

The Contribution of Copyright and Related Rights to the European Economy

Based on Data from the Year 2000

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Executive Summary

This study assesses the economic importance of copyright industries to the European economy and those of individual nations in the year 2000. The copyright industries are critically important to the European Community because they involve media, cultural, and knowledge industries. Development in the industries is indicative of performance in post-industrial society especially where related to the information society.

The legal protection afforded by the relevant rights i.e. copyright and related rights allows for the development of a copyright industry that contributed more than €1.2 trillion (€1,200 billion) to the economy of the European Union, produced value added of €450 billion, and employed 5.2 million persons in 2000. The total gross value added, which measures wealth added to the economy, represented more than 5.3 % of the total value added for the 15 EU Member States. In terms of employment, the industries contributed 3.1 % of total EU employment. As a result of gaps in data that are normally experienced when using national accounts and employment data from official international and statistical sources, a complete set of data was unavailable for study. These problems that arise as a result of these gaps in data are addressed in the study. The authors estimate that the effect of gaps in data understates the real contribution of copyright to the European economy by 5 to 10 %.

The copyright industries are divided into 2 parts: 1) core copyright industries that are based upon the creation, distribution, and sale of copyright products and services (for example, magazines, motion pictures, recorded music, software), and 2) copyright-dependent industries that would not exist without the existence of products and services subject to copyright (for example, television set manufacturers, DVD player manufacturers, computer manufacturers). Together they combine to form an overall copyright industry that is among the most important contributor to the European economy.

This assessment of the contribution of copyright industries to the European economy focuses on the turnover, value added, and employment provided by the industries. Turnover provides a measure of the flow of cash into the industries before costs, value added shows what wealth the industries create for the economy, and employment indicates the extent to which individuals and society benefit through jobs creation.

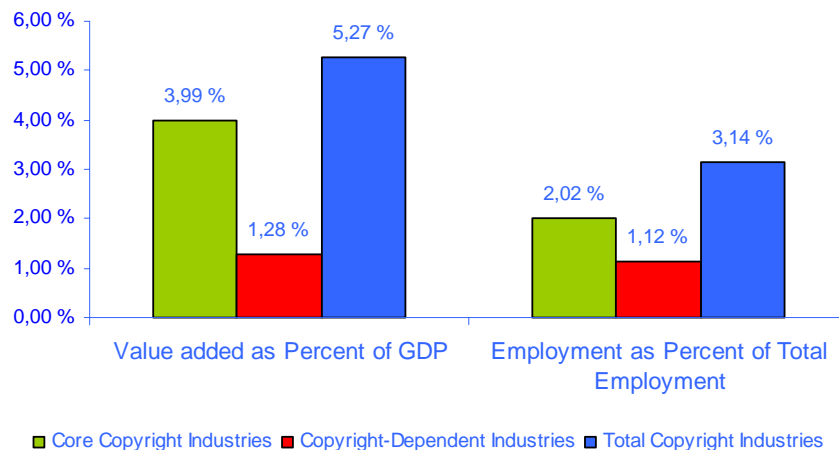
The core and dependent copyright industries both make significant contributions but the core industries are the most important to the European economy (Figure 1).

FIGURE 1. TOTAL TURNOVER AND GROSS VALUE ADDED BY EU COPYRIGHT INDUSTRIES, BILLION € 2000



The core copyright industries contribute more than 6 times as much to the wealth and 3 times as much employment to the European Union than copyright-dependent industries (Figure 2).

FIGURE 2. GROSS VALUE ADDED AND EMPLOYMENT PROVIDED BY EU COPYRIGHT INDUSTRIES AS PERCENTAGES OF TOTAL GDP AND EMPLOYMENT, 2000



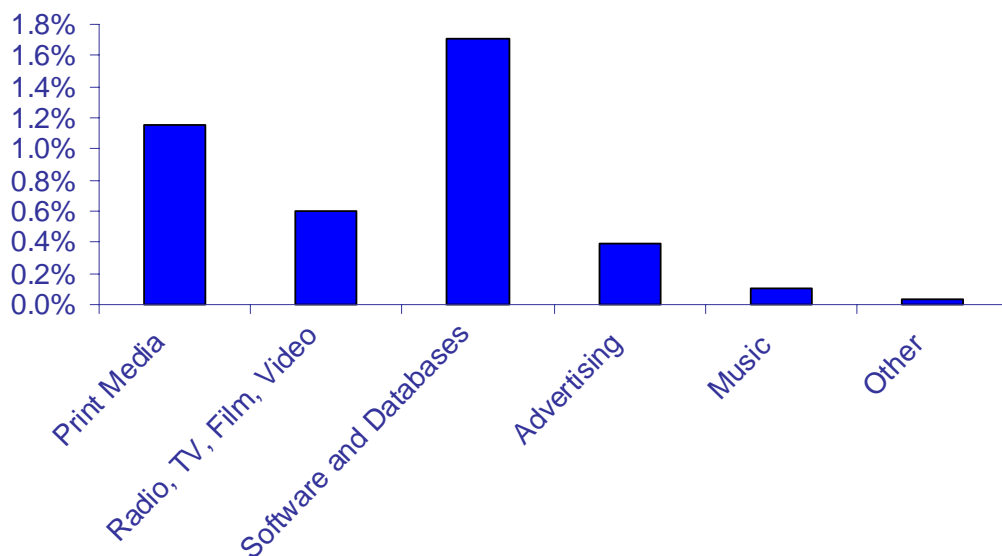
The copyright industries produced a value added per employee of €6,369. Core copyright industries overall are nearly twice as productive as dependent industries, achieving a value added per employee of €101,548, compared to €8,936.

Among core copyright industries, the software and databases industries and print media industries make the largest sectoral contributions to the European economy (Figure 3), with each contributing gross value added surpassing 1% of EU gross domestic product. Additional significant contributions are made by the audiovisual, advertising, and music sectors. It is notable that the importance of music is much higher in cultural influence than in economic contribution. The result is in line with a

previous study made about the music in Europe¹. Partly this reflects the dominance of the American music industry in the European market.

These core activities do not stand alone, however. The software and databases sector, for example, is interdependent with computer equipment manufacturing in the copyright-dependent industries sector. The core music industry's contributions are increased by the manufacture of radio receivers, CD players, and other equipment in the copyright-dependent industries.

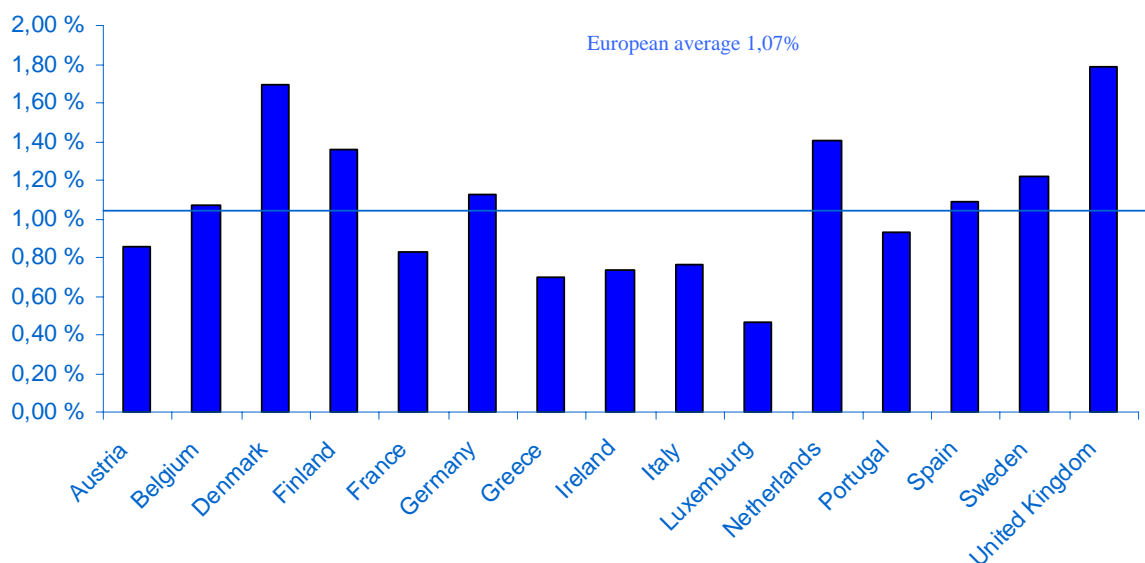
FIGURE 3. GROSS VALUE ADDED BY EU COPYRIGHT INDUSTRY SECTORS AS PERCENT OF TOTAL GDP, 2000



The average contribution of print media, including printing and publishing to GDP of European nations in year 2000 was 1,07%. The contribution of print media was highest in United Kingdom and other countries that produced above average were Denmark, Netherlands, Finland, Sweden, Germany and Spain.

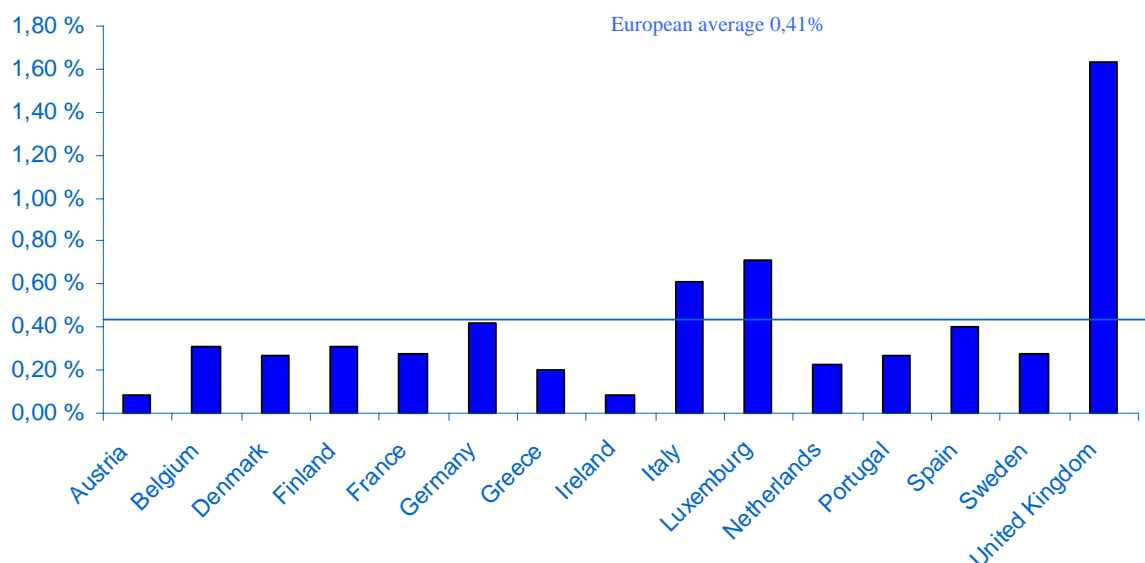
¹ The findings in the “Music in Europe”, a study carried out by the European Music Office in 1996 indicates that the total turnover of the music industry in 1995, including musical instruments, amounted to 0,34% of the GDP of all European countries.

