

Cultural Spending as a Fiscal Policy Indicator: An Empirical Study of Budgetary Constraints and Public Debt Dynamics in European Nations

Alexandru Florin Preda¹, Andreea Gabriela Tanase², Raluca Florentina Cretu³,
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Abstract. Public expenditure on cultural services reflects a society's dedication to preserving heritage, fostering creativity, and promoting social cohesion. Despite its importance, cultural spending often becomes a target for reductions during periods of fiscal stress or economic downturns as governments reallocate resources to perceived higher-priority areas. This study uses Eurostat data from European nations to examine the relationship between public expenditure on cultural services and government fiscal health. The article aims to assess whether cultural investment increases in times of fiscal surplus or suffers disproportionately during periods of high public debt and budgetary constraints. The econometric approach of this research is made by panel data regression, complemented by other statistical tests, studying the interlink between cultural spending and fiscal variables such as the general government balance sheet and debt-to-GDP ratios. Particular attention is paid to countries with high levels of public debt to assess whether or not cultural investment is deprioritized vis-à-vis other sectors. The study results indicate that cultural spending has been considered core, and governments prioritize it, even against the economic turmoil, for its more general contribution to social welfare and cultural capital. At the same time, cultural budgets might be inflexible in responding actively to macroeconomic conditions and reduce cultural investment's potential to serve as an economic recovery instrument in times of recession. This paper provides broader evidence on fiscal policy and public investment that policymakers and other stakeholders can use to develop strategies that protect cultural funding, even during periods of economic uncertainty, for long-term societal benefits.

Keywords: cultural economics, government balance sheet, fiscal policy, public investment, econometric analysis.

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Витрати на культуру як індикатор фіскальної політики: емпіричне дослідження бюджетних обмежень і динаміки державного боргу в європейських країнах

Анотація. Державні витрати на культуру відображають відданість суспільства збереженню спадщини, сприянню творчості та соціальній єдності. Незважаючи на свою важливість, витрати на культуру часто стають ціллю для скорочення в періоди фіскального стресу або економічного спаду, оскільки уряди перерозподіляють ресурси на більш пріоритетні сфери. У цьому дослідженні використовуються дані бази Євростату щодо європейських країн, щоб дослідити взаємозв'язок між державними витратами на культурні послуги та станом державного бюджету. Стаття має на меті оцінити, чи збільшуються інвестиції в культуру під час фінансового профіциту чи непропорційно страждають у періоди високого державного боргу та бюджетних обмежень. Економетричний підхід цього дослідження ґрунтується на регресії панельних даних, доповненій іншими статистичними тестами, що вивчають взаємозв'язок між витратами на культуру та фіскальними змінними, такими як баланс загального державного управління та співвідношення боргу до ВВП. Особлива увага приділяється країнам із високим рівнем державного боргу, щоб оцінити, чи є інвестиції в культуру пріоритетними порівняно з витратами на інші сфери. Результати дослідження свідчать, що витрати на культуру вважаються основними, і уряди, навіть незважаючи на економічні потрясіння, віддають їм пріоритет через їх більш загальний внесок у соціальне забезпечення та культурний капітал. У той же час, культурні бюджети можуть бути негнучкими, щоб активно реагувати на макроекономічні умови та зменшувати потенціал культурних інвестицій як інструмента відновлення економіки під час рецесії. Стаття пропонує ширші докази щодо фіскальної політики та державних інвестицій, які політики та інші зацікавлені сторони можуть використовувати для розробки стратегій, які, навіть у періоди економічної невизначеності, захищають культурне фінансування для довгострокових суспільних вигод.

Ключові слова: культурна економіка, державний бюджет, фіскальна політика, державні інвестиції, економетричний аналіз.

INTRODUCTION

Public expenditure on cultural services is essential to encouraging creative industries' development and social cohesion. Public spending usually varies widely among countries and economic cycles, as it is discretionary. While cultural services may benefit society over the long term, funding is often sacrificed when fiscal stress occurs because governments must prioritize health, education, infrastructure and other key sectors. This dynamic raises an important question: how does a government's fiscal health influence its spending on cultural services?

The purpose of this paper is to present an analysis of the relationship between public expenditure on cultural services and the fiscal condition of governments, focusing on European nations. Researchers seek to understand the extent to which fiscal health determines the level of public investment in culture and how governments balance fiscal constraints with the need to sustain cultural services. There is a call for balanced fiscal decision-making that guarantees that the priority of cultural services is sustainable in conditions that may be

described as adverse. Being a quasi-public good, cultural services often have difficulty securing consistent funding, as they are usually seen as secondary in importance to other social priorities. The study also builds on the existing empirical literature, which has been dominated by health and education, by filling an important gap in knowledge on the fiscal dynamics of investment in culture. It underlines the importance of long-term societal benefits when public resources are allocated, especially within the cultural sector. Cultural spending and fiscal policy are important but less broadly debated aspects of public expenditure, particularly in the case of the European economies faced with budget squeezes and rampant public debt. While governments must spend with limited fiscal constraints, cultural spending is too readily considered non-discretionary and susceptible to cuts. Cultural investment generates significant long-term economic and social benefits in its own right through its ability to build human capital, promote social inclusion, and stimulate economic innovation.

