

## Chapter 4

# Trends of Employment in Cultural Industries: The Case Study From European Countries

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### Abstract

The cultural industry is often seen as a subset of the broader creative economy, which includes advertising, architecture and fashion. This industry plays a vital role in shaping and reflecting cultural values and identities and can have significant economic and social impacts. It is also a significant employer in the European Union (EU), contributing to the overall economy and promoting cultural diversity. Therefore, the aim of our study was to identify the impact of educational attainment (secondary and tertiary education) and employment parameters such as female or male employee distribution among European countries, the total number of permanent workers in the cultural industries, employed persons with one job only, employed persons working full-time (persons working as creative and performing artists, authors, journalists and linguists by individual). The *t*-test was used to test the hypothesis of whether the above variables related to employment in the cultural industry differ across countries that are part of the EU. As a result of the analysis, we can state that the number of employed persons working full-time as persons working as creative and performing artists, authors, journalists and linguists by an individual is higher in EU countries.

*Keywords:* Cultural industry; cultural employment; human capital; human capital index; European Union; education

## Introduction

In the era of intensified economic globalisation, cultural industries, recognized for their high efficiency, have emerged as a potent catalyst for economic advancement worldwide. Developed nations, in particular, have witnessed substantial growth in their cultural industries, with the value added by these sectors surpassing that of traditional manufacturing and other industries. The European Union (EU) is actively fostering the development of its cultural industry, acknowledging its pivotal role as the foremost driver of growth and innovation within the tertiary sector. The cultural industry market, characterised by unparalleled growth potential and innovative dynamism, has experienced a consistent and robust expansion in recent years (Chani et al., 2014; Jílková, 2021; Londar et al., 2020). Beyond being a crucial component of the national economy, the cultural industry represents a cornerstone of a country's soft power, contributing significantly to overall national development (Friderichs et al., 2022; Greco et al., 2019). In response to the growing significance of the cultural industry, various policy measures have been implemented in recent years to fortify its role in economic development (Comunian et al., 2014; Diebolt & Hippe, 2019).

Regarding the fact, cultural industry represents a cornerstone of a country's soft power, contributing significantly to overall national development (He, 2018; Throsby, 2008; Zhou et al., 2020). Despite the demographic differences in cultural employment within the EU, the Union strongly supports all initiatives aimed at improving employment and education rates. (Eurostat, 2024).

## Research Design

The chapter aims to identify the impact of educational attainment (secondary and tertiary education) and employment parameters such as female or male employee distribution among European countries, the total number of permanent workers in the cultural industries, employed persons with one job only, employed persons working full-time (persons working as creative and performing artists, authors, journalists and linguists by individual) in the European countries. Data from culture statistics (cultural enterprises; Eurostat, 2024) were used to analyse the following research hypotheses:

- H1.* There is a difference between the EU countries and non-EU countries with respect to the dependent variable 'Total employment'.
- H2.* There is a difference between the EU countries and non-EU countries with respect to the dependent variable 'Full time employee (FTE)'.
- H3.* There is a difference between the EU countries and non-EU countries with respect to the dependent variable 'employed persons with one job only'.
- H4.* There is a difference between the EU countries and non-EU countries with respect to the dependent variable 'employed persons working full-time – Persons working as creative and performing artists, authors, journalists and linguists by individual'.

H5. There is a difference between the EU countries and non-EU countries with respect to the dependent variable ‘education (tertiary)’.

In the research, the descriptive statistics for all the variables were examined to make sure they fell within acceptable range and skewness is one such statistic that was carefully looked at. The parametric *t*-test determines the significance of mean differences between groups (EU countries (yes group) and non-EU countries (no group)) and determines whether such mean differences might have occurred by chance. When data sets have a normal distribution, but the population variance is unknown, parametric *t*-testing is typically performed.

The error structure of a *t*-test will underestimate the true error when comparing differences between several groups, hence it should not be used to measure differences between more than two groups. The T-statistical test measures several different factors and proves to be very dependable.

## Results and Discussion

In the following chapter, the results of our research are shown.

The results of the descriptive statistics for H1 show that the group of EU countries has higher values for the dependent variable ‘Total employ’ ( $M = 272.71$ ,  $SD = 373.89$ ) than the group of non-EU countries ( $M = 111.05$ ,  $SD = 89.67$ ).

The Levene test of equality of variance yields a *p*-value of 0.138, which is above the 5% significance level. The Levene test is therefore not significant and the null hypothesis that all variances of the groups are equal is retained. Thus, there is variance equality in the samples.

A two-tailed *t*-test for independent samples (equal variances assumed) showed that the difference between yes and no with respect to the dependent variable, ‘Total employment’ was not statistically significant,  $t(29) = 0.85$ ,  $p = 0.403$ , 95% confidence interval  $[-227.5, 550.82]$ . Thus, the null hypothesis is rejected (Table 4.1).

The results of the descriptive statistics (Table 4.2) show that the EU countries evince higher values for the dependent variable ‘Full time employment’ ( $M = 82.23$ ,  $SD = 11.08$ ) than the group of non-EU countries ( $M = 80$ ,  $SD = 10.03$ ).

The Levene test of equality of variance reached a *p*-value of 0.455, which is above the 5% significance level. The Levene test is therefore not significant and

Table 4.1. *T*-test for Independent Samples of Total Employment.

		<i>t</i>	df	<i>p</i> (2-tailed)
Total_employ	Equal variances	0.85	29	0.403
	Unequal variances	1.91	21.73	0.07

Source: Author’s calculations.

Table 4.2. *T*-test for Independent Samples of Full-time Employment (FTE).

		<i>t</i>	df	<i>p</i> (2-tailed)
FTE	Equal variances	0.38	28	0.708
	Unequal variances	0.41	4.21	0.703

Source: Author’s calculations.

the null hypothesis that all variances of the groups are equal is retained. Thus, there is variance equality in the samples.

