docs/ditc20082cer_en.pdf) (accessed on 12 November 2021).
- Wilhelm, Kelly. 2019. A Balancing Act: Supporting the Arts in Canada | The Philanthropist Journal. Available online: <https://thephilanthropist.ca/2019/05/a-balancing-act-supporting-the-arts-in-canada/> (accessed on 12 November 2021).



Article

# Were Culture and Heritage Important for the Resilience of Tourism in the COVID-19 Pandemic?

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**Abstract:** The unprecedented impact of the COVID-19 on the world tourism is clear and obvious. Still, modelling the impact on individual countries faces many problems from data availability to the multitude of underlying variables rather difficult to capture. This study used simple and multiple regression to research possible effects of the recent pandemic to the fall in the volume of tourism in 20 European countries, throughout the 20-month period. The results of this study were rather surprising showing that the relative fall in tourism cannot be explained only by incidence of COVID-19 by countries, while in multiple regression by adding the variables of distance of travel and composition of tourism by facilities coefficients of determination were very low. Adding variables of natural and cultural heritage as well as of cultural activities somewhat improved the baseline model with the best fitting variable of culture visits adding 11.8 percentage points to the explanatory power of the model, while culture employment and culture consumption added a possibly important 5.6 and 2.6 points, respectively. Although these findings are in line with recent literature of resilience and changes in tourism due to pandemic, a more thorough research is needed to further investigate these relations.

**Keywords:** impact of COVID-19; travel; wellbeing; NATURA; UNESCO

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## 1. Introduction

The fall of tourism due to recent pandemic was overwhelming and unprecedented, which especially stands for international arrivals falling by 73% in 2020, virtually remaining the same in 2021, and not likely to return to pre-crisis levels until 2024 (UNWTO 2022). Total volume of tourism decreased somewhat less than arrivals, especially in countries that could have compensated inbound tourism by domestic tourists staying within national borders (UNWTO 2022). With a widespread vaccination as well as some adjustments of destination choices and facilities, providing less risk of close contacts with other persons, the volume of European tourism remained at the level considerably higher than the world average. With a fall in the numbers of COVID-19 cases during the summer of 2021, volume of domestic tourism reached the levels even higher than in the same period of 2019, while the inbound tourism followed at a lower level between 60% and 70%, compared to 2019 (Appendix A Figure A1).

While inbound tourism (number of nights spent at tourist accommodation establishments) in the European Union (EU) countries fell considerably in 2020, to 31.2%, only to recover to 41.5% in 2021, figures for domestic tourism were much better, i.e., 68.1% and 80.9%, respectively. Therefore, decline in tourism in 2021 in the European countries was lower than the global decline, with the total volume recovered from 50.5% in 2020 to 62.1% in 2021, as compared to 2019 (Appendix A Table A1).

Among the tourist facilities, the least impact was on the nights spent at camping grounds, recreational vehicle parks and trailer parks with a fall to 70.3% to recover to 87.6% in the 2 years under review, followed by holiday and other short-stay accommodations with 57.3% and 69.2%, respectively. In contrast, nights spent in hotels and similar accommodation fell to a low level of 44.1% in 2020 to recover to 54.3% in 2021, indicating

that countries with very high share of hotels in the overall capacity of the accommodation establishment could have faced more significant impact. Most likely, hotels were perceived by tourists as bearing more risk of close contacts with other persons than while camping or in rented apartments and other short-stay accommodations.

According to the European Travel Commission European Travel Commission Report (2022) the outlook for 2022 is positive with tourism indicators reaching 80% of the pre-pandemic levels in 2022, and domestic tourism even exceeding the 2019 levels as a consequence of substitution by the intraregional tourism of the long-haul travel while tourists still keep the cautious and safe approach. Therefore, Europe shall show the best 2022 figures among the main tourist regions of the world. However, there are indications that the shock from the COVID-19 pandemic could remain permanent, and the model of tourism therefore could transform to a more sustainable one (Payne et al. 2021).

This study is focused on identifying possible impacts of culture and heritage on tourism outcome by countries, trying firstly to find out to what extent relative tourism performance may be attributed to relative intensity of COVID-19 by countries, followed by the analysis of the selected indicators of heritage and culture aiming to find out their possible relationship to the relative fall in tourism by countries. The objective of the research is to contribute to the scientific literature of resilience of tourism as economic activity when faced with major crises. The paper is structured as follows: Section 2 provides an overview of the recent literature on impacts of the pandemic on tourism; Section 3 follows with the description of materials and methods used while Section 4 presents the main results of the analysis; Section 5 brings discussion of the findings towards the results obtained in similar studies, followed by the concluding remarks in Section 6.

## **2. Literature Background**

In recent history, tourism was hit by several health effects (SARS, H1N1), cases of natural disaster, such as earthquakes, tsunamis and volcano eruptions, as well as wars, conflicts and political and security issues. However, risk management and long-term planning could reduce dependence on these external factors. Main impacts of these events on tourism were analyzed in scientific literature (Ma et al. 2020; Novelli et al. 2018; Rosselló et al. 2020) leading to conclusion that both natural disasters and crises caused by humans resulted in decline of tourist arrivals due to objective causes, i.e., formal obstacles to tourism industry activities, as well as to psychological risk perception by the tourists. Apart from that, there is also the “neighbourhood” effect (Maphanga and Henama 2019) whereby countries that are less or not at all affected, but are geographically close to those that are, also face reduced tourist arrivals.

COVID-19 pandemic shed new light on resilience to unpredicted and imposed challenges in the scientific literature. Some studies (Buzinde 2020; Wen et al. 2020; Garcês et al. 2020) focused on the importance of wellness and wellbeing as being more important for tourism within and after the world health crisis. Most likely, privacy, i.e., less contact with other tourists, as well as possibilities of spending time actively and in the natural surroundings may become more and more important (Santos et al. 2020). A well-known effect of the outdoor physical activities on psychological health seemingly also proved to contribute to mitigation of the negative effects of pandemic (Buckley and Westway 2020). This goes in line with research findings that for the future success of tourism, services should be tailored made, i.e., personalized (Abbas et al. 2021). Similarly, there is a noticeable preference given to private means of transport than using public transportation (Zheng et al. 2021). Moreover, many tourists postponed their planned trips even after the establishment of safe conditions. The regional and global crises have rather different effects across countries depending on health system performance, the intensity of the direct impact, as well as psychological uncertainty induced by the pandemic event (Aronica et al. 2021). The literature dealing with possible impacts of natural and cultural heritage on the resilience to crises is very limited and will be pointed out to in the discussion section.

### 3. Materials and Methods

Reliable and methodologically sound data sources were of the utmost importance for the methodology used (simple and multiple regression). The problem lies in different methods of gathering data on the intensity of pandemic by countries. There is a significant “grey area” of tourism statistics that concerns reporting on private accommodation and small-scale facilities as well as on houses and apartments owned by tourists themselves. Aside that, in many cases data collection methodology on the categories of overnight stays by the type of facilities differs considerably. Variables of type of transport used in tourism travel are not methodologically unified either, even for the EU countries. At the outset, the sample was meant to include European countries that report to Eurostat as much as possible. However, due to limited data availability, only 20 countries remained in the sample: Austria, Belgium, Croatia, Czechia, Denmark, Estonia, Finland, Germany, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden. Dependent variable was the tourist overnight stays, calculated as 20 monthly indices during the pandemic (March 2020–October 2021) compared to the 2019 monthly data.

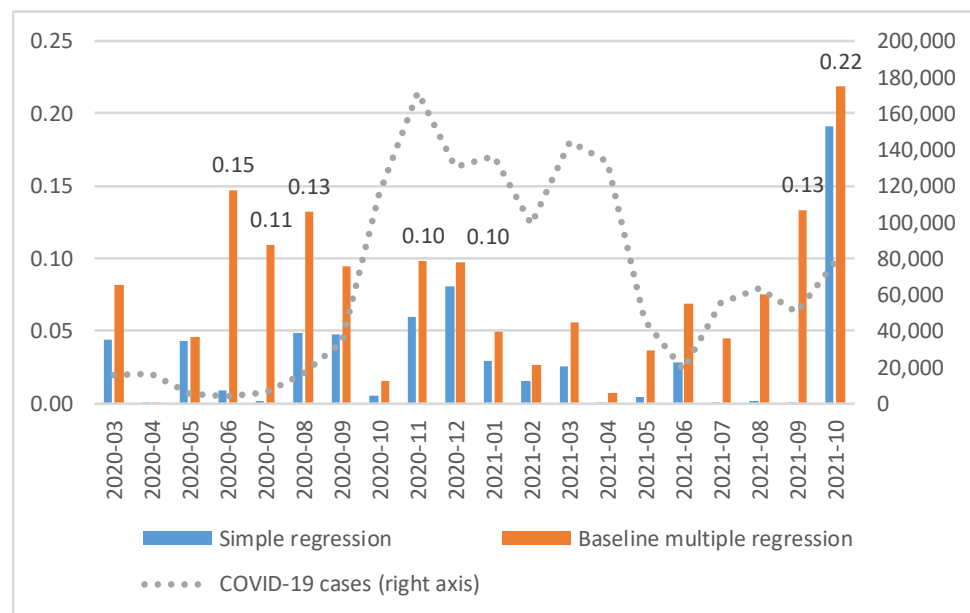
Firstly, simple regression of these data was conducted to show a direct impact of the monthly average data of new COVID-19 cases by country. After that, multiple regression was conducted by adding the indicators of the share of air transport in total inbound tourist arrivals as well as data on the share of hotels and similar accommodation in the total of monthly tourist overnight stays by countries. Finally, apart from the mentioned 3 variables of that baseline regression, further 5 multiple regressions were conducted, testing a possible additional explanatory power of natural and cultural endowments as well as cultural activity by countries to the variance of the said dependent variable representing outcome of tourism by countries. The methods were very basic, without a focus on *t*-stat and *p*-values. Moreover, independence of the variables used in multiple regression was only assumed, i.e., no multicollinearity check was conducted. All the details on the data used for the analysis (definitions and sources) are presented in the Data Availability Statement.

### 4. Results

The results of simple regression on impact of relative intensity of COVID-19 on tourist overnight stays for the 20 countries under review were rather surprising. The coefficients of determination for almost the entire 20-month period were extremely low. This indicates that variance in the relative fall in tourism cannot at all be explained only by different relative incidence of pandemic by countries. Multiple regression with two more variables assessing “closeness” of travel (share of inbound tourism conducted by land transport in total tourist arrivals) and composition of tourism facilities according to a perceived risk due to close encounters with other persons (share of hotels in total number of overnight stays) performed somewhat better in explaining relative fall in tourism by countries. Still, out of total of 20 months under review, only for 7 months there was at least a very small relation between the three variables used and the relative fall in tourism by countries. As evident from the Figure 1, the value of the coefficient was 0.1 or higher in the three summer months of the first year of the pandemic. This may be explained as in this period there was a significant fall in the pandemic intensity, while the tourists were somewhat cautious in their destination choices preferring close destinations as well as choosing type of accommodation that facilitates avoidance of close contact with strangers.

The second period with at least 0.10 coefficient of determination in multiple regression were the last 2 months of 2020 throughout the outburst of pandemic. The data for December may be attributed to the seasonal increase in travel for holidays with the large share of private travel, being somewhat more dependent on the risk factors than business travel. Surprisingly, throughout 2021, there was almost no relation of tourist overnight stays with relative intensity of pandemic, even when combined by the two additional variables in multiple regression. A possible reason may be that with a significant fall of pandemic intensity as well as with widespread vaccination, tourists largely returned to their previous

habits, although still at a lower level than before. A final period for which there is some statistical link between the variables employed to try to explain differences in tourism fall (now recovery) by countries are the last two months under review i.e., September and October of 2021. With a new increase of pandemic figures and regardless of a high percentage of vaccinated population, there was still a relatively strong impact of COVID-19 cases in relative tourism performance. However, it shall be made clear that even for the 7 months with detected impact on tourism, the coefficients are rather very low.

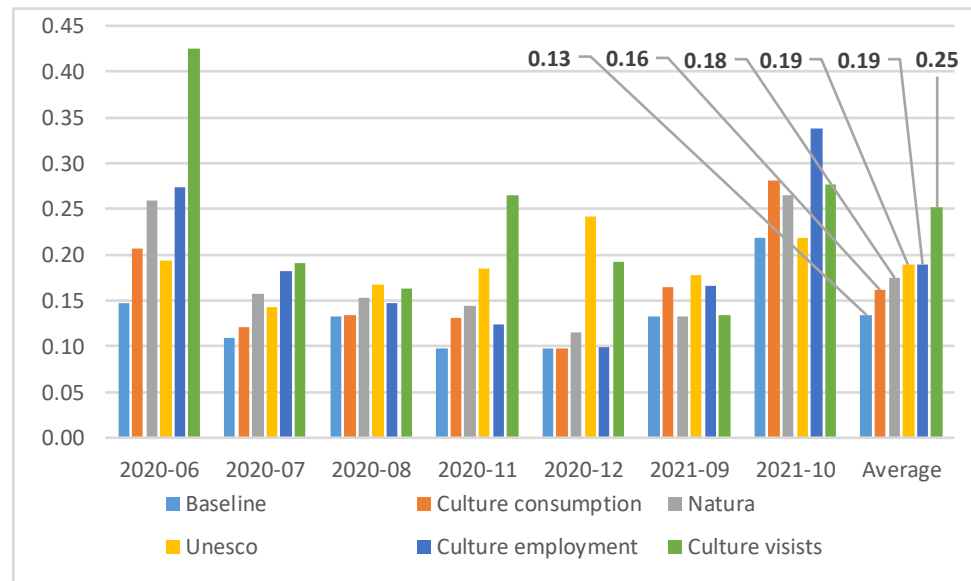


**Figure 1.** Coefficients of determination in simple regression and in baseline multiple regression and COVID-19 cases in 20 months for the 20 countries under review. Source: Authors’ calculation, using data specified in the Data Availability Statement.

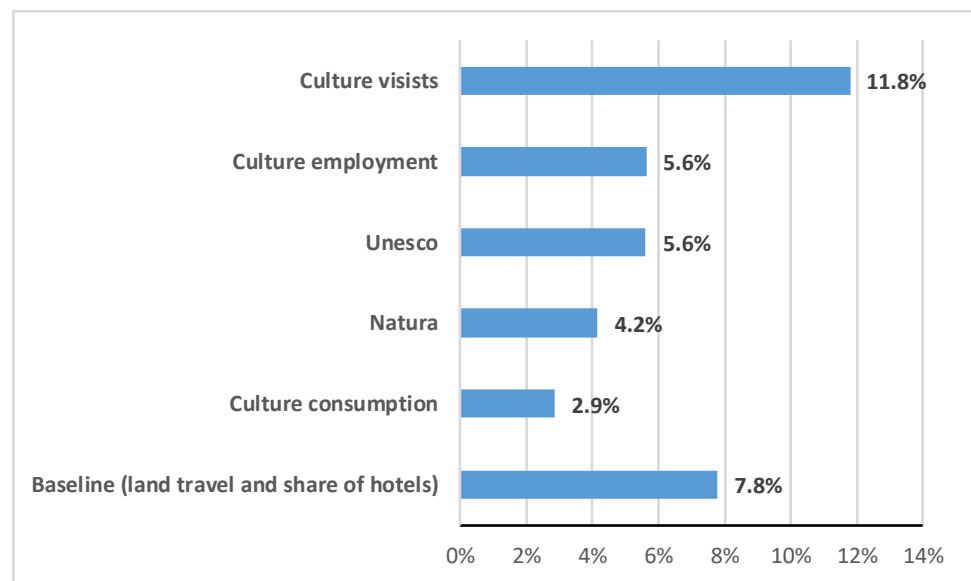
For further analysis of a possible effect of the selected indicators of culture and heritage out of the 20 periods under review only 7 were selected, with a baseline scenario multiple regression coefficients of determination 0.10 or above i.e., only for months with at least small statistical impact of pandemic on relative tourism performance by countries. The findings seem to be rather interesting indicating there was some impact of heritage and culture on relative fall of tourism. With only few exemptions, adding one more variable to three variables in the baseline scenario improved to a certain extent the explanatory power of the model, i.e., increasing the coefficient of determination (Figure 2).

Most notable impacts are for culture visits in 2020-6, 2020-11 and 2020-12, culture employment in 2020-6 and 2021-10 as well as for the UNESCO indicator for 2020-12. On average, the most notable impact on further explanation of tourism performance by countries was of the indicator of culture visits, while the lowest impact was of the indicator of culture consumption.

The main findings of the research are briefly presented in Figure 3. While the baseline multiple regression (COVID-19 cases, share of land travel and share of hotels) helped explaining additional 7.8% of the variance of the tourist overnight stays by countries as compared to a simple regression using only COVID-19 cases as independent variable, adding variable of culture employment as well as variable of the relative number of UNESCO protected sites added a possibly important 5.6 percentage points to the statistically explained share of the dependent variable. The strongest impact was of the variable of culture visits with 11.8 percentage points added to the explanatory power of the model, which, combined with the two variables of the baseline scenario, enabled the model to attribute a moderate 25.2% of the variance of the monthly tourism outcome by countries.



**Figure 2.** Coefficients of determination ( $R^2$ ) for 7 months with at least 0.10 values in the baseline multiple regression, and further 5 regressions adding indicators of heritage and culture for the 20 countries under review. Source: Author’s calculation, using data specified in the Data Availability Statement.



**Figure 3.** Percentage points of coefficients of determination added on average to the simple regression for 7 months by the baseline multiple regression, and further 5 regressions for the 20 countries under review. Source: Author’s calculation, using data specified in the Data Availability Statement.

However, it should be noted that, while having a certain explanatory power, the two indicators of heritage endowment, i.e., percentage of terrestrial protected area (“Natura”) and per capita number of World Heritage sites inscribed by each State Party (“Unesco”), have negative values of the respective coefficients in multiple regression so they cannot be considered as factors mitigating the impact of pandemic on tourism (Table 1).

Still the other indicators, i.e., visits to cultural sites (regardless of one case of negative value of the regression coefficient), culture consumption and employment might have, within the limits of the methodological approach of this study, some explanatory power showing that the relative intensity of cultural activities may have contributed to the better outcome, i.e., higher indices of inbound tourism. Again, it came as a surprise that each one of these indicators added more to the explanation of the variance of the tourism outcome

than the variables in the baseline regression using three variables presumably strongly connected to the depending variable, i.e., the incidence of the disease, the arrivals by land and the share of hotels in the pre-pandemic overnight stays.

**Table 1.** Coefficients of determination for 7 months with at least 0.10 values in the baseline multiple regression, and further 5 regressions adding indicators of heritage and culture for the 20 countries under review.

	Baseline	Natura	Unesco	Culture Visits	Culture Employment	Culture Consumption
2020-06	0.147	0.259	0.193	0.425	0.274	0.207
2020-07	0.109	0.157	0.143	0.191	0.181	0.121
2020-08	0.132	0.153	0.168	0.164	0.147	0.134
2020-11	0.098	0.144	0.185	0.265	0.125	0.131
2020-12	0.097	0.116	0.242	0.192	0.099	0.098
2021-09	0.133	0.133	0.178	0.134	0.166	0.165
2021-10	0.218	0.265	0.218	0.277	0.338	0.281
Average	0.134	0.175	0.190	0.252	0.190	0.162
Adding	0.078	0.042	0.056	0.118	0.056	0.026

Source: Authors' calculation, using data specified in the Data Availability Statement. Note: Regressions with negative values of the coefficients are marked in red. For Culture visits, the average value was calculated without the 2021-09 figure.

## 5. Discussion

While the impact of the COVID-19 on the overall fall in tourism worldwide is evident, it is difficult to model the structural issues laying behind relative outcome by countries. The results of this study were rather surprising showing that incidence of COVID-19 and relative fall in tourism in the selected 20 European countries were not statistically related for 19 out of 20 months under review. A possible explanation is that tourism was not affected only by the relative incidence of the disease by countries, but also by different, country specific prohibitive measures, not captured in this study.

Regarding structural issues determining resilience of tourism in the current pandemic, Pociño et al. (2022) reviewed 18 recent scientific articles, with a common feature that future of tourism shall be based on positive and resilient approach focused on the tourists' safety and wellbeing, promoting the quality of life. Most likely, the interest of tourists will shift towards the health and wellness tourism (Wen et al. 2020), while they seem to be reluctant to the cruise tourism (Pan et al. 2021). One study (Kock et al. 2020) investigated in more details fear of contracting COVID-19 and found positive relations to indicators of xenophobia, ethnocentrism, crowding perceptions and attitude towards group travel. An estimate (Lee et al. 2022), using data for Taiwan has shown that a 1% increase in the number of confirmed cases of COVID-19 reduced the number of tourist visits by 0.1% while total revenues of the hotels decreased by 0.33%, with rather different impact, depending on the quality of the hotels.

In contrast, in this study, adding the variables of the share of hotels in the total number of overnight stays (depicting a perceived risk due to close encounters with other persons), as well as a share of inbound tourism conducted by land transport (depicting closeness of travel) found very low coefficients of determination in the range 0.10 to 0.15 for only 6 months and moderate (above 0.20) only for a single month out of 20 under review.

However, geographical closeness was stressed as important by the European Travel Commission European Travel Commission Report (2022) stating that Europe benefited from short-haul travel in 2021, led by strong performance of destinations accessible by car from their large source markets, such as Croatia, Denmark, Luxembourg, Slovenia, France and Switzerland. Moreover, Huang et al. (2021), using survey and interviews, found that most tourists have changed their travel preferences towards the countries that are close in geographic as well as cultural sense (in terms of values and attitudes). The same study also

concluded that 82% respondents would prefer to travel to nature-based destinations, 66% to destinations with rich history, culture and cultural heritage and 63% to rural destinations.

This study is in line with that, while adding variables of cultural activities improved the explanatory power of the baseline model in explaining variance of tourism fall by countries. The best fitting variable of culture visits added 11.8 percentage points to the explanatory power of the model, lifting it up to a still moderate 25.2%, on average for the 7 months out of 20 under review. This improved the simple regression model more than the two variables (share of air transport and share of hotels) that seemed to be very important. The other two variables i.e., culture employment and culture consumption added 5.6 and 2.6 percentage points to the explanatory power of the model, respectively.

It is evident from the current study as well as from the reviewed literature that, for explaining relative impact of the pandemic on tourism by countries there is a need for further research into other variables to capture issues such as business travel, family visits as well as the use of facilities owned by tourists, which are presumably less influenced by relative intensity of pandemic. A more thorough research into the phenomenon of substitution of long-haul tourism by close destinations, including those within the countries may be needed as well.

## 6. Conclusions

The research identified possible importance of the relative intensity of cultural activities for the resilience of tourism within the COVID-19 pandemic, adding to the findings of other studies stressing the importance of geographical and cultural closeness between the inbound and outbound countries, as well as possibilities to maintain low health risk due to close contacts with unknown persons.

The analysis presented is subject to the limitations of methods used so the readers are advised to be cautious with interpretation of the results. While this research reveals insightful findings about the possible linkages between culture and impact of the pandemic on tourism for the 20 European countries, the future studies should include larger number of countries as well as additional variables in order to obtain a more thorough insight into the importance of natural and cultural heritage for the resilience of tourism.

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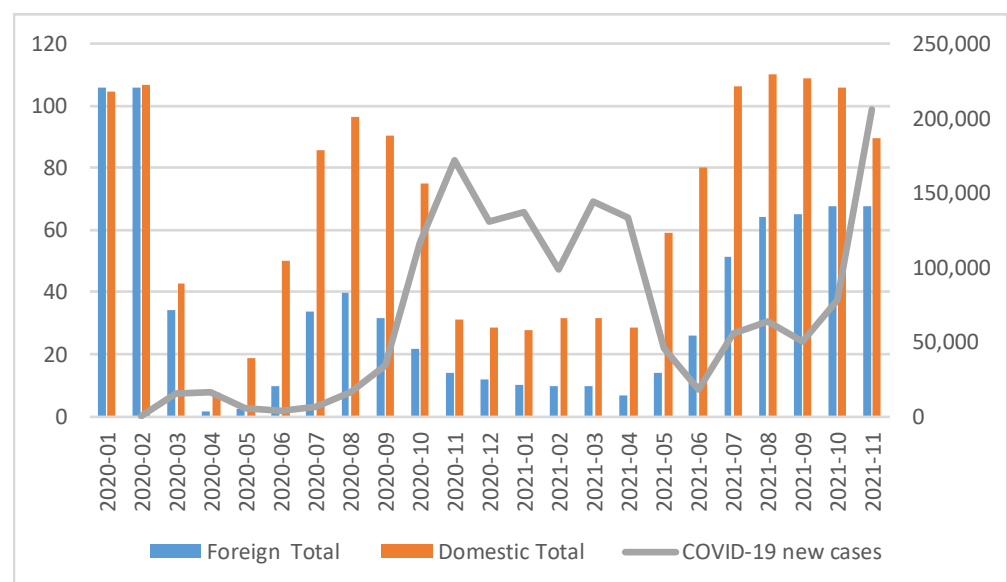
**Data Availability Statement:** Overnight stays at tourist accommodation establishments, 2019–2021: Eurostat monthly data [TOUR\_OCC\_NIM\_custom\_2135440] Data extracted on 21 February 2022 from [ESTAT], last updated on 14 February 2022. Monthly data on the daily number of new reported COVID-19 cases, 2020–2021: Data on the daily number of new reported COVID-19 cases and deaths by EU/EEA country, <https://www.ecdc.europa.eu/en/publications-data/data-daily-new-cases-covid-19-eueea-country>, accessed on 21 February 2022. Inbound tourism: Arrivals by air, percentage of total inbound arrivals, 2019: Tourism Statistics Data, UNWTO <https://www.unwto.org/tourism-statistics-data>, extracted on 21 February 2022, data for 2019, except for Bulgaria, Estonia, Finland, France, Netherlands, Norway, Portugal and Sweden, for which data were assessed using data from previous years, applying a yearly multiplier (1027) calculated for the countries with full data series. For Austria, Belgium, Czechia, Denmark, Germany, Lichtenstein and Slovakia due to no availability, data were assessed calculating average values of the indicators of two of their respective neighbouring countries. Terrestrial protected area (%), 2020: Eurostat, data extracted on 21 February 2022 from [ESTAT] Dataset: Natura 2000 protected areas (source: EEA) [ENV\_BIO1\_custom\_2137417], last updated on 3 March 2022. Data for Norway Island and Lichtenstein are extracted from national sources. Number of World Heritage sites inscribed by each State Party, 2022: UNESCO World Heritage List Statistics, <https://whc.unesco.org/en/list/stat/>, accessed on 21 February 2022. Cultural employment by sex, percentage of total employment, 2020: Eurostat, data extracted on 21 February 2022 from [ESTAT], CULT\_EMP\_SEX\_custom\_2138832], last updated on 25 June 2021. Mean consumption expenditure of private households on cultural goods and services by COICOP consumption purpose, Percentage of total expenditure, Pur-



chasing power standard (PPS), 2015: Eurostat, data extracted on 21 February 2022 from [ESTAT] CULT\_PCS\_HBS\_\_custom\_2138858], last updated on 6 August 2020. Overnight stays at tourist accommodation establishments, 2019–2021: Eurostat monthly data [TOUR\_OCC\_NIM\_\_custom\_2135440], data extracted on 21 February 2022 from [ESTAT], last updated on 14 February 2022. Monthly data on the daily number of new reported COVID-19 cases, 2020–2021: Data on the daily number of new reported COVID-19 cases and deaths by EU/EEA country, <https://www.ecdc.europa.eu/en/publications-data/data-daily-new-cases-covid-19-eueea-country>, accessed on 21 February 2022. Inbound tourism; Arrivals by air, percentage of total inbound arrivals, 2019: Tourism Statistics Data, UNWTO <https://www.unwto.org/tourism-statistics-data>, extracted on 21 February 2022, data for 2019, except for Bulgaria, Estonia, Finland, France, Netherlands, Norway, Portugal and Sweden, for which data were assessed using data from previous years, applying a yearly multiplier (1027) calculated for the countries with full data series. For Austria, Belgium, Czechia, Denmark, Germany, Lichtenstein and Slovakia due to no availability, data were assessed calculating average values of the indicators of two of their respective neighboring countries. Terrestrial protected area (%), 2020: Eurostat, data extracted on 21 February 2022 from [ESTAT] Natura 2000 protected areas (source: EEA) [ENV\_BIO1\_\_custom\_2137417], last updated on 3 January 2022. Data for Norway Island and Lichtenstein are extracted from national sources. Number of World Heritage sites inscribed by each State Party, 2022: UNESCO World Heritage List Statistics, <https://whc.unesco.org/en/list/stat/>, accessed on 21 February 2022. Cultural employment by sex, percentage of total employment, 2020: Eurostat, data extracted on 21 February 2022 from [ESTAT], CULT\_EMP\_SEX\_\_custom\_2138832], last updated on 25 June 2021. Mean consumption expenditure of private households on cultural goods and services by COICOP consumption purpose, Percentage of total expenditure, Purchasing power standard (PPS), 2015: Eurostat, data extracted on 21 February 2022 from [ESTAT] CULT\_PCS\_HBS\_\_custom\_2138858], last updated on 6 August 2020. Visits to cultural sites (historical monuments, museums, art galleries or archaeological sites) at least once in the last 12 months, percentage of population 16 years or over, 2015: Eurostat, data extracted on 21 February 2022 from [ESTAT] Frequency of participation in cultural or sport activities in the last 12 months by sex, age, educational attainment level and activity type [ILC\_SCP03\_\_custom\_2138799], last updated on 20 March 2019.

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## Appendix A



**Figure A1.** Overnight stays at tourist accommodation establishments—European Union 27 countries (EU27) (2019 = 100) and monthly average of new reported COVID-19 cases in EU27 and EFTA countries. Source: Eurostat monthly data [TOUR\_OCC\_NIM\_\_custom\_2135440] extracted on 21 February 2022

from [ESTAT], Last updated 14 February 2022. Data on the daily number of new reported COVID-19 cases and deaths by EU/EEA country, <https://www.ecdc.europa.eu/en/publications-data/data-daily-new-cases-covid-19-eueea-country>, accessed on 21 February 2022. Note: Norway, Iceland and Liechtenstein were included while Switzerland was not included in the COVID-19 cases numbers.

**Table A1.** Nights spent at tourist accommodation establishments—European Union 27 countries (2019 (1–11) = 100).

Overnight Stays	2020 (1–11)	2021 (1–11)
<b>Hotels and similar accommodation</b>	44.1	54.3
Foreign	27.6	36.5
Domestic	61.4	73.2
<b>Holiday and other short-stay accommodation</b>	57.3	69.2
Foreign	37.6	48.0
Domestic	71.7	84.8
<b>Camping grounds, recreational vehicle parks and trailer parks</b>	70.3	87.6
Foreign	42.4	61.2
Domestic	87.9	104.2
<b>Grand Total</b>	50.5	62.1
Foreign Total	31.2	41.5
Domestic Total	68.1	80.9

Source: Eurostat monthly data [TOUR\_OCC\_NIM\_custom\_2135440] Data extracted on 21 February 2022 from [ESTAT], Last updated 14 February 2022.

## References

- Abbas, Jaffar, Riaqa Mubeen, Paul Terhemba Iorember, Saqlain Raza, and Gulnara Mamirkulova. 2021. Exploring the impact of COVID-19 on tourism: Transformation potential and implications for a sustainable recovery of the travel and leisure industry. *Current Research in Behavioral Sciences* 2: 100033. [CrossRef]
- Aronica, Martina, Pietro Pizzuto, and Caterina Sciortino. 2021. COVID-19 and tourism: What can we learn from the past? *The World Economy* 45: 430–44. [CrossRef] [PubMed]
- Buckley, Ralf, and Diane Westway. 2020. Mental health rescue effects of women’s outdoor tourism: A role in COVID-19 recovery. *Annals of Tourism Research* 85: 103041. [CrossRef] [PubMed]
- Buzinde, Christine N. 2020. Theoretical linkages between wellbeing and tourism: The case of self-determination theory and spiritual tourism. *Annals of Tourism Research* 83: 102920. [CrossRef]
- European Travel Commission Report. 2022. European Tourism: Trends & Prospects, (Q4/2021): A Report Produced for the European Travel Commission by Tourism Economics, Brussels, February 2022 European Travel Commission. Available online: <https://etc-corporate.org/reports/european-tourism-2021-trends-prospects-q4-2021/> (accessed on 21 February 2022).
- Garcês, Soraia, Margarida Pochinho, and Saul Neves de Jesus. 2020. Psychological wellbeing as a creative resource for businesses in the tourism industry: A multidisciplinary view. In *Multilevel Approach to Competitiveness in the Global Tourism Industry*. Edited by Sérgio Jesus Teixeira and João Matos Ferreira. Hershey: IGI Global, pp. 98–119. [CrossRef]
- Huang, Songshan, Yuhong Shao, Ying Zeng, Xinyi Liu, and Zhiyong Li. 2021. Impacts of COVID-19 on Chinese nationals’ tourism preferences. *Tourism Management Perspectives* 40: 100895. [CrossRef] [PubMed]
- Kock, Florian, Astrid Nørfelt, Alexander Josiassen, George Assaf, and Mike G. Tsionas. 2020. Understanding the COVID-19 tourist psyche: The Evolutionary Tourism Paradigm. *Annals of Tourism Research* 85: 103053. [CrossRef] [PubMed]
- Lee, Tzong Haw, Yi Ju Su, and Hung Hao Chang. 2022. The Impact of COVID-19 on Tourist Hotel Performance and Tourism Demand: Empirical Evidence Using Population Based Administrative Data from Taiwan. *The Singapore Economic Review*, 1–24, Online ready, published 8 February 2022. [CrossRef]
- Ma, Haiyan, Yung-ho Chiu, Xiaocong Tian, Juanjuan Zhang, and Quan Guo. 2020. Safety or travel: Which is more important? The impact of disaster events on tourism. *Sustainability* 12: 3038. [CrossRef]
- Maphanga, Petrus Mfanampela, and Unathi Sonwabile Henama. 2019. The tourism impact of Ebola in Africa: Lessons on crisis management. *African Journal of Hospitality, Tourism and Leisure* 8: 1–13.
- Novelli, Marina, Liv Gussing Burgess, Adam Jones, and Brent W. Ritchie. 2018. ‘No Ebola . . . still doomed’—The Ebola-induced tourism crisis. *Annals of Tourism Research* 70: 76–87. [CrossRef] [PubMed]
- Pan, Tianyu, Fang Shu, Miranda Kitterlin-Lynch, and Eric Beckman. 2021. Perceptions of cruise travel during the COVID-19 pandemic: Market recovery strategies for cruise businesses in North America. *Tourism Management* 85: 104275. [CrossRef] [PubMed]
- Payne, James E., Luis A. Gil-Alana, and Andrea Mervar. 2021. Persistence in Croatian tourism: The impact of COVID-19. *Tourism Economics* 1–7. [CrossRef]

- Pocinho, Margarida, Soraia Garcês, and Saul Neves Jesus. 2022. Wellbeing and Resilience in Tourism: A Systematic Literature Review During COVID-19. *Frontiers in Psychology* 12: 748947. [CrossRef]
- Rosselló, Jaume, Susanne Becken, and Maria Santana-Gallego. 2020. The effects of natural disasters on international tourism: A global analysis. *Tourism Management* 79: 104080. [CrossRef] [PubMed]
- Santos, Anabela, Carmen Gonzalez, Karel Haegeman, and Alessandro Rainoldi. 2020. *Behavioural Changes in Tourism in Times of COVID-19*. Luxembourg: Publications Office of the European Union.
- UNWTO. 2022. UNWTO World Tourism Barometer and Statistical Annex, Volume 20, Issue 1, January 2022. Available online: <https://www.e-unwto.org/toc/wtobarometereng/20/1> (accessed on 5 April 2022).
- Wen, Jun, Metin Kozak, Shaohua Yang, and Fang Liu. 2020. COVID-19: Potential effects on Chinese citizens' lifestyle and travel. *Tourism Review* 76: 74–87. [CrossRef]
- Zheng, Danni, Qiuju Luo, and Brent W. Ritchie. 2021. Afraid to travel after COVID-19? Self-protection, coping and resilience against pandemic 'travel fear'. *Tourism Management* 83: 104261. [CrossRef]



Article

# The Economic Sustainability of Culture in Hawai'i: Tourists' Willingness to Pay for Hawaiian Cultural Experiences

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**Abstract:** Given the current travel restrictions with the COVID-19 pandemic, there is an unprecedented opportunity for Hawai'i to reexamine its current tourism offerings and establish a new approach to support a more authentic, cultural, and sustainable tourism for the U.S. domestic tourist market. As tourists from the continental U.S. are the largest source market for visitors to Hawai'i, the purpose of this study is to examine the trend towards an "authentic cultural" tourism experience and evaluate whether U.S. visitors will be willing to pay for a deeper integration and representation of Hawaiian culture in tourism offerings. The contingent valuation method (CVM) was adopted to quantify the willingness to pay (WTP) more by the tourists to Hawaii in order to experience a more "authentic Hawaiian cultural experience" as well as "sustainable experiences". Differences between returning and first-time visitors were considered. This study focused on continental U.S. visitors' perceptions of Hawaiian culture and the sustainability of Hawaiian tourism products, as well as the assessment of locally grown food and tourists' willingness to pay extra for these tourism products and experiences. The contingent valuation survey demonstrated that continental U.S. travelers were supportive of an additional fee in order to experience authentic Hawaiian cultural and tourism experiences designed and/or facilitated by Native Hawaiians. In addition, U.S. visitors were also supportive of paying additional fees for activities or experiences to support sustainable tourism in Hawai'i, including paying more for locally grown food, indicating that they would be willing to increase their restaurant/hotel food bill in order to support the Hawaii's local farming industry. The results of this study demonstrate that there are economic opportunities to further integrate Hawaiian culture and sustainability into the experience of visitors, and that U.S. visitors are willing to support these cultural activities financially.