The findings will contribute to the greater discourse on sustainable public finance, especially in relation to cultural policy. They will also provide practical guidance for policymakers through the complexities of fiscal management in both high- and low-debt environments.

LITERATURE REVIEW

One central theme in the area of cultural economics is the justification of public intervention in providing cultural goods and services because of inherent market failures. Naturally, a cultural good tends to be non-rivalrous and at least partly non-excludable; hence, it is under-provided in private markets. Françoise Benhamou underscores this point, noting that Pareto's political economy is based on the idea that free-market competition allows for attaining an optimum in terms of collective well-being (Benhamou, 1996). However, cultural investment does not occur in isolation; it is embedded within the broader context of fiscal policy. Governments must balance multiple spending priorities, especially when faced with budgetary constraints or high public debt. One of the critical challenges in public finance is the interplay between different government policies and their unintended consequences. Ruth Towse observes, "Even if a given government policy has the support of an overwhelming consensus and is properly implemented, it faces the offsetting consequences of other government policies. Benefits of progressive income taxes designed to provide more income to the poor may be cancelled out by agricultural price supports which make food more expensive" (Towse & Khakee, 2011). This observation is important in understanding cultural investment in a tight fiscal economy. While cultural policies may be widely supported, their implementation can be seriously weakened by competing fiscal policies, austerity measures, or changes in tax structures that lower overall government revenues.

In this regard, two economic glasses provide the best means to analyze the government's approach to cultural investment. On the one hand, the economic-material dimensions, for instance, direct funding, subsidy, and tax incentives, present an economical method to examine cultural services provided, while on the other hand, a more general perspective concerning the current economic environment for a rational choice model for investment into culture guided by measurable economic return. Alan Peacock highlights this dual perspective, stating that "economics and art can be combined in two quite different ways: as the analysis of economic or material aspects of artistic activities, and in the extreme as monetary dealings in art; and the application of the economic or rather the rational choice methodology to art" (Peacock & Rizzo, 1994). This raises an important question: Do governments treat cultural investment as a strategic economic sector or a discretionary expense that can be reduced when fiscal constraints arise? A country's revenue-generating ability further shapes the fiscal constraints on cultural investment. As Carl E. Van Horn explains, "Economists define fiscal capacity as a jurisdiction's revenue-raising ability relative to the spending needs it faces" (Van Horn, 2006). This becomes

particularly relevant to understanding why some governments can sustain cultural expenditure in conditions of high public debt while others introduce severe spending cuts. In this respect, governments with high fiscal capacity by reason of efficient taxation systems, diversified revenue streams, or access to low-cost borrowing may be able to protect cultural investment even in economic downturns. Conversely, states with weak fiscal capacity cannot afford the political cost of justifying expenditures for non-essential services; hence, cultural services become an easy target during periods of retrenchment. The problem of fiscal capacity is exacerbated when public debt reaches alarming levels. Alessandro Missale notes that public debt management requires strategic decisions about government obligations' structure, maturity, and sustainability. Cultural spending is often among the first budgetary items to be cut when debt levels become unsustainable. Michael Brauning further expands on this relationship, stating that "the government fixes the budget deficit ratio. If the deficit ratio stays below a critical level, then there are two steady states where capital, output, and public debt grow at the same constant rate" (Brauning, 2005). This highlights a key challenge: while deficit financing can allow governments to sustain cultural investment in the short term, it must remain within sustainable limits to prevent long-term economic stagnation.

Therefore, public intervention in the interest of culture gains legal ground from cases of market failures, which also emanate from the nature of goods that are indivisible but either collective or mixed. According to this conceptual framework, cultural services, though inherently essential for any society's social welfare, also need state promotion to ensure at least their ample provision. At this point, establishing clear political objectives becomes absolutely relevant in economic policy related to culture. Furthermore, Ruth Towse and Abdul Khakee emphasize that "before we can decide whether or not a set of cultural policies has a consistent pattern, it is necessary to specify the policy objectives" (Towse & Khakee, 2011). In this case, without well-defined objectives, it becomes hard to determine whether public investment in culture yields desired outcomes, especially within broader fiscal policies. This is where governments have to balance short-term fiscal realities with long-term cultural objectives, ensuring that cultural services are not disproportionately affected during periods of austerity.

While the theory of public goods and the recognition of market failure offer a sound rationale for cultural expenditures when fiscal surplus is available, the advent of fiscal constraints begs questions of priority setting, and cuts may take place in those areas perceived to be discretionary, including culture. A central tension exists between the social value created by investment in culture and its perceived discretionary status in public budgets, and it is this tension that underpins much of this research study.