FIGURE 4. GROSS VALUE ADDED BY PRINT MEDIA AS PERCENT OF TOTAL GDP, 2000



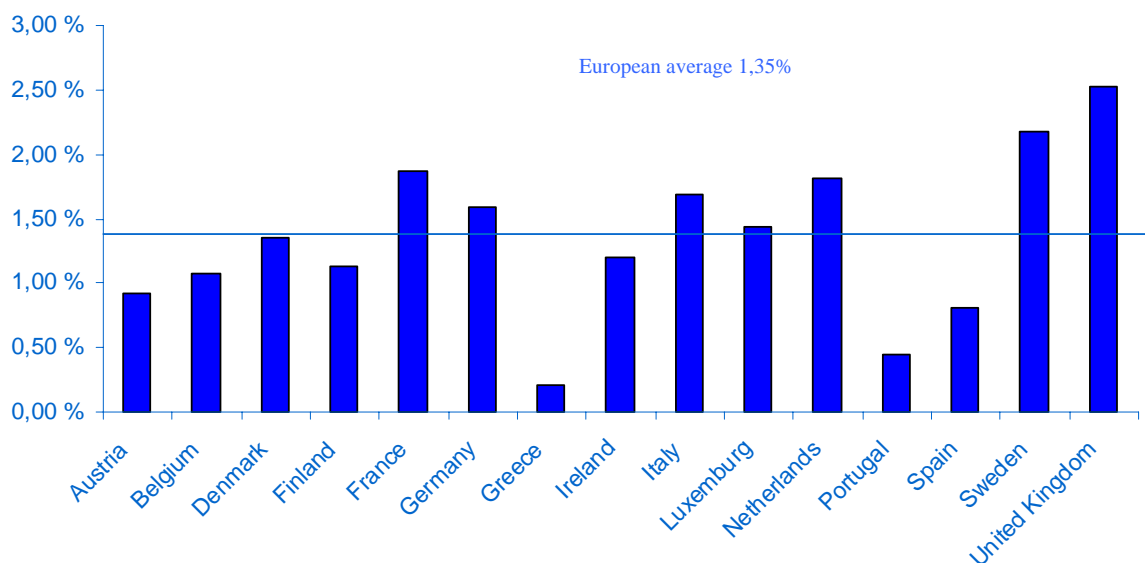
The average of radio, television, film, and video activities contribution to the GDP of European nations was 0,41% in 2000. Clearly the highest production was found in United Kingdom. Other above average nations were Luxemburg and Italy.

FIGURE 5. GROSS VALUE ADDED BY RADIO AND TELEVISION, FILM AND VIDEO AS PERCENT OF TOTAL GDP, 2000



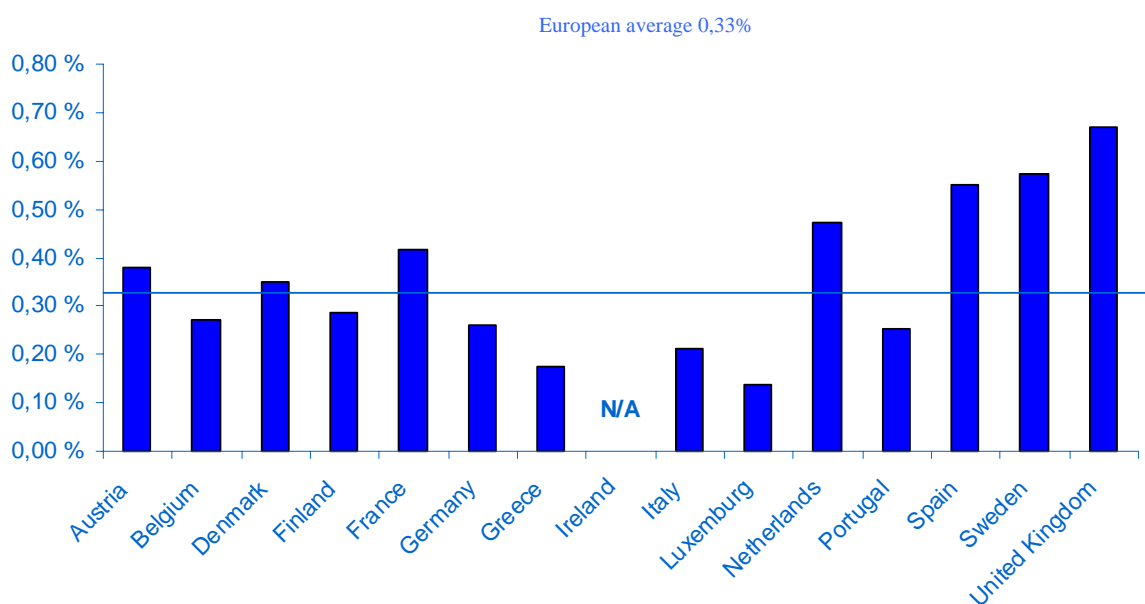
The average contribution of software and databases industries to the European nations' GDP was 1,35% in 2000. The highest relative production was again in United Kingdom followed by Sweden, France, Netherlands, Italy and Germany.

FIGURE 6. GROSS VALUE ADDED BY SOFTWARE AND DATABASES AS PERCENT OF TOTAL GDP, 2000



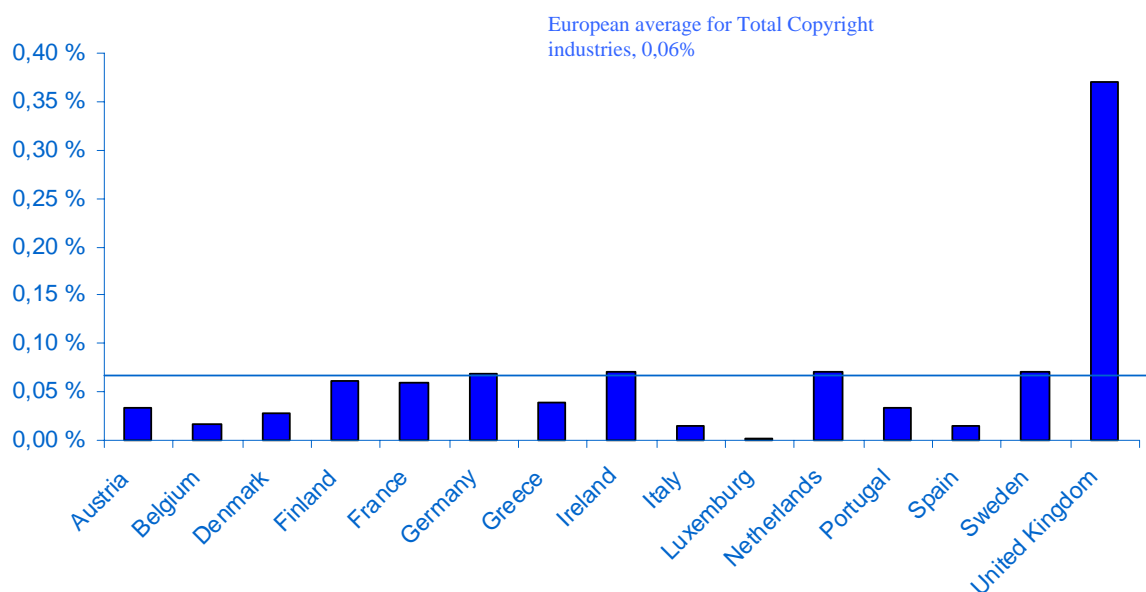
The average contribution of advertising to national GDP was 0,33% in 2000. The above average production was found in United Kingdom, Sweden, Spain, Netherlands, France and Austria.

FIGURE 7. GROSS VALUE ADDED BY ADVERTISING AS PERCENT OF TOTAL GDP, 2000



The average contribution of music industry to the GDP of European nations was 0,06% in 2000. The above average production was found only in United Kingdom followed by average GDP contribution in Sweden, Netherlands, Ireland and Germany.

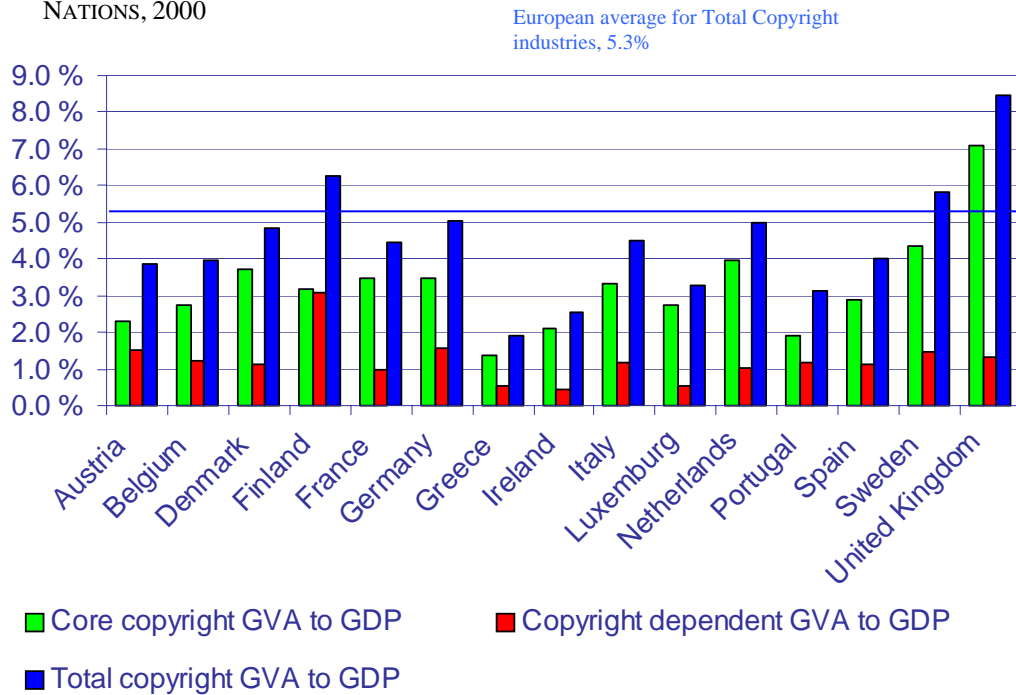
FIGURE 8. GROSS VALUE ADDED BY MUSIC INDUSTRY AS PERCENT OF TOTAL GDP, 2000



United Kingdom produces clearly the highest contribution to GDP in all copyright industries reflecting the cultural nature of these industries and the dominant international position of the English language. Other findings reflect the different media consumption patterns in different parts of Europe. In the south of Europe the electronic and audiovisual media have a stronger position than print media whereas in the northern Europe the print media has a stronger relative position.

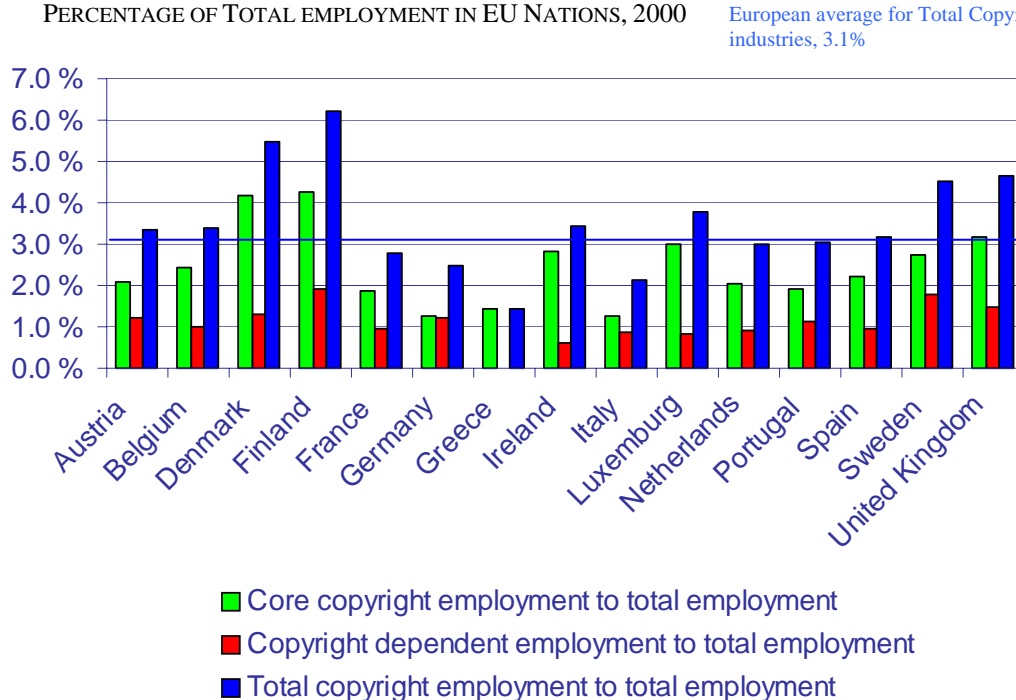
European nations vary widely in terms of individual national performance of copyright industries. The United Kingdom, Finland, and Sweden lead in terms of gross value added as a percentage of gross domestic product (Figure 9). Greece, Ireland, and Portugal lag behind.