**Keywords:** Hawaiian culture; visitor perceptions; economic sustainability; willingness to pay (WTP); COVID-19 pandemic

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## 1. Introduction

The global COVID-19 pandemic has had a tremendous impact on the world economy, and the global tourism industry has not been exempt from this. Many travel destinations have struggled amidst the economic volatility and continued uncertainty caused by this disease. Despite the unprecedented challenge caused by COVID-19, numerous tourism researchers have identified the current crisis as an opportunity to promote more sustainable practices (Chang et al. 2020; Galvani 2020; Niewiadomski 2020). For the tourism industry, the current COVID-19 pandemic presents a considerable opportunity for building and delivering more authentic cultural tourism practices that are economically sustainable and

global in scale. However, at the time of writing this research paper, there is still limited research as to how specific destinations are working towards planning and delivering authentic cultural tourism practices that are economically sustainable.

Tourism has historically been a significant contributor to the State of Hawai'i's economy (Agrusa 1994; Min et al. 2020). The disruption caused by COVID-19 has emphasized the tourism industry's importance in Hawai'i for hospitality and travel businesses, as well as its role as an economic contributor for local families who rely on employment in the tourism sector or supporting industries. Of the major tourist market areas identified by the Hawai'i Tourism Authority, a significant number of visitors to Hawai'i have historically come from the U.S. West and U.S. East markets. Based on visitor statistics released by the Hawai'i Tourism Authority in September 2020, while there has been a drastic decrease in the total number of visitor arrivals from each major market area due to COVID-19, most of the visitors who have been traveling to Hawai'i have come from the U.S. domestic market (Hawai'i Tourism Authority 2020). As it has been anticipated that domestic demand will recover before international demand (Air Passenger Forecasts: Potential Paths for Recovery into the Medium-and Long-run Rep 2020, p. 14), developing a greater understanding of the motivations and preferences of the domestic U.S. tourist market could help the State of Hawai'i to better evaluate and reimagine the tourism industry at this time. This study aims to fill a gap in existing literature by examining the perceptions of Hawaiian culture among U.S. visitors to Hawai'i, along with their willingness to pay for Hawaiian culture, in an effort to support more sustainable tourism practices in the future.

## 2. Literature Review

### 2.1. COVID-19 and Its Impact on Cultural and Sustainable Tourism

A large portion of recent tourism, hospitality, and travel literature has centered on the COVID-19 pandemic. Many researchers have sought to examine the impact that the pandemic has had on these industries (Dube et al. 2020; Gursoy and Chi 2020; Maeneenop and Kotcharin 2020; Suau-Sanchez et al. 2020; Sun et al. 2020) and anticipate how COVID-19's disruption will continue to shape tourism, hospitality, and travel in the future (Alonso et al. 2020; Zenker and Kock 2020; Zhang 2020). Other scholars have explored the relationship between international tourism and the spread of COVID-19 (Farzanegan et al. 2020) and have suggested that the disruption caused by the pandemic could represent a transformative opportunity to address many of the issues associated with mass tourism (Ioannides and Gyimóthy 2020; Sigala 2020; Qiu et al. 2020).

As a subfield of tourism research, the concept of sustainable and cultural tourism has been a significant topic of interest, as it covers a wide range of subjects—including, but not limited to, sustainable tourism practices, eco-tourism, cultural tourism, protected area tourism, sustainable development, and small island destination management (Ruhanen et al. 2015). Despite this range of subjects, the concept of sustainable tourism has historically faced criticism due to varied definitions and usage amongst researchers, as well as the oversight of a number of sub-issues (Butler 1999; Liu 2003). Prior to the COVID-19 disruption, the sub-issue of "over-tourism" was a relatively hot topic in media and tourism academia, as more destinations faced urgent evidence of the negative impacts that increases in visitors can have on a destination over time (Koens et al. 2018; Milano et al. 2019; Perkumiene and Pranskūnienė 2019). Despite this increase in attention, Dredge (2017) suggests that the real issues driving overcrowding and the exploitation of destination resources and communities have been explored in research for many years. These issues include the prioritization of pro-growth economic objectives, the need for local and inclusive tourism, the control of destination development, the consideration of travel subsectors, the exploration of the impacts of tourism on the public sector, and the lack of collaborative knowledge management to deal with tourism issues (Dredge 2017).

Liu (2003) recognizes that tourism development is supply-led and demand-driven, suggesting that the role of tourism demand is a significant issue in research related to sustainable cultural tourism management. Tourism demand is influenced by numerous

factors, including tourist preferences (Stabler et al. 2010). Tran and Ralston (2006) suggest that preferences serve as an intermediary between tourist motives and behavior, making tourist preferences “the act of selecting from among a set of choices as influenced by one’s motivations” (p. 428). Understanding tourists’ motivations is then an important aspect to consider in the effective planning and management of tourism, as it can provide insight into tourist preferences and behavior (Tran and Ralston 2006). Research by Snepenger et al. (2006) supports Iso-Ahola’s motivation theory in the tourism context, which suggests that tourists’ motivations fall into four different dimensions: personal escape, interpersonal escape, personal seeking, and interpersonal seeking. Of these dimensions, the rate of change in motivation for personal escape (getting away from the normal environment, changing pace from everyday life, and overcoming bad emotions) and personal seeking (experiencing new things, sharing experiences with others, and feeling good about oneself) was higher than for the other two dimensions, which suggests that tourism experiences are likely driven by personal escape and personal seeking motivations over interpersonal escape and interpersonal seeking motivations (Snepenger et al. 2006). Other research on tourist motivations has supported these findings and has suggested that the search for novel experiences is a factor that can affect visitors’ decisions regarding their choice of destination and the activities that they participate in (Lee and Crompton 1992). The novelty of travel, including the altering of routine and the provision of different experiences, can attract tourists to a destination (Lee and Crompton 1992), and in their search for a novel experience, the unique cultural experiences offered by a destination can be some of the influencing factors in the tourists’ decision to visit (Tapachai and Waryszak 2000).

In recent decades, there has been an increased awareness of, and interest in participating in, cultural tourism activities. According to the United Nations World Tourism Organization (UNWTO), cultural tourism can be defined as “a type of tourism activity in which the visitor’s essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions/products in a tourism destination” (United Nations World Tourism Organization 2017, p. 4). In much of the previous research on cultural tourism, the foci tend to be on the pull of different cultural attractions, composition attributes of the cultural tourist, and the identification of different segments of cultural tourists (Barbieri and Mahoney 2010; Kim et al. 2007; McKercher 2002). Cultural tourists can range from recreational or pleasure-seeking tourists who choose to participate in a cultural tourism activity to elevate their trip experience, to tourists whose primary goal is to seek out cultural tourism activities (McKercher and Cros 2003). These cultural activities and attractions can include everything from food, art, historical sites, landmarks, and cultural facilities, to experiences in rural areas of a destination that highlight the culture, traditions, values, and lifestyles of the local community.

The concept of “authenticity”, and the impacts of the commodification of culture, have been discussed extensively in sustainable tourism and cultural tourism research (Engeset and Elvekrok 2015; Gnotha and Wang 2015; Kithiia and Reilly 2016; Taheri et al. 2018; Park et al. 2019; Shepherd 2002; Yeoman et al. 2007). In the seminal work by Cohen (1988) on authenticity and commodification in tourism, it was suggested that the commoditization of culture incited by tourism can destroy the authenticity or meaning of cultural products for both locals and tourists alike. Sustainable tourism and responsible cultural tourism management can serve to protect the authenticity or meaning of cultural products for the host population, as well as for visitors to the destination. Wang (1999) highlighted three theoretical approaches to viewing authenticity in the tourist experience: objectivism, constructivism, and post-modernism (existentialism). These approaches explore the concept of “authenticity” as it relates to the physical or objective characteristics, social constructs, and self-idealizing analyses of the tourist experience from the tourist’s perspective (Wang 1999). For the purpose of this paper, perceived cultural authenticity will be explored from the perspective of visitors to Hawai’i, with careful consideration of the potential for a deeper integration of Hawaiian culture, designed and facilitated by members of the host culture, in the tourist experience. For a culture-rich destination such as Hawai’i, thoughtful con-

sideration of optimal tourism demand, the impacts of tourism on Hawai'i's resources and local communities, and the potential draw of authentic cultural activities and attractions will be essential for the long-term sustainability of the destination.

## 2.2. Tourism Growth and Sustainability in Hawai'i

Tourism is the number one economic industry in Hawai'i. In 2019, Hawai'i's tourism industry generated over USD 17 billion in total visitor spending and USD 2.07 billion in state tax revenue, emphasizing the industry's position as the largest source of private capital for the State of Hawai'i (Fact Sheet: Benefits of Hawai'i's Tourism Economy Rep 2019). Over 10.4 million annual visitor arrivals were recorded in 2019, marking a 5.4% year-over-year increase from 2018 (Fact Sheet: Benefits of Hawai'i's Tourism Economy Rep 2019). For the State of Hawai'i, the increase in total visitor spending and arrivals in 2019 marked the eighth consecutive year of growth for both categories.

This growth has not come without challenges. Over the years, overcrowding in many areas of Hawai'i has led to increasing concern about "over-tourism" and the impact that increasing visitor arrivals can have on Hawai'i's natural resources, infrastructure, and quality of life for residents (Hawai'i Saw more than 10 m Visitors 2020; Leong 2018; Yerton 2019). A study published in 2019 by the University of Hawai'i Economic Research Organization (UHERO) suggests that the current tourism governance model for the State of Hawai'i has been ineffective in managing the overall industry, as evidenced by "diminishing economic contribution, eroding resident sentiment, and increasing congestion and stress on sites and attractions" (Brewbaker et al. 2019, p. 1). While there have been some measures taken to address and regulate the impacts of tourism in Hawai'i (S.B 2319 2020; Wallace 2020), the abrupt disruption caused by the COVID-19 pandemic has emphasized both Hawai'i's dependence on tourism and the unsustainable nature of Hawai'i's tourism industry (Terrell 2020). In the period of uncertainty that COVID-19 has produced, Hawai'i's break from mass tourism could represent an incredible opportunity for Hawai'i to reexamine the current tourism offerings and establish a new approach to support long-term sustainability for the industry.

As the Hawai'i Tourism Authority's stated mission is "to strategically manage Hawai'i tourism in a sustainable manner that is consistent with economic goals, cultural values, preservation of natural resources, community desires and visitor industry needs", being cognizant of the perceptions, attitudes, and behaviors of both tourists and the local population is essential (HTA 2019, p. 2). For example, Styliadis et al. (2014) presented the social exchange theory (SET), which demonstrated the expected benefits or costs in the economic, social, and environmental spheres between residents and the tourism industry. Brunt and Courtney (1999) outlined the key social/cultural impacts that can be attributed to many destinations undergoing redevelopment or new development, which can be beneficial, as it allows residents to participate in the management, design, control, and decision making regarding their community and quality of life. Finally, with the current generational traveler looking for cultural/activity-based experiences, thoughtful consideration of the cultural exchange process between visitors and the resident population, through the sharing of cultural attractions and artifacts, is crucial, as it can either preserve or dilute the host culture. The effective management of cultural tourism helps to protect host cultures from masses of insensitive people who might trivialize the unique aspects of the community (Agrusa et al. 2003).

While there was tourism in Hawai'i prior to 1959, it was not until after statehood and the introduction of jet travel between Hawai'i and the continental U.S. that the destination started seeing significant increases in tourism (Mak 2015). In the years that followed, the increasing pressure to attract tourists to Hawai'i led to destination management and marketing tactics that prioritized economic value and conformity to the current tastes of visitors rather than connecting tourism practices to the local culture, resulting in the distortion, degradation, and commodification of Hawaiian culture (Agrusa et al. 2010). Partially inspired by the civil rights and indigenous social justice movements of the 1960s,

the Hawaiian community experienced a second cultural renaissance in the late 1960s and 1970s, which led to the renewed examination of traditional Hawaiian arts and culture (Hawaiian Renaissance 2009). This social movement eventually led to the deeper evaluation of tourism-centric development and the role that culture should play in the tourism industry of Hawai'i.

As described by Agrusa et al. (2003), the objective of true cultural tourism is to engage tourists, while also accurately informing them. According to Williams and Gonzalez (2017), "tourism in Hawai'i has relied on Native Hawaiian culture to carve out its unique niche" (p. 672); the role of tourism is critically analyzed in the structure of colonialism, and it is argued that "if the indigenous people of Hawai'i—on whom its tourism industry heavily relies for material, brand image and symbolic labor—continue to be relegated as hosts without a move toward reparation, tourism will remain socially unsustainable" (Williams and Gonzalez 2017, p. 680). Hawai'i's cultural attractions draw visitors who want to experience activities that reflect their image of the Hawaiian culture. In order to accurately inform visitors, Native Hawaiians and the local population should be involved in the planning, development, and delivery of cultural artifacts implementing a bottom-up approach to tourism development (Chiabai et al. 2013). As highlighted in the Hawai'i Tourism Authority's 2018 Resident Sentiment Report, while residents are aware of the economic benefits of tourism, they are increasingly looking for benefits beyond economic impact (Hawai'i Tourism Authority 2019); key recommendations to support resident sentiment towards tourism emphasized presenting Native Hawaiian culture in a more authentic manner; being dedicated to preserving Native Hawaiian culture and language, and sustaining Hawai'i's natural resources, parks, and cultural sites, as well as increasing the presence of resident voices in the tourism development process (Hawai'i Tourism Authority 2019). In restoring cultural control to the indigenous people of Hawai'i and the local population, visitors would be provided with a more authentic experience of the host culture, and the local resident population's perceptions of tourism could be positively impacted.

Currently, the contiguous United States is the largest source market for visitors to Hawai'i, as measured in terms of visitor spending, visitor days, and overall visitor arrivals (Hawai'i Tourism Authority 2019). As a report from Tourism Economics, in partnership with the International Air Transport Association (IATA), anticipates domestic passenger demand to recover from the COVID-19 crisis ahead of international passenger demand (Air Passenger Forecasts: Potential Paths for Recovery into the Medium-and Long-run Rep 2020, p. 14), a greater understanding of the motivations and preferences of the domestic U.S. tourist market could also help the State of Hawai'i to better plan and manage sustainable tourism practices that prioritize the preservation and cultivation of Native Hawaiian culture.

### 3. Research Questions

The purpose of this study is to examine the trend towards an "authentic" and sustainable tourism experience, and to evaluate whether there is a U.S. visitor demand and willingness to pay for a deeper integration and representation of Hawaiian culture in the tourism offerings of Hawai'i, along with whether these offerings can be financially sustainable. Based on the review of existing literature, the contingent valuation method (CVM) was adopted to quantify the willingness of tourists to Hawaii to pay (WTP) more by in order to experience a more "authentic Hawaiian cultural experience" as well as "sustainable experiences." Contingent valuation is a stated preference (survey) method in which respondents are asked to state their preferences in hypothetical or contingent markets, allowing analysts to estimate demands for goods or services that are not traded in markets (Markandya and Ortiz 2011). Specifically, the following research questions were examined:

**RQ1:** Are visitors from the continental U.S. interested in Hawaiian Culture?



**RQ2:** Are visitors from the continental U.S. interested in tourism experiences designed and/or facilitated by Native Hawaiians?

**RQ3:** Are U.S. visitors willing to pay more to support culturally respectful tourism experiences in Hawai'i?

**RQ4:** Are U.S. visitors willing to pay more to support sustainable tourism experiences in Hawai'i?

#### 4. Methodology

In order to examine the perceptions and expectations of U.S. visitors to Hawai'i, a self-administered questionnaire was developed and distributed following a thorough review of previous literature. Based on the needs of this research study, the survey questionnaire method was chosen, as it allows researchers to collect data from large samples in a standardized manner. In order to ensure that the questions were appropriate, the survey was designed with input from researchers with expertise in the area of tourism, as well as researchers with expertise in the area of Hawaiian culture.

##### 4.1. Questionnaire Design

The contingent valuation survey comprises a questionnaire. The objective of this research questionnaire was to explore some of the attitudinal and behavioral characteristics of U.S. visitors to Hawai'i, as well as to specifically examine their perceptions of Hawaiian culture in the tourist experience, and their willingness to pay for such an experience. Qualifying criteria were included to confirm that respondents met the target specification—in this case, persons who identify as current citizens of the United States, are over 18 years old, and have taken vacations by airplane in the past three years. In reference to the survey instrument itself, the 28 questions were divided into 5 different sections. A consent response was required before participants could continue with the survey. All questions except for one incorporated closed-ended responses to drive statistical analysis, while the open-ended question selected was included so that participants could share deeper insights into what would increase their interest in Hawaii as a travel destination.

The purpose of the first set of questions was to establish U.S. visitors' background travel information. The next set of questions was designed to explore the destination image and perceptions of U.S. visitors to Hawai'i. The third section consisted of questions that asked respondents to rate their agreement with statements regarding their own knowledge and interest in Hawaiian culture on a five-point scale. The fourth set of questions was designed to assess U.S. visitors' willingness to pay (WTP) extra for cultural and/or sustainable tourism experiences.

A payment ladder design was adopted for the latter section (Yeo 2003), in which respondents were presented with a series of monetary value percentages ranging from "up to 5% more" to "75% or more", and were asked for their maximum WTP within this range. The final set of questions consisted of demographic questions included to obtain background information on the target group.

##### 4.2. Sampling Size and Method

This study used a random sampling approach. The online research company Momentive (formerly Survey Monkey), alongside MTurk, was utilized to build and distribute the survey. Since the outbreak of the coronavirus pandemic, university research committees have strongly urged research faculty to minimize face-to-face survey data collection. According to Molnar (2019), the use of online data collection companies has become very popular among academic researchers—who design non-interactive online experiments, and has several advantages over platforms specifically designed for experiments, is completely web-based, and offers a more intuitive and streamlined interface. Therefore, an online survey platform is able to manage the data collection easily, and the overall survey responses are considered to be valid and reliable resources. Momentive was provided criteria by

which to survey adult residents in the continental United States who had traveled on an airplane for vacation at least once in the last year.

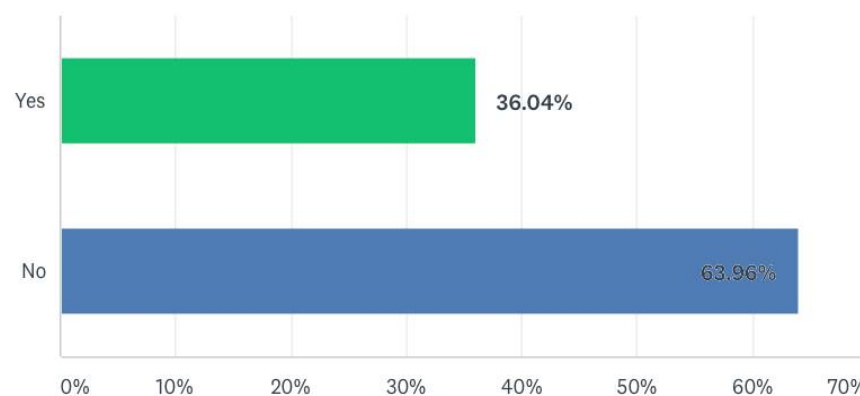
The online platform allowed a diverse sample to be collected while ensuring the safety of the sample group during the COVID-19 pandemic. The data for this research were collected from U.S. residents who were older than 18 years old. A total of 455 survey responses were collected for this study. The surveys included questions such as “What are the top 3 images or characteristics that come to mind when you think of Hawai’i as a vacation destination?”; “If/when visiting Hawai’i, how important is it for you to understand and respect Hawaiian culture?”; and “As a tourist to Hawai’i, would you be willing to pay more to support sustainable and cultural tourism in Hawai’i?”. A 5-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (5), was used to measure responses to questions 9–13. Data were analyzed using SPSS, running descriptive statistics and ANOVA testing at the 95% level of significance.

The purpose of this study was to explore the willingness of visitors from the continental U.S. to pay extra for activities that demonstrate authentic Hawaiian culture, and whether these activities can be economically sustainable, while also exploring whether there are opportunities to further integrate Hawaiian culture into the experience of U.S. visitors; the information provided by the randomly selected sampling method chosen for this study can provide significant insights.

Since the questionnaire participants were assured that their responses were anonymous and confidential, it is believed that the participants were more likely to answer honestly. A pre-test was completed to reduce the likelihood of some of the questions in the survey questionnaire being confusing to participants. Ultimately, the survey questions were verified in a pilot test to ensure that the questions chosen were appropriate and clearly understood, as the purpose of this research was to better understand tourists’ perceptions of Hawaiian culture, and whether these tourists were willing to spend enough money to keep cultural tourism in Hawaii sustainable.

The individuals involved in the pilot testing process were not included in the final survey results. Reviewing the survey instrument in the pilot test allowed the researchers to receive constructive feedback and adjust the instrument to reduce the potential for bias in the responses before conducting the larger sampling. Based on Qualtrics’ (2020) sample size calculator, given the population of U.S. citizens, the ideal sample size for this study was at least 385 participants (reflecting a 95% confidence level and a 5% margin of error). The final sample for this study included 455 usable survey responses.

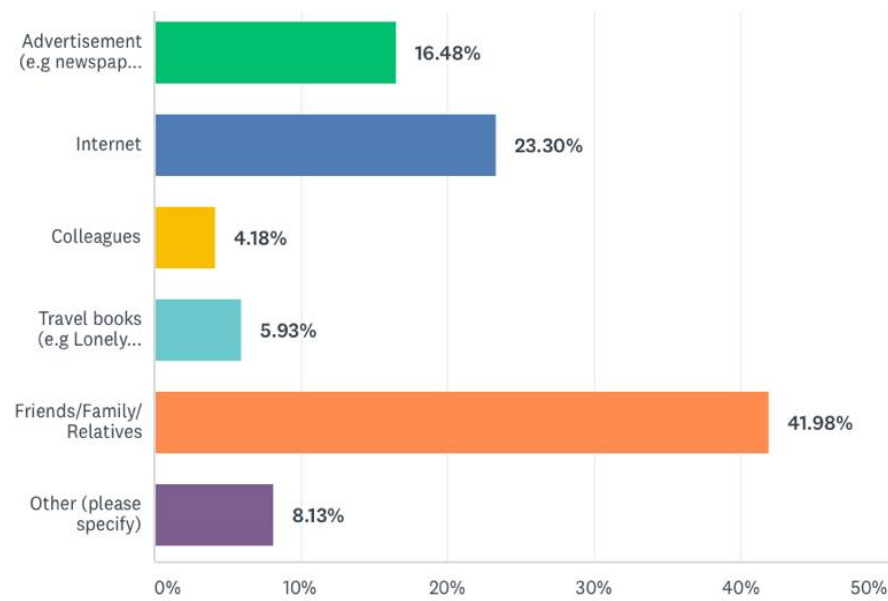
A total of 63.96% of the total survey respondents were first-time visitors and had never vacationed in Hawai’i, while 36.04% were return visitors who had previously visited the islands, see Figure 1.



**Figure 1.** Previous Hawai’i experience. Note: responses to the question “Have you ever vacationed in Hawai’i before?”.

For marketing purposes, it is crucial to be aware of the different avenues by which people can hear about a destination. Based on the survey results, word-of-mouth played a

significant role in how the survey participants heard about Hawai'i as a vacation destination, with 41.98% having heard about Hawai'i through friends/family/relatives, and 4.18% hearing about Hawai'i through colleagues. Many participants (23.30%) also seemed to rely on the Internet when searching for travel information about Hawai'i. Advertisements (including newspapers, magazines, movies, and TV programs) were another significant avenue by which survey participants learned about Hawai'i as a vacation destination (16.48%), see Figure 2.

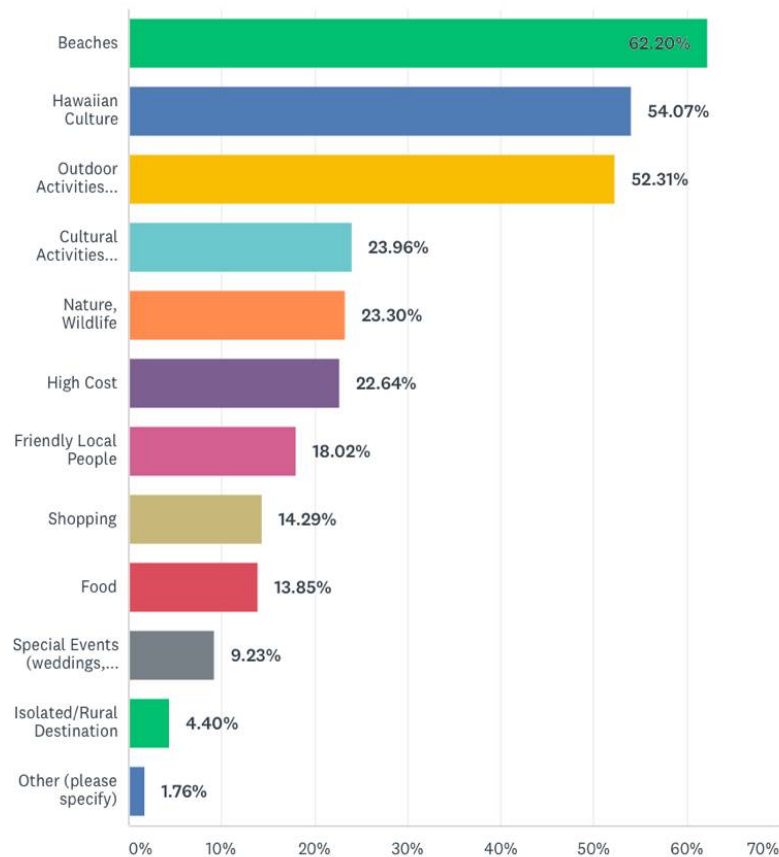


**Figure 2.** Channels of destination information. Note: responses to the question “Where did you hear about Hawai'i as a vacation destination?”.

The second section of the survey was designed to gather information on U.S. visitors' destination image of Hawai'i. Survey participants were asked to provide their top 3 images or characteristics associated with Hawai'i as a vacation destination, and to rate the importance of various characteristics in their perception of Hawai'i as a vacation destination. The provided list of images or characteristics for consideration included cultural activities, Hawaiian culture, outdoor activities, shopping, special events, friendly local people, isolated/rural destination, high cost, beaches, nature/wildlife, and food. More than 50% of survey respondents considered Hawai'i's beaches, Hawaiian culture, and Hawai'i's outdoor activities to be the top images or characteristics that came to mind when thinking of Hawai'i as a vacation destination. Of these, Hawai'i's beaches ranked highest, with 62.2% of respondents listing them as a top image or characteristic.

Hawai'i's beaches were also ranked highest in terms of importance to participants' perceptions of Hawai'i as a leisure destination. Interestingly, when asked to rate the importance of the provided images and characteristics in their perception of Hawai'i as a leisure destination, the top four images or characteristics (by mean sample response) included “beaches”, “food”, “Hawaiian culture”, and “friendly local people”. Overall, “shopping” and “special events” were ranked the lowest in importance. The survey data also indicated slight differences between participants who had previously travelled to Hawai'i and participants who had not travelled to Hawai'i. Although both groups ranked Hawai'i's “beaches” and “food” as “very Important” characteristics in their perception of Hawai'i as a leisure destination, “high cost” was the third highest rated characteristic in terms of importance in the perception of the survey participants who had not previously travelled to Hawai'i, while “nature/wildlife” was the third highest rated characteristic for participants who had been to Hawai'i before. The majority of the respondents (73.91%) who had previously travelled to Hawai'i considered Hawaiian culture to be “important”

or “very important”, and 72.85% of participants who were first-time visitors to Hawai‘i considered Hawaiian culture to be “important” or “very important”, see Figure 3.



**Figure 3.** U.S. participants’ top images or characteristics of Hawai‘i. Note: responses to the question “What are the top 3 images or characteristics that come to mind when you think of Hawai‘i as a vacation destination? (Select ONLY 3 by checking in the boxes below.)”.

The third section of the survey was designed to gather information on U.S. visitors’ knowledge of and interest in Hawaiian culture. Survey participants were asked to rate their current knowledge and interest in Hawaiian culture, as well as to indicate their level of agreement regarding the importance of interacting with local residents, experiencing Hawaiian culture, and understanding and respecting Hawaiian culture. The results suggest that most of the respondents self-rated their knowledge of Hawaiian culture as moderately low to average. When asked to self-rate their current interest in learning about Hawaiian culture, the mean response fell between average and moderately high. The mean sample response for U.S. visitors’ current interest in participating in tourism experiences designed and facilitated by Native Hawaiians also fell between average and moderately high. Over 50% of survey respondents indicated that it was important for them to understand and respect Hawaiian culture when visiting Hawai‘i. When comparing response percentages, overall, the level of interest in learning about Hawaiian culture and interest in activities designed and facilitated by Native Hawaiians was only slightly higher in participants who had previously visited Hawai‘i than in participants who were first-time visitors to Hawai‘i, see Table 1.

The data above demonstrates that there was a significant difference ( $p(0.018 < 0.05)$  SE.04940) in how female and male participants rated Hawaiian culture, with females rating Hawaiian culture higher than males. On a rating scale of 1–5, both genders “agreed” (avg = 3.9341) that Hawaiian culture was of importance. Furthermore, there were other differences found between female and male participants. Males rated “outdoor activities (hiking, water sports, etc.)” higher than women, with a significant difference ( $p(0.030 < 0.05)$

SE.04790). On a rating scale of 1–5, both genders “agreed” (avg = 3.7802) that outdoor activities were of importance in their perception of Hawai’i. Another significant difference ( $p$  (0.001 < 0.05) SE.05321) was found in how the different genders rated “isolated/rural destination”, with males rating it higher than females. On a rating scale of 1–5, both genders reported “neutral” (avg = 3.0945) for the importance of image of Hawai’i being an isolated/rural destination in their perceptions of Hawai’i as a vacation destination. There was no significant difference between genders for the other items.

**Table 1.** Importance of each item/characteristic pertaining to participants’ perceptions of Hawai’i.

		N	Mean	Std.	SE	F	Sig.
Nature, wildlife	Male	183	3.7213	1.1358	0.08396	0.069	0.793
	Female	272	3.75	1.14454	0.0694		
	Total	455	3.7385	1.13986	0.05344		
Beaches	Male	183	4.1311	1.07635	0.07957	0.379	0.538
	Female	272	4.1912	0.97961	0.0594		
	Total	455	4.167	1.01888	0.04777		
Hawaiian culture	Male	183	3.7923	1.059	0.07828	5.594	0.018
	Female	272	4.0294	1.04115	0.06313		
	Total	455	3.9341	1.05365	0.0494		
Shopping	Male	183	2.6066	1.30019	0.09611	0.97	0.325
	Female	272	2.7206	1.14738	0.06957		
	Total	455	2.6747	1.21105	0.05678		
Friendly local people	Male	183	3.9672	1.03723	0.07667	1.4	0.237
	Female	272	3.8493	1.04655	0.06346		
	Total	455	3.8967	1.04328	0.04891		
Special events (weddings, anniversaries, exhibitions, conferences)	Male	183	2.8033	1.24679	0.09217	3.052	0.081
	Female	272	2.5956	1.24123	0.07526		
	Total	455	2.6791	1.24627	0.05843		
Outdoor activities (hiking, water sports, etc.)	Male	183	3.9071	0.93592	0.06918	4.759	0.03
	Female	272	3.6949	1.06897	0.06482		
	Total	455	3.7802	1.02181	0.0479		
Cultural activities (museums, markets, crafts, festivals, etc.)	Male	183	3.6503	0.98231	0.07261	2.581	0.109
	Female	272	3.8015	0.98565	0.05976		
	Total	455	3.7407	0.98602	0.04623		
High cost	Male	183	3.8415	1.15883	0.08566	2.267	0.133
	Female	272	3.6728	1.18084	0.0716		
	Total	455	3.7407	1.17368	0.05502		
Isolated/rural destination	Male	183	3.3115	1.18888	0.08788	11.442	0.001
	Female	272	2.9485	1.07518	0.06519		
	Total	455	3.0945	1.13508	0.05321		
Food	Male	183	4.1858	0.88231	0.06522	3.502	0.062
	Female	272	4.0184	0.96986	0.05881		
	Total	455	4.0857	0.93824	0.04399		

Based on the survey results on the visitors’ knowledge in reference to Hawaiian culture, there was a significant difference ( $p$  (0.001 < 0.05) SE 0.04887) between those had traveled to Hawai’i previously and those who were first-time visitors to Hawai’i when it came to rating their own knowledge about Hawaiian culture. Those who had been to Hawai’i indicated a stronger knowledge about the culture. When it came to rating their interest in learning about Hawaiian culture and rating their interest in participating in tourism experiences designed and facilitated by Native Hawaiians, there were no significant differences found between those who had previously visited Hawai’i and those who had not ( $p$  (1.02 > 0.05) and  $p$  (0.296 > 0.05), respectively), see Table 2.