In the past sixty years, cultural economics has become an important academic field of investigation that cuts across arts organizations, creative industries, and public policy. Ruth Towse and Trilce Navarrete Hernández,

in their Handbook of Cultural Economics, observe that “over the past 60 years, cultural economics has established itself as a field of study that is relevant to arts organizations, creative industries, cultural policy and, increasingly, to economic policy for growth and development” (Towse & Hernandez, 2020). This underscores the growing recognition of culture’s role in economic development, particularly in fostering creativity, innovation, and social cohesion. Dominic Power reinforces this argument by discussing the rise of the so-called “new economy,” stating that “since the early 1980s, a so-called new economy has steadily risen to prominence as a focus of employment and output growth in virtually all the major capitalist societies. This new economy is represented primarily by sectors such as high-technology manufacturing, neo-artisanal consumer products, and diverse services, all of which have a propensity to take organizational shape as complex value-added networks” (Power & Scott, 2004). This will also show that cultural industries are not at all passive beneficiaries of public spending but rather proactive contributors to economic growth. Even with straitened finances, governments may perform better in complementarity with creative, high-value-added industries linked to digital media, gaming, and creative entrepreneurship.

Despite widespread recognition of its importance, cultural investments still lack exhaustive impact assessment studies and predictive modelling. As Xiao Zhou et al. point out, “Even though the ability of culture to promote local regeneration has received general acceptance, large-scale evaluation and prediction of its impact are still not widely practised” (Zhou et al., 2017). Therein lies much of the critical gap in research on cultural policy, especially where the long-term socioeconomic returns of cultural investment are concerned. This gap is further widened during fiscal crises when governments are pressured to cut spending in areas where immediate economic returns are hard to quantify.

If cultural economics interacts with broad economic development policies, this is especially relevant for high-debt countries with fiscal stress and consequently limited discretionary spending. While the role of cultural services in stimulating local economic growth and regeneration is increasingly recognized, they still remain particularly vulnerable to budgetary constraints. This paper’s contribution to the literature is an empirical test of whether high public debt is associated with reduced cultural expenditure, hence highlighting the order of deprioritization of cultural services during fiscal stress.

The relationship between fiscal policy and public investment is well-documented in the literature, with scholars emphasizing the trade-offs governments face when managing public expenditure under fiscal constraints. Evsey D. Domar noted that “public investment financed by borrowing, though perhaps the most direct and evident, is by no means the only method of dealing with the situation” (Domar, 1944). Domar’s analysis underscores the complexity of financing public goods, including cultural services, through deficit spending. While borrowing can temporarily sustain

public investment, it often leads to increased public debt, necessitating future fiscal consolidation. High levels of public debt impose significant constraints on fiscal policy, reducing governments’ flexibility in funding discretionary sectors such as culture. Alessandro Missale highlights that the choice of currency denomination, indexation, and maturity structure of public debt is an increasingly important aspect of policy in a world of high debts and financially integrated markets (Missale, 2023). High-debt countries must carefully manage their fiscal policies to maintain market confidence, often leading to spending cuts in less politically sensitive areas like culture. This dynamic is particularly pronounced in the European context, where strict fiscal rules, such as those outlined in the Maastricht Treaty, limit the fiscal flexibility of high-debt countries. Toshiki Tamai further illustrates how economic crises shape fiscal policy: “In recent years, global economic crises have repeatedly emerged, such as the Lehman shock, the Greek crisis, and the European sovereign debt crisis. Amid the economic crisis, many countries employed a temporary expansionary fiscal policy to stimulate the economy and overcome the ensuing economic recession” (Tamai, 2014). While fiscal expansion may temporarily accommodate the financing of public services during crises, it often goes along with higher public debt, usually compensated afterwards through fiscal tightening. The resultant fiscal cycle of expansion and contraction is particularly significant for investment in culture, which suffers during consolidation phases.

The theoretical framework developed in this study knits together significant insights from public goods theory, cultural economics, and fiscal policy analysis. It charts the intrinsic trade-offs that governments have to face in financing cultural services, especially during times of fiscal constraint. It also points to the need for clear policy objectives in cultural investment, as suggested by Towse and Khakee, and the evaluation of the long-term socioeconomic impacts of such investment, as noted by Zhou.

RESEARCH OBJECTIVES

The study aims to merge established theories and empirical insights to deepen an understanding of the economic rationale behind investment in culture, especially within the context of fiscal restraint.

This research paper will review the cumulative evidence on cultural economics and public finance. It carries out an in-depth analysis of how fiscal health influences the share of public expenditure on cultural services, thus enabling policymakers to help them devise a balanced fiscal strategy that protects cultural investment without compromising fiscal responsibility. The theoretical framework underlines the complex relationship between cultural investment, fiscal policy, and economic development. On the one hand, cultural services are often considered public goods, which, owing to market failures, need some form of government intervention. On the other hand, they have often been treated as low-priority items when fiscal stringency has compelled competing budgetary claims to be heard.

By combining perspectives on fiscal capacity, budget deficits, and economic transformation, the present research empirically examines whether cultural investment is systematically reduced in high-debt states and whether the economic trajectories of governments that maintained cultural spending differed from those that cut their cultural budgets.

RESEARCH METHODOLOGY

The data for the research was obtained from the Eurostat database Government Finance Statistics. Precisely, two data sets are involved:

1) General Government Expenditure by Function (COFOG) – Public expenditure on cultural services by European countries (Eurostat, 2024).

