

Impact of tourism on the sales of creative companies in Chile in the pandemic (Covid-19)

Impacto del turismo en las ventas de empresas creativas en Chile en la pandemia (covid-19)

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ABSTRACT

The impact of Covid-19 on economic activity was pervasive throughout 2020, with the tourism sector experiencing a notable decline in its level of activity. The main objective of this research is to identify the variables that influenced the sales of creative enterprises, such as those operating in the tourism sector in Chile, amidst the COVID-19 pandemic. The methodology employed entails the estimation of two models through ordinary least squares regression, utilizing data sourced from the National Tourism Service to capture tourist arrivals in each region and from the Central Bank of Chile for Gross Domestic Product (GDP) figures. The dependent variables were defined as the sales of creative enterprises, with the number of tourists and regional GDP established as independent variables. The results reveal that GDP serves as a determining factor for the sales of creative enterprises, while a parallel influence is not discerned in the case of regional tourist numbers. In the first model, it is concluded that the sales of creative enterprises are conditioned by the Gross Domestic Product (GDP) of the regions. However, the processed data in this study does not provide evidence to support the idea that the quantity of tourists determines or directly influences the sales of creative enterprises. In the second model, a discernible influence is observed between tourists visiting the regions and the level of production in those areas. Consequently, tourists indirectly impact the sales of creative enterprises.

Keywords: *tourism, creative, sales, GNP*

RESUMEN

El impacto de la Covid-19 en la actividad económica fue generalizado a lo largo de 2020, y el sector turístico experimentó un notable descenso en su nivel de actividad. El objetivo principal de esta investigación es identificar las variables que influyeron en las ventas de emprendimientos creativos, como los que operan en el sector turístico en Chile, en medio de la pandemia de COVID-19. La metodología empleada consiste en la estimación de dos modelos a través de la regresión por mínimos cuadrados ordinarios, utilizando datos del Servicio Nacional de Turismo para capturar las llegadas de turistas en cada región y del Producto Interno Bruto (PIB). Las variables dependientes se definieron como las ventas de empresas creativas, estableciéndose como variables independientes el número de turistas y el PIB regional. Los resultados revelan que el PIB sirve como factor determinante para las ventas de las empresas creativas, mientras que no se percibe una influencia paralela en el caso de las cifras de turistas regionales. En el primer modelo, se concluye que las ventas de las empresas creativas están condicionadas por el Producto Interno Bruto (PIB) de las regiones. Sin embargo, los datos procesados en este estudio no proporcionan evidencia que respalde la idea de que la cantidad de turistas determine o influya directamente en las ventas de las empresas creativas. En el segundo modelo, se observa una influencia perceptible entre los turistas que visitan las regiones y el nivel de producción en esas áreas. En consecuencia, los turistas impactan indirectamente en las ventas de las empresas creativas.

Palabras clave: Turismo, creativo, sales, PIB

INTRODUCTION

The concept of the Creative Economy is perceived by some as a novel idea; however, it has ancient roots and has gained prominence recently. This resurgence is attributed to the proliferation of digital media and creative enterprises emerging within the framework of a digital economy, a contemporary phenomenon (Newbiggin, 2010). Currently, these creative enterprises play a significant role, comparable or even surpassing the importance of traditional goods and services, characteristic of a more demanding and complex market.

It is a "holistic concept involving intricate interactions among culture, economy, and technology in today's globalized world, primarily characterized by the dominance of symbols, texts, sounds, and images" (Boix & Lazzeretti, 2011, p. 183). Thus, John Howkins (2001), defines it as activities related to intellectual and industrial property, brands, and design (Casani, Rodriguez-Pomeda, & Sánchez, 2012). Contemporary consensus acknowledges heritage, arts, and culture as the principal raw materials, places significant emphasis on intellectual property rights, and recognizes the direct relationship that this economy holds with the creation of value (Restrepo & Márquez, 2013).

According to UNESCO (2013), cultural and creative industries combine the creation, production, and marketing of intangible and culturally natured creative content. These contents, typically protected by copyright, can manifest as goods or services, and include all artistic or cultural production, architecture, and advertising (Restrepo & Márquez, 2013, p. 37).