**Table 2.** Participants’ current knowledge of, and interest in, Hawaiian culture.

		N	Mean	Std.	SE	F	Sig.
How would you rate your current knowledge about Hawaiian culture?	Prior	164	2.9695	1.04161	0.08134	40.655	0.001
	New	291	2.3471	0.97547	0.05718		
	Total	455	2.5714	1.04252	0.04887		
How would you rate your current interest in learning about Hawaiian culture?	Prior	164	3.5671	0.97283	0.07597	2.685	0.102
	New	291	3.4158	0.92975	0.0545		
	Total	455	3.4703	0.94723	0.04441		
How would you rate your current interest in participating in tourism experiences designed and facilitated by Native Hawaiians?	Prior	164	3.7561	0.9853	0.07694	1.094	0.296
	New	291	3.6529	1.02376	0.06001		
	Total	455	3.6901	1.0102	0.04736		

Furthermore, Table 3 shows a significant difference ( $p$  (0.006 < 0.05) SE 0.04639) between genders when it comes to the perceived importance of experiencing Hawaiian culture during their stay in Hawai’i, with it being more important for women than for men to experience Hawaiian culture. On a rating scale of 1–5, both genders “agreed” (avg = 4.07) that experiencing Hawaiian culture during their stay was of importance. Furthermore, there was a significant difference, ( $p$  (0.015 < 0.05) SE 0.04559), between genders with regard to the perceived importance of understanding and respecting Hawaiian culture during their stay, with more females indicating that understanding and respecting Hawaiian culture is important. On a rating scale of 1–5, both genders “strongly agreed” 4.287 that understanding and respecting Hawaiian culture is important. Moreover, there was no significant difference ( $p$  (0.824 > 0.05) SE 0.05074), between the genders when it came to the perceived importance of interacting with locals during their stay.

As showcased in Table 4, there were also significant differences ( $p$  (0.007 < 0.05) SE 0.05074) between age groups when it came to being able to interact with local residents while on vacation; those over the age of 60 rated being able to interact higher than the younger generations (avg = 4.03). This might be related to the number of times the respondents had traveled to the islands.

**Table 3.** Participants’ perceptions of the importance of encounters with Hawaiian culture, by gender.

		N	Mean	Std.	SE	F	Sig.
If/when visiting Hawai’i, how important is it for you to interact with local residents while on vacation?	Male	183	3.6885	1.03575	0.07656	0.05	0.824
	Female	272	3.6654	1.11441	0.06757		
	Total	455	3.6747	1.08236	0.05074		
If/when visiting Hawai’i, how important is it for you to experience Hawaiian culture during your stay?	Male	183	3.918	1.03183	0.07628	7.569	0.006
	Female	272	4.1765	0.94796	0.05748		
	Total	455	4.0725	0.9896	0.04639		
If/when visiting Hawai’i, how important is it for you to understand and respect Hawaiian culture?	Male	183	4.153	1.04754	0.07744	5.956	0.015
	Female	272	4.3787	0.90915	0.05513		
	Total	455	4.2879	0.9724	0.04559		

Based on the survey results, there was found to be a significant difference ( $p$  (0.036 < 0.05) SE 0.04385) between genders in their agreement with the statement “The tourism industry must ensure quality tourism experiences for visitors”, with males rating it higher than females. On a rating scale of 1–5, both genders “agreed” (avg = 3.8769) that ensuring quality tourism experiences for visitors is of importance. Furthermore, men also rated the statement “It is the responsibility of tourism businesses to meet visitor needs”, higher than women ( $p$  (0.000 < 0.05) SE 0.04025). On a rating scale of 1–5, both genders “strongly agreed” (avg = 3.8286) that tourism businesses are responsible for meeting visitor needs. There was also found to be a significant gender difference ( $p$  (0.006 < 0.05) SE 0.04283) in the responses to the statement “It is the responsibility of tourism businesses to meet the

needs of the local community”, where males rated the statement higher than females. On a rating scale of 1–5, both genders “strongly agreed” (avg = 3.8945) that tourism businesses are responsible for meeting the needs of the local community.

**Table 4.** Participants’ perceptions of the importance of encounters with Hawaiian culture, by age.

		N	Mean	Std.	SE	F	Sig.
If/when visiting Hawai’i, how important is it for you to interact with local residents while on vacation?	18–29	127	3.4646	1.11836	0.09924	4.141	0.007
	30–44	124	3.6452	1.02959	0.09246		
	45–60	140	3.7286	1.04464	0.08829		
	>60	64	4.0313	1.11225	0.13903		
	Total	455	3.6747	1.08236	0.05074		
If/when visiting Hawai’i, how important is it for you to experience Hawaiian culture during your stay?	18–29	127	3.9213	1.06612	0.0946	2.17	0.091
	30–44	124	4.0484	0.87285	0.07838		
	45–60	140	4.1357	1.0051	0.08495		
	>60	64	4.2813	0.98349	0.12294		
	Total	455	4.0725	0.9896	0.04639		
If/when visiting Hawai’i, how important is it for you to understand and respect Hawaiian culture?	18–29	127	4.252	0.99178	0.08801	0.765	0.514
	30–44	124	4.2419	0.94886	0.08521		
	45–60	140	4.2857	1.01277	0.08559		
	>60	64	4.4531	0.88962	0.1112		
	Total	455	4.2879	0.9724	0.04559		

Moreover, as shown in Table 5, there were no significant differences ( $p$  (0.755 > 0.05) SE 0.04104) between the genders when it came to their agreement with the statement “Tourism must be developed with consideration of the natural and cultural environment”, nor were there any significant differences ( $p$  (0.775 > 0.05) SE 0.04330) between the genders when it came to their agreement with the statement “Tourism must contribute to the improvement of the local community”. On a rating scale of 1–5, both genders “agreed” (avg = 4.0396) that this would be of importance.

**Table 5.** Participants’ view of the responsibilities of the tourism industry, by gender.

		N	Mean	Std.	SE	F	Sig.
The tourism industry must ensure quality tourism experiences for visitors.	Male	183	3.9891	0.98332	0.07269	4.435	0.036
	Female	272	3.8015	0.89542	0.05429		
	Total	455	3.8769	0.93525	0.04385		
It is the responsibility of tourism businesses to meet visitor needs.	Male	183	4.0164	0.84174	0.06222	15.107	0
	Female	272	3.7022	0.848	0.05142		
	Total	455	3.8286	0.85853	0.04025		
It is the responsibility of tourism businesses to meet the needs of the local community.	Male	183	4.0383	0.85399	0.06313	7.69	0.006
	Female	272	3.7978	0.94083	0.05705		
	Total	455	3.8945	0.9136	0.04283		
Tourism must be developed with consideration of the natural and cultural environment.	Male	183	4.2459	0.86423	0.06389	0.097	0.755
	Female	272	4.2721	0.88419	0.05361		
	Total	455	4.2615	0.87536	0.04104		
Tourism must contribute to the improvement of the local community.	Male	183	4.0546	0.9985	0.07381	0.081	0.775
	Female	272	4.0294	0.87137	0.05283		
	Total	455	4.0396	0.92361	0.0433		

Likewise, as shown in Table 6, there were significant differences ( $p$  (0.000 < 0.05) SE 0.04385) between the various ages when it came to their agreement with the statement “The tourism industry must ensure quality tourism experiences for visitors” as well as significant differences ( $p$  (0.002 < 0.05) SE 0.04025) between the ages when it came to their agreement with the statement “It is the responsibility of tourism businesses to meet visitor

needs". Lastly, there were significant differences ( $p$  (0.012 < 0.05) SE 0.04330) between the age groups when it came to the statement "Tourism must be developed with consideration of the natural and cultural environment". In all instances, those over the age of 60 rated the statements higher, except for the last question, where those aged 30–44 rated it higher.

**Table 6.** Participants' view of the responsibilities of the tourism industry, by age.

		N	Mean	Std.	SE	F	Sig.
The tourism industry must ensure quality tourism experiences for visitors.	18–29	127	3.5512	0.98165	0.08711	10.776	0.000
	30–44	124	3.8952	0.91792	0.08243		
	45–60	140	3.9571	0.8471	0.07159		
	>60	64	4.3125	0.85217	0.10652		
	Total	455	3.8769	0.93525	0.04385		
It is the responsibility of tourism businesses to meet visitor needs.	18–29	127	3.622	0.92521	0.0821	5.001	0.002
	30–44	124	3.9113	0.8066	0.07243		
	45–60	140	3.8214	0.82469	0.0697		
	>60	64	4.0938	0.81101	0.10138		
	Total	455	3.8286	0.85853	0.04025		
It is the responsibility of tourism businesses to meet the needs of the local community.	18–29	127	3.9213	0.91379	0.08109	1.907	0.128
	30–44	124	3.9355	0.92606	0.08316		
	45–60	140	3.7571	0.8722	0.07371		
	>60	64	4.0625	0.95743	0.11968		
	Total	455	3.8945	0.9136	0.04283		
Tourism must be developed with consideration of the natural and cultural environment.	18–29	127	3.8976	1.03766	0.09208	3.694	0.012
	30–44	124	4.2258	0.84429	0.07582		
	45–60	140	3.9429	0.8796	0.07434		
	>60	64	4.1719	0.86474	0.10809		
	Total	455	4.0396	0.92361	0.0433		
Tourism must contribute to the improvement of the local community.	18–29	127	4.2047	0.92872	0.08241	1.336	0.262
	30–44	124	4.3145	0.92276	0.08287		
	45–60	140	4.1929	0.83878	0.07089		
	>60	64	4.4219	0.7304	0.0913		
	Total	455	4.2615	0.87536	0.04104		

The fourth section of the survey was designed to assess U.S. visitors' overall willingness to engage with, and pay extra for, culturally respectful tourism and sustainable tourism. According to Table 7, most of the respondents agreed with statements suggesting that the tourism industry should ensure quality tourism experiences, meet local community and visitor needs, contribute to the improvement of the local community, and be developed with consideration of the natural and cultural environment. Most participants in this survey considered themselves to be culturally sensitive and environmentally responsible, as well as indicating that they consider the impact of their actions when making vacation decisions. The results of this survey also suggest that it is important for most U.S. visitors that the tourism industry supports culturally respectful and environmentally sustainable tourism practices.

More specifically, the survey results indicated that there a significant difference ( $p$  (0.002 < 0.05) SE 0.04570) between genders in their agreement with the statement "When choosing a vacation destination, it is important to me that the tourism industry supports environmentally sustainable tourism practices", with females rating this statement higher than males; on a rating scale of 1–5, women "agreed" and men remained "neutral" (avg = 3.7978). There was also a significant difference ( $p$  (0.043 < 0.05) SE 0.04235) between genders in their agreement with the statement "When choosing a vacation destination, it is important to me that the tourism industry supports culturally respectful tourism practices", with females rating it higher than males; on a rating scale of 1–5, women "agreed" and men remained "neutral" (avg = 4.0879) to the statement. On average, both genders tended to agree with statements describing themselves as responsible, culturally sensitive, or consid-



erate of the potential impacts of their actions when making many of their vacation decisions. There were no significant differences found between genders for those statements.

**Table 7.** Participants’ view of their responsibilities as leisure travelers, by gender.

		N	Mean	Std.	SE	F	Sig.
I would describe myself as environmentally responsible.	Male	183	3.7923	0.88984	0.06578	0.085	0.771
	Female	272	3.7684	0.83822	0.05082		
	Total	455	3.778	0.85846	0.04025		
I would describe myself as culturally sensitive.	Male	183	3.8743	0.9021	0.06669	0.131	0.717
	Female	272	3.9044	0.84503	0.05124		
	Total	455	3.8923	0.86758	0.04067		
I consider the potential impacts of my actions when making many of my vacation decisions.	Male	183	3.6995	0.94482	0.06984	1.395	0.238
	Female	272	3.8015	0.87457	0.05303		
	Total	455	3.7604	0.90384	0.04237		
When choosing a vacation destination, it is important to me that the tourism industry supports environmentally sustainable tourism practices.	Male	183	3.623	1.06127	0.07845	10.046	0.002
	Female	272	3.9154	0.89495	0.05426		
	Total	455	3.7978	0.97479	0.0457		
When choosing a vacation destination, it is important to me that the tourism industry supports culturally respectful tourism practices.	Male	183	3.9836	0.92864	0.06865	4.109	0.043
	Female	272	4.1581	0.88071	0.0534		
	Total	455	4.0879	0.90335	0.04235		

As Table 8 demonstrates by comparing the age groups, there were significant differences ( $p$  (0.012 < 0.05) SE 0.04025) in how the participants described themselves as environmentally responsible. Those over the age of 60 rated themselves highest (avg = 4.0625) on a scale of 1–5.

**Table 8.** Participants’ view of their responsibilities as leisure travelers, by age.

		N	Mean	Std.	SE	F	Sig.
I would describe myself as environmentally responsible.	18–29	127	3.6299	0.9743	0.08645	3.689	0.012
	30–44	124	3.7661	0.85643	0.07691		
	45–60	140	3.7929	0.80015	0.06762		
	>60	64	4.0625	0.66368	0.08296		
	Total	455	3.778	0.85846	0.04025		
I would describe myself as culturally sensitive.	18–29	127	3.8346	0.90645	0.08043	1.244	0.293
	30–44	124	3.9677	0.80583	0.07237		
	45–60	140	3.8214	0.89978	0.07605		
	>60	64	4.0156	0.82601	0.10325		
	Total	455	3.8923	0.86758	0.04067		
I consider the potential impacts of my actions when making many of my vacation decisions.	18–29	127	3.7244	0.91441	0.08114	0.383	0.766
	30–44	124	3.8226	0.91107	0.08182		
	45–60	140	3.7214	0.89818	0.07591		
	>60	64	3.7969	0.89407	0.11176		
	Total	455	3.7604	0.90384	0.04237		
When choosing a vacation destination, it is important to me that the tourism industry supports environmentally sustainable tourism practices.	18–29	127	3.7795	1.01507	0.09007	1.59	0.191
	30–44	124	3.8871	0.82845	0.0744		
	45–60	140	3.6714	0.98509	0.08326		
	>60	64	3.9375	1.11091	0.13886		
	Total	455	3.7978	0.97479	0.0457		
When choosing a vacation destination, it is important to me that the tourism industry supports culturally respectful tourism practices.	18–29	127	4.0315	0.99153	0.08798	0.419	0.74
	30–44	124	4.121	0.88889	0.07982		
	45–60	140	4.0714	0.86201	0.07285		
	>60	64	4.1719	0.84618	0.10577		
	Total	455	4.0879	0.90335	0.04235		

Moreover, there were significant differences ( $p$  (0.012 < 0.05) SE 0.02139) between the age groups when it came to their agreement with the question “As a tourist, would you be willing to pay more to support sustainable tourism in Hawai’i?”, where those aged 45–60 were willing to pay the most. The average was reported to be (avg = 1.3643), see Table 9).

**Table 9.** Participants’ willingness to pay, by age.

		N	Mean	Std.	SE	F	Sig.
As a tourist, would you be willing to pay more to support tourism experiences that are respectful of the Native Hawaiian culture?	18–29	127	1.3228	0.46941	0.04165	3.678	0.012
	30–44	124	1.1855	0.39027	0.03505		
	45–60	140	1.3643	0.48296	0.04082		
	>60	64	1.2969	0.46049	0.05756		
	Total	455	1.2945	0.45632	0.02139		
As a tourist, would you be willing to pay more to support sustainable tourism in Hawai’i?As a tourist, would you be willing to pay more to support sustainable tourism in Hawai’i?	18–29	127	1.2441	0.43125	0.03827	0.876	0.454
	30–44	124	1.2016	0.40283	0.03618		
	45–60	140	1.2786	0.44991	0.03802		
	>60	64	1.2031	0.40551	0.05069		
	Total	455	1.2374	0.42593	0.01997		
As a tourist, would you be willing to pay more to support locally grown food (produce, meat, and fish) in order to support Hawaii’s farming industry?	18–29	127	1.2205	0.41621	0.03693	2.596	0.052
	30–44	124	1.1452	0.35369	0.03176		
	45–60	140	1.2857	0.45338	0.03832		
	>60	64	1.2031	0.40551	0.05069		
	Total	455	1.2176	0.41306	0.01936		

Furthermore, as shown in Table 10, there were significant differences ( $p$  (0.018 < 0.05) SE 2.445) between the ethnicities when it came to their agreement with the statement “As a tourist, would you be willing to pay more to support locally grown food (produce, meat, and fish) in order to support Hawaii’s farming industry?”; those marked as “Other”, followed by “Black or African American” were willing to pay the most. The average was reported to be (avg = 1.7000).

**Table 10.** Participants’ willingness to pay, by ethnicity.

		N	Mean	Std.	SE	F	Sig.
As a tourist, would you be willing to pay more to support tourism experiences that are respectful of the Native Hawaiian culture?	Asian or Asian American	65	1.2615	0.44289	0.05493	0.696	0.676
	Native Hawaiian or other Pacific Islander	8	1.125	0.35355	0.125		
	Black or African American	34	1.2647	0.44781	0.0768		
	Hispanic or Latino	55	1.1636	0.37335	0.05034		
	American Indian or Alaska Native	2	1	0	0		
	White or Caucasian	270	1.2444	0.43056	0.0262		
	Multiracial or Biracial	11	1.1818	0.40452	0.12197		
	Other	10	1.4	0.5164	0.1633		
Total	455	1.2374	0.42593	0.01997			
As a tourist, would you be willing to pay more to support sustainable tourism in Hawai’i?	Asian or Asian American	65	1.2	0.40311	0.05	1.185	0.310
	Native Hawaiian or other Pacific Islander	8	1.125	0.35355	0.125		
	Black or African American	34	1.2647	0.44781	0.0768		
	Hispanic or Latino	55	1.2727	0.44947	0.06061		
	American Indian or Alaska Native	2	1	0	0		
	White or Caucasian	270	1.3222	0.4682	0.02849		
	Multiracial or Biracial	11	1.3636	0.50452	0.15212		
	Other	10	1.5	0.52705	0.16667		
Total	455	1.2945	0.45632	0.02139			

Table 10. Cont.

		N	Mean	Std.	SE	F	Sig.
As a tourist, would you be willing to pay more to support locally grown food (produce, meat, and fish) in order to support Hawaii’s farming industry?	Asian or Asian American	65	1.1846	0.391	0.0485	2.445	0.018
	Native Hawaiian or other Pacific Islander	8	1.125	0.35355	0.125		
	Black or African American	34	1.2941	0.4625	0.07932		
	Hispanic or Latino	55	1.1818	0.38925	0.05249		
	American Indian or Alaska Native	2	1	0	0		
	White or Caucasian	270	1.2111	0.40885	0.02488		
	Multiracial or Biracial	11	1.1818	0.40452	0.12197		
	Other	10	1.7	0.48305	0.15275		
	Total	455	1.2176	0.41306	0.01936		

When it came to supporting tourism experiences that are respectful of the Native Hawaiian culture, 76.26% of participants also stated that they would be willing to pay more, see Figure 4.

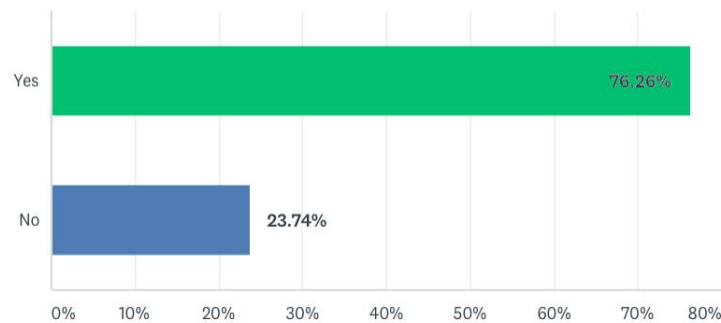


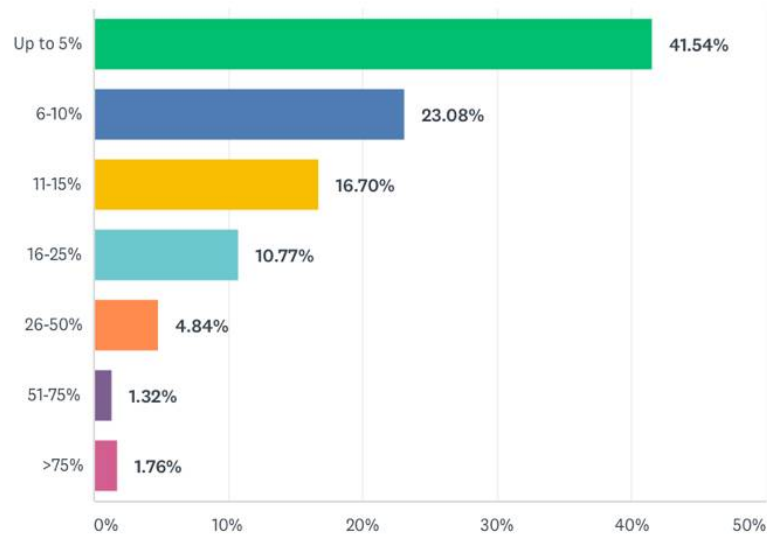
Figure 4. U.S. participants’ willingness to pay—experiences that are respectful of Hawaiian culture. Note: responses to the question “As a tourist, would you be willing to pay more to support tourism experiences that are respectful of the Native Hawaiian culture?”.

According to Figure 5, more than 3 out of 4 (76.26%) of the respondents answered that “yes”, they would be willing to pay more to support tourism experiences that are respectful of the Native Hawaiian culture, with close to 60 % (58.49%) of the participants being willing to increase their typical travel expenditures by 6% or more in order to support tourism experiences that respect the Native Hawaiian culture, while over 35% (35.39%) of the participants were willing to pay more than 10% extra. In addition, close to 20% (18.69%) of the U.S. participants were willing to pay an additional 16% or more for experiences that are respectful of Hawaiian culture.

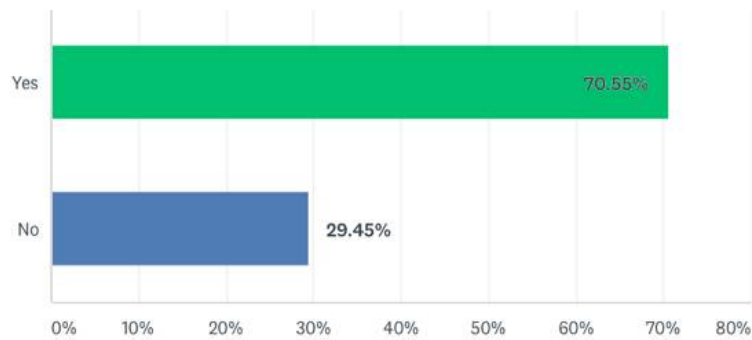
Over 70% of the U.S. visitors sampled indicated that they would be willing to pay more to support tourism experiences that were sustainable. This represents an increase of 38% from a study conducted in 2020 by MMGY Global (Leposa 2020). The younger generation is pushing more and more towards sustainability, see Figure 6.

While the majority of the tourists (65.71%) stated that they would pay in excess of 6% more, approximately one-third (32.53%) stated that they would pay over 10% more for activities or experiences to support sustainable tourism in Hawai’i.

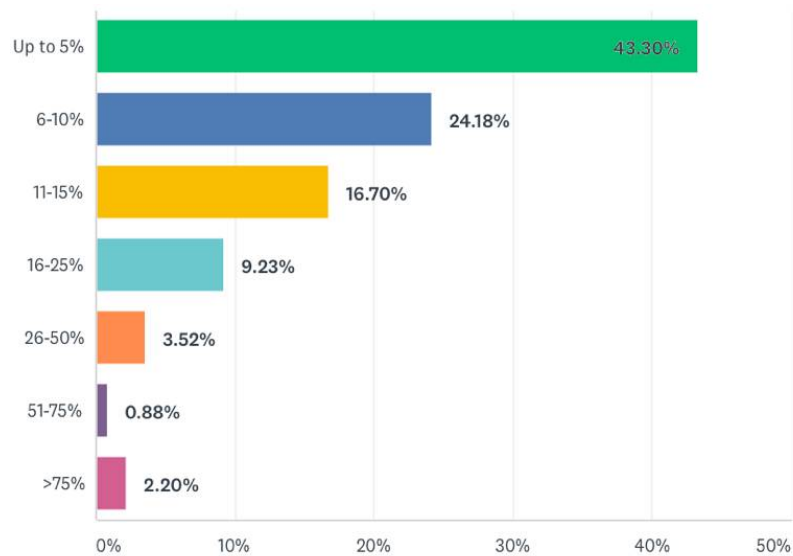
Of the 70% of the U.S. visitors sampled who were willing to increase their typical travel expenditure for sustainable tourism and to support tourism practices that respect Native Hawaiian culture, the mean was 6–10%, see Figure 7.



**Figure 5.** Amount U.S. participants are willing to pay—experiences that are respectful of Hawaiian culture. Note: responses to the question “If you responded ‘Yes’ to the previous question, how much would you be willing to increase your typical travel expenditures to support tourism experiences that respect the Native Hawaiian culture?”.

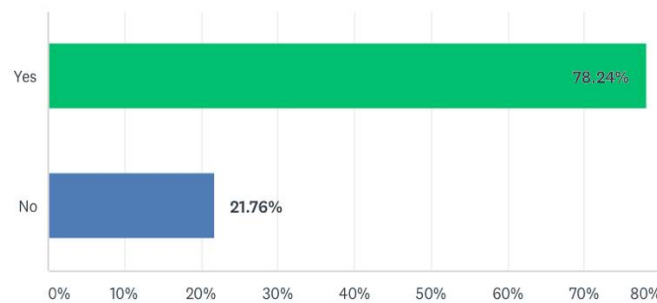


**Figure 6.** U.S. participants’ willingness to pay—sustainable tourism. Note: responses to the question “As a tourist, would you be willing to pay more to support sustainable tourism in Hawai’i?”.



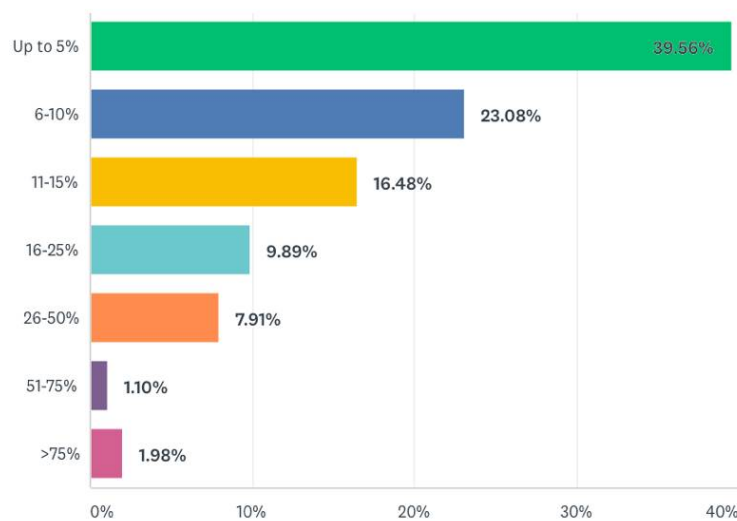
**Figure 7.** Amount U.S. participants are willing to pay—sustainable tourism. Note: responses to the question “If you responded ‘Yes’ to the previous question, how much would you be willing to increase your typical travel expenditure to support sustainable tourism in Hawai’i?”.

A total of 78.24% of the respondents indicated that they would be willing to support locally grown food to support Hawai'i's farming industry, see Figure 8.



**Figure 8.** U.S. participants' willingness to pay—support locally sourced food/farming industry. Note: responses to the question "As a tourist, would you be willing to pay more to support locally grown food (produce, meat, and fish) in order to support Hawai'i's farming industry?".

Close to 80% (78.24%) of respondents stated that they were willing to pay more to support locally grown food (produce, meat, and fish) in order to support Hawai'i's farming industry". More than 20% (20.88%) of survey participants indicated that they would be willing to increase their restaurant/hotel food bill by 16% or more, while over 37% of survey participants indicated that they would be willing to increase their bill by 11% or more, in order to support Hawai'i's local farming industry. This provides quantifiable evidence that visitors to Hawaii are willing to increase their restaurant bills/hotel food expenditure in order to support Hawai'i's local farming industry, see Figure 9.



**Figure 9.** Amount U.S. participants are willing to pay—support locally sourced food/farming industry. Note: responses to the question "If you responded 'Yes' to the previous question, how much would you be willing to increase your restaurant bill/hotel food expenditure in order to support Hawai'i's local farming industry?".

The last portion of the questionnaire measured the demographic characteristics of the survey respondents using ordinal scale variables. The descriptive analysis includes the values shown in Table 11 for the mean, median, mode, standard deviation, skewness, and kurtosis. SPSS was used to calculate the values. Where the majority of the respondents were between 30 and 44 years of age, the standard deviation indicates a small intermediate distribution between the means, showing that the respondents agree. The data were evaluated for normality and found to be within  $\pm 1.00$  and normally distributed for age (0.134), gender (−0.400), and region (−0.285). The dataset for ethnicity (−1.045) was

skewed to the left, while the data for relationship status (1.900) and number of children (1.382) were skewed to the right. The kurtosis indicates the extent to which a distribution departs from the bell-shaped or normal curve. The values for age (−1.160), gender (−1.848), and region (−1.176) were found to be flatter than normal, while the value for number of children (3.258) was peakier than normal.

Table 11. Descriptive analysis.

	Age	Gender	Region	Ethnicity	Relationship Status	Number of Children
N	455	455	445	455	455	455
Mean	3.3099	1.5978	5.2315	4.7912	2.0286	1.4462
Std. Error of Mean	0.04817	0.02301	0.12512	0.08903	0.04437	0.02734
Median	3	2	6	6	2	1
Mode	4	2	7	6	2	1
Std. Deviation	1.02749	0.49088	2.63943	1.89897	0.94639	0.58323
Skewness	0.134	−0.4	−0.285	−1.045	1.9	1.382
Std. Error of Skewness	0.114	0.114	0.116	0.114	0.114	0.114
Kurtosis	−1.16	−1.848	−1.176	−0.383	4.853	3.258
Std. Error of Kurtosis	0.228	0.228	0.231	0.228	0.228	0.228

Over half (59.78%) of the total sample respondents identified as female, whereas 40.22% were male. Of the U.S. citizens surveyed, 28% were between the ages of 18 and 29, 27% were between the ages of 30 and 44, 31% were between the ages of 45 and 60, and 14% were over 60 years of age. More than 50% of the survey respondents indicated that they had a college degree, and 21.54% indicated that they had taken some college classes. Most of the survey respondents identified as ethnically White or Caucasian (59.34%), were married (63.74%), and had children (58.46%). Most survey participants indicated that they were employed full-time (49.89%), followed by 11.87% who indicated that they were employed part-time and 9.45% who were retired.

The open-ended question “What comes to mind when thinking of Hawai’i as a travel destination?” revealed that cost was a significant concern for many survey participants. A majority of the participants indicated that expense was a major concern when planning a vacation in Hawai’i, but had a desire to go if money was no object. Despite the concerns over cost, many participants had a positive perception of Hawai’i as a tourist destination due to the destination’s family-friendliness, beautiful beaches, good food, culture, and nature.

A word cloud, also known as a tag cloud or text mining, is a visual representation of text data in the form of tags, which are usually single words whose importance is indicated by their size and color, as exemplified in Figure 10. As unstructured data in the form of text continue to expand at an unparalleled rate, particularly in the realm of social media, there is an increasing need to assess the large amounts of text generated by these platforms. Applying the responses from the open-ended survey question, one can see clearly what comes to mind for the respondents when thinking of Hawaii. One can then easily see themes of the respondents’ thoughts, which is useful, as it helps to showcase what is important to visitors and, thus, to continue to attract visitors to the islands, see Figure 10.



Figure 10. Word cloud of responses to the open-ended question.

Some of the comments mentioned were:

- “Flowers. Beauty. People of the island.”
- “Have been there 3–4 times and enjoyed it over the years. Great place for families to enjoy.”
- “Hawaii is awesome as is.”
- “Unique areas, something that isn’t in most places.”
- “Safe travel.”
- “Opportunities to learn about local culture.”
- “Less expensive airline travel I am personally interested in saving and protecting the whales. I am fascinated with Hawaiian culture and folklore.”
- “I have an interest in the forest and wildlife conservation on the islands. I also have an interest in the conservation of the marine life around the island.”

5. Discussion

The purpose of this study was, ultimately, to examine the trend towards an “authentic Hawaiian culture” tourism experience, and to evaluate whether there is a demand from U.S. visitors for a deeper integration and representation of Hawaiian culture in tourism offerings, along with tourists’ willingness to pay (WTP) for the experience. To investigate these questions, a contingent valuation survey instrument was distributed to U.S. citizens via Momentive, designed around four specific research questions: “Are continental U.S. visitors interested in Hawaiian Culture?”; “Are visitors from the continental U.S. interested in tourism experiences designed and/or facilitated by Native Hawaiians?”; “Are U.S. visitors willing to increase their expenditures (WTP) to support culturally respectful tourism experiences in Hawai’i?”; and “Are U.S. visitors willing to increase their expenditures (WTP) to support sustainable tourism experiences in Hawai’i?”.

Revisiting these research questions, the following can be concluded based on the results of the online survey:

RQ 1: Are continental U.S. visitors interested in Hawaiian Culture? In line with recent cultural tourism literature, the survey data suggest significant visitor interest in Hawaiian culture during their visit. Based on the survey results, participants seemed to

have a positive outlook on Hawaiian culture, with a majority of respondents indicating that Hawaiian culture is a significant part of their image of Hawai'i, is important to their perception of Hawai'i as a vacation destination and is an important aspect of their Hawai'i experience. Additionally, almost half of the survey respondents indicated an interest in learning about Hawaiian culture (mean = 3.4703).