A two-tailed *t*-test for independent samples (equal variances assumed) showed that the difference between EU countries and non-EU countries with respect to the dependent variable ‘Full time employee’ was not statistically significant,  $t(28) = 0.38$ ,  $p = 0.708$ , 95% confidence interval [-9.84, 14.3]. Thus, the null hypothesis is retained.

Based on our results, EU countries reached higher values for the dependent variable ‘Employed persons with one job only’ ( $M = 90.3$ ,  $SD = 6.28$ ) than the non-EU countries ( $M = 89$ ,  $SD = 5.29$ ).

The Levene test of equality of variance attained a *p*-value of 0.551, which is above the 5% significance level. The Levene test is therefore not significant and the null hypothesis that all variances of the groups are equal is retained. Thus, there is variance equality in the samples.

A two-tailed *t*-test for independent samples (equal variances assumed) showed that the difference between EU countries and non-EU countries with respect to the dependent variable ‘Employed persons with one job only’ was not statistically significant,  $t(29) = 0.39$ ,  $p = 0.699$ , 95% confidence interval [-5.48, 8.07]. Thus, the null hypothesis is retained (Table 4.3).

The results of the descriptive statistics show that the group of EU countries attained higher values for the dependent variable ‘Employed persons working full-time – Persons working as creative and performing artists, authors, journalists and linguists by individual’ ( $M = 76.68$ ,  $SD = 10.09$ ) than the group of non-EU countries ( $M = 62.5$ ,  $SD = 18.91$ ).

Table 4.3. *T*-test for Independent Samples of Employed Persons With One Job Only.

		<i>t</i>	df	<i>p</i> (2-tailed)
Employed persons with one job only	Equal variances	0.39	29	0.699
	Unequal variances	0.45	4.36	0.677

Source: Author’s calculations.

The Levene test of equality of variance shows a  $p$ -value of 0.064, which is above the 5% significance level. The Levene test is therefore not significant and the null hypothesis that all variances of the groups are equal is retained. Thus, there is variance equality in the samples.

A two-tailed  $t$ -test for independent samples (equal variances assumed) showed that the difference between EU countries and non-EU countries with respect to the dependent variable 'Employed persons working full-time – Persons working as creative and performing artists, authors, journalists and linguists' by individual was statistically significant,  $t(27) = 2.31$ ,  $p = 0.029$ , 95% confidence interval [1.57, 26.79]. Thus, the alternative hypothesis is confirmed (Table 4.4).

The results of the descriptive statistics (Table 4.5) show that the yes group has higher values for the dependent variable 'edu\_terciar' ( $M = 164.71$ ,  $SD = 218.51$ ) than the no group ( $M = 69.08$ ,  $SD = 58.72$ ).

Table 4.4.  $T$ -test for Independent Samples of the Variable, Employed Persons Working Full-Time – Persons Working as Creative and Performing Artists, Authors, Journalists and Linguists by Individual.

		$t$	df	$p$ (2-tailed)	
%Employed persons working full-time – Persons working as creative and performing artists, authors, journalists and linguists by individual	Equal variances	2.31	27	<b>0.029</b>	
	Unequal variances	1.47	3.28	0.231	
		Mean difference	Standard error of difference	Lower limit	Upper limit
%Employed persons working full-time – Persons working as creative and performing artists, authors, journalists and linguists by individual	Equal variances	14.18	6.14	1.57	26.79
	Unequal variances	14.18	9.67	–15.49	43.85

Source: Author's calculations.

Table 4.5. *T*-test for Independent Samples of edu\_terciar.

		<i>t</i>	df	p (2-tailed)
edu_terciar	Equal variances	0.86	29	0.397
	Unequal variances	1.86	18.8	0.078

*Source:* Author’s calculations.

The Levene test of equality of variance yields a *p*-value of 0.138, which is above the 5% significance level. The Levene test is therefore not significant and the null hypothesis that all variances of the groups are equal is retained. Thus, there is variance equality in the samples.

A two-tailed *t*-test for independent samples (equal variances assumed) showed that the difference between yes (EU countries) and no (EU non-countries) with respect to the dependent variable ‘edu\_terciar’ was not statistically significant,  $t(29) = 0.86$ ,  $p = 0.397$ , 95% confidence interval  $[-131.99, 323.26]$ . Thus, the null hypothesis is retained.

### Conclusion

Our research analysis reveals a significant disparity between EU and non-EU countries concerning employment in the cultural industry, particularly in roles such as full-time employment in creative and performing arts, authorship, journalism and linguistics. Parametric testing demonstrates a statistically significant difference in these areas, indicating distinct employment dynamics between the two groups. These findings offer valuable insights into employment patterns within and outside the EU, emphasising potential disparities in opportunities and labour market dynamics across different regions.

This information sheds light on the employment landscape within the creative and cultural sectors, underscoring the importance of understanding differences between EU and non-EU countries. Further investigation into the underlying factors driving these distinctions could provide valuable insights for policymakers, educators and stakeholders aiming to promote growth and inclusivity within these industries.

Further research may delve into the specific factors contributing to these differences and their implications for policymaking and workforce development strategies.

Recommendation for policymaker according to our previous analysis: To bolster job security for permanent workers in the cultural industries, particularly full-time employed individuals, with a focus on women who are persons with one job only, it is advisable to enhance policy measures.

Based on the results of the analysis, we have identified a data need for more structured data on employment and the quality and support of education in the cultural sector. Suggestion according to the Council resolution on the EU work plan for culture 2023–2026 cultural policymaker should extend data collection

mechanism over the political circumstances and stabilisation and societal transformation in order to support cultural industries in countries relating to European cultural economy.

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