

September 2014

THE ECONOMIC CONTRIBUTION OF THE CREATIVE INDUSTRIES TO EU GDP AND EMPLOYMENT

EVOLUTION 2008-2011

EXECUTIVE SUMMARY

The economic contribution of the creative industries to EU GDP and employment

This is the second report published by TERA Consultant to:

- **Measure the economic contributions of the creative industries to the EU economy;**
- **Analyse the evolution of the creative industries' contribution to EU value added and employment between 2008 and 2011.**

The first report – “*Building a Digital Economy: The Importance of Saving Jobs in the EU’s Creative Industries*” – was published in March 2010, based on 2008 data.

This study differs from earlier research by using a more accurate and comprehensive definition of Europe’s creative industries, one that expands the EU definition of core creative industries and also encompasses the economic contributions of non-core creative industries. These non-core creative industries are suppliers to and customers of the core creative industries, and their economic strength is heavily dependent upon the core industries.

This approach allows to better measure the real extent of the creative industries in the economy.

To measure the economic contributions of the creative industries to the EU economy, measured by value added to Gross Domestic Product (GDP) and by number of employees, the study considered research and statistical data developed or sponsored by EU member nations, by the European Commission and by the World Intellectual Property Organisation (WIPO), which divides the copyright-intensive industries into four main categories: core; inter-dependent, partial and non-dedicated support.

Based upon this methodology and 2008 figures, the first study reported the following findings:

- The core creative industries in the 27 countries of the European Union were estimated to generate **€558 billion in value added to GDP in 2008**, approximately **4.5% of total European GDP**.
- The value added by the total creative industries (core creative industries plus non-core creative industries) was approximately **€862 billion in 2008**, representing **an estimated 6.9% share of GDP**.
- The creative industries also account for a significant number of jobs throughout Europe. Employment in the core creative industries in the 27 countries of the EU was approximately **8.5 million** in 2008, or **3.8% of total European workforce**.
- Employment in the total creative industries (core creative industries plus non-core creative industries) was approximately **14.4 million**, or **6.5% of the total EU workforce**.

The new report proposes an update of the economic contribution of creative industries to EU GDP and employment, covering the period from 2008 to 2011, year for which Eurostat statistics are available since the end of 2013.

During this period of time, EU countries have faced a major economic and financial crisis. In the meantime the use of digital media have continuously expanded which allows creative industries developing new business models for the digital environment, such as online music platforms and video on demand.

Dealing with these transformations, the regulatory environment has not significantly changed, particularly regarding the fight against piracy, either at EU level or in the largest countries, with the exception of France with the effective implementation of the notice sending system through the creation of the French high authority HADOPI. In the UK and Spain the adoption of new legislations – DEA for the UK and SINDE for Spain – did not translate so far into a real and effective implementation, although these legislations were adopted back in 2010 and 2011.

In the same time, the online music and video platforms have expanded throughout Europe offering to European citizens and consumers a wide range of legal access to an increasingly important repertoire at a competitive and accessible price.

Key findings are the followings:

- In 2011, the core creative industries in the 27 countries of the European Union generate **€558 billion in value added to GDP**, approximately **4.4% of total European GDP**.
- The value added by the total creative industries (core creative industries plus non-core creative industries) is approximately **€860 billion**, representing a **6.8% share of GDP**.
- The creative industries represent approximately **8.3 million** full time equivalent jobs, or **3.8% of total European workforce**.
- Employment in the total creative industries (core creative industries plus non-core creative industries) is approximately **14.0 million**, or **6.5% of the total EU workforce**.

Table 1: Economic weight of the creative industries in EU27 (2011)

Creative Industries	VALUE ADDED			EMPLOYMENT		
	VA (billion €)	% of evolution 2008-2011	% of EU VA	Jobs (million)	% of evolution 2008-2011	% of EU employment
Core	558	-0.07%	4.40%	8.3	-2.33%	3.82%
Interdependent	211	-1.18%	1.67%	4.0	-3.88%	1.86%
Non dedicated support	91	0.58%	0.72%	1.7	-1.19%	0.78%
TOTAL creative industries	860	-0.28%	6.79%	14.0	-2.65%	6.47%

Source – 2013 TERA Consultants analysis

Note: due to rounding, numbers presented throughout this document may not add up precisely to the totals provided.

Table 2: Evolution of value added and employment 2008/2011

Creative Industries	VALUE ADDED - 2008/2011 EVOLUTION		EMPLOYMENT - 2008/2011 EVOLUTION	
	Billion €	% of growth	Million of jobs	% of growth
Core	0,0	0.0%	-0.2	-2.4%
Interdependent	-2.0	-0.9%	-0.2	-4.8%
Non dedicated support	1.0	1.1%	0	0.0%
TOTAL creative industries	-2.0	-0.2%	-0.4	-2.8%

Source – 2013 TERA Consultants analysis

In terms of value added, the economic contribution of the creative industries has been rather stable in Europe between 2008 and 2011. However, this overall stability hides a strong heterogeneity within the different sub-groups, which can be explained by the variety of the underlying drivers of growth.