RQ 2: Are visitors from the continental U.S. interested in tourism experiences designed and/or facilitated by Native Hawaiians? When asked directly about their interest in tourism experiences designed and/or facilitated by Native Hawaiians, most survey participants indicated that it was important to participate in such experiences (mean = 3.6901). Over half of the survey respondents reported that it was also important to interact with local residents while on vacation (mean = 3.6747). These results suggest that there is a considerable interest from the U.S. citizens surveyed in tourism experiences designed and/or facilitated by Native Hawaiians.

RQ 3: Are U.S. visitors willing to pay (WTP) more to support culturally respectful tourism experiences in Hawai'i? There was significant evidence to suggest that U.S. visitors are willing to pay (WTP) more to support culturally respectful tourism experiences in Hawai'i. When asked whether they were willing to pay more to support tourism experiences that were respectful of Hawaiian culture, a strong majority (over 76%) of the survey respondents indicated "yes". Furthermore, over 35% (35.39%) of the participants were willing to pay more than 10% extra. In addition, close to 20% (18.69%) of the U.S. participants were willing to pay an additional 16 % or more for experiences that are respectful of Hawaiian culture.

RQ 4: Are U.S. visitors willing to pay (WTP) more to support sustainable tourism experiences in Hawai'i? There was significant evidence to suggest that U.S. visitors are willing to pay more to support sustainable tourism in Hawai'i. When asked whether they were willing to pay more to support sustainable tourism in Hawai'i, over 70% of survey respondents answered "yes". While most of the tourists (65.71%) stated they would pay in excess of 6% more, approximately one-third (32.53%) stated they would pay over 10% more for activities or experiences to support sustainable tourism in Hawai'i. In addition, over 78% of the survey participants also indicated that they were willing to pay more for locally grown food to support Hawaii's farming industry; while the highest percentage of survey participants suggested that they were willing to pay up to 5% more, the mean of the data responses fell in the 6–10% range; this would result in a lower carbon footprint, being more sustainable because of the shipping distance to Hawaii being no less than 3500 miles from the nearest land mass.

## 6. Conclusions and Recommendations

The findings of this study fill the gap in the tourism research literature by providing quantitative evidence of U.S. visitors' interest in Hawaiian culture and tourism experiences designed and/or facilitated by Native Hawaiians, along with the tourists' willingness to pay (WTP) additional fees for these experiences. In addition, there is quantifiable evidence suggesting that U.S. visitors are willing to pay (WTP) extra to support sustainable tourism in Hawai'i. Furthermore, the findings of this research suggest that there are only slight differences in the perceptions of Hawaiian culture between U.S. visitors who have visited Hawai'i before and those who are first-time visitors to Hawai'i. In addition, those who have visited Hawai'i previously indicated a stronger self-rated knowledge of Hawaiian culture. The findings of this survey also suggest that female respondents considered Hawaiian culture to be more important than did their male counterparts. This study contributes to existing research by providing a better understanding of U.S. visitors' interest in culturally respectful tourism practices and sustainable practices specifically relating to Hawai'i. Furthermore, the findings of this study provide empirical evidence that there is a willingness among U.S. visitors to pay more money to support culturally respectful tourism practices as well as sustainable practices in Hawai'i.



Recently, there have been changes in Hawai'i's tourism governance. With these changes, there have been several new initiatives—including, but not limited to, the Hawaii Tourism Authority's Malama Hawai'i campaign, and a new law that will add a fee for visitors participating in ocean-based activities in Hawai'i in 2024. The Malama Hawai'i campaign was designed to attract travelers interested in learning more about Hawaiian culture, and encourage mindful travelers to give back to the destination by participating in volunteer opportunities (Hawaii Tourism Authority Launches 2021). Many incentives were provided by industry partners in Hawai'i; for example, one incentive might be a free night's stay at a participating Hawai'i hotel if tourists were willing to provide volunteer services such as working in the restoration of an "ancient Hawaiian fishpond" or working in a "Lo'i" or "Tara patch". The Hawaii Tourism Authority (HTA) has started the Malama Hawai'i campaign, which is centered on educating the traveler to facilitate a better connection with the Hawaiian culture and resource preservation (Hawaii Tourism Authority Launches 2021). The new law introduced in June 2021 adds a fee to ocean-based activities in order to aid in the conservation of natural resources by increasing funding (Gov. David Ige Marks World Oceans Day with Bill Signing Ceremony Addressing Hawaii's Marine Resources 2021). The findings of this study suggest that a considerable portion of the U.S. visitor market will likely be receptive to initiatives such as the ones described, and are willing to provide financial support by paying more to support culturally respectful tourism experiences in Hawai'i.

A study of this nature can be replicated in other destinations to assess major market interest in culturally respectful and sustainable tourism practices. From a marketing perspective, the results of this study provide a deeper insight into the perceived image of a destination, and allow for more tailored marketing efforts that support both visitor demand and destination needs. This study also contributes general information about the typical U.S. traveler, which can be utilized as destinations start to reopen and there are increases in travel as more individuals in the United States become vaccinated.

There are some limitations to this study. The results and findings of this study are not generalizable to other major market areas of tourism for Hawai'i. Future studies can also expand to explore the perceptions of Hawaiian culture in the tourism experience for other major market areas following the COVID-19 pandemic. Another avenue of research would be to look at Hawaiian residents' perceptions of Hawaiian culture in the tourism experience for visitors to Hawai'i.

While the effects of the COVID-19 pandemic will continue to have significant impacts on the global tourism industry for the foreseeable future, Hawai'i has the unprecedented opportunity to embrace its current slower tourism flows and refine its tourism product and tourism policies. This refinement process will involve a renewed dedication to addressing and meeting the needs of the local community, prioritizing the respect and appreciation of the Hawaiian culture and people, as well as determining tourists' willingness to pay more for authentic Hawaiian cultural experiences. This study strives to explore one small aspect of the refinement process—the desires of the U.S. tourists to Hawai'i and their willingness to pay (WTP) for authentic Hawaiian cultural experiences, and for those tourism products to be economically sustainable.

**Author Contributions:** Conceptualization, G.A., J.A.; H.I.; and J.L.; methodology, G.A., J.A., formal analysis, C.L.; H.I.; and G.A.; investigation, G.A.; writing—original draft preparation, G.A., H.I.; C.L., J.L., and J.A.; writing—review and editing, H.I., G.A., C.L., and J.L. All authors have read and agreed to the published version of the manuscript.

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**Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Institutional Review Board of the University of Hawaii at Manoa (protocol code 2020-00104 and approval on 19 February 2021).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study is not publicly available.

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**Conflicts of Interest:** The author declares no conflict of interest.

## References

- Agrusa, Jerome, Wendy Coats, and Jon Donlon. 2003. Working from a bottom-up approach: Cultural and heritage tourism. *International Journal of Tourism Sciences* 3: 121–28. [CrossRef]
- Agrusa, Jerome. 1994. Group tours in Hawai'i: A survey and analysis. *Annals of Tourism Research* 21: 146–47. [CrossRef]
- Agrusa, Wendy, Joseph Lema, John Tanner, Tanya Host, and Jerome Agrusa. 2010. Integrating sustainability and Hawaiian culture into the tourism experience of the Hawaiian Islands. *Pasos (Tenerife (Canary Islands))* 8: 247–64. [CrossRef]
- Air Passenger Forecasts: Potential Paths for Recovery into the Medium-and Long-run Rep. 2020. *Tourism Economics and the International Air Transport Association*. Montreal: International Air Transport Association.
- Alonso, Abel Duarte, Seng Kiat Kok, Alessandro Bressan, Michelle O'Shea, Nikolaos Sakellarios, Alex Koresis, Maria Alejandra Buitrago Solis, and Leonardo J. Santoni. 2020. COVID-19, aftermath, impacts, and hospitality firms: An international perspective. *International Journal of Hospitality Management* 91: 102654. [CrossRef] [PubMed]
- Barbieri, Carla, and Edward Mahoney. 2010. Cultural tourism behaviour and preferences among the live-performing arts audience: An application of the univorous–omnivorous framework. *International Journal of Tourism Research* 12: 481–96. [CrossRef]
- Brewbaker, Paul, Frank Haas, and James Mak. 2019. *Charting a New Course for Hawai'i Tourism* (Issue brief). Available online: <https://uhero.hawaii.edu/wp-content/uploads/2020/04/HTASustainableDestinationManagement-1.pdf> (accessed on 17 May 2021).
- Brunt, Paul, and Paul Courtney. 1999. Host perceptions of sociocultural impacts. *Annals of Tourism Research* 26: 493. Available online: <http://search.ebscohost.com.eres.library.manoa.hawaii.edu/login.aspx?direct=true&db=hoh&AN=COMP64933840&site=ehost-live> (accessed on 20 June 2021). [CrossRef]
- Butler, Richard W. 1999. Sustainable tourism: A state-of-the-art review. *Tourism Geographies: Sustainable Tourism* 1: 7–25. [CrossRef]
- Chang, Chia-Lin, Michael McAleer, and Vicente Ramos. 2020. A charter for sustainable tourism after COVID-19. *Sustainability* 12: 3671. [CrossRef]
- Chiabai, Aline, Krassimira Paskaleva, and Patrizia Lombardi. 2013. e-Participation model for sustainable cultural tourism management: A bottom-up approach. *International Journal of Tourism Research* 15: 35–51. [CrossRef]
- Cohen, Erik. 1988. Authenticity and commoditization in tourism. *Annals of Tourism Research* 15: 371–86. [CrossRef]
- Dredge, D. 2017. "Overtourism" Old Wine in New Bottles? Available online: <https://www.linkedin.com/pulse/overtourism-old-wine-new-bottles-dianne-dredge/> (accessed on 20 June 2021).
- Dube, Kaitano, Godwell Nhamo, and David Chikodzi. 2020. COVID-19 cripples global restaurant and hospitality industry. *Current Issues in Tourism* 24: 1487–90. [CrossRef]
- Engeset, Marit Gundersen, and Ingunn Elvekrok. 2015. Authentic concepts: Effects on tourist satisfaction. *Journal of Travel Research* 54: 456–66. [CrossRef]
- Fact Sheet: Benefits of Hawai'i's Tourism Economy Rep. 2019. Honolulu: Hawai'i Tourism Authority. Available online: <https://www.hawaii-tourismauthority.org/media/4167/hta-tourism-econ-impact-fact-sheet-december-2019.pdf> (accessed on 20 June 2021).
- Farzanegan, Mohammad Reza, Hassan F. Gholipour, Mehdi Feizi, Robin Nunkoo, and Amir Eslami Andargoli. 2020. International tourism and outbreak of coronavirus (COVID-19): A cross-country analysis. *Journal of Travel Research* 60: 687–92. [CrossRef]
- Galvani, Adriana. 2020. COVID-19 is expanding global consciousness and the sustainability of travel and tourism. *Tourism Geographies* 22: 567–76. [CrossRef]
- Gnotha, J., and Ning Wang. 2015. Authentic knowledge and empathy in tourism. *Annals of Tourism Research* 50: 170–72. [CrossRef]
- Gov. David Ige Marks World Oceans Day with Bill Signing Ceremony Addressing Hawaii's Marine Resources. 2021. KHON2, June 9. Available online: <https://www.khon2.com/local-news/gov-david-ige-marks-world-oceans-day-with-bill-signing-ceremony-addressing-hawaiis-marine-resources/> (accessed on 10 June 2021).
- Gursoy, Dogan, and Christina G. Chi. 2020. Effects of COVID-19 pandemic on hospitality industry: Review of the current situations and a research agenda. *Journal of Hospitality Marketing & Management* 29: 527–29. [CrossRef]
- Hawai'i Saw more than 10 m Visitors. 2020. Hawai'i Saw more than 10 m Visitors Last Year, but not Everyone is Celebrating. *Hawai'i News Now*, January 30. Available online: <https://www.hawaii-newsnow.com/2020/01/31/Hawai'i\T1\textquoterighti-saw-more-than-m-visitors-last-year-not-everyone-is-celebrating/> (accessed on 15 May 2021).
- Hawai'i Tourism Authority. 2019. 2019 Annual Visitor Research Report. Available online: <https://www.hawaii-tourismauthority.org/media/5062/2019-annual-report-final-for-posting.pdf> (accessed on 15 May 2021).
- Hawai'i Tourism Authority. 2020. Hawai'i Visitor Statistics Released for September 2020 [Press release]. October 29. Available online: <https://www.hawaii-tourismauthority.org/media/5538/september-2020-visitor-statistics-press-release-final.pdf> (accessed on 12 April 2021).

- Hawaii Tourism Authority Launches. 2021. Hawaii Tourism Authority Launches Educational Malama Hawaii Campaign. Available online: <https://www.hawaiitourismauthority.org/news/news-releases/2021/hawaii-tourism-authority-launches-educational-malama-hawaii-campaign/> (accessed on 10 July 2021).
- Hawaiian Renaissance. 2009. The Honolulu Advertiser: Hawai'i's Newspaper. Available online: <http://the.honoluluadvertiser.com/article/2009/Aug/16/ln/hawaii908160330.html> (accessed on 12 April 2021).
- HTA. 2019. Resident Sentiment Survey 2018 Highlights. Available online: <https://www.hawaiitourismauthority.org/media/2984/resident-sentiment-presentation-to-hta-board-01-31-2019.pdf> (accessed on 12 April 2021).
- Ioannides, Dimitri, and Szilvia Gyimóthy. 2020. The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies* 22: 624–32. [CrossRef]
- Kim, Hyounggon, Chia-Kuen Cheng, and Joseph T. O'Leary. 2007. Understanding participation patterns and trends in tourism cultural attractions. *Tourism Management* 28: 1366–71. [CrossRef]
- Kithiia, J., and S. Reilly. 2016. Real (or) staged? Authenticity and cultural portrayal in Indigenous tourism. *Journal of Tourism & Hospitality* 5. [CrossRef]
- Koens, Ko, Albert Postma, and Bernadett Papp. 2018. Is overtourism overused? Understanding the impact of tourism in a city context. *Sustainability* 10: 4384. [CrossRef]
- Lee, Tae-Hee, and John Crompton. 1992. Measuring novelty seeking in tourism. *Annals of Tourism Research* 19: 732–51. [CrossRef]
- Leong, L. 2018. Overtourism and Crowding at Our Favorite Spots. *Hawai'i Business*, January 5. Available online: <https://www.hawaiiibusiness.com/overtourism/> (accessed on 12 April 2021).
- Leposa, Adam. 2020. Stt: 32% Willing to Pay More for Sustainable Vacations. Available online: <https://www.travelagentcentral.com/your-business/stats-32-willing-to-pay-more-for-sustainable-vacations> (accessed on 12 April 2021).
- Liu, Zhenhua. 2003. Sustainable tourism development: A critique. *Journal of Sustainable Tourism* 11: 459–75. [CrossRef]
- Mak, J. 2015. Creating "Paradise of the Pacific": How Tourism began in Hawai'i. *UHERO*. Available online: <https://uhero.hawaii.edu/creating-paradise-of-the-pacific-how-tourism-began-in-hawaii/> (accessed on 12 April 2021).
- Maneepop, Sakkakom, and Suntichai Kotcharin. 2020. The impacts of COVID-19 on the global airline industry: An event study approach. *Journal of Air Transport Management* 89: 101920. [CrossRef] [PubMed]
- Markandya, A., and R. A. Ortiz. 2011. General introduction to valuation of human health risks. *Encyclopedia of Environmental Health* 871–78. [CrossRef]
- McKercher, Bob, and Hilary Du Cros. 2003. Testing a cultural tourism typology. *International Journal of Tourism Research* 5: 45–58. [CrossRef]
- McKercher, Bob. 2002. Towards a classification of cultural tourists. *International Journal of Tourism Research* 4: 29–38. [CrossRef]
- Milano, Claudio, Marina Novelli, and Joseph M. Cheer. 2019. Overtourism and tourismphobia: A journey through four decades of tourism development, Planning and local concerns. *Tourism Planning & Development* 16: 353–57. [CrossRef]
- Min, Jihye, Jerome Agrusa, Joseph Lema, and Harold Lee. 2020. The tourism sector and U.S. regional macroeconomic stability: A network approach. *Sustainability* 12: 7543. [CrossRef]
- Molnar, Andras. 2019. SMARTRIQS: A simple method allowing real-time respondent interaction in Qualtrics surveys. *Journal of Behavioral and Experimental Finance* 22: 161–69. [CrossRef]
- Niewiadomski, Piotr. 2020. COVID-19: From temporary de-globalisation to a re-discovery of tourism? *Tourism Geographies* 22: 651–56. [CrossRef]
- Park, Eunkyung, Byoung-Kil Choi, and Timothy J. Lee. 2019. The role and dimensions of authenticity in heritage tourism. *Tourism Management* 74: 99–109. [CrossRef]
- Perkumienė, Dalia, and Rasa Pranskūnienė. 2019. Overtourism: Between the right to travel and residents' rights. *Sustainability* 11: 2138. [CrossRef]
- Qiu, Richard, Jinah Park, ShiNa Li, and Haiyan Song. 2020. Social costs of tourism during the COVID-19 pandemic. *Annals of Tourism Research* 84: 102994. [CrossRef]
- Qualtric. 2020. How to Determine the Correct Survey Sample Size. Available online: <https://www.qualtrics.com/experience-management/research/determine-sample-size/> (accessed on 12 April 2021).
- Ruhanen, Lisa, Betty Weiler, Brent D. Moyle, and Char-lee J. McLennan. 2015. Trends and patterns in sustainable tourism research: A 25-year bibliometric analysis. *Journal of Sustainable Tourism* 23: 517–35. [CrossRef]
- S.B 2319. 2020. 13th Legislature, 2020 Reg. Sess. Available online: [https://www.capitol.Hawaii.gov/session2020/bills/SB2319\\_.HTM](https://www.capitol.Hawaii.gov/session2020/bills/SB2319_.HTM) (accessed on 12 April 2021).
- Shepherd, Robert. 2002. Commodification, culture and tourism. *Tourist Studies* 2: 183–201. [CrossRef]
- Sigala, Marianna. 2020. Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research* 117: 312–21. [CrossRef] [PubMed]
- Snepenger, David, Jesse King, Eric Marshall, and Muzaffer Uysal. 2006. Modeling Iso-Ahola's motivation theory in the tourism context. *Journal of Travel Research* 45: 140–49. [CrossRef]
- Stabler, Mike J., Andreas Papatheodorou, and M. Thea Sinclair. 2010. *Economics of Tourism*, 2nd ed. London: Routledge.
- Stylidis, Dimitrios, Avital Biran, Jason Sit, and Edith M. Szivas. 2014. Residents' support for tourism development: The role of residents' place image and perceived tourism impacts. *Tourism Management* 45: 260–74. [CrossRef]

- Suau-Sanchez, Pere, Augusto Voltes-Dorta, and Natàlia Cugueró-Escofet. 2020. An early assessment of the impact of COVID-19 on air transport: Just another crisis or the end of aviation as we know it? *Journal of Transport Geography* 86: 102749. [CrossRef] [PubMed]
- Sun, Xiaoqian, Sebastian Wandelt, and Anming Zhang. 2020. How did COVID-19 impact air transportation? A first peek through the lens of complex networks. *Journal of Air Transport Management* 89: 101928. [CrossRef] [PubMed]
- Taheri, Babak, Ross Curran, Kevin O’Gorman, and Babak Taheri. 2018. Sustainability and the authentic experience. Harnessing brand heritage—A study from Japan. *Journal of Sustainable Tourism* 26: 49–67. [CrossRef]
- Tapachai, Nirundon, and Robert Waryszak. 2000. An Examination of the Role of Beneficial Image in Tourist Destination Selection. *Journal of Travel Research* 39: 37–44. [CrossRef]
- Terrell, J. 2020. Will Hawai’i Finally be Able to Break its Dependence on Tourism? *Honolulu Civil Beat*, October 12. Available online: <https://www.civilbeat.org/2020/10/will-hawaii-finally-be-able-to-break-its-dependence-on-tourism/> (accessed on 12 April 2021).
- Tran, Xuan, and Linda Ralston. 2006. Tourist preferences influence of unconscious needs. *Annals of Tourism Research* 33: 424–41. [CrossRef]
- United Nations World Tourism Organization. 2017. Tourism and Culture. Available online: <https://www.unwto.org/tourism-and-culture> (accessed on 12 April 2021).
- Wallace, D. 2020. One year later: The effects of Hawai’i’s illegal short-term rental ban. *Honolulu Magazine*, August 10. Available online: <http://www.honolulumagazine.com/Honolulu-Magazine/September-2020/One-Year-Later-The-Effects-of-Hawaiiis-Illegal-Short-Term-Rental-Ban/> (accessed on 12 April 2021).
- Wang, Ning. 1999. Rethinking authenticity in tourism experience. *Annals of Tourism Research* 26: 349–70. [CrossRef]
- Williams, Liza Keānuenueokalani, and Vernadette Vicuña Gonzalez. 2017. Indigeneity, sovereignty, sustainability and cultural tourism: Hosts and hostages at ‘Iolani Palace, Hawai’i. *Journal of Sustainable Tourism* 25: 668–83. [CrossRef]
- Yeo, B. H. 2003. The Recreational Benefits of Coral Reefs: A Case Study of Pulau Payar Marine Park, Kedah, Malaysia 2003 ReefBase. Available online: [http://www.reefbase.org/resource\\_center/publication/pub\\_20541.aspx](http://www.reefbase.org/resource_center/publication/pub_20541.aspx) (accessed on 12 April 2021).
- Yeoman, Ian, Danna Brass, and Una McMahon-Beattie. 2007. Current issue in tourism: The authentic tourist. *Tourism Management* 28: 1128–38. [CrossRef]
- Yerton, S. 2019. 10 Million Visitors: Can Hawai’i Survive Its Own Popularity? *Honolulu Civil Beat*, June 10. Available online: <https://www.civilbeat.org/2019/07/10-million-visitors-can-hawaii-survive-its-own-popularity/> (accessed on 12 April 2021).
- Zenker, Sebastian, and Florian Kock. 2020. The coronavirus pandemic—A critical discussion of a tourism research agenda. *Tourism Management* 81: 104164. [CrossRef]
- Zhang, Junyi. 2020. Transport policymaking that accounts for COVID-19 and future public health threats: A PASS approach. *Transport Policy* 99: 405–18. [CrossRef] [PubMed]





Article

# Sail Away to a Safe Harbor? COVID-19 Vaccinations and the Volatility of Travel and Leisure Companies

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**Abstract:** This paper examines the impact of vaccination programs on the stock market volatility of the travel and leisure sector. Using daily data from 56 countries over the period from January 2020 to March 2021, we find that vaccination leads to a decrease in the investment risk of travel and leisure companies. Vaccination results in a decrease in the volatility of stock prices of travel and leisure companies. The drop in volatility is robust to many alternative estimation techniques, different volatility measures, and various proxies for vaccinations. Moreover, this effect cannot be explained by an array of control variables; this includes the pandemic itself and both the containment and closure policies that followed. Furthermore, the beneficial role of vaccinations is relatively stronger in emerging markets than in developed ones.

**Keywords:** COVID-19; pandemic; stock market volatility; travel and leisure; vaccinations

**JEL Classification:** G01; G12; G15; G18; H12; H51; I18; Q54

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## 1. Introduction

The COVID-19 pandemic has had an unprecedented effect on not only humanity but also the global economy. Notably, the tourism and hospitality sectors—in particular—have been hit hardest by the pandemic (Gerwe 2021; Nagaj and Žuromskaitė 2021; World Economic Forum 2022). In 2021, international tourist arrivals remained 72% below 2019 levels, which equals more than 1 billion fewer arrivals. This implies that the industry reached levels last seen in the late 1980s (World Economic Forum 2022). Governments implement several policy measures in order to help flatten the curve due to the asymptomatic transmission of COVID-19. Border closures, travel restrictions, gathering size limitations, quarantines, and temporary closure of restaurants all have detrimental impacts on the hospitality and tourism industry. Although temporary reopening in the summer of 2020 was considered a partial solution, new lockdown measures that have been implemented due to new waves have, once again, brought tourism to a complete standstill. The World Travel and Tourism Council estimates that the global travel and tourism sector's contribution to global GDP experienced an unprecedented decline of nearly 50% in 2020.<sup>1</sup>

The tourism and hospitality literature shows a rising interest in analyzing the impact of COVID-19 on the industry. Early studies focus on the preliminary impact that COVID-19 has had on the tourism industry. They show that COVID-19 harms hospitality companies' performance (Anguera-Torrell et al. 2020; Gil-Alana and Poza 2020; Lee et al. 2021; Lin and Falk 2021; Wu et al. 2021) or tourism demand—in general (Gössling et al. 2020;

Yang et al. 2020). Another line of research explores what factors can provide resiliency to those companies. Chen et al. (2020), Kaczmarek et al. (2021), Jawed et al. (2021), Poretti and Heo (2021), and Song et al. (2021) show that the negative impact of COVID-19 is heterogeneous, as better pre-pandemic financial characteristics can provide immunity to hospitality firms against COVID-19. In a similar vein, Qiu et al. (2021) show that CSR activities can improve the stock returns of tourism firms during the COVID-19 pandemic. Recent studies explore the recovery of the tourism industry under different scenarios (Zhang et al. 2021; Fotiadis et al. 2021).

In this paper, we aim to explore whether mass vaccinations help to play a role in stabilizing financial markets. Specifically, we analyze the relationship between daily mass vaccinations and stock market volatility of travel and leisure companies. Mass vaccinations are expected to lower the stock price volatility of travel and leisure companies because herd immunity becomes a key concept for controlling the pandemic. An effective vaccine can be considered the safest way to reach herd immunity (Fontanet and Cauchemez 2020). Vaccination programs are essential for the tourism and hospitality industry. Mass vaccination can speed up the industry's recovery (Zhu et al. 2021), leading to an increase in the demand for hospitality and tourism services. Global availability of COVID-19 vaccines and the resulting herd immunity will lower the risk perceptions and travel anxiety, which can contribute to the recovery of the hospitality and tourism industry (Gursoy and Chi 2020). Investors can regard tourism stocks as a less risky and uncertain vehicle of investment since countries that are on track to achieve herd immunity utilizing vaccinations are contemplating the possibility of reopening their borders for both domestic and international travel. A mass vaccination program can eliminate the pandemic-induced volatility in financial markets via different channels.

The first channel is the decrease in macroeconomic uncertainty, which transmits to the tourism and hospitality industry. The rollout of vaccinations enables countries to control the COVID-19 pandemic. As countries approach herd immunity, businesses reopen, and social gathering and traveling restrictions are gradually relaxed. Government interventions—such as border closures and travel restrictions—can be minimized once herd immunity is achieved. The elimination of such unexpected interventions will also eliminate substantial negative demand and supply-side shocks (del Rio-Chanona et al. 2020), as vaccinated people might travel both domestically and internationally. The future cash flows of travel and leisure companies will be more predictable. As the industry recovers, economic expectations stabilize. A growing (declining) volume of good (bad) news increases (decreases), triggering volatility declines. This leads to a lower tourism and hospitality industry stock volatility. While there is evidence that the pandemic triggered an unprecedented increase in macroeconomic uncertainty (Altig et al. 2020; Baker et al. 2020; Caggiano et al. 2020; Sharif et al. 2020), our results, reported in Section 3, show that the reversal can have stabilizing effects on international stock markets. Thus, consistently with Bansal and Yaron (2004) and Bansal et al. (2014), volatility in the tourism and hospitality industry can be driven by macroeconomic expectations. Second, stock market volatility decreases because in countries where a larger population share becomes immunized, there is a lower probability of unexpected government interventions, which might otherwise disrupt the economy and the tourism and hospitality industry and/or undermine its recovery. As governments can more confidently ease or even terminate lockdowns, businesses operating in the tourism and hospitality industry and tourists become less dependent on government economic support packages, strengthening public finances and reducing the need to raise tax rates. This can lead to the repricing of financial assets, including stocks. Consistently with Mele (2007), volatility can change due to changing expectations of future returns in the tourism and hospitality industry. Third, vaccinations can lower the financial/operating leverage of firms, including tourism and hospitality operators (Schwert 1989), which manifests in improved financial performance and a decrease in financial risk. Fourth, vaccinations are associated with less stringent government restrictions. Concurrently, in line with Manela and Moreira (2017), decreases in the flow of policy-related news are associated with lower

stock market volatility. Fifth, the divergence of opinions (Harris and Raviv 1993; Banerjee 2011; Foucault et al. 2011), driven by the COVID-19 pandemic crisis, becomes less significant when the economy and the tourism and hospitality industry is on course to achieve herd immunity. This is likely to calm stock market volatility too. Sixth, vaccinations can conceivably reduce fear in financial markets. In line with Donadelli et al. (2017), globally dangerous diseases can spread fear throughout the economy, which spills over to the stock market (through the so-called “Main Street” effects). Even if no traveling restrictions to the affected countries are in place, rational individuals will take preventive measures, and they would likely amend their travel plans. In this light, the rollout of vaccinations is likely to curb investor fear spread. All these elements should lead to greater price stability in financial markets. Expectations of improved performance in the tourism and hospitality industry can trigger less sizable valuation changes, which results in lower volatility.

To examine the role of vaccinations, we use daily data from 56 markets around the world from the period January 2020–March 2021. In particular, we explore the novel dataset of global vaccinations that—to our knowledge—has never been explored in the broad international context of tourism sector performance or in financial markets. We run a battery of panel regressions to determine how the vaccinations affect the risk and volatility of travel and leisure companies.

Our findings demonstrate that vaccination results in a decrease in the volatility of stock prices of travel and leisure companies. The drop in risk is both economically and statistically significant, pervasive, and robust to many considerations. It survives different measures of volatility and various proxies for vaccinations. It is not explained by an array of control variables; this includes the pandemic itself and both the containment and closure policies that followed. Finally, the beneficial role of vaccinations is relatively stronger in emerging markets than in developed ones.

To the best of our knowledge, we are the first to analyze the impact of vaccination on the stock market volatility of travel and leisure companies across 56 countries. Earlier studies in the related literature focus on the role of the pandemic itself or government policy responses. We consider the role of vaccination in controlling the impact of the pandemic itself and government interventions. We extend the discussion on how the financial markets react to the news on vaccines (Demir et al. 2021; Rouatbi et al. 2021), focusing on the travel and leisure industry. While few studies scrutinize this issue (Chan et al. 2022; Acharya et al. 2021), there is not yet a study that focuses on the travel and leisure industry where vaccinations play a crucial role.

The remainder of the article proceeds as follows. Section 2 describes our data and methodology. Section 3 presents the empirical findings. Finally, Section 4 discusses the research findings and concludes.

## **2. Data and Methodology**

This paper aims to explore the impact of vaccination programs on the stock price volatility of travel and leisure companies. The choice of the sample depended on the financial and vaccination data availability. In terms of the stock market data, we searched and collected all the daily travel and leisure index data from Datastream Global Equity Indices. After that, we obtained vaccination-related data from the COVID-19 Data Hub website, which is funded by the Institute for Data Valorization.<sup>2</sup> We matched the country-level stock index data with the vaccination data. China was excluded from the sample due to a lack of daily vaccination data.<sup>3</sup> Our final sample comprised 56 countries from 1 January 2020 to 30 March 2021.<sup>4</sup> China declared several pneumonia cases of an unknown cause in Wuhan on 31 December 2019; therefore, we used the first trading day following this announcement. Table 1 presents the list of stock markets in our sample. Notably, our equity universe covers the top tourist destinations worldwide in developed (e.g., France, Spain) and emerging (e.g., Turkey, Mexico) markets.



**Table 1.** Countries covered by the study.

Developed Markets				Emerging Markets					
1.	Australia	13.	New Zealand	22.	Bahrain	34.	Malaysia	46.	Saudi Arabia
2.	Austria	14.	Norway	23.	Brazil	35.	Malta	47.	Slovakia
3.	Canada	15.	Portugal	24.	Bulgaria	36.	Mexico	48.	Slovenia
4.	Denmark	16.	Singapore	25.	Chile	37.	Morocco	49.	South Africa
5.	Finland	17.	Spain	26.	Croatia	38.	Nigeria	50.	South Korea
6.	France	18.	Sweden	27.	Cyprus	39.	Oman	51.	Sri Lanka
7.	Germany	19.	Switzerland	28.	Egypt	40.	Pakistan	52.	Taiwan
8.	Ireland	20.	United Kingdom	29.	Estonia	41.	Peru	53.	Thailand
9.	Israel	21.	United States	30.	Greece	42.	Philippines	54.	Turkey
10.	Italy			31.	India	43.	Poland	55.	UAE
11.	Japan			32.	Jordan	44.	Romania	56.	Vietnam
12.	Netherlands			33.	Kuwait	45.	Russia		

This table shows the lists of developed and emerging markets covered by our study.

Figure 1 depicts the variation over time in the average volatility of returns on travel and leisure industry stocks for the whole sample (solid blue line), as well as for the subsamples of countries classified into developed (long-dashed red line) and emerging (dashed green line) markets. Panels A and B show the equal-weighted and capitalization-weighted volatility measures, respectively. The figure uncovers that volatility markedly rose in March–April 2020, when the COVID-19 outbreak was declared a pandemic by the WHO. Following the launch of mass vaccinations, the volatility appears to have declined in both the developed and emerging market countries. One possible reason is that COVID-19 vaccinations helped stabilize the stock market, particularly the travel and leisure industry.