2) General Government Balance and Debt – To get data about the fiscal position of the government: government balance sheet – surplus/deficit, and level of public debt (Eurostat, 2025).

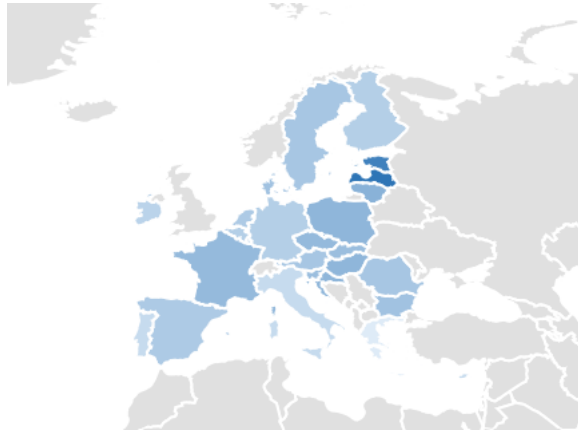


Figure 1. Geographical map depicting the countries from which data was centralized

Source: Constructed by the authors (2025).

Data consists of annual observations for a sample of 19 European countries within a chosen timeframe from 2013 to 2022. The data contains enough variation in fiscal conditions and public spending. The sample retains only those countries with continuous reporting in both datasets, allowing for comparable reliability in the data.

Hypothesis:

H1: Public spending on cultural services is positively associated with fiscal surplus or improved government financial resources.

The given hypothesis flows from the supposition that, in a better fiscal position, the government would commit more to cultural services to demonstrate that culture is not last in the pecking order when budgetary constraints are slack.

H2: Compared with other sectors that can indicate a deprioritization of the cultural sector, public spending on cultural services has been relatively low in countries with high public debt levels.

It assumes that the highly indebted government will more likely reduce or keep the amount spent on culture at a minimum, mainly since fiscal adjustments are always targeted towards more critical areas.

To some, the “art” element in econometrics has made several eminent economists sceptical of the power of econometrics in yielding sharp predictions (Baltagi, 2011). The key variables used in this analysis include cultural expenditure as the dependent variable and government balance and public debt as the primary independent variables.

Cultural expenditure is the share of total government expenditure on cultural services, as obtained from data in the Classification of the Functions of Government framework supplied by Eurostat. The main independent variables include government balance and public debt in percentages of GDP. Government balance is a country’s fiscal position, with a positive value indicating surplus and a negative value reflecting deficit.

In contrast, represented by public debt, the ratio of all government debt to GDP is also included as a better proxy of fiscal pressure or even fiscal binding. This has proved necessary in showing how much fiscal health could affect the apportionment of public resources to cultural services. As Friedman’s argument illustrates, the question of the appropriate objectives for economic theory cannot be disentangled from the question of the appropriate methods of theory appraisal (Gerrard, 2002).

This study’s econometric model tests two major hypotheses regarding the relationship between fiscal health and cultural expenditures. The first hypothesis (H1) posits that public expenditure on cultural services increases in tandem with fiscal surpluses, indicating a positive relationship between cultural investment and government financial resources.

The second hypothesis (H2) suggests that countries with high public debt allocate a smaller proportion of their budget to cultural services, implying that cultural spending is deprioritized during periods of fiscal stress.

Based on testing these hypotheses, the present study provides empirical evidence on how fiscal constraints affect prioritization in public budgets for cultural services.

The researchers performed subgroup analysis by categorizing countries into high-debt and low-debt groups. High-debt countries refer to those whose public debt has surpassed 60% of GDP. In contrast, low-debt countries have public debts below the threshold.

Separate regressions are estimated for each subgroup to identify the differences in the relationship between fiscal variables and cultural expenditure according to a country's debt burden. This would allow a more fine-grained understanding of the impact of fiscal stress on cultural investment in various economic contexts. Statistical software was used to process panel data

regression. Descriptive statistics, correlation matrices, and diagnostic tests are performed to check for multicollinearity, stationarity, and model assumptions.

RESULTS AND DISCUSSION

The descriptive analysis of the levels of cultural investment in countries provides important information on the distribution and dispersion of government expenditure related to cultural services. Cultural spending is the dependent variable, and total debts and public deficit are independent variables.