FIGURE 9. CORE, DEPENDENT, AND TOTAL COPYRIGHT INDUSTRIES CONTRIBUTIONS TO GDP IN EU NATIONS, 2000



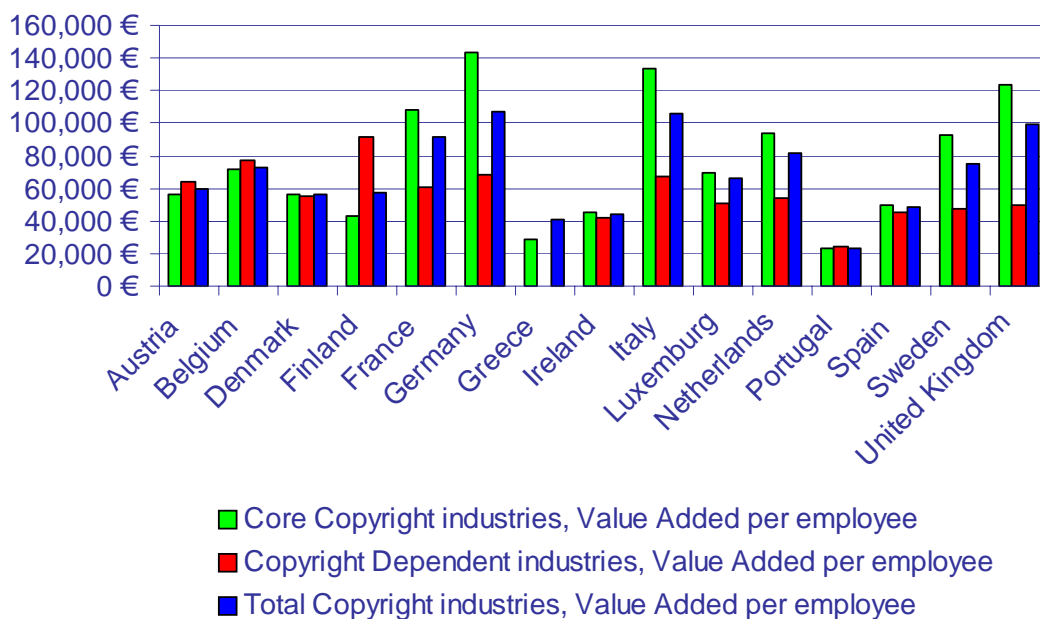
In terms of contributions to national employment, the copyright industries are highly significant contributors in Denmark, Finland, Sweden, and the United Kingdom, but are less important in countries such as France, Germany, Greece, and Italy (Figure 5).

FIGURE 10. CORE, DEPENDENT, AND TOTAL COPYRIGHT INDUSTRIES EMPLOYMENT CONTRIBUTIONS AS PERCENTAGE OF TOTAL EMPLOYMENT IN EU NATIONS, 2000



National performance in terms of productivity of copyright industries also varies widely, with Germany, Italy and the United Kingdom leading in total overall productivity and Greece, Ireland, Portugal, and Spain lagging behind (Figure 6).

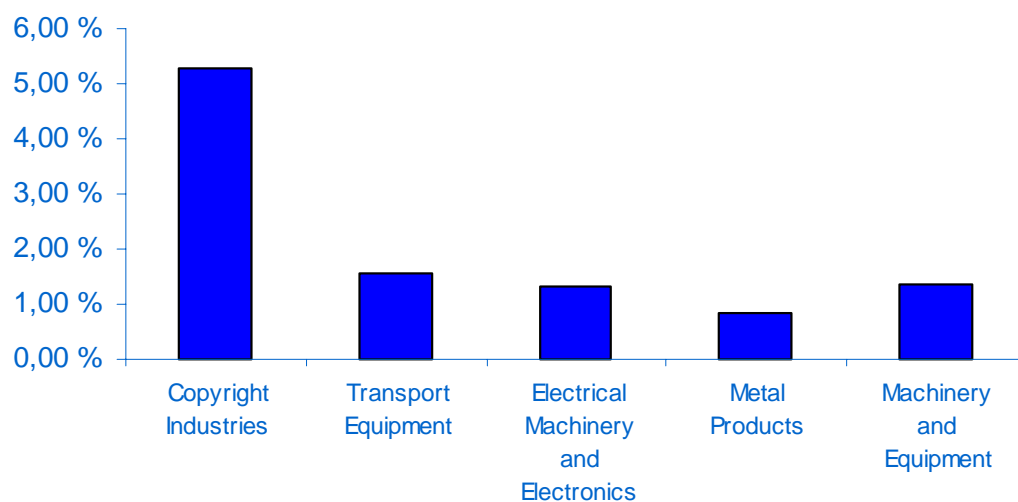
FIGURE 11. PRODUCTIVITY OF CORE, DEPENDENT, AND TOTAL COPYRIGHT INDUSTRIES IN EU NATIONS, 2000 (MEASURED AS VALUE ADDED PER EMPLOYEE)



In comparative terms, the copyright industries exceed the economic contributions of many other industries.

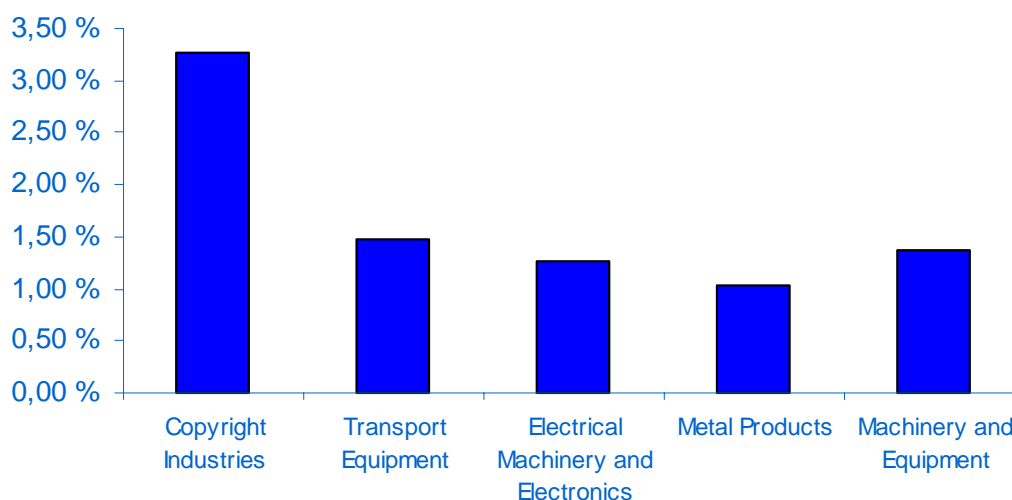
When value added as a percent of total value added is considered, the copyright industries contribute two and a half times more to the European economy than the transport equipment industry. The ratio is approximately the same with electrical machinery and electronics industry, and with machinery and equipment industry. The contribution of copyright industries is about five times more than that of metal products industry (Figure 7).

FIGURE 12. TOTAL GROSS VALUE ADDED OF COPYRIGHT INDUSTRIES AS PERCENT OF GDP COMPARED TO SELECTED OTHER INDUSTRIES



The copyright industries are also major employers, providing 2 times the employment of the transport equipment industry (automobiles, trucks, parts), 2.5 times that of electrical machinery and electronics industry, 3 times that of metal processing, 2.5 times the employment provided by machinery and equipment industry (Figure 8).

FIGURE 13. EU EMPLOYMENT SHARE OF TOTAL EMPLOYMENT OF THE COPYRIGHT INDUSTRIES COMPARED TO SELECTED OTHER INDUSTRIES



Core copyright industries have a high productivity

This study reveals that there are significant opportunities for economic growth in copyright industries and activities and development efforts can be focused on sectors where strengths exist, as well as on those in which unusual weaknesses are present. Efforts should focus primarily on the core copyright industries because they make the greatest contributions to the EU and member state economies and because the productivity of labour is higher in the core industries than the copyright-dependent industries.

The availability of national data should be improved

The study found significant data limitations and data classification issues for the copyright industries that should receive the attention of European and national statistical agencies. The goal should be to provide highly precise data in categories that are as clear and separable as those of agriculture, clothing, mining, metals, and other industries that have been historically given significant statistical attention. The authors found that the greatest problems of missing data and data indistinguishable exist in cultural industry data such as music, theatre and opera, film, video, radio, television, and visual and graphic arts.

Commission and member states can enhance the success of copyright industries

Because of the economic and cultural importance of the copyright industries, the Commission and member states should continue to ensure that EU copyright policies, member state laws, and international copyright agreements provide adequate protection of copyright and related intellectual property rights. New forms and formats of copyright material and the changing nature of information is not always recognised or fully addressed in existing legislation. The Commission and member states should continue to ensure that appropriate copyright enforcement mechanisms and processes are in place so that the Community benefits economically from these important industries and activities.

INTRODUCTION

Why Measure Copyright?

This study considers the economic contributions that copyright make to the European economy. The value of works subject to copyright is increasingly important in economic terms. Its significance is increasing dramatically because information and communications technologies have become the fundamental bases for value creation in a wide variety of industries in developed societies.

The shift from industrial society to information society that is dependent upon knowledge creation and the development, processing, and use of information places copyright at the centre of economic development in the twenty-first century. The copyright industries provide the central information that is used in other economic sectors of the information society.

Despite the importance of copyright, the full value of copyright to national economies has been calculated in only a few nations. Regular assessment of that value occurs only in the United States.²

Assessing the economic impact of copyright industries in individual nations provides numerical measures of their contributions. There is some usefulness to these measures, but, ultimately, comparison of size and impact to those of other industries or copyright industries in other countries is necessary to illuminate the relative importance of the copyright industries.

When the economic value of copyright is established and understood, policy makers and those producing materials subject to copyright can effectively create legal and industrial development policies that promote the development of copyright industries, protect the value of material subject to copyright after its creation, and continue to support the transition from industrial to information society.

² The U.S. studies have been conducted for more than a decade by Stephen E. Siwek. The latest report is *Copyright Industries in the U.S. Economy. The 2002 Report*. Washington, D.C: International Intellectual Property Alliance. Other notable studies include: Antônio Márcio Buainain, *Estudio Sobre la Importancia Económica de las Industrias y Actividades Protegidas por el Derecho de Autor y los Derechos Conexos en los Países de Mercosur y Chile*. Campinas, Brasil: Universidade Estadual de Campinas y Organización Mundial de la Propiedad Intelectual, 2002; Allen Consulting Group. *Economic Contribution of Australia's Copyright Industries*. Australian Copyright Council and Centre for Copyright Studies, 2001; Petteri Sinervo and Robert G. Picard, *Economic Importance of Copyright Industries in Finland: Finnish Copyright Industries in 1997*. Helsinki: The Finnish Copyright Society, 2000; Timo E. Toivonen and Robert G. Picard, *Economic Importance of Copyright Industries in Norway: Norwegian Copyright Industries in 1999*. Helsinki: Finnish Copyright Society and Norwegian Ministry of Cultural Affairs, 2002; Marlies Hummel, *The Economic Importance of Copyright in the Federal Republic of Germany*. Institut für Wirtschaftsforschung, 1989; Fritz Scheuch, *The Economic Importance of the Copyright Industries in Austria*. Vienna University of Economics and Business Administration. Vienna, 1989.