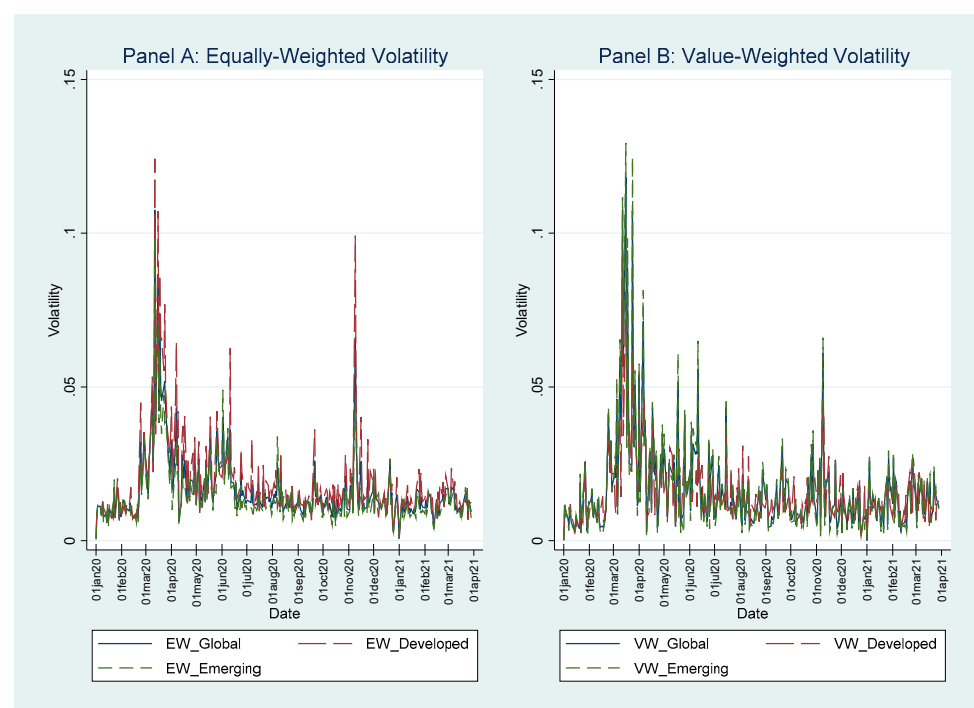
We used the following model (subscripts are dropped for notational convenience) in line with the literature (Bae et al. 2021; Zaremba et al. 2020):

$$VOLATILITY = \alpha + \beta \cdot VACCINATION + \Gamma' \cdot CONTROL + \Lambda' \cdot TIME + \varepsilon \quad (1)$$

where *VOLATILITY* is proxied by two measures: (1)  $\log |R|$  denotes the logarithm of absolute daily returns, (2)  $\log |RR_{CAPM}|$  indicates the logarithm of absolute residual returns from the CAPM (Schwert 1989). We used absolute values to measure volatility in line with Antonakakis and Kizys (2015). Moreover, we calculated the logarithmic transformation of the dependent variables to (i) ensure that daily volatility in levels is positive definite and (ii) to control for non-linearities in the relation between the level of volatility and its covariates (Zaremba et al. 2020).  $|RR_{CAPM}|$  was calculated using rolling regressions that utilized 60 months of daily data. The market risk factor in the model is represented by the capitalization-weighted portfolio of all the country equity indices in the sample. The risk-free rate was downloaded from Kenneth R. French’s database.<sup>5</sup>

Our primary variable of interest is the *VACCINATION* variable. To confirm the robustness of our results, we considered four various vaccination-related variables. These were  $\log(\text{Daily Vaccinations})$ ,  $\text{Daily Vaccinations per 100,000}$ ,  $\text{Vaccination Period}$ , and  $\Delta \text{Daily Vaccinations Dummy}$ .  $\log(\text{Daily Vaccinations})$  indicates the logarithm of the count of daily COVID-19 vaccinations.  $\text{Daily Vaccinations per 100,000}$  was calculated as the number of daily COVID-19 vaccinations scaled by the population in a country and then multiplied by 100,000. Countries that immunize a larger population share on a given day can attain herd immunity sooner than countries that immunize a smaller population share. Admittedly, travel and leisure stocks can be perceived as a less risky vehicle of investment in these countries. Staggered vaccination rates across countries can lead to portfolio rebalancing

across countries. Investors can sell travel and leisure stocks in countries with lower vaccination rates and invest in countries with higher vaccination rates. *Vaccination Period* denotes a dummy variable equal to one for the period starting from the country's first vaccination day, and is zero otherwise. Countries with a relatively earlier rollout of mass vaccination campaigns can achieve herd immunity earlier than countries that launch mass vaccinations later. These countries can also reopen to international tourism earlier and can be perceived as safer locations for stock investments.  $\Delta$  *Daily Vaccinations Dummy* is the variable that takes the value of one if the daily change in the number of COVID-19 vaccinations is strictly positive—and zero otherwise. If there is an increase in the number of vaccinations relative to the previous day, this can be regarded as positive news by stock investors. Overall, we expected to find a negative impact of those vaccination-related variables on stock market volatility. This implies that accessing COVID-19 vaccines will lower the stock market volatility.



**Figure 1.** Volatility in international markets during the COVID-19 pandemic. The figure presents the average daily absolute returns on investment in travel and leisure stocks across countries covered. The presented measures of volatility are for the whole sample (solid blue line), the sub-sample of developed countries (long-dashed red line) and the sub-sample of emerging markets (dashed green line). The research period is from 1 January 2020 to 30 March 2021. Panels A and B report equal-weighted averages and value-weighted averages, respectively.

We introduced several control variables, *CONTROLS*, that can affect stock market volatility in line with previous studies (e.g., Bae et al. 2021; Zaremba et al. 2020).  $\Gamma'$  is a row vector of population coefficients that quantify the effects of the control variables. First, the *Stringency Index* of Hale et al. (2021) was considered in the estimation. This index measures the stringency of the government policy response to the COVID-19 pandemic and takes a value between 0 and 100. Governments have implemented several measures; these include school closing, restrictions on domestic and international travel, and the cancellation of public events in order to flatten the curve. The index is widely used in the recent pandemic literature as a factor affecting stock markets (Aggarwal et al. 2021; Baig et al. 2021; Chen et al. 2020; Feng et al. 2021). *BM* is the book-to-market ratio. *Log (MV)* is the logarithm of market capitalization in U.S. dollars. *Turnover* is the turnover ratio that was calculated as a 12-month average trading volume over the corresponding

aggregate market capitalization.  $\Delta \text{Cases to Tests}$  is the change in the daily number of COVID-19 infections to the daily number of tests (in percentage).  $\Delta \text{Deaths}$  is the daily change in the number of COVID-19 fatalities. The previous studies document that COVID-19-related deaths can influence the stock markets, so they should be considered in the estimations (Chen et al. 2020; Seven and Yılmaz 2021; Zaremba et al. 2020). Finally, by means of the set of indicator variables (*TIME*), we also controlled for the day of the week and month effects (Zhang et al. 2017).  $\Lambda'$  is a row vector of population coefficients that quantify the day of the week and month effects on the daily volatility of returns on the travel and leisure industry stocks. Finally,  $\varepsilon_{i,t}$  is the composite random disturbance term. The fixed-effects estimation method implies that  $\varepsilon_{i,t}$  comprises two components: the unobserved country-specific volatility effect,  $u_i$ , and the idiosyncratic shock term,  $v_{i,t}$ .

Table 2 exhibits the descriptive statistics of all variables used in the analysis. We winsorized all continuous variables at the 1st and the 99th percentiles to minimize the effect of outliers (Chia et al. 2020). On average, 41 inhabitants were vaccinated in a population of 100,000 per day (Panel A). This low average can be explained by the fact that vaccinations started in early 2021, making most of our sample's observations outside the vaccination period. Furthermore, we observe high variability in the Stringency Index across countries.

Table 3 shows the pairwise correlation coefficients between explanatory variables. Not surprisingly, the correlation coefficients between the vaccination-related variables are high (more than 0.6). The remaining correlation coefficients, however, are very low; this indicates that multicollinearity is not likely to present a problem in our empirical analysis.

Model 1 was mainly estimated using a fixed-effects estimator, which considers any unobserved heterogeneity in the stock market volatility across countries. Moreover, it allows for arbitrary correlation between the unobserved country fixed effects and the observed explanatory variables. In addition to fixed effects, we also estimated Model 1 with pooled OLS and random effects estimators (see robustness checks below).

In addition, we performed additional robustness tests by considering alternative dependent variables, incorporating additional control variables, and considering an alternative sample period. We also divided our sample into developed and emerging market countries, as emerging market countries have limited access to COVID-19 vaccines.

Table 2. Descriptive statistics.

Variables	Log  R	Log  RR <sub>CAPM</sub>	Log (Daily Vaccinations)	Daily Vaccinations Per 100,000	Vaccination Period	ΔDaily Vaccinations Dummy	Stringency Index	BM	Turnover	Log (MV)	ΔCases to Cases	ΔDeaths to Cases
<i>Panel A: Descriptive statistics: Full sample</i>												
Mean	-5.181	-5.084	1.278	41.130	0.159	0.074	54.057	0.713	5.100	7.631	0.006	0
Std. Dev.	1.805	1.478	3.465	156.976	0.366	0.262	26.016	0.769	10.784	2.057	0.072	0.001
25th Quartile	-5.979	-5.941	0	0	0	0	40.740	0.234	0.317	6.173	-0.003	0
Median	-4.822	-4.854	0	0	0	0	60.190	0.501	1.653	7.652	0	0
75th Quartile	-3.919	-4.026	0	0	0	0	73.150	1.212	4.480	8.939	0.004	0
<i>Panel B: Descriptive statistics: Emerging markets</i>												
Mean	-5.510	-5.290	1.064	32.224	0.145	0.059	54.805	0.854	6.031	6.841	0.006	0
Std. Dev.	1.936	1.562	3.153	139.845	0.352	0.235	26.696	0.899	13.724	1.653	0.074	0.001
25th Quartile	-6.448	-6.293	0	0	0	0	41.670	0.272	0.093	5.755	-0.003	0
Median	-5.144	-5.057	0	0	0	0	60.190	0.772	0.899	6.792	0	0
75th Quartile	-4.129	-4.139	0	0	0	0	75.000	1.537	3.930	8.295	0.005	0
<i>Panel C: Descriptive statistics: Developed markets</i>												
Mean	-4.659	-4.758	1.617	55.257	0.183	0.099	52.870	0.490	3.943	8.886	0.006	0
Std. Dev.	1.429	1.266	3.886	179.962	0.387	0.299	24.853	0.406	4.935	2.013	0.069	0.001
25th Quartile	-5.321	-5.413	0	0	0	0	38.890	0.217	0.891	7.357	-0.002	0
Median	-4.444	-4.592	0	0	0	0	59.260	0.388	2.711	8.370	0	0
75th Quartile	-3.719	-3.900	0	0	0	0	71.300	0.614	4.755	10.450	0.004	0

This table displays statistical properties of the variables used in our main analysis for the full sample (Panel A), the subsample of emerging markets (Panel B), and the subsample of developed markets (Panel C). Log |R| and Log |RR<sub>CAPM</sub>| denote the logarithm of absolute daily returns and the logarithm of residual returns from the CAPM, respectively. Log (Daily Vaccinations) indicates the logarithm of the number of daily COVID-19 vaccinations. Daily Vaccinations per 100,000 represents the number of daily COVID-19 vaccinations scaled by the population of a country (multiplied by 100,000). Vaccination Period denotes a dummy variable taking the value of one for the period starting from the country's first vaccination day and zero otherwise. Δ Daily Vaccinations Dummy is an indicator variable that amounts to one if the daily change in the number of COVID-19 vaccinations is strictly positive and zero otherwise. Stringency Index reflects the government response to the pandemic and ranges between 0 and 100. BM is the book-to-market ratio; turnover is stock turnover; Log (MV) is the logarithm of market value in U.S. dollars. Δ Cases to Cases represents the daily change in the number of COVID-19 infections scaled by the total number of confirmed cases. Δ Deaths to Cases is the daily change in the number of COVID-19 fatalities to the aggregate number of confirmed infections. We winsorized the continuous variables at the 1st and 99th percentiles.

**Table 3.** Pairwise correlation coefficients between major variables.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Log (Daily Vaccinations)	1.000									
2. Daily Vaccinations Per 100,000	0.752 ***	1.000								
3. Vaccination Period	0.845 ***	0.601 ***	1.000							
4. $\Delta$ Daily Vaccinations Dummy	0.759 ***	0.621 **	0.648 ***	1.000						
5. Stringency Index	0.205 ***	0.150 ***	0.212 ***	0.149 ***	1.000					
6. BM	-0.074 ***	-0.054 ***	-0.075 ***	-0.048 ***	0.012	1.000				
7. Turnover	-0.013	-0.014 *	-0.051 ***	-0.026 ***	0.099 ***	0.109 ***	1.000			
8. Log (MV)	0.079 ***	0.059 ***	0.046 ***	0.065 ***	-0.049 ***	-0.451 ***	0.155 ***	1.000		
9. $\Delta$ Cases to Cases	-0.029 ***	-0.016 **	-0.037 ***	-0.014 *	-0.115 ***	-0.005	0.023 ***	0.002	1.000	
10. $\Delta$ Deaths to Cases	-0.015 *	-0.007	-0.021 ***	-0.004	0.007	-0.004	0.021 **	0.006	0.311 ***	1.000

This table shows pairwise correlations between the explanatory variables used in our main regressions. Log (Daily Vaccinations) indicates the logarithm of the number of daily COVID-19 vaccinations. Daily Vaccinations per 100,000 represents the number of daily COVID-19 vaccinations scaled by the population of a country (multiplied by 100,000). Vaccinations Period denotes a dummy variable taking the value of one for the period starting from the country's first vaccination day and zero otherwise.  $\Delta$  Daily Vaccinations Dummy is an indicator variable that amounts to one if the daily change in the number of COVID-19 vaccinations is strictly positive and zero otherwise. Stringency Index reflects the government response to the pandemic and ranges between 0 and 100. BM is the book-to-market ratio; turnover is stock turnover; Log (MV) is the logarithm of market value in U.S. dollars.  $\Delta$  Cases to Cases represents the daily change in the number of COVID-19 infections scaled by the total number of confirmed cases.  $\Delta$  Deaths to Cases is the daily change in the number of COVID-19 fatalities to the aggregate number of confirmed infections. We winsorized the continuous variables at the 1st and 99th percentiles. The asterisks \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

### 3. Empirical Findings

This section examines the results from our panel data models, which were estimated using the fixed effects approach. We begin with reporting our baseline results; these are, in turn, supplemented with further robustness checks. Finally, we turn to differences in the magnitude of the effect between developed and emerging markets.

#### 3.1. Baseline Results

Table 4, summarizing our baseline results, is organized into two blocks. In the first block of the table (Columns 1–4), the dependent variable is the natural logarithm of absolute returns. In the second block (Columns 5–8), the dependent variable is the natural logarithm of absolute residual returns, estimated by employing the CAPM. To evaluate the impact of mass vaccinations on the volatility of returns on travel and leisure stocks, we utilized four different predictors, which also carried different information sets. The main predictor of volatility in international stock markets is the logarithm of the daily number of COVID-19 vaccinations (Columns 1 and 5). The coefficient of this predictor can be regarded as vaccination elasticity of volatility. As an alternative indicator of the scale of vaccinations, we used Daily Vaccinations per 100,000 inhabitants (Columns 2 and 6). The coefficient of this predictor shows the percentage rate of change in volatility when one more inhabitant in a population of 100,000 is inoculated. A third predictor is the so-called Vaccination Period (Columns 3 and 7), which takes on the value of one on the day when mass vaccinations were rolled out in a country. It aims to answer whether the volatility of the tourism industry's stock returns responds more strongly to an early launch of mass vaccinations instead of a late rollout. A fourth predictor also aims to evaluate the effects of the vaccination rate (Columns 4 and 8). This predictor takes a value of one if the number of immunized people on a given day is strictly higher than on the previous day, and it takes on a value of zero otherwise. Thus, the purpose of this variable is to ascertain whether a rise in the vaccination rate can stabilize international stock markets.

The results displayed in Table 4 are as follows. First, Columns 1 and 5 indicate that the logarithm of mass vaccination exerts a negative and significant effect (at the 1% significance level); a 10% increase in the number of vaccinations reduces volatility by 0.378% if absolute returns are used to compute volatility, and by 0.286% if volatility is measured with absolute residual returns. We further scrutinized the coefficient estimates for the second measure of daily vaccinations. Columns 2 and 6 indicate that if 1000 inhabitants in a population of 100,000 are immunized per day, volatility decreases by 0.5% for both absolute returns (Column 2) and absolute residual returns (Column 6). Further, considering Columns 3 and 7, we find that an early rollout of vaccines has a negative effect on the volatility of the travel and leisure industry's stock returns. The rollout of vaccinations caused a decline in volatility of 0.4872% and 0.3809% in absolute returns (Column 3) and absolute residual returns (Column 7), respectively. Our results also show that a higher vaccination rate is associated with more stable international stock markets, as Columns 4 and 8 appear to indicate. Concretely, if more inhabitants are inoculated on a given day compared to the previous day, volatility decreases by 0.2448% and 0.2135% for absolute returns (Column 4) and absolute residual returns (Column 8), respectively.

#### 3.2. Robustness Checks

Our baseline findings are validated by a series of robustness checks, as is displayed in Tables 5 and 6. These tests concern different stages and aspects of our research process.

Table 4. Primary regressions.

	Dependent Variable: Log  R				Dependent Variable: Log  RR <sub>CAPM</sub>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log (Daily Vaccinations) <sub>t-1</sub>	-0.0378 *** (-6.44)				-0.0286 *** (-4.89)			
Daily Vaccinations Per 100,000 <sub>t-1</sub>		-0.0005 *** (-3.69)				-0.0005 *** (-4.50)		
Vaccination Period			-0.4872 *** (-7.54)				-0.3809 *** (-5.83)	
Δ Daily Vaccinations Dummy <sub>t-1</sub>				-0.2448 *** (-4.18)				-0.2135 *** (-4.16)
Stringency Index <sub>t-1</sub>	-0.0018 (-1.54)	-0.0032 *** (-2.94)	-0.0007 (-0.58)	-0.0033 *** (-2.83)	0.0006 (0.57)	-0.0002 (-0.21)	0.0016 (1.51)	-0.0005 (-0.47)
BM <sub>t-1</sub>	0.2723 (1.55)	0.2655 (1.48)	0.2857 * (1.73)	0.3554 * (1.81)	0.1176 (1.07)	0.0965 (0.88)	0.1235 (1.17)	0.1777 (1.48)
Turnover <sub>t-1</sub>	0.0152 *** (3.35)	0.0158 *** (3.47)	0.0147 *** (3.37)	0.0160 *** (3.41)	0.0125 *** (3.11)	0.0128 *** (3.23)	0.0121 *** (3.16)	0.0130 *** (3.16)
Log (MV) <sub>t-1</sub>	-0.2335 ** (-2.41)	-0.2793 *** (-2.99)	-0.1918 ** (-2.06)	-0.2747 *** (-2.73)	-0.1930 ** (-2.31)	-0.2227 *** (-2.82)	-0.1581 * (-1.92)	-0.2272 ** (-2.64)
Δ Cases to Cases <sub>t-1</sub>	0.1618 (0.83)	0.1946 (0.99)	0.1191 (0.61)	0.2166 (1.10)	0.5289 *** (2.90)	0.5404 *** (3.04)	0.4947 *** (2.79)	0.5601 *** (3.08)
Δ Deaths to Cases <sub>t-1</sub>	-4.2655 (-0.41)	-2.4980 (-0.24)	-5.4021 (-0.52)	-2.4986 (-0.24)	-1.2914 (-0.14)	-0.6183 (-0.07)	-2.3240 (-0.25)	-0.3476 (-0.04)
Weekday Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
#Obs.	12,869	12,869	12,872	12,827	12,869	12,869	12,872	12,827
R <sup>2</sup> within	0.0595	0.0574	0.0615	0.0565	0.0503	0.0499	0.0523	0.0484

This exhibit reports the fixed-effects estimates of the relation between COVID-19 vaccinations and equity returns volatility. The dependent variables include the logarithm of absolute daily returns (Log |R|, Columns (1)–(4)) and the logarithm of absolute residual returns from the CAPM model (Log |RR<sub>CAPM</sub>|, Columns (5)–(8)). Log (Daily Vaccinations) indicates the logarithm of the number of daily COVID-19 vaccinations. Daily Vaccinations per 100,000 represents the number of daily COVID-19 vaccinations scaled by the population of a country (multiplied by 100,000). Vaccination Period denotes a dummy variable taking the value of one for the period starting from the country's first vaccination day and zero otherwise. Δ Daily Vaccinations Dummy is an indicator variable that amounts to one if the daily change in the number of COVID-19 vaccinations is strictly positive and zero otherwise. Stringency Index reflects the government response to the pandemic and ranges between 0 and 100. BM is the book-to-market ratio; turnover is stock turnover; Log (MV) is the logarithm of market value in U.S. dollars. Δ Cases to Cases represents the daily change in the number of COVID-19 infections scaled by the total number of confirmed cases. Δ Deaths to Cases is the daily change in the number of COVID-19 fatalities to the aggregate number of confirmed infections. We winsorized the continuous variables at the 1st and 99th percentiles. The numbers in parentheses are *t*-statistics based on standard errors clustered at the country level. The asterisks \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

**Table 5.** Robustness tests—alternative estimation methods and dependent variables.

<i>Panel A: Alternative Regression Frameworks</i>												
	Pooled OLS			Random effects					Dependent Variable: Log   RR <sub>CAR</sub>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Log (Daily Vaccinations) <sub>t-1</sub>	-0.0311 *** (-3.03)				-0.0445 *** (-7.54)							
Daily Vaccinations Per 100,000 <sub>t-1</sub>		-0.0005 ** (-2.48)				-0.0007 *** (-4.65)						
Vaccination Period			-0.5277 *** (-5.11)				-0.5717 *** (-9.06)					
Δ Daily Vaccinations Dummy <sub>t-1</sub>				-0.2202 ** (-2.32)				-0.2976 *** (-4.89)				
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Weekday and Month Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	12,869	12,869	12,872	12,827	12,869	12,869	12,872	12,872	12,869	12,872	12,827	12,827
R <sup>2</sup> within	0.0725	0.0716	0.0774	0.0705	0.0562	0.0535	0.0587	0.0524	0.0535	0.0587	0.0524	0.0524
<i>Panel B: Alternative Measures of Volatility</i>												
	Dependent Variable: Log   RR <sub>FF</sub>			Dependent Variable: Log   RR <sub>AMP</sub>			Dependent Variable: Log   RR <sub>CAR</sub>					
Log (Daily Vaccinations) <sub>t-1</sub>	-0.0290 *** (-5.05)				-0.0291 *** (-5.08)				-0.0292 *** (-4.95)			
Daily Vaccinations Per 100,000 <sub>t-1</sub>		-0.0005 *** (-4.36)				-0.0005 *** (-4.03)				-0.0005 *** (-4.03)		
Vaccination Period			-0.3951 *** (-6.90)				-0.4129 *** (-7.34)				-0.4146 *** (-7.07)	





Table 6. Cont.

<i>Panel A: Additional Control Variables</i>												
	Log (TV) <sub>t-1</sub>			Momentum <sub>t-1</sub>			Crisis					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Δ Daily Vaccinations Dummy <sub>t-1</sub>		-0.3072 ***						-0.2180 ***				-0.1453 **
		(-5.16)						(-3.62)				(-2.51)
Additional Control Variable	0.1214 ***	0.1245 ***	0.1180 ***	0.1234 ***	-0.1412	-0.2060 *	-0.1428	-0.2238 **	0.6516 ***	0.6967 ***	0.5956 ***	0.7432 ***
	(5.05)	(5.18)	(5.05)	(5.29)	(-1.25)	(-1.92)	(-1.50)	(-2.02)	(7.77)	(8.02)	(7.34)	(8.71)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Weekday and Month Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	12,869	12,869	12,872	12,827	12,869	12,869	12,872	12,827	12,869	12,869	12,872	12,827
R <sup>2</sup> within	0.0609	0.0578	0.0636	0.0569	0.0599	0.0582	0.0619	0.0574	0.0662	0.0654	0.0668	0.0656
<i>Panel B: Alternative Study Period (Starting from 11 March 2020)</i>												
	Fixed Effects			Pooled OLS			Random Effects					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Log (Daily Vaccinations) <sub>t-1</sub>												
	-0.0416 ***				-0.0319 ***				-0.0493 ***			
	(-6.61)				(-3.18)				(-7.99)			
Daily Vaccinations Per 100,000 <sub>t-1</sub>		-0.0006 ***				-0.0005 **				-0.0007 ***		
		(-3.33)				(-2.39)				(-4.47)		
Vaccination Period			-0.5706 ***				-0.5925 ***				-0.6728 ***	
			(-7.90)				(-5.81)				(-9.75)	
Δ Daily Vaccinations Dummy <sub>t-1</sub>				-0.2579 ***				-0.2172 **				-0.3169 ***
				(-4.41)				(-2.47)				(-5.22)

Table 6. Cont.

	Panel B: Alternative Study Period (Starting from 11 March 2020)												
	Fixed Effects						Pooled OLS						Random Effects
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Weekday and Month Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Obs.	12,038	12,038	12,038	12,038	12,038	12,038	12,038	12,038	12,038	12,038	12,038	12,038	
R <sup>2</sup> within	0.0598	0.0570	0.0627	0.0598	0.0718	0.0708	0.0775	0.0695	0.0558	0.0521	0.0595	0.0505	

This table presents the results of a second set of sensitivity tests. In all regressions, the dependent variable is the natural logarithm of absolute daily returns,  $\log |R|$ . Panel A shows regression results after including three variables, one at a time, as additional controls to our main regressions. Namely, (i)  $\log(TV)$ , defined as the logarithm of trading volume in U.S. dollars. When using this variable, we did not include  $\log(MV)$  and Turnover in our regression to avoid multicollinearity; (ii) Momentum is the total stock return in the past 250 trading days; and (iii) Crisis, which is a dummy variable that equals one for the COVID-19 crisis period from 18 February to 20 March 2020 (Bae et al. 2021) and zero otherwise. In Panel B, we rerun our main regressions after considering an alternative study period that starts at 11 March 2020 and ends at 29 March 2021.  $\log(Daily\ Vaccinations)$  indicates the logarithm of the number of daily COVID-19 vaccinations. Daily Vaccinations per 100,000 represents the number of daily COVID-19 vaccinations scaled by the population of a country (multiplied by 100,000). Vaccination Period denotes a dummy variable taking the value of one for the period starting from the country's first vaccination day and zero otherwise.  $\Delta Daily\ Vaccinations$  Dummy is an indicator variable that amounts to one if the daily change in the number of COVID-19 vaccinations is strictly positive and zero otherwise. All specifications include weekday and month dummies. We winsorized the continuous variables at the 1st and 99th percentiles. The numbers in parentheses are t-statistics based on standard errors clustered at the country level. The asterisks \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

**Alternative estimation methods.** Our default approach assumed estimations of fixed-effects models. To ensure that our findings did not hang on this approach, we replicated our analysis using pooled OLS and random effects estimators (Table 5, Panel A). Both estimators produced qualitatively similar results to the fixed effects estimator. Notably, the four measures of mass vaccinations appeared to exert both negative and significant effects on the volatility of the tourism industry's stocks.

**Alternative measures of volatility.** In Table 5, Panel B, we vary the asset pricing model, which is used to estimate residual returns. In Columns 1–4, the three-factor model, developed by Fama and French (1993), is used to estimate the residual return. In Columns 5–8, the residual return is derived from Asness et al.'s (2013) asset pricing model. In Columns 9–12, the residual return is estimated based on Carhart's asset pricing model (1997). The precise residuals calculation procedures closely follow Zaremba et al. (2020). Notably, the coefficient estimates are always negative and significant at the 1% significance level; also, the strength of the estimated effect is numerically similar for the same measure of mass vaccinations.

**Additional control variables.** In Table 6, Panel A, we visualize coefficient estimates of further extensions of the baseline model. These extensions entail explanatory variables; such as turnover ratio ( $\text{Log (TV)}_{t-1}$ ), momentum ( $\text{Momentum}_{t-1}$ ), or crisis dummy (Crisis).  $\text{Log (TV)}$  indicates the logarithm of trading volume expressed in U.S. dollars.<sup>6</sup> Momentum is the total stock return in the past 250 trading days. Finally, Crisis is a dummy variable that takes value one for the COVID-19 crisis period from 18 February to 20 March 2020 (Bae et al. 2021) and zero otherwise. Its use aims at accounting for the potentially elevated volatility during the most intense initial pandemic crisis. Our principal conclusions are intact in all these additional specifications, corroborating the stabilizing influence of vaccinations on the tourism sector.

**Modified study period.** To ascertain that our findings were not specific to our study period, we also considered an alternative start date; namely, the date at which the WHO considered the COVID-19 as a pandemic (11 March 2020). This approach excludes the initial weeks of the intense global market downturn that culminated on 11 March 2020. We perform this exercise using fixed effects, pooled OLS, and random effects estimators (Table 6, Panel B). Our principal findings remain unchanged, and the coefficients on vaccination-related variables remain negative and significant at the 5% level.

To sum up, the additional robustness checks confirmed the validity of our findings. The vaccination programs help to decrease the volatility of the travel and leisure companies.

### 3.3. Vaccinations and Market Development

Having established the essential relationship between vaccinations and the risk of travel and leisure companies, we now carry on with providing further insights. We now concentrate on the impact of vaccinations on both emerging and developed markets.

Table 7 reports additional explorations of the role of market development. We seek to ascertain if the observed negative effect is not confined to a particular group of countries. To this end, we divided our sample into developed and emerging market countries. Such a division was determined by the difference in the scale, timeliness, and speed in mass vaccinations in the two groups of countries. This is because emerging market countries have limited access to COVID-19 vaccines when compared with developed countries.

**Table 7.** The vaccination effect in developed and emerging markets.

	Emerging	Developed	Emerging	Developed	Emerging	Developed	Emerging	Developed
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log (Daily Vaccinations) <sub>t-1</sub>	-0.0394 *** (-4.00)	-0.0340 *** (-4.68)						
Daily Vaccinations Per 100,000 <sub>t-1</sub>			-0.0007 *** (-2.86)	-0.0003 * (-1.99)	-0.5330 *** (-5.60)	-0.4080 *** (-4.37)		
Vaccination Period							-0.2647 ** (-2.40)	-0.1898 *** (-3.25)
Δ Daily Vaccinations Dummy <sub>t-1</sub>							-0.0050 *** (-2.79)	-0.0011 (-0.74)
Stringency Index <sub>t-1</sub>	-0.0038 ** (-2.04)	0.0006 (0.41)	-0.0049 *** (-2.83)	-0.0012 (-0.98)	-0.0025 (-1.42)	0.0013 (0.92)	0.3089 (1.30)	0.1549 (0.81)
BM <sub>t-1</sub>	0.2109 (1.01)	0.1321 (0.66)	0.2229 (1.05)	0.0952 (0.48)	0.2205 (1.10)	0.2183 (1.12)		
Turnover <sub>t-1</sub>	0.0105 *** (3.02)	0.0449 *** (7.83)	0.0110 *** (3.18)	0.0462 *** (7.65)	0.0098 *** (3.09)	0.0448 *** (7.87)	0.0110 *** (3.13)	0.0470 *** (7.95)
Log (MV) <sub>t-1</sub>	-0.2012 * (-1.84)	-0.3499 ** (-2.83)	-0.2590 ** (-2.45)	-0.4064 *** (-3.51)	-0.1770 (-1.63)	-0.2522 * (-1.75)	-0.2361 ** (-2.16)	-0.4162 *** (-3.34)
Δ Cases to Cases <sub>t-1</sub>	0.0747 (0.25)	0.2768 (1.26)	0.1076 (0.37)	0.3238 (1.38)	0.0121 (0.04)	0.2680 (1.26)	0.1302 (0.44)	0.3308 (1.44)
Δ Deaths to Cases <sub>t-1</sub>	1.1800 (0.08)	-11.5439 (-0.79)	2.5303 (0.17)	-8.5181 (-0.56)	-0.9133 (-0.06)	-10.9465 (-0.74)	2.7561 (0.18)	-9.4817 (-0.63)
Weekday Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	7047	5822	7047	5822	7049	5823	7022	5805
R <sup>2</sup> within	0.0546	0.0770	0.0535	0.0736	0.0580	0.0773	0.0518	0.0739

The table shows fixed-effects estimates of the relation between COVID-19 vaccinations and equity volatility in emerging and developed countries. The left-hand side variable is the logarithm of absolute daily returns, Log |R|. Log (Daily Vaccinations) indicates the logarithm of the number of daily COVID-19 vaccinations. Daily Vaccinations per 100,000 represents the number of daily COVID-19 vaccinations scaled by the population of a country (multiplied by 100,000). Vaccination Period denotes a dummy variable taking the value of one for the period starting from the country's first vaccination day and zero otherwise. Δ Daily Vaccinations Dummy is an indicator variable that amounts to one if the daily change in the number of COVID-19 vaccinations is strictly positive and zero otherwise. Stringency Index reflects the government response to the pandemic and ranges between 0 and 100. BM is the book-to-market ratio; turnover is stock turnover; Log (MV) is the logarithm of market value in U.S. dollars. Δ Deaths to Cases is the daily change in the number of COVID-19 fatalities to the aggregate number of confirmed infections. We winsorized the continuous variables at the 1st and 99th percentiles. The numbers in parentheses are *t*-statistics based on standard errors clustered at the country level. The asterisks \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Results are organized in eight columns. Columns 1, 3, 5, and 7 visualize estimations for the emerging market countries. The remaining columns (2, 4, 6, and 8) show estimations for the developed market countries for the four indicators of mass vaccinations. The general picture that emerges from Table 5 is that the effect of mass vaccinations on the volatility of the tourism industry's stock is not sensitive to a group of countries. Nevertheless, analysis reveals that the effect is relatively stronger for emerging market countries. In these countries, the lower incidence of mass vaccinations has a larger marginal effect on the tourism industry in this group of countries, adding a significant value to their income. The effect is particularly pronounced for Daily Vaccinations Per 100,000<sub>t-1</sub> and  $\Delta$  Daily Vaccinations Dummy<sub>t-1</sub>. For instance, for the number of daily vaccinations, the 1000 people receiving shots per 100,000 inhabitants per day results in a drop in volatility by 0.7% in emerging markets, compared with 0.3% in developed markets.

#### **4. Discussion**

Mass vaccinations are of paramount importance for the tourism industry, decimated by the COVID-19 pandemic and the ensuing confinement and closure policies launched by governments around the globe. Our results show that following the rollout of mass vaccinations, the volatility of tourism industry stocks significantly decreased. Stock market investors now regard tourism stocks as a less risky and uncertain investment vehicle. This is because countries that are on track to achieve herd immunity through vaccinations are contemplating the possibility of reopening their borders for international travel. Investors closely monitor vaccination rates across countries. Vaccination rates can influence stock market volatility in the short and long run. First, staggered vaccination rates across countries provide opportunities for profitable investment opportunities in the short run. Equipped with the vaccination data, investors can rebalance their portfolios towards tourism industry stocks in relatively more vaccinated countries, which are expected to remove travel restrictions earlier and faster than countries with lower vaccination rates. This can reduce travel and leisure stock volatility in countries with relatively earlier rollouts of mass vaccinations and relatively higher vaccination rates. Second, in the long run, mass vaccinations are expected to reduce global economic uncertainty, which can be perceived as good news by investors in travel and leisure stocks around the globe. This reduces the volatility of stock investments in this industry in the long run. Taken together, mass vaccinations reduce the risk of investment in the tourism industry, which manifests in lower volatility of returns on the tourism industry's stocks.

Although it is easier said than done, policymakers should endeavor to increase the vaccination rate in order to attain herd immunity. In turn, a higher vaccination rate will translate into a faster recovery of the economy and the tourism industry. Specifically, such policy efforts will eliminate demand shocks due to COVID-19 itself and restrictions; and, in turn, boost tourism demand. Managers of travel and leisure companies should also keep abreast of vaccination policies to meet the possible rising demand for travel and leisure. However, it is worth mentioning that the complexity of such a recovery should not be underestimated in light of the multidimensional uncertainty brought by the COVID-19 pandemic (Zenker and Kock 2020).