	2013		2014		2015		2016		2017		2018		2019		2020		2021		2022											
	Dep	Ind Vb	Ind Vb																											
Euro area - 19 countries (2015-2022)	1	92.8	-3.2	1	93	-2.5	1.0	91	-2	0.9	90.0	-1.5	1	87.5	-1	1	85.6	-0.4	1	83.6	-0.5	0.9	96.5	-7	0.9	93.9	-5.1	0.9	89.6	-3.5
Belgium	0.9	105	-3.2	0.9	106.5	-3.2	0.9	105.6	-2.5	1	106.4	-2.4	1	102.5	-0.8	1	100	-1	1	97.5	-2	0.9	111.2	-9	0.9	108.4	-5.4	1	102.6	-3.6
Bulgaria	1.2	17	-0.7	1.4	27	-5.4	1.5	25.9	-1.9	1.1	29.1	0.3	1.6	25.1	1.6	1.3	22.1	3.7	1.2	20.1	2.2	1.1	24.4	3.8	1.2	23.8	-3.9	0.9	22.5	-2.9
Czechia	1.4	44.1	-1.3	1.4	41.5	-2.1	1.4	39.5	-0.7	1.4	36.2	0.7	1.4	33.8	1.5	1.6	31.7	0.9	1.6	29.6	0.3	1.4	36.9	-5.6	1.3	40.7	-5	1.4	42.5	-3.1
Denmark	1.2	47.8	-0.9	1.2	46.7	1.4	1.2	44.6	-0.9	1.3	41.7	0.3	1.3	40.2	1.7	1.2	38.5	0.8	1.3	38.3	4.3	1.2	46.3	0.4	1.2	40.5	4.1	1.2	34.1	3.4
Germany	0.9	77.4	0.1	0.9	74.5	0.7	0.9	71.2	0.9	0.8	68.3	1.1	0.9	64	1.3	0.9	60.8	1.9	0.9	58.7	1.3	0.8	66	4.4	0.8	61.1	-3.2	0.8	65	-2.1
Estonia	2.8	11.4	-0.2	2.7	11.6	0.9	2.6	10.8	0.2	2.6	10.2	-0.1	2.6	9.4	-0.5	2.4	8.5	-0.6	2.5	9	-0.1	2.1	19.1	-5.4	2.1	18.4	-2.6	2.2	19.1	-1.1
Ireland	0.8	117.5	-6.3	0.9	101.3	-3.5	0.9	74	-2	0.9	72.8	-0.8	0.9	65.2	-0.3	0.9	61.5	0.1	0.9	55.9	0.4	0.8	57	-4.9	0.8	57.6	-1.4	0.8	43.1	1.7
Greece	0.2	189.4	-13.6	0.2	182.7	-3.8	0.2	179.6	-5.9	0.3	163.1	0.2	0.3	162.1	0.7	0.3	159.9	0.9	0.3	163.2	0.8	0.3	209.4	-9.6	0.3	197.3	-6.9	0.3	177	-2.5
Spain	1	100	-7.5	1	104.4	-6	1.0	102.5	-5.3	1	102.9	-4.2	1.1	101.2	-3.1	1.1	99.8	-2.6	1.1	97.7	-3.1	0.9	116.3	-9.9	0.9	115.7	-4.7	1	109.6	-4.6
France	1.4	94.5	-4.9	1.4	94.1	-4.6	1.2	96.9	-3.9	1.2	98.1	-3.8	1.2	98.7	-3.4	1.2	98.5	-2.3	1.3	98.1	-2.4	1.1	114.8	-8.9	1.2	112.7	-6.6	1.2	111.2	-4.7
Croatia	1.5	79.5	-5.5	1.5	83.2	-5.1	1.4	82.8	-3.5	1.3	79.3	-1.1	1.5	76.2	0.5	1.5	72.8	0	1.6	70.9	0.2	1.5	86.5	-7.2	1.5	78.2	-2.6	1.5	68.5	0.1
Italy	0.6	131.8	-2.9	0.6	134.8	-2.8	0.7	134.7	-2.5	0.5	134.2	-2.4	0.6	133.7	-2.5	0.6	134.1	-2.2	0.5	133.8	-1.5	0.5	154.3	-9.4	0.6	145.7	-8.9	0.5	138.3	-8.1
Cyprus	0.6	107.5	-5.6	0.5	112.7	-8.8	0.7	111.6	-0.8	0.7	106.8	0.5	0.7	96.5	-2.1	0.5	100.7	-3.4	0.6	92.3	1	0.5	113.6	-5.6	0.5	96.5	-1.6	0.5	81	2.6
Latvia	3.1	41.8	-1.3	3.1	43.1	-1.7	2.9	38.3	-1.5	2.6	41.7	0	2.9	40.3	-0.3	2.8	38.3	-1.4	2.6	37.9	-0.2	2.2	44	-4.1	2.2	45.9	-7.2	2.2	44.4	-4.9
Lithuania	1.6	35.9	-2.7	1.7	40.7	-1.8	1.8	42.4	-0.8	2	39.9	0	2	39.1	0.4	2.1	35.3	0.6	2.1	35.6	0.5	2.1	45.9	-6.3	1.9	43.3	-1.1	2	38.1	-0.7
Luxembourg	1.1	22.4	0.8	1.1	21.9	1.3	1.1	21.1	1.3	1.2	19.6	1.9	1.2	21.8	1.4	1.3	20.9	3.2	1.3	22.3	-2.7	1.1	24.5	-3.1	1.2	24.4	1	1.2	24.6	0.2
Hungary	1.5	77.2	-2.6	1.6	76.5	-2.8	1.6	75.7	-2	2.1	74.6	-1.8	2.5	72	-2.5	2.7	68.8	-2	2.5	65	-2	2.5	78.7	-7.5	2.1	76.2	-7.1	2.2	73.8	-6.2
Malta	1.6	64.9	-2.2	2	60.7	-1.5	2.1	55	-0.8	1.9	53.1	1.1	2.4	45.6	3.4	2.2	41.4	1.9	1.8	39.2	0.7	2	48.7	-8.7	1.7	49.6	-7	2.2	49.4	-5.2
Netherlands	1	67.2	-2.9	1	67.2	-2.2	1.0	63.8	-1.8	1.1	60.8	0.2	1.1	55.9	1.3	1.2	51.5	1.5	1.1	47.6	1.8	1	53.3	-3.6	1.1	50.4	-2.2	1.1	48.3	0
Austria	1.1	82.4	-2	1	85.2	-1.9	1.0	85.6	-0.5	1.1	84.1	-1.5	1.1	79.1	-0.8	1.1	74.6	0.2	1.1	71	0.5	0.9	83.2	-8.2	0.9	82.4	-5.7	0.9	78.4	-3.3
Poland	1.5	56.9	-4.2	1.6	51.1	-3.7	1.5	51.1	-2.6	1.5	54.1	-2.4	1.7	50.4	-1.5	1.9	48.2	-0.2	1.7	45.2	-0.7	1.4	56.6	-6.9	1.3	53	-1.7	1.3	48.8	-3.4
Portugal	0.6	130.8	-5.2	0.5	132.5	-7.4	0.4	131	-4.5	0.6	131.2	-1.9	0.6	126	-3	0.6	123.1	-0.4	0.6	116.1	0.1	0.6	134.1	-5.8	0.7	123.9	-2.8	0.7	111.2	-0.3
Romania	1.1	37.8	-2.3	1.3	39.1	-1.2	1.2	37.7	-0.5	1.1	37.8	-2.5	1.1	35.3	-2.5	1	34.4	-2.8	1	35	-4.3	0.9	46.6	-9.2	0.8	48.3	-7.1	0.8	47.9	-6.4
Slovenia	1.3	70.8	-11.2	1.5	81.1	-4.5	1.5	83.4	-2.8	1.4	79.4	-2	1.5	74.9	0.1	1.5	71	0.9	1.5	66	0.7	1.3	80.2	-7.7	1.5	74.8	-4.6	1.5	72.7	-3
Slovakia	1.3	54.6	-2.9	1.1	53.4	-3.2	1.2	51.6	-2.8	1	52.1	-2.6	1.1	51.4	-1	1.5	49.3	-1	1.4	48	-1.2	1.1	58.4	-5.3	1	60.2	-5.1	1.2	57.7	-1.7
Finland	0.9	68.8	-2.5	0.9	64.8	-3	0.9	68.8	-2.4	0.9	68.8	-1.7	0.9	66.6	-0.6	0.9	65.4	-0.9	0.9	65.3	-0.9	0.9	75.4	-5.5	1	73.2	-2.7	0.9	74	-0.2
Sweden	1.1	40.8	-1.6	1.2	45.7	-1.8	1.1	44.5	-0.3	1.1	42.8	0.9	1.1	41.6	1.3	1.1	39.8	0.7	1.1	35.7	0.4	1.1	40.1	-3.2	1.3	36.7	-0.1	1.1	33.6	1