How is Economic Impact Measured?

There are a variety of types of indicators of economic impact of industries and enterprises. These include measurements of turnover, employment provided, wealth generation (value added), contribution to gross domestic product and gross national product, increase in overall productivity, exports, and multiplier effects³.

The impact of economic sectors is important because policy aspects of neoclassical economics focus on how societies use resources to produce economic benefit. National economic policies in market economies focus on creating growth in the economy. Use of sectoral indicators helps explain what an industry adds to the economy by focusing on the value added to the economy, that is, the increase in wealth resulting from the activity. As the majority of copyright industries contribute to the culture and information society, their significance in those often exceeds the direct economic contribution. The measuring of the socio-cultural contribution of copyright industries requires a multiple approach of both quantitative and qualitative assessment. The focus of this study is on the economic contribution of the copyright industries and therefore applies economic measures only.

Value added and GDP

A majority of the studies made of the importance of copyright industries adopt broadly the same basic methods. Their point of departure is gross domestic product (GDP). This is the measure of the total annual output of goods and services produced by the residents of a particular country. It includes exports but excludes the property income from abroad. When this income is added to GDP, the result is gross national product (GNP). Net national income is GNP less depreciation. GNP and GDP include the output of capital goods, but these measures overstate the resources available to the nation unless a deduction is made for depreciation of existing assets. Depreciation is, however, to some extent arbitrary and therefore hard to measure. GNP and GDP are therefore normally used as a measure of the economy's output. They are measured at factor cost, excluding taxes in a particular calendar year. GDP is chosen in all previous studies on the national impact of copyright as being the figure that the industry value creation figures are measured against.

The gross output of an industry measures the industry's value of sales in a particular year, adjusted for stock changes. It is normally estimated at wholesale prices. However, gross output of an industry overestimates an industry's contribution to national income because it includes the value of inputs produced by other industries. GVA, gross value added, is therefore usually taken to represent the true contribution that an industry makes to the national economy. This is the value of gross outputs less the value of inputs from other industries. This value added of a particular industry is equivalent to the total staff costs in an industry plus profits before tax.

³ Here the term "multiplier effects" refers to the contribution to other industries than copyright industries.

Data Issues

Data on industries worldwide are based on enterprise, industrial, and national account statistics and, although there are continual efforts to standardise data, there are many national differences in the amount of data and specificity of data available. As use of statistics developed during the industrial age, nations focused their greatest efforts on producing data about specific industries that played important roles in their national economies. Although data on other industries was also collected and provided, the categories under which activities were recorded and the amount of data varied widely.

Historically, copyright industries have been recognised for their cultural, social, and political contributions to European society, and research and policies have focused on those functions. Although it has been recognised that copyright industries do play economic roles, the central economic activities in copyright content creation and dissemination were traditionally not given significant attention by policymakers or national statistical agencies.

As a result of this, data availability on copyright industries has lagged behind that of many industries and only low levels of data are often available on these industries. It is not unusual for national account statistics to have far more data with greater specificity about agriculture, fishing, leather, textile, automobiles, chemical, and metal industries than about copyright industries.

The problems surrounding the availability of data on copyright industries have gained increased notice in recent years. A recent EC report on publishing industries, for example, noted that “Official sources of data are currently of limited use in gathering publishing industry data. Few useful categories of data are employed for the publishing industries. When data are reported, they often contain gaps...Even when data are available, they are rarely directly comparable because of significant national differences in how data are recorded and what is included.”⁴

Eurostat created a special report on printing and publishing industries in 2001 to supplement its basic data and its *Panorama of European Business*. It was based on Eurostat, New Cronos Database, and other European statistics and material from industry associations. It noted that there are gaps in data for many nations and problems with data on small- and medium-sized enterprises (which make up the bulk of firms in media and communications).⁵

Much of the data regarding copyright industries also involves cultural statistics and their insufficiency has been recognised for a number of years. The Council of European Ministers for Culture passed a resolution urging improvement of statistics in 1995 and, after national research and experimental data gathering, Eurostat established a working group on cultural statistics in 2000. The work currently underway is creating common definitions and data methods that will improve statistics in the future.

⁴ *Competitiveness of the European Union Publishing Industries*. Luxembourg: Office for Official Publications of the European Communities, 2000, p. 68

⁵ *Special Feature on Publishing and Printing*. Eurostat: Structural Business Statistics Unit, 2001.

Jeannie Cardona, head of the statistics unit for the French Ministry of Culture and a member of the working group on cultural statistics, noted in 2002 that improvement of cultural statistics “greatly depends upon the capacity and willingness of National Statistical Institutes to provide sufficiently detailed data. There is one major obstacle to the pursuance of work given the uncertainty that reigns over the classification of cultural activities in the 2007 revised version of the NACE currently underway.”⁶

The problem has also been recognised in the audiovisual industry. A recent report for the Directorate General for Education and Culture reported that “The national and European statistical instruments relating to the cinema industry, with a few rare exceptions, are inadequate or inappropriate in nearly all countries. The only reliable indication available at the European level is the number of cinema admissions.”⁷

These kinds of issues create significant challenges in compiling European copyright industry data and there are gaps and difficulties regarding employment statistics and value added. Even when cross-national data are available from statistical sources, the dates of the data often vary widely because some national statistical offices are slower in collecting and processing data or because it is not compiled annually.

The main sources of economic data are Eurostat and national statistical offices that contribute to its work. Their data collection and reporting activities employ the NACE (Nomenclature de Activités économiques de la Communauté Européenne) system of classification. The data are developed within the national accounts systems and statistical directives provide considerable flexibility to national statistics offices in gathering and reporting data.

NACE data often reports within broad categories that often co-mingle activities and despite its efforts to harmonise statistics not all European nations use the NACE categories. Even when data are available, it is often not very rigorous because many copyright industries have traditionally been considered cultural rather than economic activities and only limited economic statistics have been gathered. Or they have been gathered in broad categories that also include a variety of activities that make the data inappropriate for assessing the impact of the copyright industries.

This study has endeavoured to overcome these problems by widening the sources of data used to gather data to include official European- and world-wide economic sources of data and national statistics offices.⁸ It has standardised the categorisation of the data to the extent possible and provides the first comprehensive overview of the importance of copyright industries to the European Community and its member states.

⁶ Jeannie Cardona, “Cultural Statistics in Europe: Updates and Trends,” UNESCO International Symposium on Cultural Statistics,” Montréal, Canada, 21-23 October 2002, p. 21.

⁷ Executive Summary, “Identification and Evaluation of Financial Flows within the European Cinema Industry by Comparison with the American Model.” Study for the European Commission, Directorate General for Education and Culture, Unit C1.p. 1

⁸ This approach of using multiple sources is well accepted for research relating to media, communications, and cultural activities. The European Audiovisual Observatory uses a similar approach because of limitations in basic statistical data from Eurostat and national statistics offices. See *Economy of the European Audiovisual Industry*, 2002 Yearbook, Vol. 1. Strassbourg: European Audiovisual Observatory, p. 10-12.

This study is based on data for the year 2000. Because of delays in processing and publishing data at the national and European levels, it is the most current year for which an assessment could be carried out without large gaps in reported data.⁹ Use of data from 2000 provides a good baseline assessment of the importance of the copyright industries as the twenty-first century began.

The authors of the study note and underscore the need for the Community to continue developing and improving measurement of the copyright industries by European-level official organisations, and national statistics offices.

⁹ In a few cases data for 2000 were not yet available because some nations do not undertake certain economic surveys on an annual basis. In order to make the data from earlier years comparable, the authors estimated 2000 data using national GDP growth rates for the missing year(s) and applying that growth rate to the reported data from the earlier year. Data for which this technique has been used is indicated in the national reports.

INDUSTRIES WITH COPYRIGHT-RELATED ACTIVITIES

A variety of industries produce copyright materials, but all their activities are not equally focused on the creation of value through these intellectual property rights. In measuring the economic contributions of copyright industries it is thus necessary to focus on those activities that primarily involve the creation of copyright material and the use of materials subject to copyright.

In this study we use the terms core copyright industries, copyright-dependent industries, and copyright-related industries to make distinctions between the activities. The distinction is necessary because the economic activities go far beyond the creation of copyright works. Materials subject to copyright are modified, packaged, reproduced, distributed, and stored. In addition, much of the process is inextricably linked to particular types of hardware, services, and sales that could not exist without the matter subject to copyright.

Core copyright industries operate nearly exclusively with works subject to copyright and other subject matter. The task of these industries is to create, produce or distribute works and other subject matter subject to copyright. All activities in these industries are tied to works and other subject matter subject to copyright. All activities of these industries should be included in measures of the economic importance of copyright.

Copyright dependent industries are largely dependant to works and other subject matter subject to copyright, producing either production or consumption goods for copyright protected material. In some studies the industries in this category are called copyright hardware industries because they included industries manufacturing hardware to be used in creation, production or consumption of the works subject to copyright.

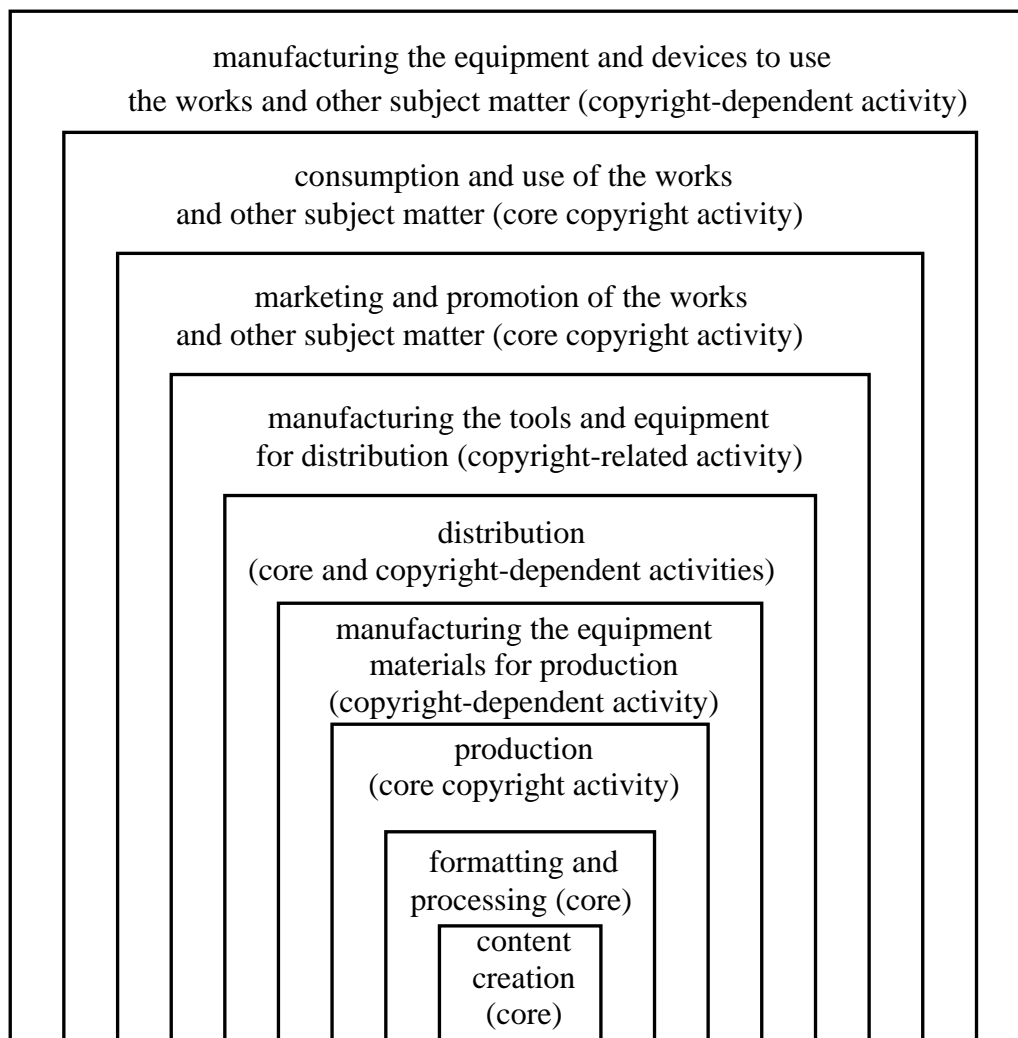
The industries in which activities and production partially depend on works and other subject matter subject to copyright are called copyright-related industries. Works and other subject matter subject to copyright generate, to a varying degree, part of the production value of these industries.