One indirect implication of the critical discussion of a tourism research agenda in the post-pandemic era in Zenker and Kock (2020) is that the valuation models of the tourism industry's recovery should cater to these five points: (i) a change in destination image driven by the COVID-19 pandemic; (ii) a change in tourist behavior; (iii) a change in the host country's behavior; (iv) a change in the tourism industry; and (v) the long-term and indirect costs created by the COVID-19 pandemic. Our results indicate that mass vaccinations appear to resolve this multidimensional uncertainty partially. It is worth noting that the rollout of COVID-19 vaccines is associated with a larger volatility decline in emerging market countries. Lower volatility can attract international capital flows, which can be of paramount importance for their business cycle recovery. Lower volatility can also translate into a lower cost of capital. The lower cost of capital, in turn, implies that more

investment projects in the travel and leisure industry will break even, which will attract more investors. The travel and leisure industry contributes more to the gross domestic product in less developed countries with favorable climate conditions, where tourism often constitutes a primary source of foreign exchange and income than in more developed countries (Rosselló et al. 2017).

Furthermore, despite the growing anti-globalization sentiment around the globe, there are sound arguments as to why the world economy should be steered towards an even higher degree of globalization, of which international tourism is an important component. Although Contractor (2021) envisages higher perceived risks in the post-pandemic world, such risks can be ameliorated by a number of factors. These include (a) more sophisticated information systems used among international trade parties; (b) closer relationships between parties involved in an international transaction; (c) marginal increase in the diversification of input and assembly-point sources; (d) a decrease in a multidimensional “distance” between countries, in which parties to the international transaction are located; and (e) the quest for common standards in international trade. To the extent to which information about vaccination rates is perceived by investors to mediate the effects of these factors, the volatility of returns on travel and leisure industry stocks may decline.

## 5. Conclusions

In this study, we explored the effect of vaccination programs on the stock market volatility of the travel and leisure sector. By using daily data from 56 countries over the period from January 2020 to March 2021, we documented that vaccination decreases the investment risk of travel and leisure companies. There is a drop in volatility. Our finding is robust to many alternative estimation techniques, alternative volatility measures, additional control variables, and time periods, and does not depend on either the pandemic or government policy responses. Furthermore, the impact of mass vaccinations on the risk of tourism companies is more substantial in emerging markets.

The main limitation of this study lies in the nature of the dataset, which is fresh and relatively short. Spreading vaccination to more countries would yield more extensive and richer datasets, allowing us to re-evaluate and verify our findings. Future studies can compare the impact vaccinations have on the return and volatility of different industries. They can also consider alternative risk measures, such as default probability, systemic risk, or value at risk. Future research could disentangle “good volatility” (i.e., positive semi-variance) from “bad volatility” (i.e., negative semi-variance). In this regard, Patton and Sheppard (2015) find that future volatility is more strongly linked to the volatility of past negative returns (“bad volatility”) than the volatility of past positive returns. Thus, it would be interesting to ascertain how the balance between “good volatility” and “bad volatility” has changed since the rollout of mass vaccinations around the globe. Moreover, researchers can explore how vaccination affects other asset classes, such as corporate bonds and the credit of travel and leisure companies.

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**Conflicts of Interest:** The authors declare no conflict of interest.

## Notes

- <sup>1</sup> The Financial Times, <https://www.ft.com/content/f3413c8a-2d59-4a75-befd-ee73cd45fd80#post-9c108ebe-9a4f-4c8c-8171-5bdcb32489fb>, accessed on 17 April 2020.
- <sup>2</sup> For more details, please visit <https://covid19datahub.io> (accessed on 17 April 2020).
- <sup>3</sup> Importantly, though official data from China is unavailable at the time of writing of this paper, rough estimations can be made based on press reports. For robustness, in an unreported analysis, we replicate our analyses with these data included. Accounting for China does not measurably affect our findings.
- <sup>4</sup> The data was collected in April 2021.
- <sup>5</sup> [https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html) (accessed on 17 April 2020).
- <sup>6</sup> When using Log (TV), we do not include Log (MV) and Turnover to our regression to avoid multicollinearity.

## References

- Acharya, Viral V., Timothy Johnson, Suresh Sundaresan, and Steven Zheng. 2021. *The Value of a Cure: An Asset Pricing Perspective*. No. w28127. Cambridge: National Bureau of Economic Research.
- Aggarwal, Shobhit, Samarpan Nawn, and Amish Dugar. 2021. What caused global stock market meltdown during the COVID pandemic—Lockdown stringency or investor panic? *Finance Research Letters* 38: 101827. [CrossRef]
- Altig, Dave, Scott Baker, Jose Maria Barrero, Nicholas Bloom, Philip Bunn, Scarlet Chen, Steven J. Davis, Julia Leather, Brent Meyer, Emil Mihaylov, and et al. 2020. Economic uncertainty before and during the COVID-19 pandemic. *Journal of Public Economics* 191: 104274. [CrossRef] [PubMed]
- Anguera-Torrell, Oriol, Juan Pedro Aznar-Alarcón, and Jordi Vives-Perez. 2020. COVID-19: Hotel industry response to the pandemic evolution and to the public sector economic measures. *Tourism Recreation Research* 46: 148–57. [CrossRef]
- Antonakakis, Nikolaos, and Renatas Kizys. 2015. Dynamic spillovers between commodity and currency markets. *International Review of Financial Analysis* 41: 303–19. [CrossRef]
- Asness, Clifford S., Tobias J. Moskowitz, and Lasse Heje Pedersen. 2013. Value and momentum everywhere. *Journal of Finance* 68: 929–85. [CrossRef]
- Bae, Kee-Hong, Sadok El Ghouli, Zhaoran Gong, and Omrane Guedhami. 2021. Does CSR matter in times of crisis? Evidence from the COVID-19 pandemic. *Journal of Corporate Finance* 67: 101876. [CrossRef]
- Baig, Ahmed S., Hassan A. Butt, Omair Haroon, and Syed Aun S. Rizvi. 2021. Deaths, panic, lockdowns and US equity markets: The case of COVID-19 pandemic. *Finance Research Letters* 38: 101701. [CrossRef]
- Baker, Scott R., Nicholas Bloom, Steven J. Davis, Kyle Most, Marco Sammon, and Tasaneeya Viratyosin. 2020. The unprecedented stock market reaction to COVID-19. *Review of Asset Pricing Studies* 10: 742–58. [CrossRef]
- Banerjee, Snehal. 2011. Learning from prices and the dispersion in beliefs. *Review of Financial Studies* 24: 3025–68. [CrossRef]
- Bansal, Ravi, and Amir Yaron. 2004. Risks for the long run: A potential resolution of asset pricing puzzles. *Journal of Finance* 59: 1481–509. [CrossRef]
- Bansal, Ravi, Dana Kiku, Ivan Shaliastovich, and Amir Yaron. 2014. Volatility, the macroeconomy, and asset prices. *Journal of Finance* 69: 2471–511. [CrossRef]
- Caggiano, Giovanni, Efram Castelnuovo, and Richard Kima. 2020. The global effects of COVID-19-induced uncertainty. *Economics Letters* 194: 109392. [CrossRef] [PubMed]
- Carhart, Mark M. 1997. On persistence in mutual fund performance. *Journal of Finance* 52: 57–82. [CrossRef]
- Chan, Kam Fong, Zhuo Chen, Yuanji Wen, and Tong Xu. 2022. COVID-19 vaccines and global stock markets. *Finance Research Letters*. in press. [CrossRef]
- Chen, Ming-Hsiang, Ender Demir, Conrado Diego Garcia-Gomez, and Adam Zaremba. 2020. The impact of policy responses to COVID-19 on US travel and leisure companies. *Annals of Tourism Research Empirical Insights* 1: 100003. [CrossRef]
- Chia, Yee-Ee, Kian-Ping Lim, and Kim-Leng Goh. 2020. More shareholders, higher liquidity? Evidence from an emerging stock market. *Emerging Markets Review* 44: 100696. [CrossRef]
- Contractor, Farok J. 2021. The world economy will need even more globalization in the post-pandemic 2021 decade. *Journal of International Business Studies* 53: 156–71. [CrossRef]
- del Rio-Chanona, R. Maria, Penny Mealy, Anton Pichler, Francois Lafond, and J. Dooyne Farmer. 2020. Supply and demand shocks in the COVID-19 pandemic: An industry and occupation perspective. *Oxford Review of Economic Policy* 36: S94–S137. [CrossRef]
- Demir, Ender, Renatas Kizys, Wael Rouatbi, and Adam Zaremba. 2021. COVID-19 Vaccinations and the volatility of energy companies in international markets. *Journal of Risk and Financial Management* 14: 611. [CrossRef]



- Donadelli, Michael, Renatas Kizys, and Max Riedel. 2017. Dangerous infectious diseases: Bad news for Main Street, good news for Wall Street? *Journal of Financial Markets* 35: 84–103. [CrossRef]
- Fama, Eugene F., and Kenneth R. French. 1993. Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics* 33: 3–56. [CrossRef]
- Feng, Gen-Fu, Hao-Chang Yang, Qiang Gong, and Chun-Ping Chang. 2021. What is the exchange rate volatility response to COVID-19 and government interventions? *Economic Analysis and Policy* 69: 705–19. [CrossRef]
- Fontanet, Arnaud, and Simon Cauchemez. 2020. COVID-19 herd immunity: Where are we? *Nature Reviews Immunology* 20: 583–84. [CrossRef] [PubMed]
- Fotiadis, Anestis, Stathis Polyzos, and Tzung-Cheng T. C. Huan. 2021. The good, the bad and the ugly on COVID-19 tourism recovery. *Annals of Tourism Research* 87: 103117. [CrossRef]
- Foucalt, Thierry, David Sraer, and David J. Thesmar. 2011. Individual investors and volatility. *Journal of Finance* 66: 1369–406. [CrossRef]
- Gerwe, Oksana. 2021. The COVID-19 pandemic and the accommodation sharing sector: Effects and prospects for recovery. *Technological Forecasting and Social Change* 167: 120733. [CrossRef]
- Gil-Alana, Luis Alberiko, and Carlos Poza. 2020. The impact of COVID-19 on the Spanish tourism sector. *Tourism Economics* 2020: 1354816620959914. [CrossRef]
- Gössling, Stefan, Daniel Scott, and C. Michael Hall. 2020. Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism* 29: 1–20. [CrossRef]
- Gursoy, Dogan, and Christina G. Chi. 2020. Effects of COVID-19 pandemic on hospitality industry: Review of the current situations and a research agenda. *Journal of Hospitality Marketing & Management* 29: 527–29.
- Hale, Thomas, Noam Angrist, Rafael Goldszmidt, Beatriz Kira, Anna Petherick, Toby Phillips, Samuel Webster, Emily Cameron-Blake, Laura Hallas, Saptarshi Majumdar, and et al. 2021. A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker). *Nature Human Behaviour* 5: 529–38. [CrossRef]
- Harris, Milton, and Artur Raviv. 1993. Differences of opinion make a horse race. *Review of Financial Studies* 6: 473–506. [CrossRef]
- Jawed, Mohammad Shameem, Archit Vinod Tapar, and Amol S. Dhaigude. 2021. Crisis, firm characteristics and stock performance: Evidence from Hospitality and Tourism sector. *Tourism Recreation Research* 2021: 1–18. [CrossRef]
- Kaczmarek, Tomasz, Katarzyna Perez, Ender Demir, and Adam Zaremba. 2021. How to survive a pandemic: The corporate resiliency of travel and leisure companies to the COVID-19 outbreak. *Tourism Management* 84: 104281. [CrossRef]
- Lee, Chi-Chuan, Chien-Chiang Lee, and Yizhong Wu. 2021. The impact of COVID-19 pandemic on hospitality stock returns in China. *International Journal of Finance & Economics*. in press.
- Lin, Xiang, and Martin Thomas Falk. 2021. Nordic stock market performance of the travel and leisure industry during the first wave of COVID-19 pandemic. *Tourism Economics* 2021: 1354816621990937. [CrossRef]
- Manela, Asaf, and Alan Moreira. 2017. News implied volatility and disaster concerns. *Journal of Financial Economics* 123: 137–62. [CrossRef]
- Mele, Antonio. 2007. Asymmetric stock market volatility and the cyclical behavior of expected returns. *Journal of Financial Economics* 86: 446–78. [CrossRef]
- Nagaj, Rafat, and Brigita Žuromskaitė. 2021. Tourism in the Era of COVID-19 and Its Impact on the Environment. *Energies* 14: 2000. [CrossRef]
- Patton, Andrew J., and Kevin Sheppard. 2015. Good volatility, bad volatility: Signed jumps and the persistence of volatility. *Review of Economics and Statistics* 97: 683–97. [CrossRef]
- Poretti, Cédric, and Cindy Yoonjoung Heo. 2021. Asset-light strategies and stock market reactions to COVID-19's pandemic announcement: The case of hospitality firms. *Tourism Economics* 2021: 13548166211005198. [CrossRef]
- Qiu, Shangzhi Charles, Jianing Jiang, Xinming Liu, Ming-Hsiang Chen, and Xina Yuan. 2021. Can corporate social responsibility protect firm value during the COVID-19 pandemic? *International Journal of Hospitality Management* 93: 102759. [CrossRef]
- Rosselló, Jaume, Maria Santana-Gallego, and Waqas Awan. 2017. Infectious disease risk and international tourism demand. *Health Policy and Planning* 32: 538–48. [CrossRef] [PubMed]
- Rouatbi, Wael, Ender Demir, Renatas Kizys, and Adam Zaremba. 2021. Immunizing markets against the pandemic: COVID-19 vaccinations and stock volatility around the world. *International Review of Financial Analysis* 77: 101819. [CrossRef]
- Schwert, G. William. 1989. Why does stock market volatility change over time? *Journal of Finance* 44: 1115–53. [CrossRef]
- Seven, Ünal, and Fatih Yilmaz. 2021. World equity markets and COVID-19: Immediate response and recovery prospects. *Research in International Business and Finance* 56: 101349. [CrossRef]
- Sharif, Arshian, Chaker Aloui, and Larisa Yarovaya. 2020. COVID-19 pandemic, oil prices, stock market, geopolitical risk and policy uncertainty nexus in the US economy: Fresh evidence from the wavelet-based approach. *International Review of Financial Analysis* 70: 101496. [CrossRef]
- Song, Hyoung Ju, Jihwan Yeon, and Seoki Lee. 2021. Impact of the COVID-19 pandemic: Evidence from the US restaurant industry. *International Journal of Hospitality Management* 92: 102702. [CrossRef]
- World Economic Forum. 2022. This Is the Impact of COVID-19 on the Travel Sector. Available online: <https://www.weforum.org/agenda/2022/01/global-travel-tourism-pandemic-covid-19/> (accessed on 17 April 2020).

- Wu, Wenmin, Chien-Chiang Lee, Wenwu Xing, and Shan-Ju Ho. 2021. The impact of the COVID-19 outbreak on Chinese-listed tourism stocks. *Financial Innovation* 7: 1–18. [CrossRef]
- Yang, Yang, Hongru Zhang, and Xiang Chen. 2020. Coronavirus pandemic and tourism: Dynamic stochastic general equilibrium modeling of infectious disease outbreak. *Annals of Tourism Research* 83: 102913. [CrossRef]
- Zaremba, Adam, Renatas Kizys, David Y. Aharon, and Ender Demir. 2020. Infected markets: Novel coronavirus, government interventions, and stock return volatility around the globe. *Finance Research Letters* 35: 101597. [CrossRef]
- Zenker, Sebastian, and Florian Kock. 2020. The coronavirus pandemic—A critical discussion of a tourism research agenda. *Tourism Management* 81: 104164. [CrossRef] [PubMed]
- Zhang, Hanyuan, Hanyuam Zhang, Long Wen, and Chang Liu. 2021. Forecasting tourism recovery amid COVID-19. *Annals of Tourism Research* 87: 103149. [CrossRef]
- Zhang, Jilin, Yongzeng Lai, and Jianghong Lin. 2017. The day-of-the-week effects of stock markets in different countries. *Finance Research Letters* 20: 47–62. [CrossRef]
- Zhu, Oscar Yuheng, Bettina Grün, and Sara Dolnicar. 2021. Tourism and vaccine hesitancy. *Annals of Tourism Research*. in press. [CrossRef] [PubMed]



Article

# Peculiarities of Sustainable Cultural Development: A Case of Dark Tourism in Lithuania

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**Abstract:** The aim of this article is to reveal the connection and significance of the concepts of dark tourism and sustainable tourism for the sustainable development of tourism, especially for regional tourism growth. The article discusses the theoretical aspects of dark tourism and details the aspects of this tourism industry as part of cultural tourism. The article also analyses principles and models of sustainable tourism development, with a stronger focus on the integrated development paradigm. As a relatively significant part of the research and analysis of sustainable tourism is more focused on the challenges posed by global mass tourism, this article focuses on the issues of sustainable development of niche tourism in relation to regional tourism. The article presents the analysis of Lithuanian dark tourism resources, presents the most common dark (dissonant) heritage objects, as well as the evaluation of resources according to the spectrum of dark tourism and the comparative analysis of the country's most popular dark tourism objects from the point of view of sustainable tourism. A qualitative study revealed that regional tourism in Lithuania (especially niche, such as dark tourism) lacks integrity among different stakeholders, especially in involving the local community in the processes of cultural heritage protection and cultural tourism development and in developing more intensive links with the private sector. On the other hand, the analysis also revealed that there is an ambiguous public opinion regarding the dark heritage, which does not contribute to the sustainable development of tourism and the actualization of such heritage. The article also discusses the models of sustainable development of dark tourism and invites to discuss how to encourage greater public involvement in the development of dark tourism as part of cultural tourism, so that the principle of sustainable tourism does not remain an empty declaration.

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**Keywords:** sustainable development; tourism; dark tourism; cultural heritage management; tourism industry development; sustainable tourism development

## 1. Introduction

Globally, cultural tourism and heritage development is inseparable from sustainable development. Cultural tourism, just as any other branch of economy, uses resources, part of which are non-renewable. Inappropriate planning and implementation of cultural heritage tourism activities can cause damage for heritage itself, worsen the quality of residential environment, encourage degradation of traditional culture and increase social injustice; thus, all participants of tourism activities have great responsibility for their actions and the consequences of these actions. The post-modern tourist is part of the post-society. The latter is not only consumerist, passive, secular, individualized, in search of "other", new experience. The post-society has pushed out death from the daily life by turning it into a complete taboo; it has lost the ability to create a unique and acceptable model that would explain the finality of existence. The society has become excessively interested and amazed by death. According to Seaton, back in the 20th century Great Britain, interest in death was

a loathsome and pathological phenomenon; however, now it has become a normal part of the daily life, which can be seen in the number of tragic events made public through mass information means (Seaton 2002). It can be said that every representative of the modern western culture feels a varying degree of nostalgia for death that used to naturally be a part of the daily life. This has given rise to a niche branch of cultural tourism, i.e., dark tourism. However, this has become possible in the modern society due to the following two reasons: (1) changed economic conditions that allow mass consumption of these tourism products, and (2) transition to the information society, i.e., frequent publication of death images via means of mass information. Dark tourism as a branch of cultural tourism is characterized of its massiveness and quite rapid growth. However, to achieve sustainable growth of this niche of tourism, it is essential to aim for its integration with sustainable tourism, i.e., to reveal the peculiarities of dark tourism as sustainable cultural tourism development.

The main question raised in the article is how could the development of dark tourism in the regions be encouraged, while maintaining the principles of sustainable development and ensuring the needs of local stakeholders? In order to answer that question, the article is divided into five parts. The Section 1 presents the theoretical aspects of cultural tourism and paradigm of sustainable tourism development. The Section 2 is intended to deliver the core ideas and theoretical structures of dark tourism, dark heritage, the interrelationships with cultural tourism and its development. In addition, this part presents the main classifications of dark tourism, types of resources, discusses the challenges of dark heritage protection and preservation which tourism industry and societies meet.

The Section 3 is intended to present the case—the Lithuanian dark tourism industry and its resources, typology and specific challenges related with the growth of dark tourism industry preservation of dark heritage in the region. The Section 4 discusses the results of a qualitative analysis of the case study as well as analysis and synthesis of secondary data focusing on the aspects of regional dark tourism development based on the principles of sustainable tourism paradigm. This section also delivers three models of sustainable tourism as opposed to the current situation in the Lithuanian tourism market.

The last part of the article provides conclusion and suggestions for future scientific discussion on how to encourage greater public involvement in the development of dark tourism as part of cultural tourism, so that the principles of sustainable tourism do not remain an empty declaration in national law, but rather contrary—makes a real contribution to regional tourism growth.

## **2. Paradigm of Sustainable Cultural Tourism Development**

Lehtimäki (2009) claimed that education, increasing social well-being and pure curiosity of human-beings are the essential factors that encourage that what we call cultural tourism. Lehtimäki states that we should understand that all tourism is cultural, because it arises from certain cultural contexts and is mostly related to the goal of experiencing “other” or many different cultural experiences (Lehtimäki 2009, p. 16). Back in 1995, UNESCO claimed that cultural tourism is one of the most important guarantees of stable growth and heritage preservation (UNESCO 1995).

Cultural tourism consists of two areas, namely culture and tourism. In this context, tourism is understood both as the entirety of business and other constituents of tourism. Meanwhile, culture is here understood as both heritage and the daily life culture of today (Žalpyš 2007, p. 257). However, we face another dilemma—how do we define the culture of today? Culture can be conceptualized as an onion, i.e., the layers represent the levels of culture so that it is possible to reach deeper layers of cultural identity by knowing the first ones (Hofstede and Minkov 2010).

Hall (1997) discusses the concept of culture by using another metaphor, i.e., an iceberg. They distinguish culture into two parts—that which is visible and that which cannot be seen. The visible part of the iceberg encompasses behaviour, traditions, customs, and the part that cannot be seen consists of attitudes, opinions, thinking models, and values (Samovar et al. 2013).

Despite these (and many other) attempts to define culture, we often doubt whether it is important in the context of cultural tourism how culture is understood. Probably not because cultural tourism encompasses more and more different aspects. It is related to cognitive tourism because during cognitive tourism, the tourist arrives to know the cultural life, cultural objects or cultural events of a certain location, and, of course, have entertainment (Žalienne 2002, p. 9). Cultural tourism is closely related to heritage. According to Žalpys, this is a part of business and an opportunity to preserve cultural heritage objects by adapting them to the needs of tourism (Žalpys 2007, p. 257).

Cultural tourism plays an important role in preserving the value of national cultural heritage that has not only a physical form, but intangible values, too. According to Ashworth, only a small part of heritage is created for tourists intentionally, i.e., most of the heritage appeared due to local political or social reasons and can exist without tourism at all. Therefore, it can be concluded that cultural heritage resources not only promote development of local products that can be sold, but also create benefit for other parts of the tourism infrastructure (Ashworth 2009, p. 52). In the Convention on the Value of Cultural Heritage for Society, cultural heritage is explained as a group of resources inherited from the past. Despite the form of ownership, people recognize them as a reflection and expression of constantly developing values, beliefs, knowledge and traditions (The Council of Europe 2015). As it is said in the Analysis of Ethnic Cultural Heritage and Country's (Lithuania) Introduction, cultural heritage is ethnically, aesthetically or scientifically important cultural values passed on through several generations (Drašutienė et al. 2012, p. 61). Comparing the concepts of cultural resources and cultural heritage, there are no main differences; however, the concept of cultural resources includes various cultural objects and values on a wider scale. Cultural national resources play the main role in cultural tourism. According to Svetikienė (2002), resources of tourism localities consist of natural resources, cultural resources, and social, economic and management purpose objects. In this way, cultural tourism resources include objects of dark tourism as natural cultural and social purpose objects. Cultural heritage management depends highly on the ability to use historical environment and on sustainable tourism development, i.e., general initiatives and actions, both local and regional, and their development.

Sustainable tourism development exists when the actions carried out are economically possible, allowed, necessary and prospective in the social and ecological context as well as adapted and integrated into the local region.

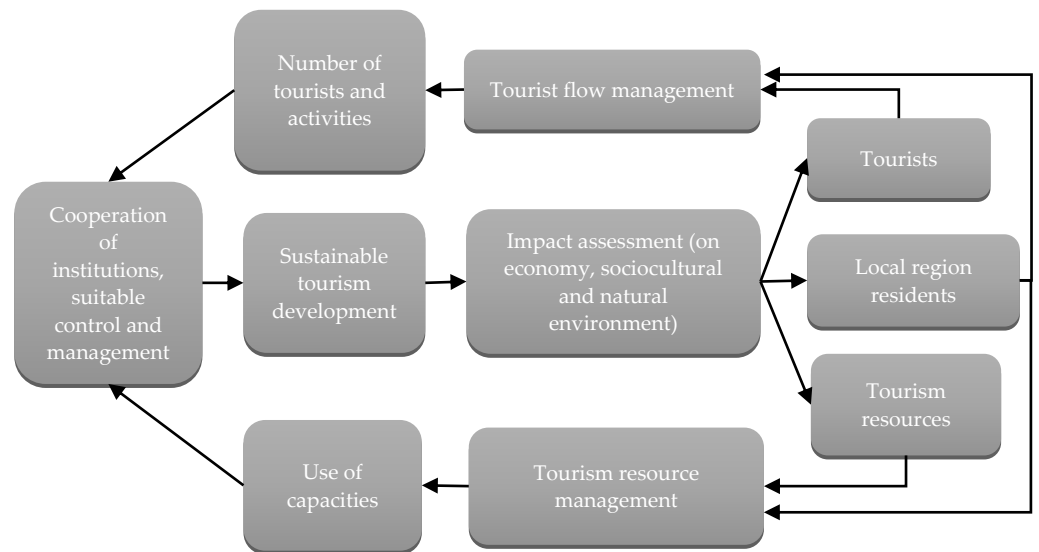
Sharpley suggests a sustainable tourism development model (cited in Hopenienė and Kamičaitytė 2004) that is presented in Figure 1.

This model spreads out the sustainable tourism system part which points out relations, cooperation between private, non-profit organizations, state institutions and social groups. Moreover, this model emphasizes both positive and negative impact of tourism on macro-environment. With negative impact of tourism on macro-environment, it is necessary to look for ways how to rationally use tourism resources, manage tourist flows, use the capacity of the tourism infrastructure and other elements of the tourism system (Hopenienė and Kamičaitytė 2004).

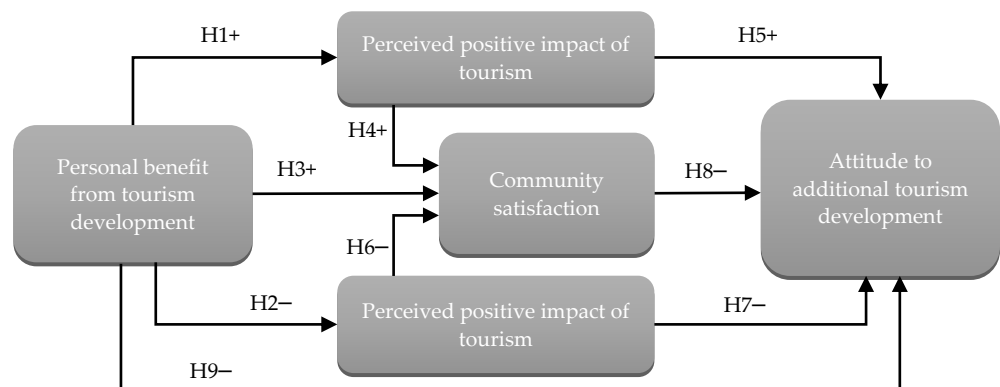
Stewart and Ko (2002) provided a hypothetical model (see Figure 2). It shows the relation between tourism development and the community's attitude towards tourism development. The figure presents H values with a plus sign showing the benefit received, and the opposite sign shows the negative impact of tourism development.

Cultural tourism development always leads to economic growth in any area. According to Žalienne et al. (2008), tourism activities are not just a process that provides economic benefit, i.e., creates jobs, increases income into the budget. The system of tourism is oriented towards mass tourism development and manifests through negative impact on the environment as well. However, it often has a negative impact on ecology and environment. Tourists' interest in one or another tourism location usually changes, i.e., first, there is a large flow that gradually decreases. This is related to social consequences as well.

Sometimes cultural tourism can pose threat to receiving cultures. Tourism development often becomes a conflict between residents and tourists.



**Figure 1.** Sustainable tourism development model according to Sharpley. Source: Hopenienė and Kamičaitytė (2004). Darni turizmo plėtra: konkurencingos turizmo sistemos kūrimo prielaidos. Organizacijų vadyba: sisteminiai tyrimai, No. 29, p. 56.



**Figure 2.** The relation between tourism development and community's attitude. Source: Stewart and Ko (2002). A structural equation model of residents' attitudes for tourism development. Tourism Management, no. 23.

In the service sector, as global problems increase, there has been a need to form the conception of sustainable development. This reveals when analysing tourism development models as well. It is important to emphasize post-modern tourism development, i.e., sustainable development of all tourism that emerged only during the last decade of the 20th century. In Lithuania, there is a lack of experience in this development because the country's independence was restored only in 1990, and this branch of economy has been developed since then.

In the last decade of the 20th century, the concept of sustainable development was expanded by introducing the social aspect that encompasses preservation and increase of opportunities for future humanity rather than just preservation of historically formed environment and natural resources. Thus, sustainability stands for leaving future generations with the same opportunities, if not higher, that we have had, and sustainable development is development that encompasses and satisfies existing needs of the society without decreasing opportunities for future generations to satisfy their future needs. This

conception encompasses social, economic and environmental aspects (Hopenienė and Kamičaitytė 2004).

In the 21st century, we cannot forget the aspect of culture as one of the aspects of sustainable development. In 2010, the global organization United Cities and Local Governments published a political statement *Culture as the Fourth Pillar of Sustainable Development*. It states that culture is an important support of global sustainable development and it should be included into the conception of the three-aspect sustainable development (UCLG (Executive Bureau of United Cities and Local Governments) 2010). One of the most important UNESCO documents on the topic of sustainable culture ‘*Culture for the 2030 Agenda*’ (UNESCO 2008) states that sustainable development is impossible without the culture; thus, the aim is to create new opportunities for culture by integrating it into the policy of social and economic inclusion as well as environmental policy (UNESCO 2012).

Therefore, when speaking about sustainable tourism, it is essential to talk about 4 aspects of sustainable cultural tourism. This is emphasized by Pan et al. (2018) and Kriščiūnaitė and Pranskūnienė (2020). After all, the cultural aspect cannot discord with national values or attitudes and outlooks. Even now in Lithuania, the question of whether Soviet cultural heritage is preserved or presented as heritage (Radzevičius and Jurėnienė 2014) arises discussions about the (in)sustainability of this cultural heritage with the current society and communities. However, in the public discourse, there is a lack of a broader and deeper analysis on the value of this heritage in the context of the entire Lithuanian history, i.e., its evaluation is formally carried out during a specific period by government parties. This only proves that culture and cultural heritage in Lithuania are not separate from politics as opposed to Western Europe.

Since cultural tourism inevitably impacts the economic, natural and sociocultural regional environments, it is extremely important to follow the principles of sustainable development in these areas. The conception of sustainable tourism development encompasses the main principles of sustainable tourism development, but their practical application is much more complex.

To maintain the quality of natural environment and social life for an unlimited period of time, it is necessary to include the local community into all the phases of local development. Hassan (2000) claims that to achieve successful sustainable tourism development, the following is necessary:

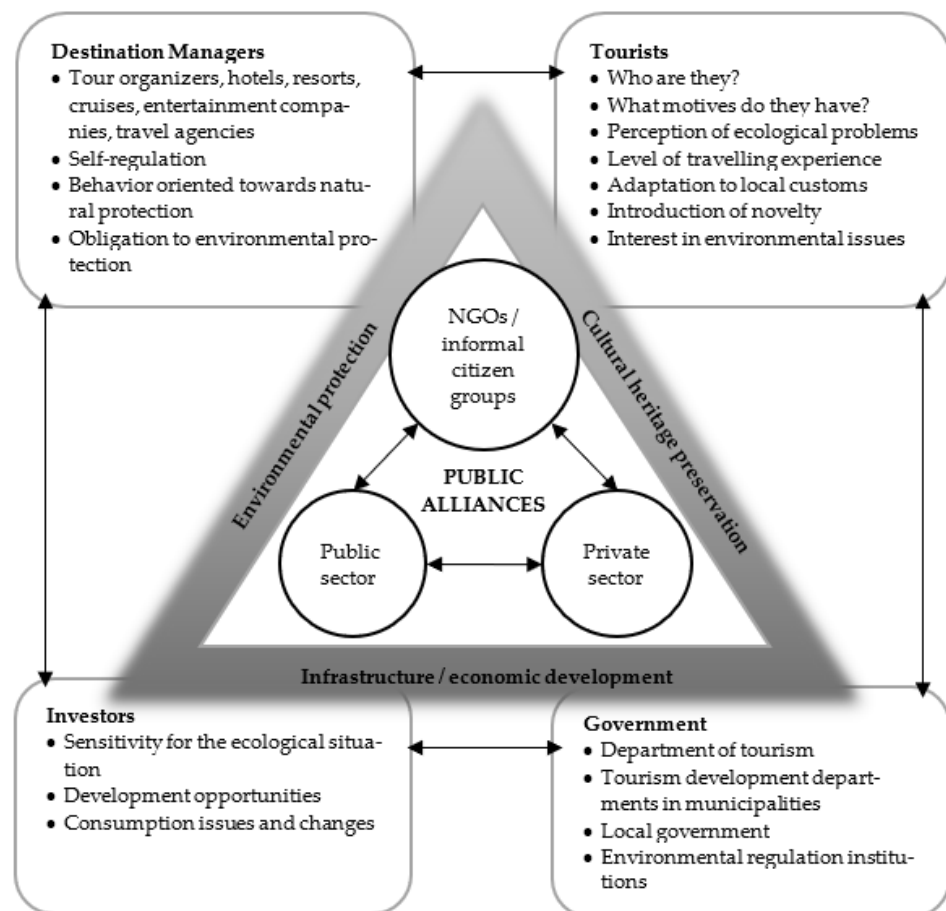
1. To maintain natural and cultural resources that are important for tourism development, they must be included into long-term development plans;
2. To understand that tourism is an industry that brings benefit not only for the local community, but also for the locality itself and tourists;
3. To create and maintain relationships between tourism and environment—tourism cannot cause harm for the environment;
4. Tourism development must regard the situation of a specific locality (environment, uniqueness, nature, cultural heritage); in other words, when developing tourism, we cannot unify everything;
5. To achieve good results, business, local government and protection institutions should develop the tourism industry in a specific region together—only then will the optimal solution be found (Hopenienė and Kamičaitytė 2004, p. 52).

All the principles illustrate relationship between environmental sustainability and managed tourism demand. For specific localities to preserve their originality and demand in the tourism market, it is necessary to ensure cooperation between the government, business, non-governmental organizations and communities. This system is presented in Figure 3.

Therefore, the main idea of sustainable development is to achieve that natural and man-made resources are not fully exhausted, that consumers are provided with a high-quality tourism product, and that this product is integrated into the local region. Thus, the development of the tourism sector that is based on the principles of sustainable tourism



development will satisfy the needs of tourists, residents and organizations that provide tourism services (Hopenienė and Kamičaitytė 2004).