Figure 2. Tabular representation of data retrieved from the Eurostat database, displaying key statistical indicators relevant to the study

Source: Data processed by the authors (2025).

The mean amount of cultural investment is 1.21% of total government expenditure, indicating that, on average, governments invest a modest part of their budget in this area. The median of 1.1% and the mode of 1.2% show a small dispersion of most countries' expenditures around these figures, with a slight upward skew-evidenced by the skewness at 0.655. This implies some right-skewed distribution due to a few countries with higher-than-average investment levels.

This data set has a medium degree variability: the standard deviation equals 0.546, whereas the range is from 0.3% (minimum investment) to 2.2% (maximum). Such a range reflects sharp differences between countries that may be due to fiscal priorities or economic conditions. The kurtosis value -0.304 indicates a platykurtic distribution with fewer outliers and relatively stable dispersal. Taken together, these measures underpin the inequality of cultural investment across nations, some of which invest substantially less because of fiscal restraint or different policy priorities. The overall full cumulative investment of 32.6% throughout the countries and the variance of 0.298-that is, a generally moderate variance-reveal the same basic pattern of consistent yet unequal distribution. The said results form a good starting point for further analysis to determine the factors underlying cultural expenditure, particularly fiscal conditions, such as government debt and budgetary balance, in setting investment patterns.

On the European scene, minor variables have kept the general level of cultural investment roughly the same

regardless of whether any fluctuation increases public debt or improves fiscal balance. This means that cultural investment, for any short economic volatility or possible government fiscal variations, has not largely changed. Whether this debt rises or budget deficits rise, the contribution towards the culture sectors seems mostly constant. Such a pattern would suggest that cultural investment is a strategically prioritized, cultural expenditures being a long-term public good.

Cultural investment may be insulated from fiscal austerity or economic expansion pressures in a way that reflects its importance in fostering societal cohesion, preserving heritage, and creative industries. This trend may also reflect institutional mechanisms or political commitments that insulate cultural budgets from fiscal duress. However, the other side of such stability is a lack of responsiveness by cultural policies to change economic fortunes. To the degree that cultural investment is unaffected by fiscal pressure, for instance, it diminishes the potential to use public funding strategically during periods of growth or recovery.