The relevance for this study lies in the fact that creative enterprises, as defined by the Department for Digital, Culture, Media & Sport in the United Kingdom, are "activities that have their origin in individual creativity, skill, and talent, and that have the potential to create jobs and wealth through the generation and exploitation of intellectual property" (Department for Digital, Culture, Media & Sport DCMS, 2023). These enterprises encompass sectors not characterized by mass production, a sophisticated level in their processes, or substantial investments in marketing. Instead, they stand out for their cultural and creative essence. For this reason, the study of their sales takes on an

innovative character, as it is crucial for the comprehensive development of a country.

Therefore, the research questions are as follows: Does the number of tourists impact the sales of creative enterprises? How does the regional Gross Domestic Product (GDP) influence the sales of these enterprises? In this analysis, culture plays a crucial role as a catalyst for development, extending beyond its economic aspects. In recent years, culture has significantly contributed to the emergence of innovative technologies and creative ideas, offering unquantifiable social benefits. Additionally, culture empowers individuals to control their developmental processes (UNESCO, 2010). Ultimately, this study aims to determine the impact of tourist numbers on the sales of creative enterprises during the COVID-19 pandemic.

METHODOLOGY

This study operates on the premise that tourism is both an explanatory and conditioning variable for the sales of creative enterprises in Chile. To examine this, data sources from the year 2020 are utilized, obtained from official information provided by public entities.

Data on the number of tourists received by each region in the year 2020 is sourced from the National Tourism Service. These figures are then juxtaposed with information on the Regional Gross Domestic Product (GDP) from the databases of the Central Bank of Chile. Additionally, sales data for creative enterprises is extracted from databases provided by the Internal Revenue Service in 2020.

Mixed research methods are employed in the development of the present study. It begins with a thorough bibliographic review of relevant concepts, including creative industries and tourism. Concurrently, explanatory models are formulated, utilizing empirical data from Chile related to the variables.

For the completion of this article, data sources include those provided by the Central Bank of Chile, such as regional Gross Domestic Product (GDP). Additionally, secondary sources from the Internal Revenue Service regarding creative industries and information obtained from the da-

tabases of the National Tourism Service are utilized. The processing of these data is conducted using the Stata software.