**Figure 3.** Relationship-Based Paradigm of Sustainable Tourism by Hassan (2000). Source: Hassan 2000. Determinants of Market Competitiveness in an Environmentally Sustainable Tourism Industry. *Journal of Travel Research* 38: 239–45.

To sum up, it can be said that sustainable development of cultural tourism not only satisfies all the modern needs of tourism short-term, but also has a long-term positive impact as well. When UNESCO, EU and the European Commission included the aspect of culture into the conception of sustainable development, cultural tourism integrated sustainable development into its concept and became its inseparable part.

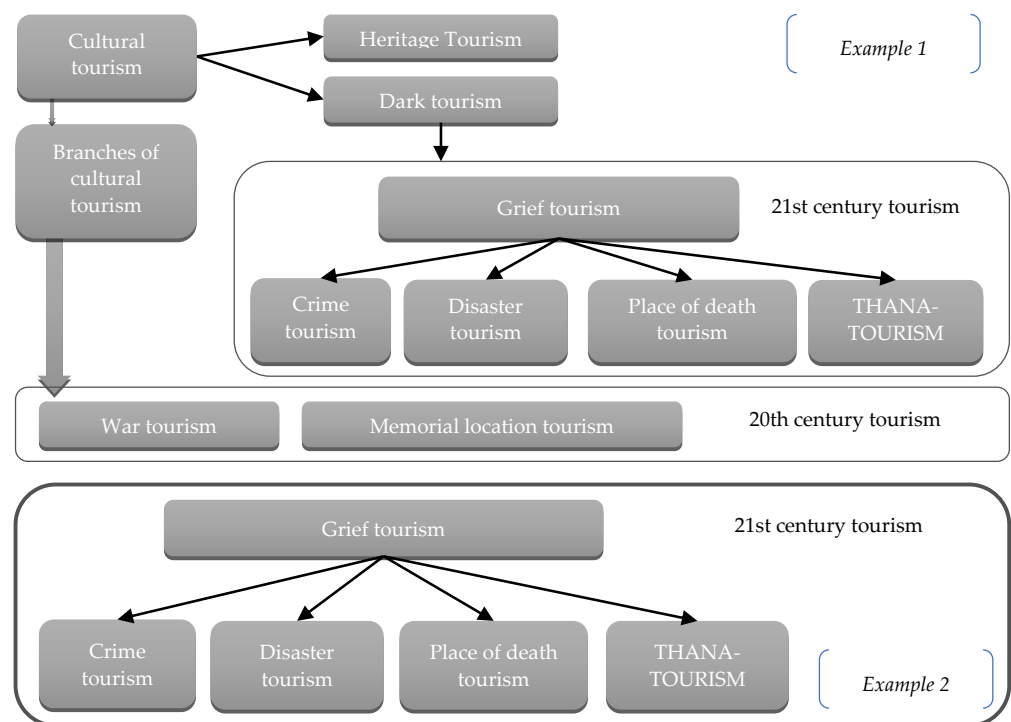
### 3. Dark Tourism as a Branch of Cultural Tourism

However, there is a question of where in cultural tourism dark tourism is or can be. According to the Convention concerning the Protection of the World Cultural and Natural Heritage, cultural heritage is divided into tangible and intangible. Tangible cultural heritage includes monuments, ensembles and well-known locations. Monuments are divided into architectural heritage, i.e., architectural monuments; fine art heritage, namely fine artwork; archaeological heritage, i.e., archaeological structures or findings. Ensembles are treated as isolated or related groups of structures whose architecture is related to landscape. Well-known locations are treated as man-made and natural creations (The Lithuanian National Commission for UNESCO 2006). Dark tourism objects can be included into the areas of cultural tangible heritage of ensembles and well-known locations.

The term ‘dark tourism’ was first used by Lennon and Foley in articles published in 1996. In the 21st century, this term spread into the worlds of science and business.

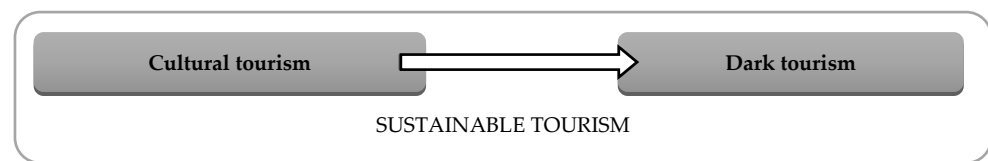
Dark tourism can be described as a branch of cultural tourism that partly oversteps the line of what is conventionally called cultural tourism resources. In Figure 1, examples 1 and 2 show the sub-branches of dark tourism.

As the Figure 4 shows, dark tourism began developing earlier than the 21st century. However, only in current century researchers made more precise description of dark tourism. As it has been mentioned in the previous section, new “other” motives of a cultural tourist that had not been noticed before had impact on this.



**Figure 4.** The development of Dark Tourism.

Foley and Lennon (2000) in their book ‘Dark Tourism: The Attraction of Death and Disaster’ distinguished the following seven subtypes of dark tourism: war, memorial location, crime, disaster, place of death and thanatourism. However, looking and the sub-branches, it is evident that two of these types (war and memorial location) were sub-branches of the developing mass tourism since the 20s, and since the 70s—a sub-branch of cultural tourism that had impact on rapidly growing cultural and heritage tourism industries. Back then, it was not seen in relation to sustainable tourism. Analysing dark tourism, it can be seen that the types of dark tourism distinguished by Foley and Lennon such as crime, disaster, place of death, thanatourism, have a common link that is shown in Figure 1 under the name of grief tourism. Summing up on the classification of cultural tourism, heritage tourism and dark tourism as well as their overlap, it can be said that the newest sub-branch of dark tourism is grief tourism that has its own sub-types, namely, crime, disaster, place of death tourism and thanatourism. Not all of these subtypes belong to heritage tourism. This depends on the cultural traditions, attitude and legal environment of the nation where the dark tourism location is. According to Robinson’s book ‘Cultural Heritage and Tourism’, it can be said that dark tourism is a part of cultural tourism (Robinson 2009). So dark tourism as a constituent of cultural tourism must follow the principles of sustainable tourism (see Figure 5).

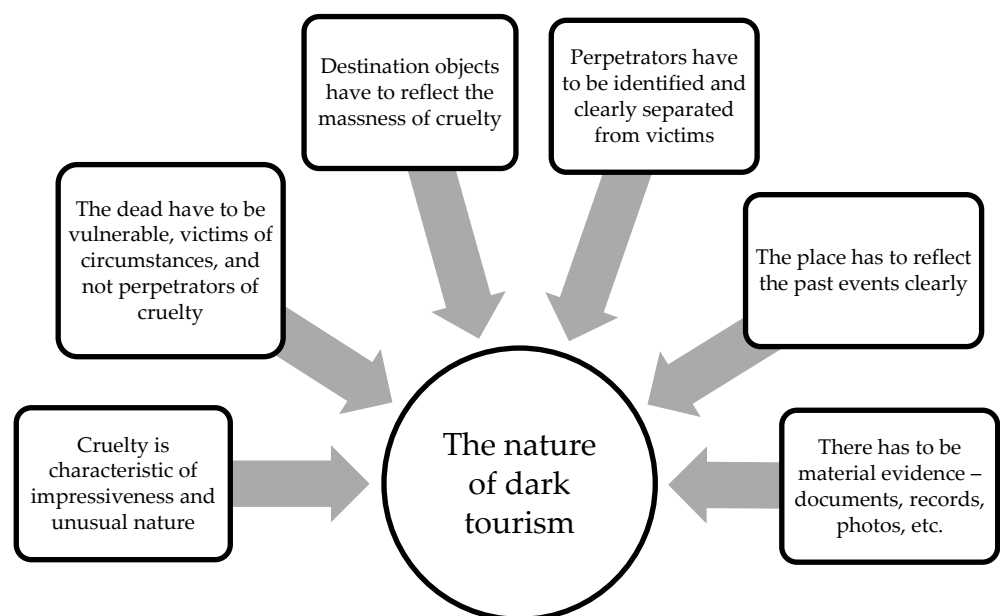


**Figure 5.** Dark Tourism and Cultural Tourism as Sustainable Tourism.

The Institute for Dark Tourism Research (United Kingdom) provides the following concept of research: visiting death and disaster-related or macabre-looking locations. As Korstanje (2015) states, dark tourism is characterized by a strange fascination or at least curiosity for what specialists call “death spaces”. The term refers to sites where the death of others is commoditized as a tourist product (Korstanje 2015). The conception of dark tourism is evaluated in mixed ways. Foley and Lennon (2000) point out that increased tourists’ interest in death-related objects was noticed and started to be analysed in the end of the 20th century—beginning of the 21st century. They point out that dark tourism is an evident intimation of post-modernity related to consumption of certain and recreated places of death and disasters as well as their specific presentation for the consumer. This death and disaster consumption culture could have emerged only in the contemporary society (Lennon 2005; Foley and Lennon 2000).

Sharpley (2009) and Stone (2006) analyse dark tourism from different points of view. On the one hand, Sharpley claims that this branch of tourism must be developed due to educational purposes and is not less important than visiting monuments, churches and other historically important places; on the other hand, Stone points out that dark tourism cannot be developed for educational purposes because it is related to violence and death. He points out that dark tourism can be analysed from a social point of view.

In their analysis of the nature of dark tourism management, Foley and Lennon (2000) distinguish 6 criteria that attract potential visitors. These criteria are provided in Figure 6.



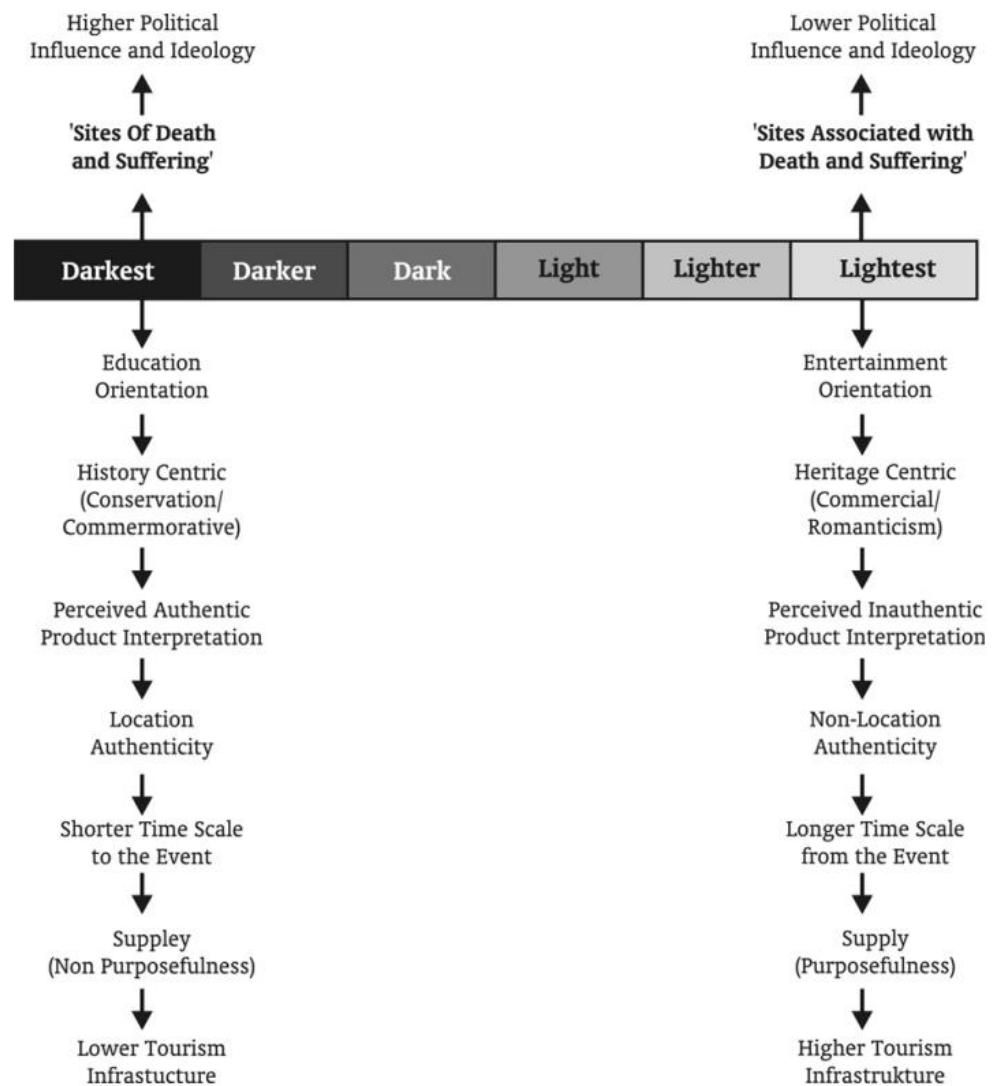
**Figure 6.** The nature of dark tourism. Source: Foley and Lennon (2000). *Dark Tourism: The Attraction of Death and Disaster*. London: Continuum.

As the figure shows, not all forms of dark tourism are limited by visiting objects that represent real death. The existing variety of dark tourism forms shows that dark tourism is also attributed objects that reveal economic rather than physical pain (Johanson 2012) and

macabre places that point to anticipated inevitable but not necessarily human (e.g., live environment, certain intangible, spiritual aspects) death (Shackley 2001).

Due to its great diversity, dark tourism attractions are not and cannot be equivalent. The subject of a recent large-scale catastrophe will always be far more sensitively valued by society than by a mythologized millennial-linked object linked to death, the application of which to tourism seems so natural and understandable that it no longer raises ethical debates. Therefore, some clarity is needed when assessing this direction of tourism, both from an ethical and an economic perspective.

In order to achieve this clarity in the field of dark tourism, many experts propose to divide a wide range of objects belonging to this tourism direction into certain (lighter-darker/lighter-brighter) categories of dark tourism, distinguishing their characteristic features (Stone 2006; Sharpley 2009). Although the naming of such a thing as ‘darker’ or ‘lighter’ dark tourism is contradictory, in the absence of other alternatives, the scientific literature so far refers to this division of dark tourism products by Miles (2002) and Stone (2006) as it is shown in Figure 7.



**Figure 7.** The Spectrum of Dark tourism. Source: (Stone 2006). A Dark Tourism spectrum: towards a typology of death and macabre related tourist sites, attractions and exhibitions. Available online: [http://clonk.uclan.ac.uk/27720/1/27720%20fulltext\\_stamped.pdf](http://clonk.uclan.ac.uk/27720/1/27720%20fulltext_stamped.pdf) (accessed on 5 January 2022).

The spectrum of dark tourism formed by Miles (2002) and Stone (2006), which is presented in Figure 7, shows that dark tourism products are not qualitatively equivalent, resulting in different experiences for consumers and different degrees of empathy for victims. According to the author, the local authenticity has a decisive influence on the perception of the scale of the tragedy, which manifests itself through the empathy of the visitors. Miles (2002) argues that “the present dimension of dark tourism objects also contributes to the empathy of visitors for victims, and therefore the importance of how a product is perceived, produced, and ultimately consumed.” More recent tragic events that can be traced back to “living “memories” through the stories of survivors or witnesses are more memorable (according to the scale presented by W. Miles—“darker”, see Figure 7) dark tourism products than those presented from the distant past.

To successfully adapt dark tourism heritage for cultural tourism, first, the existence of the events cannot be doubted, and second, it should be relevant to the society or its part. Third of all, according to Sharpley (2009), one should remember the main goals of heritage preservation, i.e., transfer of the past.

Seaton (2002) distinguished the following 5 forms of dark tourism:

- Visiting places of mass killings;
- Visiting places of executions;
- Visiting of memorial or historical places, i.e., places where the dead are buried such as war memorials, crypts, etc.;
- Visiting places that include torture devices, holocaust, war, weapon, former prison, etc. museums;
- Imitation of well-known historical battles, fights, organization of performances with elements of death.

Stone (2011) agrees with the classification proposed by Seaton; however, the author makes it more detailed and extended in Table 1.

**Table 1.** Types of Dark Tourism.

Type	Description
Entertainment type	Aimed at attracting tourists by means of imaginary death-related stories. Tourists are attracted mainly due to the emotions experienced through entertainment in dark tourism that is provided aesthetically, and the fact of death is perceived without high levels of adrenalin, and is usually unauthentic.
Exhibitions of dark tourism	Exhibitions of objects collected; related to death, suffering, wars and similar topics. These exhibitions are usually found in museums, the exhibits collected from different places are outside of the original place of event, and it is difficult for the visitor to experience the represented events
Prisons	Organisation of excursions to former prisons, past punishment rooms, law and order institutions. Many of these places are entertainment and commercial type, they do not always represent accurate past events and focus on attracting visitors
Graves	Visiting graves of people related to cruel historical events during which they suffered or lost their lives. Graves are treated as historical heritage; however, recently, there have been tendencies to visit graves of celebrities (e.g., kings of pop music) as well.
Places of disaster	These are places of disaster characteristic of strong past experiences that shocked the society. For example, the place of Princess Diana’s death. Popularity of such objects is directly impacted by mass media.
Places of conflict	Visiting places of military conflict is important from the educational and historical point of view because the goal of the trip is not the visit itself, but rather historical facts, reasons why the military conflict occurred in a particular place.
Genocide camps	They are related to historical events such as the holocaust, repressions by the Soviet government, anti-human conflict places.

When applying the heritage object for dark tourism, there is a need to create opportunity for its respective interpretation that would not interfere with the main principles of

social morale. When visiting dark heritage objects, visitors should not only satisfy their curiosity, but also feel the events and history of the period presented. When preparing the heritage object itself, it should be changed as little as possible to preserve its authenticity and so that it invokes strong emotions.

Increase in demand evidently promotes the supply of dark tourism services and variety of forms. One of the reasons for making dark tourism popular is curiosity as the main motif that encourages searching for not only what would create good emotions, but also morbid images of death that make the levels of adrenalin rise and are inseparable from the desire of novelty. In this age of information, people want to not only know, but also feel historical events more and more by taking a walk-through place of disaster, listening to guide stories about executions and other cruel events, looking at remaining photos and objects. Curiosity as the main motif that encourages looking for morbid death images is inseparable from the desire for novelty. In general, seeking for novelty and adventure motivates people for any kind of travel, which is usually contrasted against routine. For people living in today's urbanized, routine world, especially westerners, it is natural to look for ways to decrease the boredom created by their daily routine (Walter 2009). When looking for different experiences and novelty, tourists choose an environment that is socially and physically different from their usual residential environment (Yuill 2003). The environment of death naturally resists the living environment. In order to feel excited, tourists are determined to try even dangerous novelties, travel to unknown and unexpected environment (for instance, the war tourism case).

To sum up, it can be said that cultural heritage is constantly being refreshed through cultural tourism by creating tourism products, which creates an opportunity to create links to the past, present and future. In the area of heritage management, this highly depends on not only the ability to use the historically important, catastrophes' and disasters' places, but also on sustainable tourism development.

#### **4. Dark Tourism Resources in Lithuania**

Dark tourism objects in Lithuania are not distinguished by any separate category; however, most of the objects that can be attributed to dark tourism are included into the register of cultural values as immovable cultural values. These are war heritage objects, mass killing and torture places, forts, cemeteries, etc. According to Sharpley (2009), the division of dark tourism into smaller categories helps to determine what heritage management should focus on and what specific threats can arise when adapting a certain type of dark tourism for cultural tourism.

One of the most popular dark tourism objects in Lithuania is the Grūtas Park that has been raising discussions and creating opposing opinions in the society since its launch. In Lithuania, exaltation of the Soviet past is treated unfavourably fearing propagation of this historical period. The Grūtas Park is in a forest where partisans fought against the Soviet occupation regime. The same place exhibits list of captured and executed people, sculptures, souvenirs with Soviet memorabilia can be purchased (Figure 8A,B).

In order to attract visitors to dark tourism objects, these places are often presented in a lighter context than they are; as Wight and Lennon (2006) note, in this case, there is a danger that a cruelty heritage place will become another pastime activity rejecting the real, deeper social context as in the aforementioned case of the Grūtas Park.

The demand of dark tourism in Lithuania is increasing. This is evident because of the amount of information on websites related to not only tourism, but also history and entertainment. Wight and Lennon (2006) carried out a study about dark tourism objects in Lithuania and confirmed that Lithuania is attractive from the aspect of dark tourism, emphasising the heritage of genocide, invasions and repressions. During World War II, more than 200,000 Jews were killed in Lithuania, and there are approximately 200 mass-killing places throughout the territory of Lithuania; thus, holocaust heritage is one of the main topics of dark tourism. According to the data provided by the Kaunas 9th Fort Museum, 50,000 people were killed in Kaunas 9th Fort: 30,000 Kaunas ghetto prisoners,

10,000 Jews brought from other European countries, 10,000 people of other nationalities. Nevertheless, the place where was lost most lives of Jewish people in Lithuania is Paneriai where Nazis killed over 70,000 people.



**Figure 8.** (A) Train used for mass deportation in 1941. Available online: <https://tinyurl.com/2d73f9he> (accessed on 22 March 2022); (B) Statue in The Grūtas Park. Available online: <https://tinyurl.com/2d73f9he> (accessed on 22 March 2022).

The Paneriai memorial (Figure 9A,B) is the darkest dark tourism object in Lithuania. The monument in the mass killing place to commemorate the Jews that were killed was built in 1945 with the effort of the Jews that had survived the Holocaust. In 1952, it was demolished. In 1960, the Paneriai Memorial Museum as a branch of Vilnius Local Lore Museum was opened in the mass killing place. In 1985, a new museum building was built and the exhibit was renewed. In June of 1991, the Lithuanian Jewish community revealed a memorial for Jews who were killed with writings in Yiddish, Hebrew and Lithuanian languages. In the same year, the Paneriai Memorial Museum was transferred to the Vilnius Gaon Jewish State Museum. In 2009, when commemorating the 50-year anniversary of the launch of the museum, a part of the exhibit was renewed.



**Figure 9.** (A) Paneriai Memorial in Vilnius, Lithuania. Available online: <https://tinyurl.com/bzw2uzuh>; <https://tinyurl.com/25y752kt> (accessed 22 March 2022); (B) Paneriai Memorial in Vilnius, Lithuania. Available online: <https://tinyurl.com/bzw2uzuh>; <https://tinyurl.com/25y752kt> (accessed 22 March 2022).

In Lithuania, there are many war heritage objects remaining; one of the best-preserved objects that reflects cruel historical periods—Kaunas forts that include many occupant military heritages as well as the heritage showing the Nazi Germany cruelty and Soviet repressions. In 1878, Russian emperor Alexander II signed an order to build Kaunas fortress.



In 1914, on the eve of World War I, Kaunas was surrounded by 9 forts, batteries in between them and other defence structures. Kaunas became the first-class fortress of the tsarist Russian empire (Figure 10).



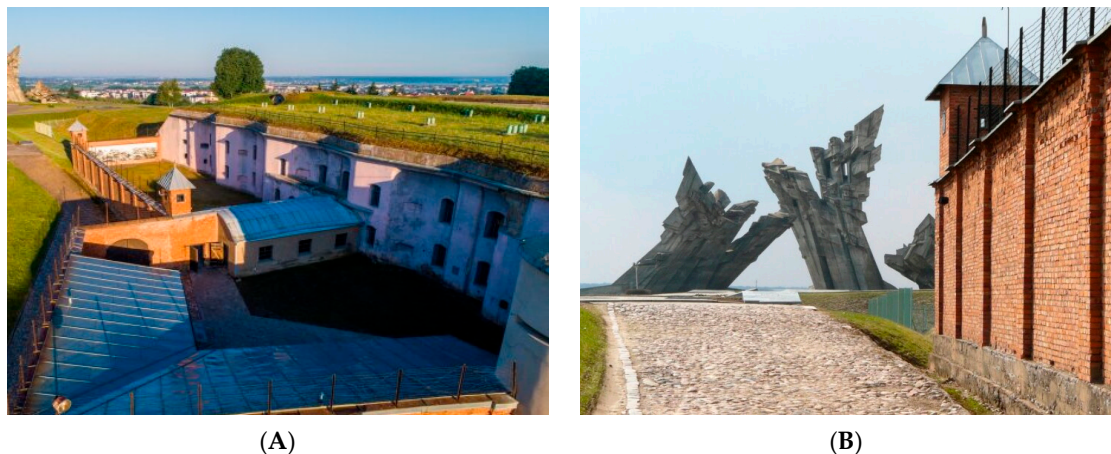
**Figure 10.** The scheme of Kaunas Forts (Lithuania) and its trail in 19th century. Available online: <https://tinyurl.com/2n8uaf6k> (accessed on 24 January 2022).

From the architectural and urbanistic point of view, Kaunas forts were not different from other fortresses built in Europe or Russia in the period of the end of the 19th century—beginning of the 20th century. In the 21st century, the 7th and 9th forts were adapted to dark tourism, and currently, 1st and 6th forts are being actively adapted as well. The 9th fort was adapted to tourism activities the longest time ago.

During World War I, the 9th fort practically did not suffer damages. After the war, it was turned into a branch of the city prison, and in 1940–1941, it was the prison for People’s Commissariat for Internal Affairs. In 1941–1944, the fort was turned into a death camp where masses of Jewish people from Lithuania and other European countries were killed. After that, the fort was used to store agricultural production for some time.

The new page of the 9th fort’s history was turned when in 1958 a museum was opened in the premises of the former 9th Fort of Kaunas (Figure 11A,B). Currently, the fort holds a national Kaunas 9th Fort Museum that has a variety of expositions. Two of the halls of the museums are used for Kaunas Fortress and World War I history expositions.





**Figure 11.** (A) The Building of former 9th Fort in Kaunas, Lithuania. Available online: <https://tinyurl.com/2p969snd>; <https://tinyurl.com/4j4hcb6j> (accessed on 23 March 2022); (B) The Building of former 9th Fort in Kaunas, Lithuania. Available online: <https://tinyurl.com/2p969snd>; <https://tinyurl.com/4j4hcb6j> (accessed on 23 March 2022).

After 1990 restoration of independence of Lithuania, the 9th fort collection was complemented by exhibits showing Soviet repressions and Lithuanian resistance. The entire collection of the 9th fort reflects the totalitarian regime and crime against humanity by condemning it and emphasising respect for the defenders of the Lithuanian freedom.

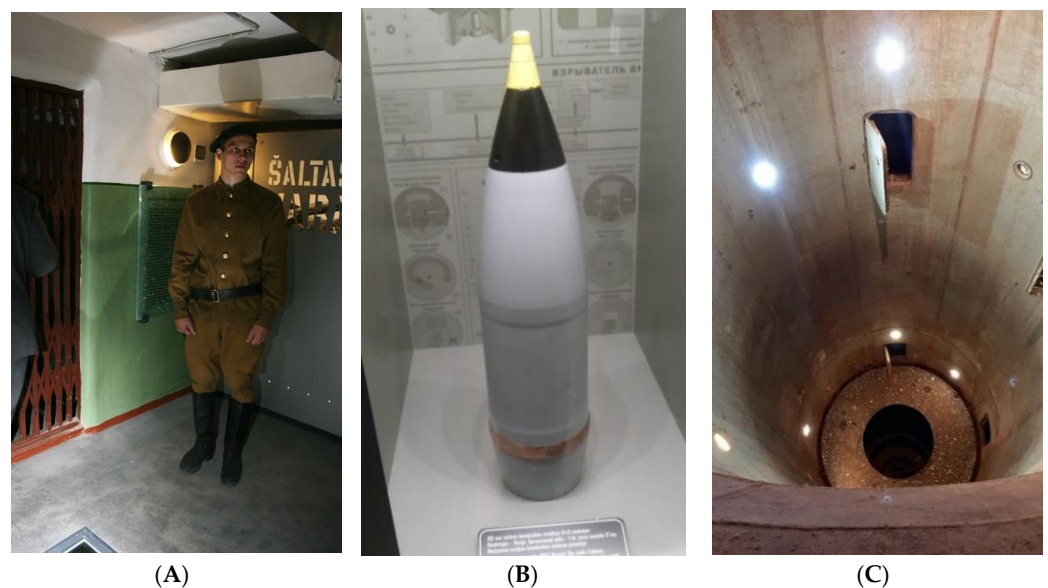
Another noteworthy Soviet occupation symbol and a dark tourism object in Lithuania is the Museum of Occupations and Freedom Fights (KGB museum in Vilnius). The museum was established in a building that had housed Soviet security services best known as KGB for almost 50 years. The museum reminds of the difficult and tragic period of 1940–1991 for Lithuania and its people.

The Museum of Occupations and Freedom Fights (KGB museum in Vilnius) was established in 1992. This is the only such museum in the Baltic States established in the same building that had housed Soviet repression institutions The People’s Commissariat for Internal Affairs, NKGB-MGB-KGB from the 2nd half of 1940 until August of 1991. The basement of the building has an internal prison—interrogation chamber where Lithuanians who went against the occupation government were held from the autumn of 1940 until 1987. The former KGB internal prison was left completely authentic (Figure 12A,B).



**Figure 12.** (A) Museum of Occupations and Freedom Fights in Vilnius, Lithuania. Available online: <https://tinyurl.com/39dvbz9f>; <https://tinyurl.com/2p88539s> (accessed on 19 January 2022); (B) Museum of Occupations and Freedom Fights in Vilnius, Lithuania. Available online: <https://tinyurl.com/39dvbz9f>; <https://tinyurl.com/2p88539s> (accessed on 19 January 2022).

In 2012 the Cold War Museum was opened, where the exposition of the Cold War epoch was introduced (Figure 13A–C). The museum was established in the Plokštinė former missile base close to Lake Plateliai. This is the first military base in former Soviet Union for R-12 Dvina intermediate-range ballistic missiles. The base was built from the autumn of 1960 until the end of 1962. In 1978, when the U.S. intelligence found out the location of the base, the weaponry was taken out of it, and soldiers retreated as well. From 1990 until 2009, the base was abandoned and damaged. The directorate of the Samogitian National Park took initiative and implemented the project Installation of the Cold War Museum and its Environment Infrastructure. A Cold War museum was established in Lithuania that reflected the historical development of 1946–1990.



**Figure 13.** (A) Exposition in Cold War museum (former Soviet missile base; now—part of Samogitian National Park, Lithuania). Available online: <https://tinyurl.com/3xdbsvyz>; <https://tinyurl.com/yn5zx5c9>; <https://tinyurl.com/jbs6m6dt> (accessed on 21 March 2022); (B) Exposition in Cold War museum (former Soviet missile base; now—part of Samogitian National Park, Lithuania). Available online: <https://tinyurl.com/3xdbsvyz>; <https://tinyurl.com/yn5zx5c9>; <https://tinyurl.com/jbs6m6dt> (accessed on 21 March 2022); (C) Exposition in Cold War museum (former Soviet missile base; now—part of Samogitian National Park, Lithuania). Available online: <https://tinyurl.com/3xdbsvyz>; <https://tinyurl.com/yn5zx5c9>; <https://tinyurl.com/jbs6m6dt> (accessed on 21 March 2022).

All the resistance period of the Lithuanian fight (1944–1953) can be attributed to dark tourism because it relates to resistance against the occupation regime. The armed resistance occurred until the death of the leader of the Soviet Union, Joseph Stalin. After his death, the general aplogy was announced. Here, two groups of dark tourism can be distinguished: partisan death places and their graves, and places of resistance, i.e., partisan dugouts (Figure 14A,B).

The pastime type of dark tourism is also carried out in Lithuania. One of the most popular places is the Soviet bunker in Vilnius.

During the armament competition between the U.S. and USSR in 1978, the order of the general secretary Leonid Brezhnev of the Central Committee of the Communist Party of the Soviet Union ordered to build reserve television stations that would replace the existing ones in case of a nuclear war with the U.S. The first such station was secretly build close to Moscow, the second one—in Tashkent. The third such station was built in Vilnius. The construction of the bunker began in 1983 and was finished in 1985. In documents, it was titled *Dom Tvorchestva* (Eng. House of Creation). Until 1991, the bunker was used to carry out test radio and television broadcasts. On 24 September 1991, the Soviet troops left the



House of Creation. From 1991 until 2007, the object belonging to the Lithuanian National Radio and Television was abandoned. In 2007, the national radio and television leased the premises of the bunker (Figure 15A), and the bunker was used for project of experiential performance called '1984. Survival Drama' that is being active today, too (Figure 15B).



**Figure 14.** (A) Partisan dugout (Pašiliai Forest); (B) Partisan dugout (Žalioji Giria). Available online: <https://tinyurl.com/3pjfyw5x> (accessed on 19 January 2022).



**Figure 15.** (A) Soviet bunker 'House of Creation'. Available online: <https://tinyurl.com/36kt673r> (accessed on 21 March 2022); (B) Scene from '1984. Survival Drama'. Available online: <https://tinyurl.com/36kt673r> (accessed on 21 March 2022).

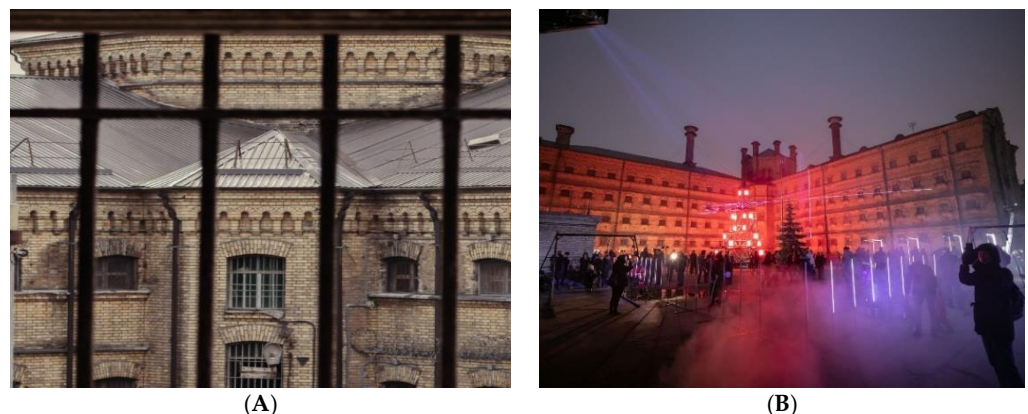
And the last object adapted to dark tourism in 2020 is the Lukiškės prison. This is a former interrogation chamber and prison in Vilnius. It is one of the oldest institutions of imprisonment in Lithuania. In 1905 its construction was finished, and only in 2019 the prison was closed (Figure 16A).

Currently, the building is used by a public institution that carries out excursions and organises art events (Figure 16B).

Navickienė and Meištė (2019) agree with Seaton's classification and provide more and newly discovered types of dark tourism:

1. *Black politics.* Places where human has no rights (North Korea, Maydan Ukraine);
2. *Black art.* Exhibitions, concerts which are related with killings, disasters, pain, sadness. This subcategory of dark tourism has a strong educational value: there is one exhibition of human body, where tourists are shown dead people in order to understand the anatomy of the body.
3. *Night tours.* Stargazing, jungle trips, night safari.