- Within the core creative industries, there is a decrease in all activities except for TV broadcasting and movie production. On the contrary, ICT-related activities included in the core post a significant growth, mostly driven by web development, data hosting and processing and computer software programming.
- The Interdependent sub-group, which mostly includes retail related activities, experienced a limited decline that can be explained by the broader decline of the retail sector at least in the Western part of Europe.
- Lastly, the non-dedicated sub-group has experienced a modest growth throughout the 2008-2011 period, following the overall stability of the Telecom sector in Europe.

For all sectors, the economic contribution of the creative industries in terms of job creation has been weaker than the contribution in terms of GDP.

- The overall tendency has been the destruction of jobs within most sub-groups, particularly for the traditional core activities, for which job destruction has been particularly significant.
- The diverging tendencies between GDP and employment growth are illustrating a change in the productive system of the creative industries, which rely more on capital (particularly ICT-type of capital investment) than on labour.

In addition to the Pan-European picture, this report includes an estimate of the economic contribution of the creative industries for the five largest European countries (UK, France, Germany, Italy and Spain).

Table 3 shows the weight of the creative industry (contribution of the creative industries divided by the contribution of all industries), in terms of value added and of employment, in the economy of each of the five countries.

Table 3: Economic weight of the creative industries in the main European markets (2011)

Creative Industries	5 COUNTRIES		UK		FRANCE		GERMANY		ITALY		SPAIN	
	VA	Jobs										
Core	4.5%	4.1%	5.8%	5.4%	5.1%	3.7%	3.9%	4.1%	3.9%	3.7%	3.4%	3.4%
Interdependent & support	2.4%	2.8%	3.2%	3.6%	2.7%	2.6%	2.1%	2.9%	2.2%	2.5%	1.7%	2.2%
TOTAL creative industries	6.9%	7.0%	9.0%	9.0%	7.9%	6.3%	6.1%	7.0%	6.1%	6.2%	5.0%	5.6%
Creative GDP (billion €)	618		159		152		159		95		53	
Creative employment (million)		9.5		2.6		1.6		2.8		1.4		1.0

Source – TERA Consultants analysis

Table 4 shows the evolution, between 2008 and 2011, of the weight of the creative industry in these five countries in terms of value added and of employment.

Table 4: Evolution of the economic contribution of the creative industries in the main European markets (2008-2011)

Creative Industries	5 COUNTRIES		UK		FRANCE		GERMANY		ITALY		SPAIN	
	VA	Jobs	VA	Jobs	VA	Jobs	VA	Jobs	VA	Jobs	VA	Jobs
Creative industries	-3.1%	-2.0%	-8.8%	-3.8%	4.0%	0.4%	-1.7%	4.1%	1.6%	-1.1%	-14.5%	-15.7%
Overall economy	1.2%	-1.3%	-3.6%	-1.0%	3.5%	-0.4%	5.5%	3.1%	0.3%	-1.9%	-3.8%	-10.6%

Source – TERA Consultants analysis

- Overall, creative industries in the top 5 European countries have posted a stronger decrease than the overall economy;
- The decrease of the creative industries has proved much stronger in the “centre” (the five biggest economies of the Euro zone) than in the “periphery” (the other 22 countries), both at the value added and at the employment level;
- It has generally been stronger in terms of added value than in terms of jobs, which could be explained by an increase in payroll per euro sold and / or deterioration in corporate earnings.
- The overall declining trend in Europe top 5 hides a strong heterogeneity between countries:
 - The economic weight of the creative industries has decreased in the UK, in Spain, and in Germany (in terms of value added);
 - On the contrary, the creative industries have grown in France and Italy.
- Again, the explanation for this heterogeneity of trends must be multifactorial. It is however possible to underline the correlation between the growth of the creative industries and the IP protection legislation. Thus, France has established some form of response to Internet piracy before 2011 with the notice sending system implemented by HADOPI. The cultural industries in France have posted a much better dynamic during the period studied than in countries where such measures do not exist.

In its first report released in 2010 TERA Consultant had forecasted the impact of digital piracy in Europe, in terms of employment, if no legislative action was taken.

The initial study concluded that based on current projections and assuming no significant policy changes, the European Union’s creative industries could expect to see, depending on scenarios, cumulative retail revenue losses between €166 billion and €240 billion by 2015, resulting in jobs lost between 600,000 and 1.2 million by 2015. Using the actual 2011 figures, we can now have a first look at the real trends at work based on real figures in the top 5 European countries that have posted a stronger decrease than the overall economy, and see how it compares to initial forecast.