The division of copyright activities within these three groups is generally consistent with previous European, U.S., and other major studies conducted elsewhere. The World Intellectual Property organisation commissioned an expert working group in 2002 to prepare a handbook, "Guidelines on Surveying the Economic Importance of the Copyright Industries," that will help standardise measurement systems and will be published in 2003. The methods and categories used in this study are generally consistent with the approach and categories suggested in those guidelines.

In considering the three major categories, it is useful to think of them as layers of economic activities that radiate the effects of copyright as shown in Figure 9. Each of these layers falls within the core copyright, copyright-dependent, or copyright-related activities.

Obviously the activities related to production, distribution, and use of works and other subject matter subject to copyright differ among different types of material subject to copyright and copyright sectors. The layers involved are quite different, for example, between newspaper production and operatic productions. Although these differences result in separate value chains for different segments of copyright industries, the economic impact measurement techniques for them are similar.

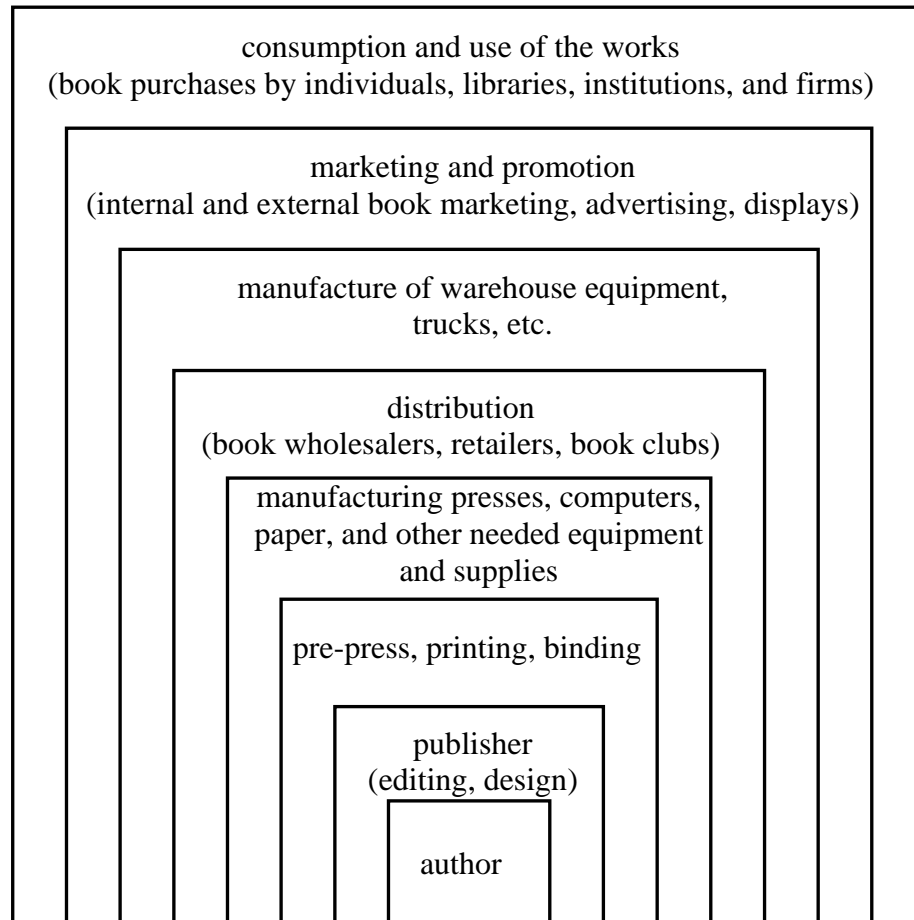
FIGURE 14. LAYERS OF ECONOMIC ACTIVITIES RELATED TO THE PRODUCTION, PACKAGING AND DISTRIBUTION OF MATERIAL PROTECTED BY COPYRIGHT AND RELATED RIGHTS



The amounts, types, and degrees of radiating effects vary by copyright sector and the types of value chains necessary to support their activities create differences in the significance of contributions radiated to economies. These differences are illustrated through the examples of two different copyright industry sectors, book publishing and television programming.

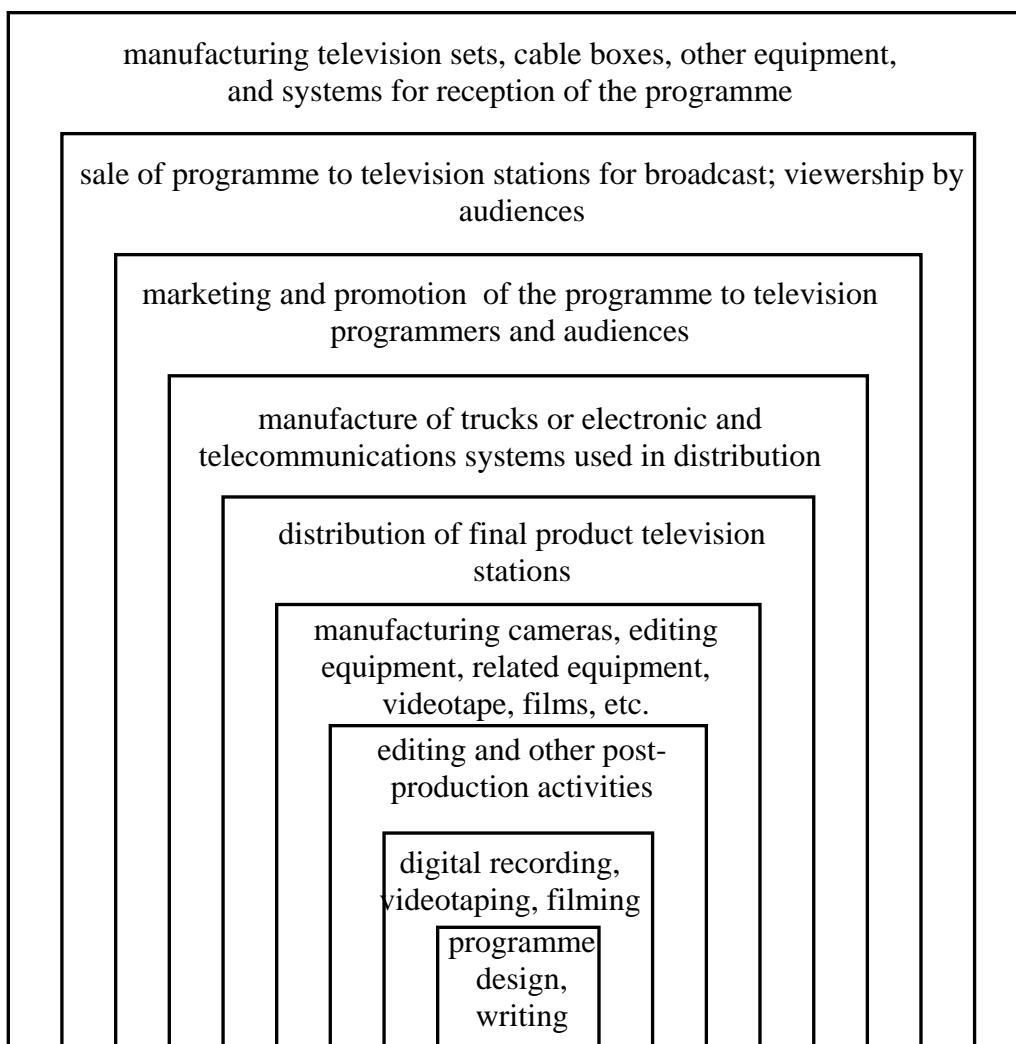
In the case of book publishing the activities begin with the author creating a manuscript and the effects radiate outward, creating economic activity for the publisher, printing firm, distribution chain, marketing, and ultimately consumption (sales) of the book (Figure 10). Because books are physical products that do not require hardware for use, there is no effect in manufacturing the equipment and devices to use the book, unless it is an electronic book and some sort of electronic book device is necessary.

FIGURE 15. EXAMPLE OF THE RADIATING EFFECT OF BOOK PUBLISHING



In the case of television programming, the process begins with the development of a programme idea, its design, and writing. The effects then radiate outward to include economic activities associated with recording the programme in digital form or on videotape or film, editing and preparing the final programme, digital, video and cinematographic equipment and supplies, distribution of the programme to stations and the equipment necessary for the process, marketing and sales activities, purchase of the programme by consumers and its use by audiences, and manufacturing and sales of television receivers and other equipment and services necessary to view the programme (Figure 11).

FIGURE 16. EXAMPLE OF THE RADIATING EFFECT OF TELEVISION PROGRAMMING PRODUCTION



Core Copyright Activities and Industries

The activities and industries classified as core copyright industries involve the creation, production and, usually, distribution and consumption, of copyright works and other subject matter. These industries are able to exist and produce economic contributions because of the protections afforded by legislation protecting their creative activities.

Core copyright industries are distinguishable from copyright-dependent and -related industries because their activities are wholly devoted to creation, production, performance, exhibition, broadcast, or other distribution and sales of works subject to copyright.

The activities and industries included in the core copyright industries are:

- Press and literature

- Music, theatrical productions, opera
- Film and video
- Radio and television
- Photography
- Visual and graphic arts
- Advertising
- Software and databases

Descriptions of these categories and the subcategories included follow.

Press and Literature

This category of data is the oldest statistical category for copyright materials and covers the range of activities associated with publishing and related activities.

In addition to clear, distinct subcategories for newspapers, magazines and periodicals, the category also includes other subcategories that encompass less distinct or directly related activities, such as “books and maps”. The category also includes a subcategory for production aspects of published materials that covers printing activities that are not internal. Thus, if a newspaper has its own printing facility that activity is reported under “newspapers.” However, if the newspaper contracts printing-related activities with a commercial printer, that economic activity is reported under “pre-press, printing, and post-press of published materials”. This category also includes economic activity of libraries. This may seem an anomaly but when statistical categories were established, it was included here because it was seen as related to press and literature.

The main subcategories of activities for this category include:

- Authors, writers, translators
- Newspapers
- News and feature agencies, etc.
- Magazines and periodicals
- Books, maps
- Other publishing (cards, directories, etc.)
- Pre-press, printing, and post press of published materials
- Wholesale and retail of press and literatures
- Libraries

Music, Theatrical Productions, Opera

This category includes a variety of activities associated with musical creation, performance, and recording. It includes publication of music, musical recordings, live performances, and some related activities. The primary subcategories in which data are reported are:

- Composers, lyricists, arrangers, choreographers, directors, performers, etc.
- Printing and publishing of music
- Reproduction of recorded music
- Wholesale and retail sales of recorded music
- Artistic and literary creation and interpretation
- Performances and allied agencies (booking agencies, ticket agencies, etc)

Film and Video

This category encompasses direct and related activities involved in the creation, production, distribution, and use of motion pictures and video products. Exhibition categories such as video rentals and sales include those activities within the European Union; sales made outside the EU are reported in the country of sale and thus not included in the subcategories. Benefits from foreign sales will appear as income for EU producer and be shown in the production category.