THEORETICAL FRAMEWORK

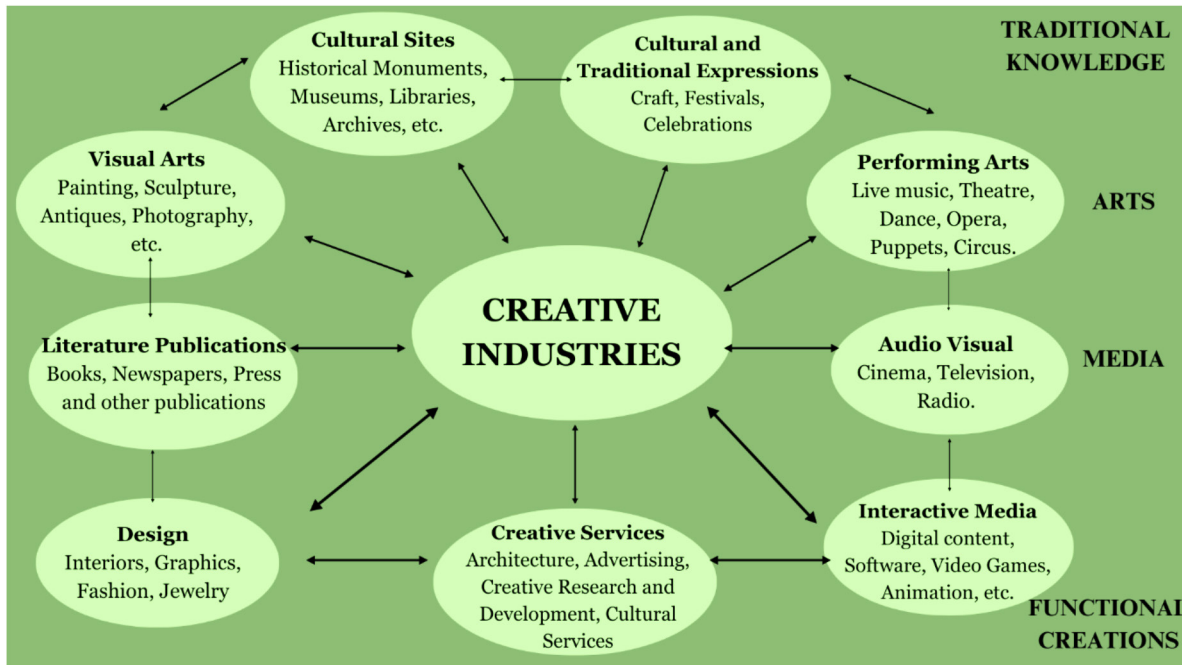
Creative economy

According to the UNCTAD Classification (2008), a distinction is made between upstream activities, which pertain to artistic and culturally related activities, and downstream activities, including design, editing, audiovisual, multimedia, and similar domains. Hence, taking this as a background, it is concluded that cultural and creative activities

can be categorized into distinct groups.

Firstly, traditional knowledge, or Heritage, is defined in relation to patrimonial resources and traditional spaces such as libraries, archives, museums, etc. Secondly, Arts encompass artistic and performance activities, including painting, music, circus, and theater. Thirdly, Medias refer to mass media directed at the public, such as books, magazines, newspapers, film, television, and radio. Lastly, in the fourth category of Functional Creations, which are activities that target market demands including design, interactive media (software, video games, etc.), and creative services in architecture, advertising, and R&D, among others (Trigo & Idrovo, 2014).

Figure 1. United Nations Conference on Trade and Development (UNCTAD) Classification of Creative Industries



Source: United Nations Conference on Trade and Development, UNCTAD (2010)

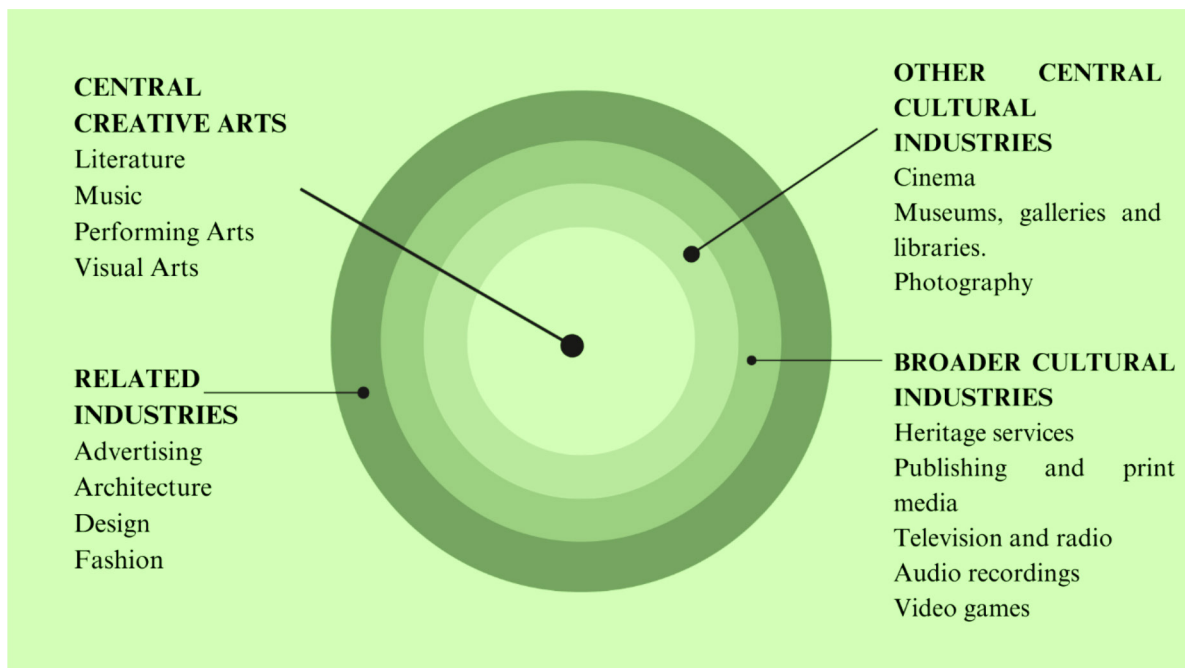
Finally, the conceptions and definitions of the creative or orange economy are based on four models described in the Creative Economy Report 2010, from UNCTAD.