France, Germany, Italy, Spain and the UK represent **72%** of the total EU creative industries' value added and **68%** of the employment.

In the top five European countries:

- **Real value added destruction amounts to €20 billion;**
- **Real job losses in the creative industries between 2008 and 2011 amount to 189,633.**

However, in order to measure the impact piracy has had on value added and job destruction, it is necessary to estimate how economic contribution and employment would have evolved in the creative industries, absent all piracy ("counterfactual" scenario).

In a first stage of analysis, one can consider that, absent piracy, the value added and employment in the creative industries would have evolved as in the overall economy or as in the service industries¹.

Between 2008 and 2011, total economic contribution has increased by **1.2%** and total employment has decreased by **1.3%**. While economic contribution of services industries has increased by **3.1%** and employment in service activities has increased by **7.9%**.

Using this as an estimate of the counterfactual scenario, it means that:

- The real value added destruction between 2008 and 2011 in the top five European countries, **would be in the range of €27.1 and €39.7 billion;**
- The job destruction between 2008 and 2011 in the top five European countries **would be comprised between 64,089 and 955,125.**

Table 5: The impact of piracy on value added destruction (in € billion) in the five main European countries between 2008 and 2011 (new estimate)

	2008	2011	2008/2011	2008/2011
Creative industries – factual	637.6	617.9	-19.8	-3.1%
Overall economy	8 906.1	9 008.9	102.9	+1.2%
Creative industries – counterfactual 1	637.6	645.0	7.4	+1.2%
Impact of piracy – counterfactual 1			-27.1	
Service industries	2 529.3	2 608.5	79.2	+3.1%
Creative industries – counterfactual 2	637.6	657.6	20.0	+3.1%
Impact of piracy – counterfactual 2			-39.7	

Source – TERA analysis

¹ In its Green Paper "Unlocking the potential of cultural and creative industries", the Commission states that the growth of cultural and creative industries could be comparable to the service economic sector: Cultural and creative industries are recognized as growth sectors in the above mentioned Commission Consultation Paper as well as in the Commission Staff Working Document «Challenges for EU support to innovation services – Fostering new markets and jobs through innovation» – SEC (2009) 1195.

Table 6: The impact of piracy on job losses in the five main European countries between 2008 and 2011 (new estimate)

	2008	2011	2008/2011	2008/2011
Creative industries – factual	9 649 048	9 459 415	-189 633	-2.0%
Overall economy	137 452 800	135 664 400	-1 788 400	-1.3%
Creative industries – counterfactual 1	9 649 048	9 523 504	-125 544	-1.3%
Impact of piracy – counterfactual 1			- 64 089	
Service industries	45 427 833	49 031 776	3 603 943	+7.9%
Creative industries – counterfactual 2	9 649 048	10 414 540	765 491	+7.9%
Impact of piracy – counterfactual 2			-955 125	

Source – TERA analysis

The comparison of these real figures with our initial forecast in 2010 yields the conclusion that, for the five central European countries, the forecast of the initial study have proved accurate:

- The actual job losses encompasses the initial study's estimates;
- The assumptions of scenario 2 are globally consistent with the way Internet piracy evolved between 2008 and 2011.

These numbers are very close from the scenarios we had elaborated in our previous report published in March 2010 calculating the piracy impact up to 2011 and lead to new estimates as follows:

- **A value destruction in the range of €27.1 and €39.7 billion between 2008 and 2011, which added to €7.4 billion as a base for 2008 leads to a cumulative value destruction in the range of €34.5 and €47.1 billion;**
- **A cumulative job loss in the range of 204,089 and 1,095,125 at the end of 2011, as a result of the addition of the job losses in 2008 (140,000) and the job losses between 2008 and 2011 (between 64,089 and 955,125).**

In conclusion, creative industries in Europe represent in 2011 a significant share of GDP (6.8%) and employment (6.5%) but report significant value destruction (unlike the overall trend of the economy) and noticeable decrease in employment in the main five markets between 2008 and 2011.

The comparison of these real figures with our initial forecast highlights **the obvious negative effect of piracy on value and employment in the creative sector, which has a real potential for growth at the digital era, and for sustainable international specialization of Europe in a globalized economy, in addition to its importance for reflecting the richness of the European culture and diversity.**



About TERA CONSULTANTS

“The economic contribution of the creative industries to EU GDP and employment -Evolution 2008-2011” study was conducted by TERA Consultants. TERA Consultants is an independent consultancy firm providing services in the field of ICT and combining the expertise of economists and engineers. Laurent Benzoni has been the director of the study.
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