The primary subcategories for motion picture data are:

- Writers, directors, actors, etc.
- Motion picture and video production
- Motion picture and video distribution
- Motion picture exhibition
- Video rentals and sales
- Allied services

Radio and Television

This category aggregates information regarding broadcasting, cablecasting, and satellite broadcast activities. It includes activities of both commercial and public service broadcasters.

- Radio and television activities
- Transmission via cable and satellite networks

Photography

This category covers commercial photographic and related activities designed as economic activities. It includes commercial photographers, but excludes hobby and family photographic activities. Subcategories included here are:

- Photographers and studios
- Photo agencies and libraries

Visual and Graphic Arts

This category includes commercial activities surrounding art and art-related activities. Subcategories include:

- Artists
- Art galleries and other wholesale and retail
- Art auctions and others
- Picture framing and allied services
- Graphic design

Advertising

This category includes the activities involved in creating advertising services and purchasing advertising space and time from publishers, broadcasters, and others who facilitate distribution of advertising to the public. Advertising activities that are taking

place in advertising departments of companies (an automobile manufacturer, for example) are reported under automobiles in national accounts data, so they are not included here. The data here represents external activities such as advertising services and media buying services contracted by an automobile manufacturer. Data are reported in 1 general category:

- Agencies, buying services

Software and Databases

This category involves the range of activities relating to the creation, maintenance, and sales of computer software of all kinds. It also includes databases and electronic publishing based upon those databases.

- Programming, development, and design
- Wholesale and retail
- Databases and processing
- Database publishing

Copyright-Dependent Activities and Industries

Industries and activities included in this category are dependent upon the existence of works subject to copyright produced by the core copyright industries and would produce a lower economic contribution without the existence of copyright. These industries create, manufacture, distribute, and sell equipment that is necessary for the creation and use of works subject to copyright. Items produced by copyright-dependent industries are jointly consumed; there is a strong relationship between these items and works subject to copyright. Without the basic material subject to copyright, there would be no purpose for this equipment, so its existence is dependent upon the availability of the content. Industries and activities included in the copyright-dependent industries are:

TV Sets, Radio Sets, VCRs, CDs Players, and Other Equipment

This category includes the creation, production, and sale of the hardware necessary to use content material in the form of broadcasts, recordings, etc. Subcategories are:

- Manufacture
- Wholesale and retail

Computers and Equipment

This category includes the creation, production, and sale of the hardware necessary to use content material in the form of software and databases. Subcategories are:

- Manufacture
- Wholesale and retail

Photography Equipment and Services

This category includes the equipment and services necessary to produce copyright images. Subcategories are:

- Photographic and cinematographic equipment
- Photo processing and finishing as copyright-dependent industries

Musical Instruments

This category includes the creation, production and sale of the instruments with which music is performed. Subcategories are:

- Manufacture
- Wholesale and retail

Copyright-Related Activities and Industries

Copyright-related activities and industries are industries, whose products and services partially involve copyright, but the amount is not substantial or the portion that is related cannot be segregated from their non-copyright activities. They will not be included in this study. The authors recognise that portions of industries such as office business machines, architecture, jewellery, furniture, china and glass, clothing and footwear, toys, wall coverings, and engineering have copyright aspects but their contributions cannot be measured through national statistics.

COPYRIGHT INDUSTRIES AND STATISTICAL DATA

The authors identified a variety of categories of statistical data within the NACE classification (Nomenclature de Activités économiques de la Communauté Européenne)--the general industrial classification system for the European Communities--for use in data collection activities of this research project. Several additional categories for use were identified within the CPA 2002 (classification of products by activity in the European Economic Community), and the PRODCOM (Production Communautaire) classification systems.

Data was then sought from various statistical sources based on the classification categories and numbers listed in Table 1.

TABLE 1. STATISTICAL CATEGORIES FOR COPYRIGHT INDUSTRY DATA

	NACE Category, Rev. 1.1
Press and Literature	
newspapers	22.12
news and feature agencies, etc.	92.40
magazines and periodicals	22.13
books, maps	22.11
other publishing (cards, directories, etc.)	22.15
pre-press, printing, and post press of published materials	22.21; 22.22; 22.23; 22.24; 22.25
retail of press and literature	52.47
libraries	92.51
Music, Theatrical Productions, Opera	
printing and publishing of music	22.14
reproduction of recorded music	22.31
wholesale and retail of recorded music ¹⁰	51.43; 52.45
artistic and literary creation and interpretation	92.31
performances and allied agencies (booking agencies, ticket agencies, etc)	92.32 ¹¹
Film and Video	
motion picture and video production	92.11
motion picture and video distribution	92.12
motion picture exhibition	92.13
video rentals and sales	

¹⁰ The NACE categories 51.43 and 52.45 include also the wholesale and retail sales of electrical household equipment, radio and television goods and musical instruments and scores. The share of sound recording sale turnover, total value added and employment for the category are based on the Eurostat *Statistics on Audiovisual Services* (2002) estimates of the turnover by country from sound recording sales.

¹¹ Another category, 74.87, is relevant because it includes agents that represent performers and artists, etc. However, the category is mixed with an expansive and unsegregatable variety of other services unrelated to copyright. As a result, it is not included in the statistical data in this study.

Photography	
photographic services, studios, etc.	74.81
Visual and Graphic Arts	
art galleries and other wholesale and retail	92.52
Radio and Television	
radio and television activities	92.20
transmission via cable and satellite networks	
Software and Databases	72.0
Advertising	
agencies, buying services	74.40
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	
manufacture	32.30
wholesale and retail of radio and television goods and musical instruments	51.43, 52.45
Computers and Equipment	
manufacture	30.02
wholesale and retail	
Musical Instruments	
manufacture	36.30
Photographic and Cinematographic Instruments	
manufacture	33.40
wholesale and retail	

Although the NACE system is used in most European nations, not all nations use the exact classifications and some report data only in the broader category but not in subcategories. In other cases data are not reported in distinguishable categories and cannot be accurately estimated. In some nations there are significant differences in the classification systems. When dealing with those nations, the authors of the study worked directly with the national statistics offices to identify the comparable, relevant categories in their systems and then obtained the data and reported it within the common framework used for this study.

The problem with NACE-based information on employment is that it provides the amount of persons working for the firms operating in the NACE categories. Therefore it disregards many independent or free-lance professionals who are producing the very content of copyright value. Such occupations include writers, journalists, sculptors, painters, composers, musicians, singers, dancers, actors, photographers, and other creative occupations that may not appear in industrial or business statistics. The statistics on occupations are based on labour force surveys and internationally classified according to ISCO (the International Standard Classification of

Occupations). The ISCO-based statistics overlap with the NACE-based statistics in such a way that it is impossible, for example, to distinguish the portion of authors and journalists that are included both in the industrial statistics and in the labour force surveys. The number of people in copyright occupations is therefore presented separately. In order to distinguish the number of persons in copyright occupations the four-digit classification is needed. The copyright occupations are printed in bold in Table 1. However, for only four EU countries the labour force survey data are provided in level 4¹². Therefore in the analyses by country the data on occupations is presented in level 3.

TABLE 2. COPYRIGHT OCCUPATIONS IN ISCO CLASSIFICATIONS

243	Archivists, librarians and related information professionals
	2431 Archivists and curators
	2432 Librarians and related information professionals
245	Writers and creative or performing artists
	2451 Authors, journalists and other writers
	2452 Sculptors, painters and related artists
	2453 Composers, musicians and singers
	2454 Choreographers and dancers
	2455 Film, stage and related actors and directors
313	Optical and electronic equipment operators
	3131 Photographers and image and sound recording equipment operators
	3132 Broadcasting and telecommunications equipment operators
	3133 Medical equipment operators
	3139 Optical and electronic equipment operators not elsewhere classified
347	Artistic, entertainment and sports associate professionals
	3471 Decorators and commercial designers
	3472 Radio, television and other announcers
	3473 Street, night-club and related musicians, singers and dancers
	3474 Clowns, magicians, acrobats and related associate professionals
	3475 Athletes, sports persons and related associate professionals

Data Used to Measure Copyright Impact

As noted in the introduction, there are multiple ways of assessing the size and importance of an industry: net sales, turnover, number of employees, value of assets, and net profits. Different measurements serve different purposes.

This study utilises four fundamental measures: turnover, value added, value added as a percent of GDP, and number of employees.

Turnover and number of employees gives general information that can be used to compare generally to all turnover and total employment. Turnover, however, measures the gross output of an industry, including inputs from firms in other sectors

¹² The levels relate to the specificity of the data. For example, radio and television announcers are subsumed under the level 3 heading number 347 for “artistic, entertainment and sports associate professionals”. They are accounted for separately under the level 4 heading number 3473 for “Radio, television and other announcers”.

(in this case other copyright sectors) in a way that results in duplication of double counting when turnover is totalled. Employment figures ideally include both those individuals employed by firms and those who work independently. In most nations, distinctions are not made between full-time and part-time labour nor are they reported as person years of employment, so much available data are limited by the lack of comparability.

National accounts data does not fully cover activities of a wide variety of individuals involved in copyright creation and cultural industries, such as authors, composers, performers, and artists. Because accounts data are focused on industry activities, the economic activities of these individuals, whether as employees or independent professionals, are reported under the industries by companies using their services. Employment data on these fields are useful, however, in understanding the number of persons benefiting directly from the copyright industries. Such data are obtained from labour statistics and other sources.

In assessing the economic importance of an industry, the most common measurement method is the use of value added or gross value added (GVA). Value added measures the contribution of a particular industry to a good or a service. It is defined as turnover (or production value) less the cost of all inputs from other industries. The sum of all industries GVA equals GDP. When an industry's GVA is measured, it provides the value of gross outputs less the value of inputs from other industries. This value added of a particular industry is equivalent to the total staff costs in an industry plus profits before tax. As a result it provides an indicator of the wealth added to the economy, not merely the flow of money that is indicated by turnover. The value added is then also calculated as a percent of GDP to allow a comparison of its impact.

Countries Selected for Study

This study compiled national data from the 15 European Union member states and three nations identified as principal competitors in copyright industries: Canada, Japan, and United States of America. The next section contains detailed data from each of these countries individually and then compares them.

TURNOVER, VALUE ADDED AND NUMBER OF EMPLOYEES OF CORE COPYRIGHT AND COPYRIGHT-DEPENDENT INDUSTRIES BY COUNTRY

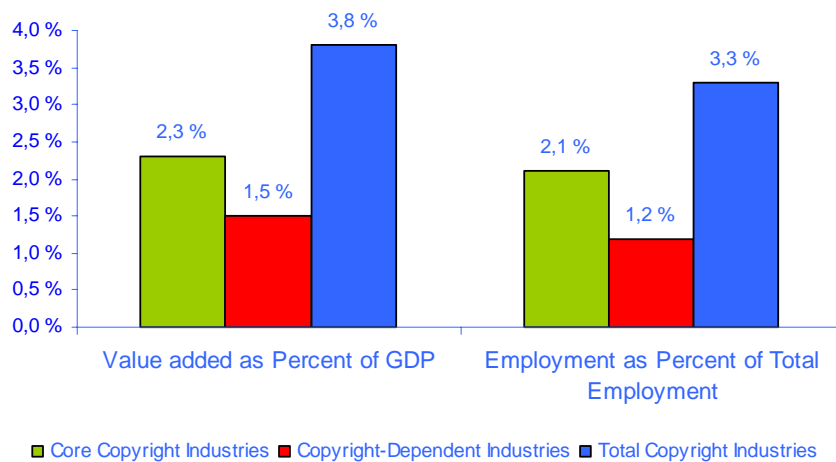
Austria

Although a small nation that shares language with a large neighbour, Austria's copyright industries are active and perform reasonably well. The country's copyright industries produce 3.8 percent of national value added and 3.3 percent of total national employment, figures consistent with European averages.