- UK DCMS model. In the late 1990s, the United Kingdom introduced the DCMS (Department for Digital, Culture, Media & Sport) model, aptly named for its origin within the Department of Culture, Media, and Sport. The primary objective of this model was to stra-

tegically reposition the economy, placing emphasis on creativity and innovation. The model identifies 13 creative industries, interconnected by creativity, skill, and talent. These industries encompass a diverse range of sectors: advertising, architecture, art and antique markets, craftsmanship, design, fashion, film and video, music, performing arts, publishing, software, television, and radio, as well as video and computer games.

- Symbolic Text Model: This model, predominantly developed in Europe, especially in the United Kingdom, considers that "high" or "serious" arts belong to the social and political class. Consequently, it directs its focus towards popular culture (UNCTAD, 2010). The model elucidates the ways in which a society's culture is conveyed through the industrial production and consumption of symbolic texts or messages.
- Copyright models by the World Intellectual Property Organization (WIPO): The framework is grounded in industries that are directly or indirectly associated with the creation, manufacturing, production, broadcasting, and distribution of works protected by intellectual property. It distinguishes industries that generate intellectual property from those essential in delivering goods and services to consumers (UNCTAD, 2010).
- Throsby Concentric Circles Models: This model has served as the foundation for classifying creative industries in Europe, as noted in studies prepared by the European Commission. Moreover, it stands as the most used model to generate a scheme of the creative sectors (UNCTAD, 2010). This model is characterized by concentric circles situated "at the core of the arts in the form of sound, text, and image, with these ideas and influences radiating outward through a series of layers or concentric circles" (Guzmán, 2014). The cultural proportion diminishes with increasing distance from the center. Accordingly, core activities such as the arts and music reside at the model's center, while peripheral activities including advertising, architecture, design, and fashion are positioned at the extremes (Throsby, 2001).

Figure 2. David Throsby 's Concentric Circles Model



ORANGE ECONOMY

Measurement

Peter Drucker (Simón de Cirene, 2023) asserted that what cannot be measured cannot be controlled, and what cannot be controlled cannot be managed or improved. This sentiment echoes the words of the scientist, physicist, and mathematician William Thomson Kelvin (Aiteco Con-

sultores, 2022). Following this reasoning, this section initiates an analysis of how contributions from the creative economy are measured in societies across different continents. The examination will focus on measurements in Europe, with a particular emphasis on Spain. Subsequently, a review will be conducted in the United States, and finally, the discussion will extend to the case of Latin American and Caribbean countries.

The Orange Economy, if it were considered a country in the world, would constitute the fourth-largest economy, the ninth-largest exporter of goods and services, and the fourth-largest labor force. Nonetheless, it is imperative to acknowledge that the data pertaining to the Orange Economy more closely align with characteristics of an informal economy. This is attributable to the inherent informality in its measurements, compounded by deficient classification systems characterized by a lack of consensus in definitions and the presence of irregular political commitments.

The creative sector in Europe employs up to 6.5% of the workforce, depending on the definition of the creative industry in the country under study (Serra, 2015). Pioneering examinations conducted by Lazzeretti (2008) and Boix (2012) marked the initial efforts in analyzing the creative industries across European nations, culminating in the determination that Italy, France, Spain, and the United Kingdom collectively harbor approximately 4 million employees within the European creative industry. A noteworthy European nation for examination is Portugal, which, in 2006, accounted for 2.6% of its workforce engaged in the creative economy (Mateus, 2010). Spain, ranking as the fifth European country with the highest production in creative industries, follows Germany, the United Kingdom, France, and Italy in this regard (Boix & Lazzeretti, 2011).