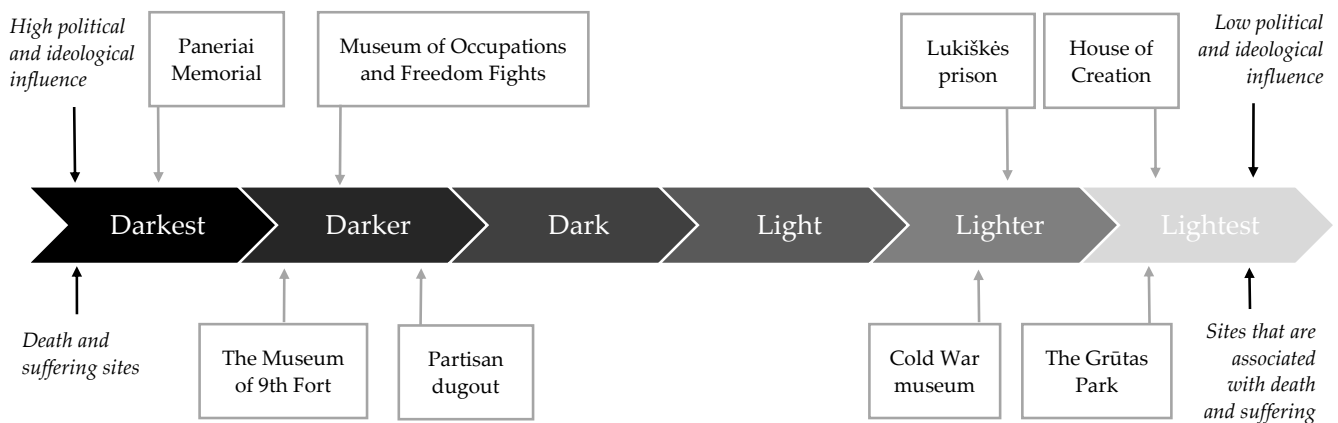
4. *Mystical places*. Tours to haunted places, to sorcerers and shamans' spots and hideouts.
5. *Hiking through swamps*. Today it is a popular tourist attraction—an activity where you can learn a lot about nature and experience indelible. These are the secret roads through the swamps that were built in the 13–15 centuries to escape the enemy.
6. *Acid forest in Nida: human–bird–tree*. In the most beautiful corner of Lithuania, Nida settled birds—cormorants, whose stools burn the trees with acid and they die<sup>1</sup>.
7. *Lithuanian Alps—gypsum mountains in Kėdainiai*<sup>2</sup>. White Phosphogypsum mountains—a unique phenomenon not only in Lithuania, but also in the Baltic States. Mountains began to pour in the fertilizer factory since 1968. Currently, phosphogypsum is accumulated in over 21 million tons.
8. *Night diving*. Polar settlement underwater in Molėtai, Luokesa lake. You can also dive at Klaipėda, where you can find sunken ships during World War II. Diving is dark tourism because underwater is almost always used by spotlights, the water hides its beauty.
9. *Kaunas museum of the blind-people*. The Kaunas Museum for the Blind was opened in 2005. It was the first museum for the blind in the Baltic States and one of the first in Eastern Europe. The museum is in the catacombs underneath St. Michael the Archangel Church. The exhibits can be perceived through sound, smells, and touch (Navickienė and Meištė 2019).



**Figure 16.** (A) Lukiškės prison. Available online: <https://tinyurl.com/2dfer723> (accessed on 22 March 2022); (B) 'Lukiškės prison 2.0'. Available online: <https://tinyurl.com/2dfer723> (accessed on 22 March 2022).

Summing up on the objects of dark tourism in Lithuania we put them in Miles (2002) and Stone (2006) developed spectrum of dark tourism. This was made with the aim to show general supply of Lithuanian dark tourism resources regarding to how strong are two main factors—relation with actual death and suffering (1) and political and ideological influence (2). The Lithuanian dark tourism spectrum is represented by Figure 17.

Assessing the spectrum of Lithuanian dark tourism, it is striking that extremes prevail in the country. A very large part of the objects is very dark and related to the history of the war, occupation and resistance movement in Lithuania. These objects are characterized by a particularly strong ideological and political direction, most of them are the places of mass-murder and suffering. However, another significant part of Lithuania's dark tourism is already on the opposite side of the spectrum. It is strongly focused on entertainment, attracting tourists and with a rather clear connotation of political-ideological sarcasm and irony. It is also important to mention that even though most of these sites are in the actual heritage sites, they are perceived by visitors as unauthentic and artificial.



**Figure 17.** Lithuanian dark tourism spectrum, based on Stone (2006) heritage management model.

And based on Seaton’s classification, it can be said that the following 6 types of dark tourism are being developed: genocide camps, places of conflict, dark tourism exhibitions, graveyards, prisons, entertainment type. Only visiting places of disaster is developed in the family circle. In Lithuania, it is popular to visit graves of famous people in Vilnius Rasos cemetery and Kaunas Petrašiūnai cemetery. Navickienė and Meištė (2019) distinguish 9 newest and smaller types of dark tourism that are spread in Lithuania and the entire Baltic region.

**5. Peculiarities of Dark Tourism as Cultural Tourism Sustainable Development**

When analysing the peculiarities of dark tourism as a part of cultural tourism, first we will discuss visitor tendencies in the analysed objects (Table 2).

**Table 2.** Dark tourism objects in Lithuania (2016–2020)<sup>3</sup>.

Dark Tourism Objects	Number of Visitors, in Thousands				
	2016	2017	2018	2019	2020
Paneriai memorial (Vilnius Gaon Jewish History Museum)	27	28	34	31	10
Plokštinė Cold War museum (Samogitian National Park)	35	34	35	44	33
Museum of Occupations and Freedom Fights (KGB museum)	88	83	99	98	20
Grūtas Park	63	58	57	61	51
Kaunas 9th Fort Museum	47	50	52	61	30
IN TOTAL:	260	253	277	295	144

Source: Statistical Data of Museums. Available online: <http://statistika.lrkmlt/muzieju-veiklos-statistika/pradzia/17/reportpage?sqid=dae67d8634e2e73f735bfd80257ec6312b34f758> (accessed on 19 January 2022).

The data in the table shows a dark tourism tendency, i.e., increase in the number of visitors, except of 2020—the COVID-19 pandemic year. Thus, the data of this year cannot be compared with 2016 when people all over the world had an opportunity to visit various global tourism objects, including Lithuanian dark tourism ones.

As the data shows, the most popular object from 2016 until 2020 was the Museum of Occupations and Freedom Fights. This corresponds to the results of a study carried out by Radzevičius and Jurėnienė in 2012 that the most popular objects of dark tourism were the Cold War Museum, the KGB museum and the bunker (Radzevičius and Jurėnienė 2014, p. 24). It can be said that as the inbound tourism went down in 2020, local tourism went up.

As it has already been mentioned, dark tourism is an inseparable part of cultural tourism. This is related to objects of cultural heritage. Cultural tourism is a part of sustainable tourism because sustainable tourism encompasses a sustainable society, economy, environment and culture (Pan et al. 2018). Sustainable culture encompasses the continuity of heritage, cultural tourism and rural tourism (Kriščiūnaitė and Pranskūnienė 2020).

The directions of the tourism sector analysis and development in the study of opportunities (2019) are distinguished as directions of tourism belonging to cultural tourism; however, it does not include dark tourism, even though it includes its separate types such as knowing the Jewish national heritage (visiting and knowing historical Jewish districts, cemeteries, memorials, museums, etc.), night tourism (going on night orientation trips, etc.), visiting museums cultural heritage objects (2019). Even though sustainable tourism is not mentioned, the study notes that social, demographic and other tendencies are relevant to the sector of tourism.

Among other tendencies, sustainable tourism is mentioned. It states that focus on sustainable environment (nature, culture, social environment, etc.) remains in its broad sense. The significance of sustainable development in the tourism sector is increasing, and this is understood as an integral and inseparable part of successful tourism development. Such elements of sustainable development as slow culture, ecology, aim to reduce CO<sub>2</sub> emissions and consumption, engagement of communities and NGOs, sharing economy principles, decrease of negative impact of tourism on residents, etc. remain relevant. Sustainable development for countries is becoming an additional competitive advantage in the tourism sector when they aim for complete value creation for residents, tourists and employees of the tourism sector (Turizmo sektoriaus analizė bei strateginės plėtros kryptys galimybių Studija 2019).

Therefore, altogether with analysis of dark tourism resources in Lithuania, the research of most popular Lithuanian dark tourism sites was conducted. It was carried out in order to assess how much development of dark tourism in Lithuania meets the general qualities of sustainable tourism according to three models discussed in previous sections as well as assuming that dark tourism is a constituent of cultural tourism (as it shown in Figure 5).

The analysis mostly was focused to the key aspects i.e., community involvement, cooperation between local government and private initiatives, and the links between environmental and heritage protection and the promotion of local culture. These criteria were chosen according to a Relationship-based Paradigm of Sustainable Tourism by Hassan and evaluated one-by-one from site to site with the simple Likert scale (from *low* to *high*). The results are shown in the Table 3.

**Table 3.** Evaluation of Lithuanian Dark tourism sites sustainability based on Relationship-Based Paradigm of Sustainable Tourism by Hassan (2000).

DARK TOURISM SITE	Factors, Assessment Scale and Evaluation					
	Cultural Heritage Preservation	Environment Protection	Community Involvement	Tourism Infrastructure	Public-Private Partnerships	Relations to Private Sector
	High-low	High-low	High-low	Good-poor	Active-passive	Strong-weak
Paneriai memorial (Vilnius Gaon Jewish History Museum)	High	High	Average	Average	Passive	Average
Plokštinė Cold War museum (Samogitian National Park)	High	High	Average	Average	Passive	Weak
Museum of Occupations and Freedom Fights (KGB museum)	High	Average	Low	Good	Passive	Weak
Grūtas Park	Low	High	Low	Good	Active	Strong
Kaunas 9th Fort Museum	High	High	Low	Good	Passive	Weak

The comparative analysis revealed two essential things that, in the opinion of the authors, determine the current situation of the development of dark tourism in Lithuania. First of all, despite significant efforts of national government in Lithuania and real encouragement, many dark tourism sites—even popular and well-known not only in the country—do not seek to involve local communities in their activities, or at least in the long-standing debate on actualisation of dark heritage and the ways of acceptable delivery and presentation to tourists. It goes without saying that this encourages local people to reject the dark heritage (especially those objects with strong connotations to the Second

World War and the Cold War) and the desire of dark tourism site managers to present such heritage as entertainment as much as possible, even sacrificing the authenticity of the site and ethical issues. It is also interesting that this problem exists in both public and private heritage sites.

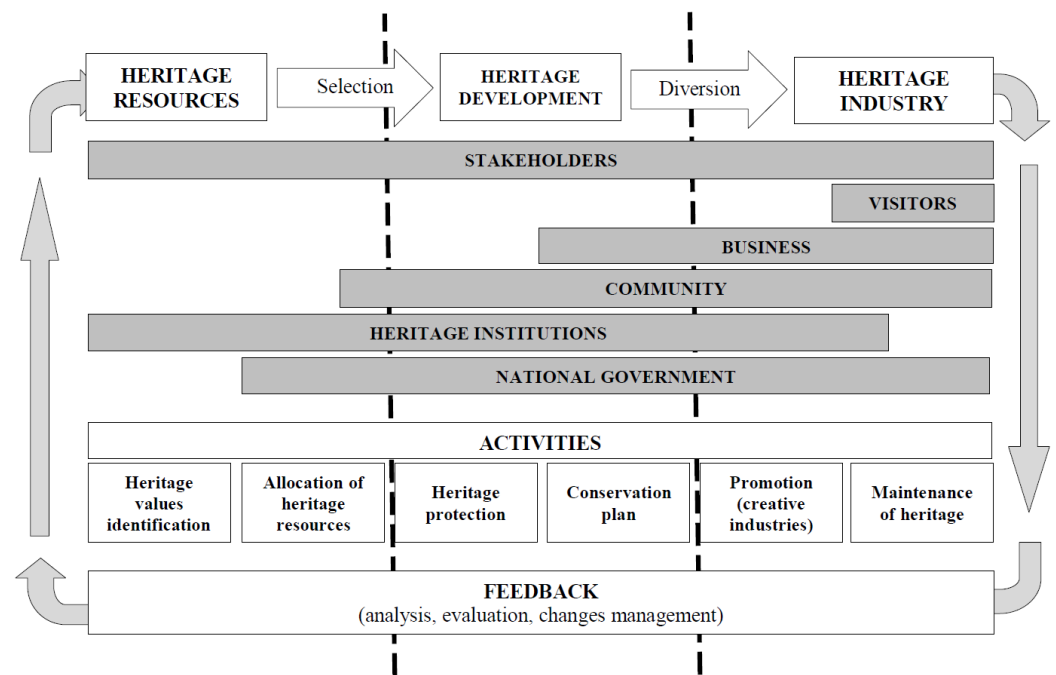
On the other hand, the question of the passivity of the local community (or Lithuanian society itself) in tourism development remains open. As Korstanje and George (2015) claimed, the open and closed-ended questionnaires applied on dark tourism seekers reveal that heritage is a key factor of their motivation; however, this does not mean that they understand what heritage is. This statement could probably be applied in another direction, as well: despite the relatively broad interest in the topic of dark tourism among scholars, local communities still have a lack of information about dark heritage with the clear focus on community needs. Finally, it should be acknowledged that heritage managers and national government activism (or apathy in some cases) are not always the real cause of the unsatisfactory situation.

Another thing that emerged from the study is the weak and slow development of links between state-owned dark tourism sites and the private sector, and the lack of private initiatives and projects. However, this is important not only for the development of dark tourism as a niche in the tourism industry, more efficient creation of the necessary infrastructure or the growth of the site's awareness nationally and internationally. More important is the fact, that unstable and episodic relations with the private sector is serious limitation of the effective development of sustainable tourism in the region. As it was explained in Section 1, the development of sustainable tourism that is efficient and beneficial to all stakeholders is based on the principle of partnership. Only then is sustainable development possible when the needs of all parties are ensured (consensus principle). Unfortunately, the study revealed that even dark tourism sites located in the capital city of Lithuania do not have any significant partnerships with the private tourism businesses.

On the other hand, it is gratifying that, despite the negative aspects mentioned above, the tourism infrastructure in the assessed dark tourism sites is sufficient and consistently improved. This only confirms the fact that the state is making significant efforts at the national level to accelerate the development of tourism in the country. It should also be noted that Lithuanian dark tourism sites ensure a high level of dark heritage preservation and actively contribute to environmental protection, too.

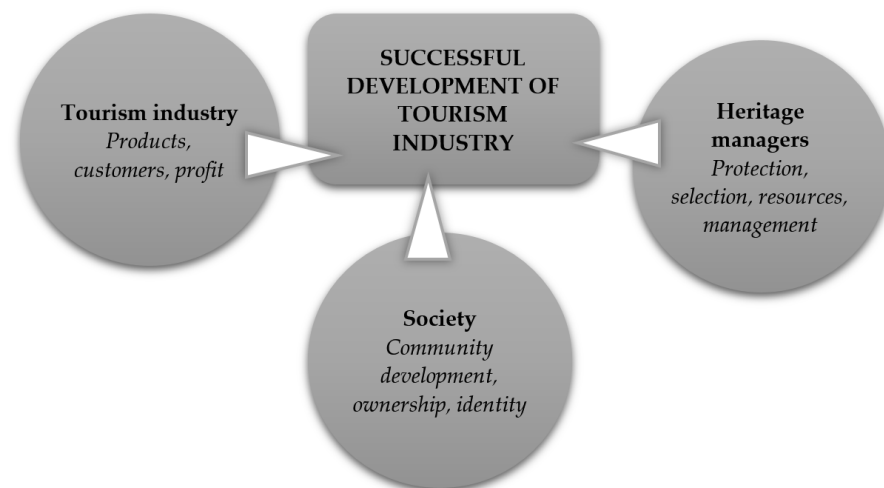
According to Sharpley's sustainable tourism development model, it is necessary to carry out tourist flows and impact assessment. In Lithuania, the question of how to include communities into the management of dark tourism objects belonging to cultural tourism is still an issue. As it has been mentioned in the text, many objects belong to state, municipalities, departmental or private museums and are managed vertically. Often, national priorities and priorities of separate municipalities in cultural tourism development are not coordinated. They are not fully integrated. The aforementioned study points out that Lithuania has the prevailing competition and cooperation culture. Every interested party tends to receive rather than give and aims at maximising their individual short-term benefit. Cooperation is often understood as formal coordination or inclusion, there is a lack of openness to different opinions, ability to coordinate them and look for the best possible solution instead of local optimum (Sharpley 2009). However, the area of cooperation does not anticipate inclusion of communities, i.e., in order to achieve sustainable development of the tourism sector, it is essential to strengthen the cooperation culture among different interested parties such as political influencers, institutions, municipalities, business and associated business structures (Sharpley 2013). As Stewart and Ko (2002) points out, one needs to see and understand the benefit created by tourism. Figure 18 presents the Lithuanian heritage management model, developed by Jurėnienė and Radzevičius (2014).





**Figure 18.** Lithuanian heritage management model. Source: Radzevičius and Jurėnienė (2014). Soviet Heritage and Tourism Development: the Case of Lithuania. XXI № 2, p. 38.

As it can be seen from the model, the dark tourism management model includes the community in between heritage institutions and businesses. However, creators of Lithuanian tourism strategies do not see communities as important part for an efficient and sustainable tourism development. The heritage risk management model formed by Australian Heritage Commission (Australian Heritage Commission 2000) states that risk management includes three groups of actors—tourism operators, heritage managers and the local community. Figure 19 presents the essential functions of the interested parties included in the AHC model in order to be more informative.



**Figure 19.** AHC Model of Heritage management. Source: Jurėnienė and Radzevičius (2014), Models of Cultural Heritage, Transformations in Business and Economics, Vol. 13, No 2 (32), p. 244.

As both models show, inclusion of community into cultural heritage management is one of the risk reduction factors. It can be said that the cultural heritage management model in Lithuania will remain the same as it has been since 1990. What it is more important, that the inclusion and active participation of local communities in development of dark



tourism sites helps significantly reduce the resistance and negative mood against this type of heritage and tourism. Finally, it should help to make the approach and principles of sustainable tourism alive and beneficial for all stakeholders.

## **6. Discussion**

Dark tourism is a constituent of cultural tourism because it uses the same cultural heritage objects and creates products that are related to unique social material, intellectual, spiritual and emotional functions. According to the definition provided by the World Tourism Organisation, cultural tourism is a type of tourism activities where the main visitor motivation is to learn, discover, experience and consume tangible and intangible cultural objects/products found in a tourist location. These objects/products relate to both cultural and dark tourism. Unfortunately, the feasibility study of Lithuanian tourism development does not distinguish dark tourism, although there are mentioned Jewish heritage, museum, cultural heritage object tourism.

Cultural and dark tourism coordinates well with sustainable tourism and sustainable development. Even though sustainable development in Lithuania does not include culture as the 4th sustainable development aspect until now, the analysis of researchers' studies and international documents shows that sustainable development encompasses sustainable culture as well, and it includes cultural tourism. Lithuania anticipates the aspect of sustainability in tourism development but through so-called "slow pace" tourism culture. This means that the aim includes long holidays of inbound tourism consumers in a country and their long-term engagement into the local culture. So, there is a conflict between the principles of sustainable development and dynamics and preferences of the nowadays tourists.

However, these aspects are not the most important and actual for ensuring the sustainable dark tourism development in region. The main topic is how to involve communities into the development process, into adaptation of their local cultural objects for the needs of cultural dark tourism, so that it generates added value for the region and for the community as well.

And here is a dilemma, because it is necessary to consider how the concept of dark tourism should be supplemented so that this conflict would not be so acute; how to ensure that the growing interest of travellers in visiting dark tourism sites, especially the darkest ones, does not become an obstacle to sustainable development and does not do more harm than good to the local environment and communities. On the other hand, by severely restricting attendance, tightening the preservation and consumption of the dark heritage, and protecting local communities, there is likely to create only greater pressure and opposition between sustainability and the demand for dark tourism. Furthermore, there is still open question of why local societies (and not in Lithuania only—this is common issue for the all former Soviet Republics) stand out for lack of active attention and awareness to their local history, lack communality and civic activism, which could be the keys for the higher local community engagement into development of sustainable tourism sites.

The analysis of the dynamics of dark tourism sites visitors since 2016 shows that the numbers increased<sup>3</sup>. This is related to the insufficiently developed tourism industry because the participants of the Lithuanian tourism industry seek short-term benefit based on a financial expression rather than sustainable cooperation. In 2020, the tourism market developed only based on local tourism resources. However, the KGB museum remained the most visited object.

The Lithuanian dark tourism, similar to any other tourism, is managed vertically. Often, there is no general cultural heritage strategy on state and municipal levels. Sustainable tourism development models include community that is or should be interested in effective management of existing heritage. Lithuanian tourism development studies do not anticipate engagement of communities into cultural heritage and cultural tourism development studies. This in its turn does not reflect the sustainable development model because one of the constituents is sustainable society. The anticipated cultural heritage

management model will not change. Therefore, cultural tourism development in Lithuania will not change as well, and sustainability will remain just a declarative expression.

As it was mentioned before, dark tourism, as a type of tourism, is a complex, ambiguous and controversial topic that has been the subject of much debate and criticism. Therefore, the deeper and more active involvement of the local community is essential for the more sustainable development of dark tourism, both locally and globally. It is the community (and, in a broad sense, the society of the region or country) that should be most interested in the preservation, promotion and sustainable use of its cultural, heritage and historical resources. As Light (2017) stated, the people whose stories are represented at a place of death represent a stakeholder group that has, to date, been largely neglected. Engaging with such groups enables a better understanding of the tensions over the interpretation and marketing of such places but could potentially contribute to developing strategies that are considered acceptable and appropriate (Light 2017). This can be achieved through joint projects of researchers, cultural workers and local people (one of the great initiatives in Lithuania is the involvement of communities in activities, events and general implementation of project “Kaunas—European Capital of Culture 2022” in order to exploit local heritage, including dark heritage, too<sup>4</sup>).

However, in addition to the active involvement of communities, the development of sustainability principles in national tourism development documents is no less important. Here again, it is important to emphasize that we are not talking about the “incorporation” of declarative principles of sustainability, but about the revision of the tourism strategy, which aims to introduce more horizontality into national tourism management. However, let us not forget the obvious fact that today’s world is extremely dynamic, and therefore the strategy must be flexible and responsive to reality. Therefore, horizontality in tourism management and community involvement are some of the best ways to achieve this, while actively developing sustainable dark tourism.

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## Notes

<sup>1</sup> A hort video about <https://tinyurl.com/bdHz3afz> (accessed on 6 January 2022).

<sup>2</sup> A Short movie about gypsum mountains <https://www.youtube.com/watch?v=Op9K3Mx0U-4> (accessed on 6 January 2022).

<sup>3</sup> This argument does not include the statistics for 2020, when COVID-19 spread worldwide and the consequent restrictions on travel and tourism were applied.

<sup>4</sup> See more about Kaunas—European Capital of Culture’ programme “Memory Office”: <https://kaunas2022.eu/en/memory-office/> (accessed on 22 March 2022).

## References

- Ashworth, Gregory J. 2009. Kaip turistai veikia paveldo vietas? In *Kultūros paveldas ir turizmas. Galimybės, poveikis*. Vilnius: Department of Cultural Heritage under the Ministry of Culture, p. 52.
- Australian Heritage Commission. 2000. *Successful Tourism at Heritage Places: A Guide for Tourism Operators, Heritage Managers and Communities*. Gold Coast: AHC.
- Drašutienė, Vida, Loreta Kubiliūnienė, Rima Strelčiūnienė, Nijolė Kelpšaitė, and Sigitas Drašutis. 2012. Etninės kultūros paveldo ir šalies (Lietuvos) pristatymo analizė. Report. Available online: [http://www.focalproject.eu/image/Cultural\\_heritage\\_report\\_LT\\_130621.pdf](http://www.focalproject.eu/image/Cultural_heritage_report_LT_130621.pdf) (accessed on 6 January 2022).

- Foley, Malcolm, and John J. Lennon. 2000. *Dark Tourism: The Attraction of Death and Disaster*. London: Continuum.
- Hall, Stuart. 1997. *Representation: Cultural Representations and Signifying Practices*. London: Sage Publications & Open University.
- Hassan, Salah. 2000. Determinants of Market Competitiveness in an Environmentally Sustainable Tourism Industry. *Journal of Travel Research* 38: 239–45. Available online: [https://www.researchgate.net/publication/238430830\\_Determinants\\_of\\_Market\\_Competitiveness\\_in\\_an\\_Environmentally\\_Sustainable\\_Tourism\\_Industry](https://www.researchgate.net/publication/238430830_Determinants_of_Market_Competitiveness_in_an_Environmentally_Sustainable_Tourism_Industry) (accessed on 6 January 2022). [CrossRef]
- Hofstede, Geert, and Michael Minkov. 2010. *Cultures and Organizations: Software of the Mind*, 3rd ed. Edmonton: McGraw-Hill, Available online: <http://tar.tic.lt/Default.aspx?id=2&item=results&aktoid=320A0641-4105-42C0-A65B-621D9D563429> (accessed on 7 January 2022).
- Hopenienė, Rimantė, and Aušra Kamičaitytė. 2004. Darni turizmo plėtra: Konkurencingos turizmo sistemos kūrimo prielaidos. *Organizacijų vadyba: Sisteminiai tyrimai* 29: 49–55.
- Johanson, Mark. 2012. Dark Tourism: Understanding the Attraction of Death and Disaster. Available online: <http://au.ibtimes.com/articles/337625/20120506/dark-tourism-research-idtr.htm> (accessed on 7 January 2022).
- Jurėnienė, Virginija, and Martynas Radzevičius. 2014. Models of Cultural Heritage. *Transformations in Business & Economics* 13: 244.
- Korstanje, Maximiliano. 2015. The Anthropology of Dark Tourism: Exploring the Contradictions of Capitalism. Available online: <https://www.researchgate.net/publication/287968233> (accessed on 3 April 2022).
- Korstanje, Maximiliano, and Babu George. 2015. Dark Tourism: Revisiting Some Philosophical Issues. *e-Review of Tourism Research (eRTR)* 12: 127–36. Available online: <https://www.researchgate.net/publication/283813368> (accessed on 3 April 2022).
- Kriščiūnaitė, Viltė, and Rasa Pranskūnienė. 2020. Tarp tamsiojo ir darniojo turizmo. *Regional Formation and Development Studies* 2: 208–18. [CrossRef]
- Lehtimäki, Marianne. 2009. Kultūros paveldas ir turizmas. Vilnius: Kultūros paveldo departamentas prie Kultūros ministerija. Available online: <http://www.kpd.lt/uploads/Tai%20%C4%AFdomu/FORUMO%20KKNYGA.pdf> (accessed on 12 December 2021).
- Lennon, John J. 2005. Journeys in understanding: What is dark tourism? *The Sunday Observer*. October 23. Available online: <http://www.guardian.co.uk/travel/2005/oct/23/darktourism.observerescapesection> (accessed on 6 January 2022).
- Light, Duncan. 2017. Progress in dark tourism and thanatourism research: An uneasy relationship with heritage tourism. *Tourism Management* 61: 275–301. Available online: <https://www.researchgate.net/publication/316473254> (accessed on 7 January 2022). [CrossRef]
- Miles, William. 2002. Auschwitz: Museum interpretation and darker tourism. *Annals of Tourism Research* 29: 1175–78. [CrossRef]
- Navickienė, Regina, and Rūta Meištė. 2019. Dark Tourism as Accessible Nature Tourism for Everyone. Available online: <https://www.skogsstyrelsen.se/globalassets/projektwebbplatser/attractive-hardwoods/dark-tourism-r-miste-and-r-navickiene.pdf> (accessed on 8 January 2022).
- Pan, Shu-Yuan, Mengyao Gao, Hyunook Kim, Kinjal J. Shah, Si-Lu Pei, and Pen-Chi Chiang. 2018. Advances and challenges in sustainable tourism toward a green economy. *Science of the Total Environment* 635: 452–69. [CrossRef] [PubMed]
- Radzevičius, Martynas, and Virginija Jurėnienė. 2014. Soviet Heritage and Tourism Development: The Case of Lithuania. *Intellect* 21: 16–40.
- Robinson, Mike. 2009. Kultūrinio turizmo patirtys. In *Kultūros paveldas ir turizmas. Galimybės, poveikis, partnerystė ir valdymas*. Edited by M. Lehtimäki. Vilnius: Department of Cultural Heritage under the Ministry of Culture.
- Samovar, Larry, Richard Porter, and Edwin McDaniel. 2013. *Communication between Culture*. Boston: Thomson Wadsworth.
- Seaton, Anthony V. 2002. Thanatourism's Final Frontiers? Visits to Cemeteries, Churchyards and Funerary Sites as Sacred and Secular Pilgrimage. *Tourism Recreation Research* 27: 73–82. [CrossRef]
- Shackley, Myra. 2001. Potential Futures for Robben Island: Shrine, museum or theme park? *International Journal of Heritage Studies* 7: 355–63. [CrossRef]
- Sharpley, Richard. 2009. Chapter 1. Shedding Light on Dark Tourism: An Introduction. In *The Darker Side of Travel—The Theory and Practice of Dark Tourism*. Edited by R. Sharpley and P. Stone. Bristol and Blue Ridge Summit: Channel View Publications, pp. 3–22.
- Sharpley, Richard. 2013. *Tourism and the Millennium Development Goals*, rev. ed. London: Routledge.
- Stewart, William P., and Dong-Wan Ko. 2002. A structural equation model of residents' attitudes for tourism development. *Tourism Management* 23: 521–30.
- Stone, Philip. 2006. A Dark Tourism spectrum: Towards a typology of death and macabre related tourist sites, attractions and exhibitions. *TOURISM: An Interdisciplinary International Journal* 54: 145–60.
- Stone, Philip. 2011. Dark tourism Experiences: Mediating Life and Death. In *Tourist Experience: Contemporary Perspectives*. Edited by R. Sharpley and P. Stone. London: Routledge, Available online: <https://core.ac.uk/download/pdf/190363411.pdf> (accessed on 23 March 2022).
- Svetikienė, Irena. 2002. *Turizmo marketingas*. Vilnius: Vilniaus kolegija.
- The Council of Europe. 2015. Convention on the Value of the Cultural Heritage for Society. Available online: <http://www.kpd.lt/uploads/Teises%20aktai/Konvencijos/KULT%C5%AAROS%20PAVELDO%20VERT%C4%96S%20VISUOMENEI.pdf> (accessed on 12 December 2021).
- The Lithuanian National Commission for UNESCO. 2006. Convention Concerning the Protection of the World Cultural and Natural Heritage. Available online: <http://www.unesco.org/culture/ich/doc/src/00009-LT-PDF.pdf> (accessed on 7 January 2022).

- Turizmo sektoriaus analizė bei strateginės plėtros kryptys galimybių Studija. 2019. Available online: <https://eimin.lrv.lt/uploads/eimin/documents/files/Turizmo%20sektoriaus%20analiz%C4%97%20bei%20strategin%C4%97s%20pl%C4%97tros%20kryptys.pdf> (accessed on 12 December 2021).
- UCLG (Executive Bureau of United Cities and Local Governments). 2010. *Culture: Fourth Pillar of Sustainable Development*. Mexico: UCLG.
- UNESCO. 2008. *Culture for the 2030 Agenda*. Paris: United Nations Educational, Scientific and Cultural Organization, Available online: [https://unesdoc.unesco.org/in/documentViewer.xhtml?v=2.1.196&id=p::usmarcdef\\_0000264687&file=/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach\\_import\\_85cb2399-c3df-4783-9f35-a97a08bf53ef%3F\\_%3D264687eng.pdf&locale=en&multi=true&ark=/ark:/48223/pf0000264687/PDF/264687eng.pdf#%5B%7B%22num%22%3A76%2C%22gen%22%3A0%7D%2C%7B%22name%22%3A%22XYZ%22%7D%2Cnull%2Cnull%2C0%5D](https://unesdoc.unesco.org/in/documentViewer.xhtml?v=2.1.196&id=p::usmarcdef_0000264687&file=/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach_import_85cb2399-c3df-4783-9f35-a97a08bf53ef%3F_%3D264687eng.pdf&locale=en&multi=true&ark=/ark:/48223/pf0000264687/PDF/264687eng.pdf#%5B%7B%22num%22%3A76%2C%22gen%22%3A0%7D%2C%7B%22name%22%3A%22XYZ%22%7D%2Cnull%2Cnull%2C0%5D) (accessed on 6 January 2022).
- UNESCO. 1995. *Workshop on Sustainable Tourism Development in World Heritage Sites: Planning for Hue*. Final Report, Vol. III: Executive Summary and Recommendations. Bangkok: UNESCO Principal Regional Office for Asia and the Pacific.
- UNESCO. 2012. *Culture: A Driver and an Enabler of Sustainable Development*. New York: UN System Task Team, Available online: [https://www.un.org/millenniumgoals/pdf/Think%20Pieces/2\\_culture.pdf](https://www.un.org/millenniumgoals/pdf/Think%20Pieces/2_culture.pdf) (accessed on 7 January 2022).
- Walter, Tony. 2009. Dark tourism: Mediating between the dead and the living. In *The Darker Side of Travel: The Theory and Practice of Dark Tourism*. Edited by R. Sharpley and P. Stone. Bristol: Channel View Publications, pp. 39–55.
- Wight, Craig A., and John J. Lennon. 2006. Selective interpretation and eclectic human heritage in Lithuania. Available online: <http://sgo.pccu.edu.tw/geog/chi/D/D1/D1A/D1A/D1A-1/04B--Selective%20interpretation%20and%20eclectic%20human%20heritage%20in%20Lithuania.pdf> (accessed on 12 December 2021).
- Yuill, Stephanie Marie. 2003. Dark Tourism: Understanding Visitor Motivation at Sites of Death and Disaster. Available online: <http://repository.tamu.edu/bitstream/handle/1969.1/89/etd-tamu-2003C-RPTS-Yuill-1.pdf?sequence=1> (accessed on 12 December 2021).
- Žalienė, Irina. 2002. *Pasaulio ir Lietuvos turizmo raida*. Kaunas: LKKA.
- Žalienė, Irina, Linas Žalys, and Inga Iždonaitė-Medžiūnienė. 2008. *Šiaulių regiono turizmo plėtros situacijos analizė*. Available online: <https://etalpykla.lituanistikadb.lt/object/LT-LDB-0001:J.04~{}2008~{}1367161908272/J.04~{}2008~{}1367161908272.pdf> (accessed on 12 December 2021).
- Žalpins, Edmundas. 2007. *Meno aritmetika Kultūros vadyba Lietuvoje*. Vilnius: Tyto Alba.



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