Conversely, this might mean resisting disproportionate cuts in times of economic downturn in areas that tend to be less valued for their indirect contributions to economic and social life. Therefore, it calls for sophisticated cultural policy frameworks that manage stability and flexibility in a balanced way, making sure cultural investments meet broader economic and social goals.

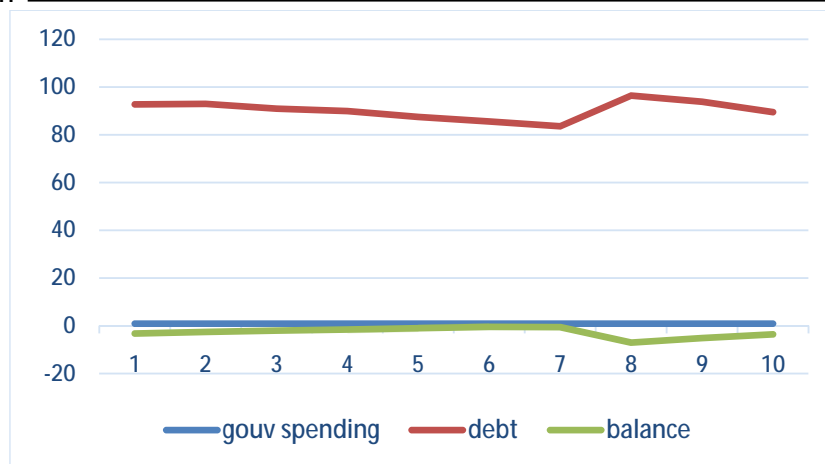


Figure 3. Comparison of government spending and public debt & balance

Source: Data processed by the authors (2025).

Further econometric analysis will provide more nuanced insights into these dynamics. The results reveal a statistically significant negative relationship between these variables, suggesting that cultural expenditures tend to decline as public debt increases. The model's R² value of 0.2634 indicates that approximately 26.34% of the variation in cultural spending can be explained by public debt, while the adjusted R² of 0.2339 accounts for degrees of freedom, providing a more conservative estimate of explanatory power.

The multiple RRR value of 0.5132 reflects a moderate correlation between the two variables, and the standard error of 0.4781 shows the average deviation of observed values from predicted values. The ANOVA results confirm the model's overall significance, with an F-statistic of 8.94 and a ppp-value of 0.00618, well below the 1% significance threshold. The intercept of 1.7086 suggests that cultural expenditure would represent approximately 1.71% of total government expenditure in the absence of public debt.

Meanwhile, the coefficient for public debt is -0.0074, indicating that for every 1% increase in public debt as a percentage of GDP, cultural expenditure decreases by approximately 0.0074%. This negative relationship is

statistically significant, as shown by the ttt-statistic of -2.99 and a ppp-value of 0.00618. The 95% confidence interval for this coefficient, ranging from -0.01257 to -0.00232, consistently supports the negative impact of public debt on cultural expenditure.

These findings align with the hypothesis that fiscal constraints driven by high public debt levels lead governments to reduce discretionary spending, including cultural investments. However, the moderate R² suggests the influence of additional factors that warrant further investigation to better understand the dynamics between fiscal policies and cultural expenditure. A second regression analysis investigates the relationship between state deficits in percent of GDP and cultural expenditure in percent of total government expenditure. The regression result is a weak and statistically insignificant relationship between the two variables. The R² of 0.0294 shows that only 2.94% of the variation in cultural expenditure is explained by changes in state deficits, meaning that other factors predominate in influencing cultural investment. The adjusted R² is even negative: -0.0095, reflecting the lack of explanatory power and raising questions about the relevance of state deficits as a predictor in this context.

SUMMARY OUTPUT							
Regression Statistics							
Multiple R	0,513234						
R Square	0,263409						
Adjusted R Square	0,233945						
Standard Error	0,478115						
Observations	27						
ANOVA							
	df	SS	MS	F	Significance F		
Regression	1	2,043664	2,043664	8,940138	0,006185		
Residual	25	5,714855	0,228594				
Total	26	7,758519					
Coefficients							
	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	1,708639	0,191228	8,935088	2,96E-09	1,314797	2,10248	1,314797
X Variable	-0,00745	0,002491	-2,99001	0,006185	-0,01258	-0,00232	-0,01258

Figure 4. Regression from public spending and public debts

Source: Data processed by the authors (2025).

The standard error is 0.5488, reflecting moderate dispersion of the data. The results of ANOVA essentially confirm that this model has only weak explanatory strength: F-statistic: 0.7560; p-value: 0.3929, very far above traditional significance thresholds such as 0.05. Besides, such statistical insignificance points to the inability of a model to outline a significant level of association between state deficits and cultural expenditure. The intercept of 1.1355 suggests that, for zero state deficits, cultural expenditure is forecasted to be around 1.14% of total government expenditure. The coefficient of the state deficit variable is -0.0329, indicating a slight negative relationship: for every 1% increase in state deficits, cultural expenditure falls about 0.033%. This effect is not statistically significant, given the t-statistic -0.8695 and p-value 0.3929. The 95%

confidence interval for the coefficient ranges from -0.1108 to 0.0450, crossing zero, again indicating no significance. These findings suggest that state deficits in their own right do not exert a significant or dependable impact on cultural spending, reflecting the complexity of fiscal decision-making and the probable effect of other macroeconomic, political, and institutional variables on cultural investment.