Comparison of Core and Dependent Copyright Activities and Industries

The available data indicate that Austria's core copyright activities and industries add about one third more value to GDP and a little less than half more the contribution to employment as copyright-dependent industries.

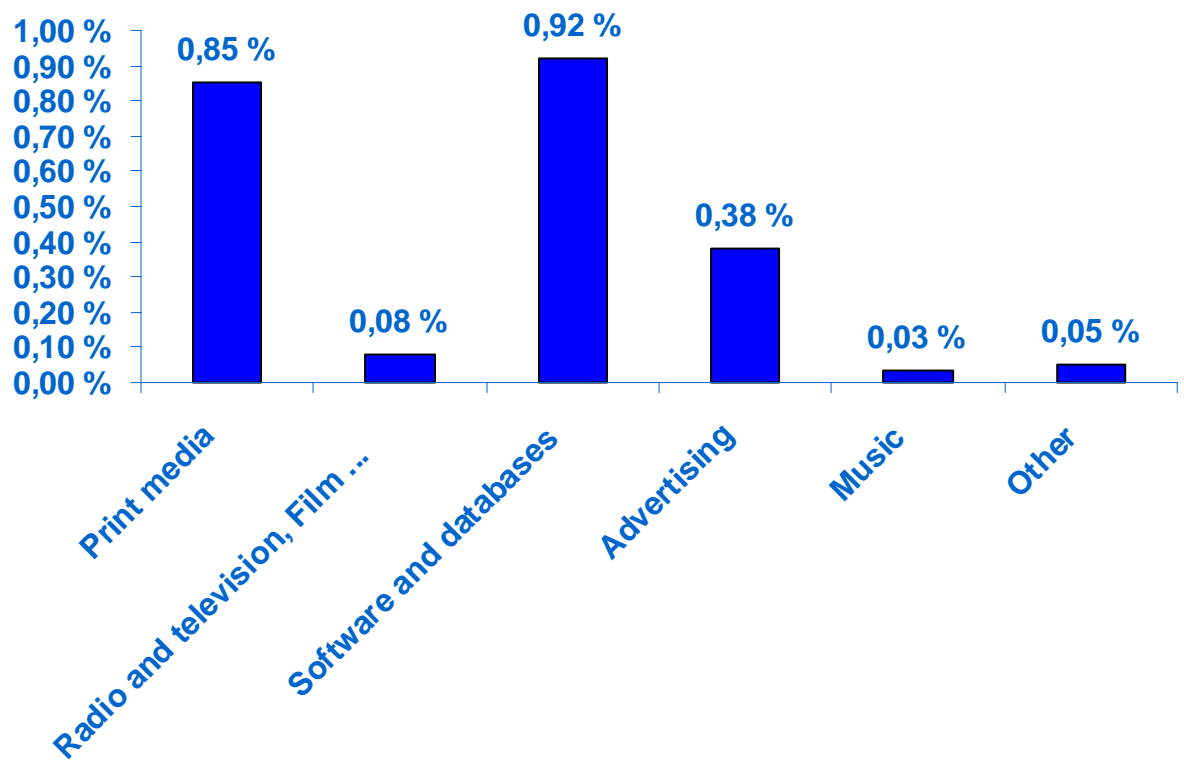
FIGURE 17. AUSTRIAN CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

The software and databases sectors and print media sectors are the most important contributors to copyright industry contribution to national economic development. Data for gross value added for the radio and television sectors were not available so the contribution of the radio, television, film and video sector is understated in this comparison.

FIGURE 18. CONTRIBUTIONS OF AUSTRIAN CORE SECTORS TO GDP



Statistical Data

TABLE 3. AUSTRIAN CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	4772	1754	0,009	40638	0,010
newspapers	860	314		3252	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	534	185		2459	
books, maps	213	77		1377	
other publishing (cards, directories, etc.)	23	10		249	
pre-press, printing, and post press of published materials	2086	982		16803	
Retail of press and literatures	1008	148		7136	
libraries	49	38		9362	
Music, Theatrical Productions, Opera	473	68	0,000	1465	0,000
printing and publishing of music	N/A	N/A		N/A	
reproduction of recorded music	N/A	N/A		N/A	
whole and retail of recorded music	473	68		1465	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	285	115	0,001	N/A	
motion picture and video production	83	45		N/A	
motion picture and video distribution	32	8		N/A	
motion picture exhibition	93	43		N/A	
video rentals and sales	77	19		N/A	
Photography	204	109	0,001	N/A	
Photographic Services, Studios, etc.	204	109		N/A	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	144	49	0,000	0	0,000
radio and television activities	N/A	N/A		N/A	
transmission via cable and satellite networks	144	49		N/A	
Software and Databases	4493	1899	0,009	31700	0,008
Advertising	2692	783	0,004	10934	0,003
agencies, buying services	2692	783		10934	
Total	13063	4778	2,3 %	84737	2,1 %

TABLE 4. AUSTRIAN COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	6143	1009	0,005	19839	0,005
manufacture	1220	301		4599	
Wholesale and retail of radio and television goods and musical instruments	4923	708	0,003	15240	0,004
Computers and Equipment	2188	1140	0,006	564	0,000
manufacture	380	45		564	
wholesale and retail	1808	1095		N/A	
Musical Instruments	54	34	0,000	691	0,000
manufacture	54	34		691	
wholesale and retail	N/A	N/A		N/A	
Photographic and cinematographic instruments	250	129	0,001	2567	0,001
manufacture	250	129		2567	
Manufacture of prepared unrecorded media	8	N/A		52	0,000
Manufacture of paper	N/A	N/A		7817	0,002
Manufacture of photographic equipment and materials	257	139		2567	0,001
Total	8899	3158	1,5 %	49337	1,2 %

TABLE 5. AUSTRIAN COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	2222	0.055 %
245 Writers and creative or performing artists	24010	0.597 %
313 Optical and electronic equipment operators	7488	0.186 %
347 Artistic, entertainment and sports associate professionals	17232	0.429 %
Total	50952	1.268 %

Data Notes and Gaps

Although industrial data available from official statistical sources of data, ministerial sources, and organisational sources is generally good for Austria, large gaps exist in data for cultural industries, particularly music, theatre and opera, motion picture industry, and radio and television. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

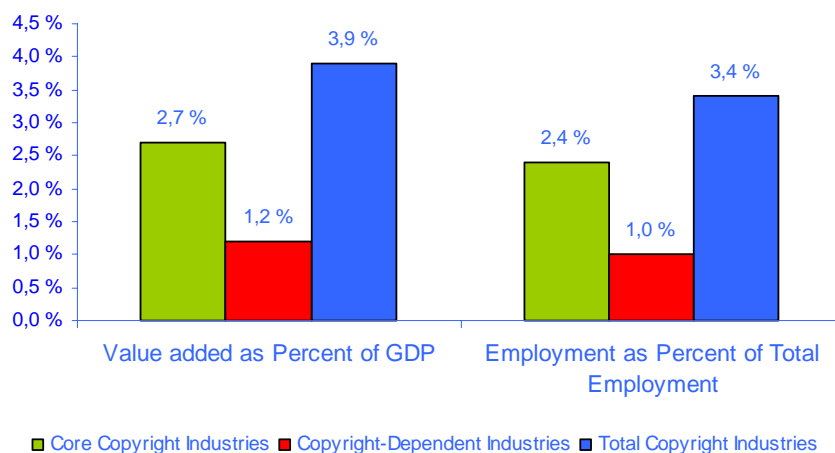
Belgium

The Belgian copyright industries face a relatively small split market in which Flemish- and French-speaking populations must be served. Nevertheless, the industries contribute 3.9 percent of the total value added in Belgium and about 3.4 percent to total national employment. This contribution is consistent with the overall EU contribution of copyright industries.

Comparison of Core and Dependent Copyright Activities and Industries

Core copyright industries contribute more than twice the amount of value added as a percentage of gross domestic product and about two and a half times as much employment as copyright-dependent industries.

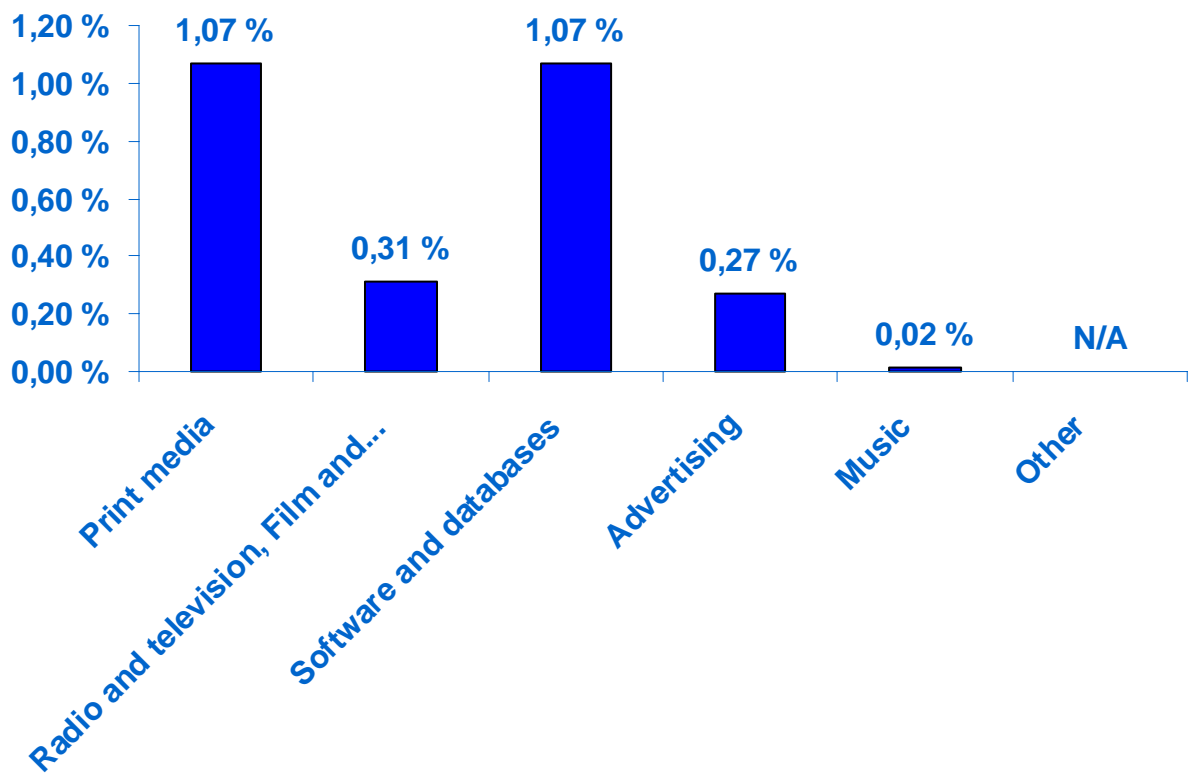
FIGURE 19. BELGIAN CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

The software and databases sectors and print media sectors are the largest contributors to the gross domestic product.