In Latin America, creative industries serve as significant sources of income and opportunities, therefore, there must be precise measurement to ascertain their genuine impact on local economies. At the national level, cultural satellite accounts stand out as the most widely employed methodological instruments in the region (Rodriguez Oliva & Luzardo, 2018). Within this framework, the significance of the Orange Economy in Latin America and the Caribbean becomes apparent. Nevertheless, it is noteworthy that the measurements conducted in this context are not entirely clear and systematic.

Various countries utilize different metrics to assess the contribution of the creative sector to their economic landscape. These metrics include added value to the Gross Domestic Product (GDP), production percentages, employment figures in creative industries, and export levels. The creative or orange economy presents opportunities in both production and employment, potentially playing a role in elevating Latin American and Caribbean countries from the status of emerging economies (Romero, 2016).

Measurement in Chile

In Chile, the measurement of the country's economic activity is conducted by the Central Bank through the System of National Accounts. This system adopts a definition that considers the economic reality by favoring the notion of residence over nationality. Consequently, any entity habitually present in the economic territory, regardless of nationality, is considered part of the national economy. Regarding the economic territory, it is defined based on the spatial scope over which the State aims to implement a uniform economic policy. The measurement of a flow is undertaken with reference to a specific period (Sérizier, 2003). The System of National Accounts underwent an update in 2008 by the United Nations Organization to align the national accounting framework with the evolving needs of users, acknowledging the changing economic environment over the years (European Commission; International Monetary Fund; OECD; United Nations; World Bank, 2008).

The Gross Domestic Product (GDP) constitutes the predominant indicator in national accounts, summarizing the total value of goods and services production in an economy within a specific period. This calculation is undertaken by economic agents (businesses, households, and government) residing within the national territory (Central Bank of Chile, 2022). Annual National Accounts involve the compilation of GDP and its components, considering three approaches: production, expenditures, and income. The process commences with the collection of information, such as basic statistics, followed by the creation of economic aggregates at the level of activity and products. Subsequently, a reconciliation process is conducted to provide economic and accounting coherence to the estimates within the framework of the Supply and Use Tables (SUT).

The creative economy, recently acknowledged as a productive sector, faces challenges in its measurement. This process becomes intricate due to the difficulty of precisely capturing it in the national accounts of the Central Bank. Furthermore, in the Internal Revenue Service, the collected tax information is not segregated, encompassing various creative activities under broad tax codes.

An important source for measuring the creative economy in Chile is the mapping of creative industries conducted by the National Council of Culture and the Arts. This mapping provides detailed information on how they are characterized, and which areas constitute the key artistic aspects from the perspective of industrial development.

In this study, data on sales using codes from the International Standard Industrial Classification (ISIC) (Clasificación Industrial Internacional Uniforme, CIIU), published by the SII (Servicio Impuestos Internos, Internal Revenue Service) until 2014, were employed. Additionally, data on value-added by economic activity published by the Central Bank of Chile were used, available for the period 2008-2013.

In accordance with the mapping conducted by the National Council of Culture and the Arts (2014), each creative sector is individually and explicitly considered. This includes the sectors that are the subject of analysis in this study, as well as other sectors that, although not the focus of an in-depth investigation, are acknowledged to be part of the broader creative industry. The encompassed sectors comprise crafts, visual arts, photography, theatre, dance, circus arts, publishing (books, periodicals, and other publications), music, audiovisual (film), architecture, design, computer media, radio, television, advertising, heritage, education, and cultural research.

Tourism

According to the World Tourism Organization (WTO) in 1994, "tourism includes the activities undertaken by individuals during their journeys and stays in locations different from their usual environment, with purposes including leisure, business, and other diverse objectives, which tourists carry out over a consecutive period of less than one year."

On the contrary, the UNWTO points out that tourism constitutes an economic and social phenomenon, marked by ongoing expansion and substantial diversification, intricately linked to processes of development and socioeconomic advancement (Organización Mundial del Turismo, 2023).