This fact is borne out by the narrow margins of variation and the stability in fiscal conditions, such as increasing public debt and deterioration in fiscal balance. The implication here would be that cultural expenditure is some form of quasi-fixed expenditure; governments prioritise its long-term benefits to society, for example, education, tourism, and national identity.

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0,171326							
R Square	0,029353							
Adjusted R Square	-0,00947							
Standard Error	0,548846							
Observations	27							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	0,227733	0,227733	0,756008	0,392852			
Residual	25	7,530785	0,301231					
Total	26	7,758519						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1,135525	0,134132	8,465722	8,25E-09	0,859275	1,411775	0,859275	1,411775
X Variable	-0,0329	0,037833	-0,86949	0,392852	-0,11081	0,045023	-0,11081	0,045023

Figure 5. Regression from public spending and public debts

Source: Data processed by the authors (2025).

The regression analysis shows a statistically significant but small negative relationship between public debt and cultural investment, meaning that, though debt affects cultural funding, the effect is small, probably because of cultural goods’ public or quasi-public nature, which requires continuous government support. By contrast, the fiscal balance had no statistically significant effect on the level of cultural investment; this might underpin the fact that expenditure related to multi-year programs and multi-annual activities is generally “sticky.” Such consistency reveals that cultural spending has been considered core, and governments are prioritizing it, even against the economic turmoil, for its more general contribution to social welfare and cultural capital. On the other hand, the findings also reveal that cultural budgets might be inflexible in responding actively to macroeconomic conditions and reduce the potential of cultural investment to serve as one of the economic recovery instruments in times of recession.

This conforms to the broader understanding of cultural goods, whose positive externalities include stimulating creative industries and facilitating urban regeneration, while their indirect economic value remains

underestimated in fiscal metrics. Cultural spending’s relative inelasticity to fiscal pressures testifies to its resilience, but at the same time, it calls for novel approaches that could ensure further impact without excessive strain on public finances.

CONCLUSIONS

Drawing on the rich datasets from Eurostat, the study develops a more subtle understanding of whether cultural investment increases in periods of financial surplus or is sacrificed during periods of budgetary constraint. This is particularly relevant for economies with high public debt, whereby governments have to face stringent fiscal limitations and make hard choices in public spending. The insights derived from such an analysis are really important for policymakers who must balance economic priorities with preserving and developing cultural assets. By exploring fiscal determinants of cultural expenditure, this study connects two important areas of public finance and economic policy. It offers an unusual perspective on how fiscal discipline influences sectoral budget allocation.

Therefore, the analysis confirms the assumption that cultural investment at the European level does not vary markedly, whatever the fiscal situation may be, whether rising public debt or worsening fiscal balance, by the narrow dispersion of expenditure for culture across different economic scenarios, which would suggest that cultural expenditure is viewed as core by policymakers in most countries and hence is largely unresponsive to short-term fiscal pressures. These regression results represent a slight, statistically significant negative relation between public debt and cultural investment, suggesting that, although growing debt has some marginal effects on cultural funding, it does not undermine the priority of cultural expenditures. On the other hand, the absence of a significant influence of fiscal balance on cultural spending further reinforces the hypothesis of its relative inelasticity. What it does indicate is that, in times of financial stringency, cultural investment can be a very stable determinant of long-term economic and social welfare. This makes the task of ensuring that cultural spending is aligned dynamically with wider economic recovery all the more critical.

Recommendations

1. Innovative Financing Mechanisms: Public-private partnerships, cultural bonds, or crowdfunding models are all financing mechanisms that should be considered by governments to sustainably invest in culture without increasing public debt. This will provide diversified funding sources by leveraging private-sector interest in cultural initiatives.

2. Improved Impact Analysis: Policymakers need to conduct comprehensive assessments regarding the socioeconomic returns from cultural investment. Quantifying positive externalities- such as job creation in the creative industries and urban regeneration- will better enable governments to justify expenditure and allocate resources effectively.

3. Adaptive Cultural Policies: Governments should design flexible cultural budgets to make cultural spending more responsive to macroeconomic fluctuations. For instance, including contingency funds for cultural programs during recessions may help align investments with broader economic recovery goals.

4. Fostering Regional Equity: Since cultural investment is relatively stable at the national level, efforts should be made to ensure equal distribution across regions, especially in those areas with low cultural infrastructure or economic disparities. This may contribute to regional development and social cohesion.

5. Cross-Sectoral Collaboration: Governments should link cultural policies with tourism, education, and digital innovation strategies to maximize the impact of cultural investments. This can lead to synergies that amplify economic and social returns on cultural spending.

Finally, the hypothesis of stability in the investment of culture is proved, but it also shows the need for new and adaptive methods to maximize the effect, especially given modern economic challenges and society's demands.

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