Moreover, it is widely recognized that international tourism serves as a catalyst for economic growth by fostering investment, contributing foreign exchange to the host country, and serving as a platform for the development of human capital (Alonso Rodriguez, 2022).

There are different types of tourism, such as: Rural Tourism, Urban Tourism, Cultural Tourism, Agrotourism, Ecotourism, Gastronomic Tourism and Business Tourism (Mogorón Huerta, 2020).

In Chile, the governmental entity responsible for advancing and facilitating the progress of tourism is the National Tourism Service, known as SERNATUR. Established on November 8, 1975, its mandate is to "investigate, plan, stimulate, regulate, promote, and coordinate tourism activity in Chile, performing all the functions stipulated in Decree Law No. 1,224" (Servicio Nacional de Turismo, 2023). Preceding the establishment of SERNATUR, the entities overseeing these functions were the Tourism Directorate and the Regional Tourism Councils.

SERNATUR not only spearheads initiatives aimed at promoting the country but also compiles and develops databases for the analysis and examination of tourism. These endeavors align with the fundamental mission of the Service, namely the promotion of tourist activity, with the recognition that such efforts contribute to the economic growth of Chile.

ANALYSIS OF RESULTS

As indicated in the methodological section, the data were extracted from the Central Bank of Chile, specifically from the information pertaining to the Regional Gross Domestic Product. Concerning the data related to creative companies, these were chosen from the creative sectors registered by the Internal Revenue Service, involving a cross-referencing of information with the Regional Tourism data provided by the databases supplied by the National Tourism Service, SERNATUR.

Drawing upon this information, fundamentally two models were developed. The first one, presented below, aims to ascertain whether the number of tourists who visited different regions of the country in the year 2020 influences the sales of creative companies. This model is detailed as follows:

$$\text{Average Sales of the Creative Industry} = B_0 + B_1 \text{ Regional GDP} + B_2 \text{ Tourists}$$

Table 1: Statistical values of the model

| Variables | Coefficients | P-Value |
|--------------|--------------|---------|
| Regional GDP | 12.83 | 0.000** |
| Tourists | -0.89 | 0.391 |
| Constant | -2.06 | 0.060 |

*Significant at 0.1

**Significant at 0.05 $r^2 = 95,08\%$

Based on the findings above, it can be inferred that the regional Gross Domestic Product serves as an explanatory variable for the sales of creative industries. However, the number of tourists does not emerge as a determinant of

sales for companies in the orange sector.

The second model proposed, aims to ascertain whether the volume of tourists influences the Gross Domestic Product of the regions in the year 2020.

$$\text{Regional GDP} = B_0 + B_1 \text{ Tourists}$$

Table 2: Statistical values of the model

| Variables | Coefficients | P-Value |
|-----------|--------------|---------|
| Tourists | 3.32 | 0.005** |
| Constant | -0.83 | 0.419 |

** Significant at 0.05

$r^2 = 44,06\%$

On the other hand, it can be inferred that tourists contribute to explaining the Gross Domestic Product (GDP) of each region. Although the r^2 coefficient is relatively low, the model accounts for 44.06% of the variability in GDP. This outcome is attributed to the presence of other variables, such as investments, consumption, and net exports, which are considered determining factors according to the principles of classical macroeconomics

CONCLUSIONS

Based on the results obtained from the results analysis, it is discerned that the sales of creative companies are influenced by the Gross Domestic Product (GDP) of the respective regions. However, the processed data do not distinctly reveal whether the number of tourists determines or impacts the sales of creative companies.

Conversely, the second model elucidates a correlation between the influx of tourists visiting regions and the levels of regional production. Consequently, it can be inferred that tourists indirectly influence the sales of creative companies by virtue of their role in determining the Gross Regional Product.

As a recommendation for public policy, the establishment of satellite accounts to monitor variables associated with the creative economy, incorporating tourism data and environmental metrics, is proposed. This suggestion stems from an intuition that regions with more tourist activities may incur greater environmental damage. Hence, this avenue opens more prospects for future research and projects.

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