FIGURE 20. CONTRIBUTIONS OF BELGIAN CORE SECTORS TO GDP



Statistical Data

TABLE 6. BELGIAN CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	8177	2654	0,011	40360	0,010
newspapers	958	290		3835	0,001
news and feature agencies, etc.	N/A	N/A		N/A	N/A
magazines and periodicals	967	245		3984	0,001
books, maps	846	364		3211	0,001
other publishing (cards, directories, etc.)	84	29		459	0,000
pre-press, printing, and post press of published materials	3379	1322		21161	0,005
Retail of press and literatures	1711	252		3060	0,001
libraries	233	153		4650	0,001
Music, Theatrical Productions, Opera	251	40	0,000	573	0,000
printing and publishing of music	21	5		60	0,000
reproduction of recorded music	50	20		279	0,000
whole and retail of recorded music	181	15		234	0,000
Artistic and literary creation and interpretation	N/A	N/A		N/A	N/A
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	N/A
Film and Video	865	359	0,001	2951	0,001
motion picture and video production	363	196		1572	0,000
motion picture and video distribution	186	47		180	0,000
motion picture exhibition	173	80		1199	0,000
video rentals and sales	143	36		N/A	N/A
Photography	N/A	N/A		N/A	N/A
Photographic Services, Studios, etc.	N/A	N/A		N/A	N/A
Visual and Graphic Arts	N/A	N/A		N/A	N/A
art galleries and other wholesale and retail	N/A	N/A		N/A	N/A
Radio and Television	1223	417	0,002	8900	0,002
radio and television activities	902	308		8900	0,002
transmission via cable and satellite networks	321	109		N/A	N/A
Software and Databases	6633	2652	0,011	31700	0,008
Advertising	4474	677	0,003	10218	0,003
agencies, buying services	4474	677		10218	0,003
Total	21623	6798	2,7 %	94702	2,4 %

TABLE 7. BELGIAN COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	11803	1368	0,006	18209	0,005
manufacture	2142	505		5686	0,001
Wholesale and retail of radio and television goods and musical instruments	9661	863	0,003	12523	0,003
Computers and Equipment	144	50	0,000	801	0,000
manufacture	144	50		801	0,000
wholesale and retail					
Musical Instruments	10	5	0,000	125	0,000
manufacture	10	5		125	0,000
wholesale and retail	N/A	N/A		N/A	N/A
Photographic and cinematographic instruments	92	27	0,000	534	0,000
manufacture	92	27		534	0,000
Manufacture of prepared unrecorded media	54	18	0,000	220	0,000
Manufacture of paper	2291	624	0,003	5699	0,001
Manufacture of photographic equipment and materials	5341	27	0,000	534	0,000
Total	19735	2983	1,2 %	38644	1,0 %

TABLE 8. BELGIAN COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	3882	0.099 %
245 Writers and creative or performing artists	26386	0.673 %
313 Optical and electronic equipment operators	10943	0.279 %
347 Artistic, entertainment and sports associate professionals	5313	0.136 %
Total	46524	1.187 %

Data Notes and Gaps

Although industrial data available from official statistical sources of data, ministerial sources, and organisational sources is generally good for Belgium, gaps existed in data for photography, motion picture industry, and visual and graphic arts. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

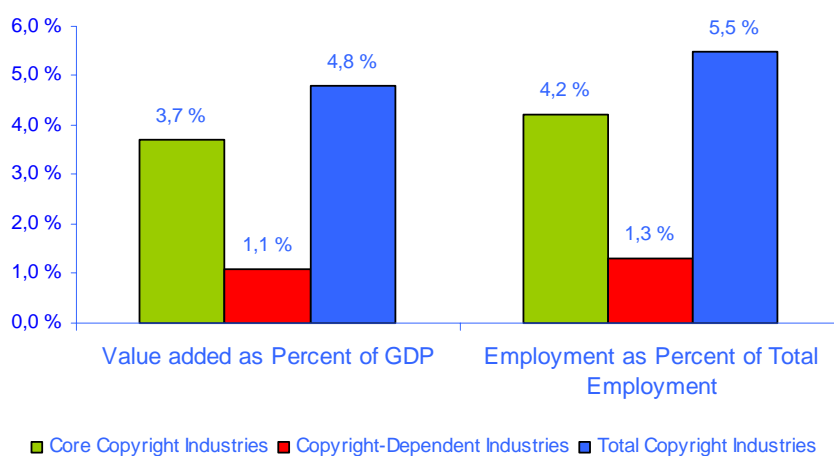
Denmark

The Danish copyright industries contribute above the European-wide average to gross domestic product and national employment. The industries' total value added is 4.8 percent of total national value and they contribute 5.5 percent to national employment.

Comparison of Core and Dependent Copyright Activities and Industries

Core copyright industries contribute over three times as much value added as percent of GDP and three times as much employment as copyright-dependent industries.

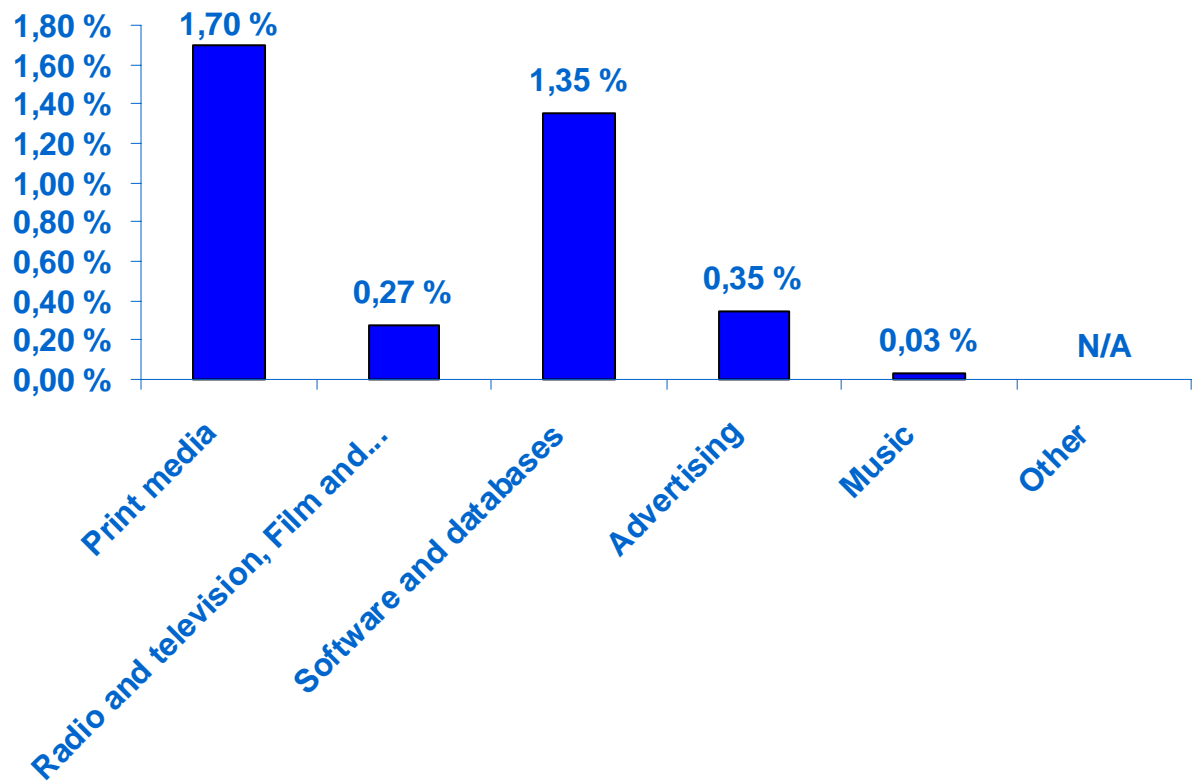
FIGURE 21. DANISH CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

The Danish print media sector is the largest contributor of the core copyright sectors, followed by the software and databases sector.

FIGURE 22. CONTRIBUTIONS OF DANISH CORE SECTORS TO GDP



Statistical Data

TABLE 9. DANISH CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	6199	2991	0,017	59553	0,022
newspapers	1026	489		20086	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	869	359		8323	
books, maps	644	249		4066	
other publishing (cards, directories, etc.)	156	63		1264	
pre-press, printing, and post press of published materials	1936	862		16643	
Retail of press and literatures	396	84		3376	
libraries	1172	885		5795	
Music, Theatrical Productions, Opera	396	48	0,000	1105	0,000
printing and publishing of music	29	7		130	
reproduction of recorded music	N/A	N/A		N/A	
whole and retail of recorded music	366	41		975	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	621	276	0,002	4686	0,002
motion picture and video production	239	157		2526	
motion picture and video distribution	140	10		356	
motion picture exhibition	88	70		1804	
video rentals and sales	154	39		N/A	
Photography	N/A	N/A		N/A	
Photographic Services, Studios, etc.	N/A	N/A		N/A	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	1036	204	0,001	2000	0,001
radio and television activities	860	144		2000	
transmission via cable and satellite networks	176	60		N/A	
Software and Databases	6633	2384	0,014	31700	0,011
Advertising	2449	615	0,003	16500	0,006
agencies, buying services	2449	615		16500	
Total	17333	6518	3,7 %	115544	4,2 %

TABLE 10. DANISH COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	4956	715	0,004	17558	0,006
manufacture	816	250		6544	
Wholesale and retail of radio and television goods and musical instruments	4139	465	0,003	11014	0,004
	262	N/A		N/A	
Computers and Equipment	262	99		1586	
manufacture	262	99		1586	
wholesale and retail					
Musical Instruments	17	10	0,000	240	0,000
manufacture	17	10		240	
wholesale and retail					
Photographic and cinematographic instruments	570	304	0,002	2280	0,001
manufacture	570	304		2280	
Manufacture of prepared unrecorded media					
Manufacture of paper	284	86	0,000	1182	0,000
Manufacture of photographic equipment and materials	570	303	0,002	2298	0,001
Total	6658	1982	1,1 %	36159	1,3 %

TABLE 11. DANISH COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	7403	0.268 %
245 Writers and creative or performing artists	30563	1.105 %
313 Optical and electronic equipment operators	10966	0.397 %
347 Artistic, entertainment and sports associate professionals	14049	0.508 %
Total	62981	2.278 %

Data Notes and Gaps

Data available from official statistical sources of data, ministerial sources, and organisational sources is generally excellent for Denmark, but gaps exist for all data in photography and visual and graphic arts. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

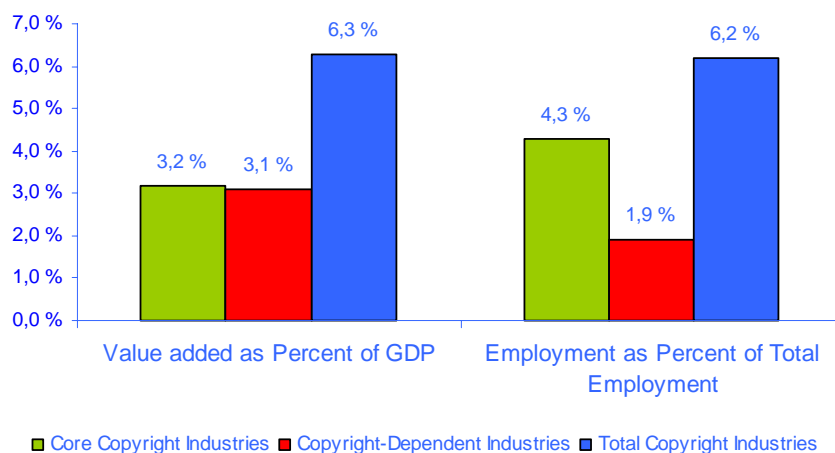
Finland

The copyright industries contribute over 6 percent of total value added in the country and about 6 percent of employment, according to available statistics. The both figures are somewhat above European average.

Comparison of Core and Dependent Copyright Activities and Industries

The contribution of core copyright industry to GDP almost equals to that of the copyright-dependent industries. The employment is 2.5 times higher in core copyright industries than in copyright-dependent industries. This is largely due to the large contribution of paper production that is highly capital-intensive industry and thus contributes relatively more to the GDP than to the employment.

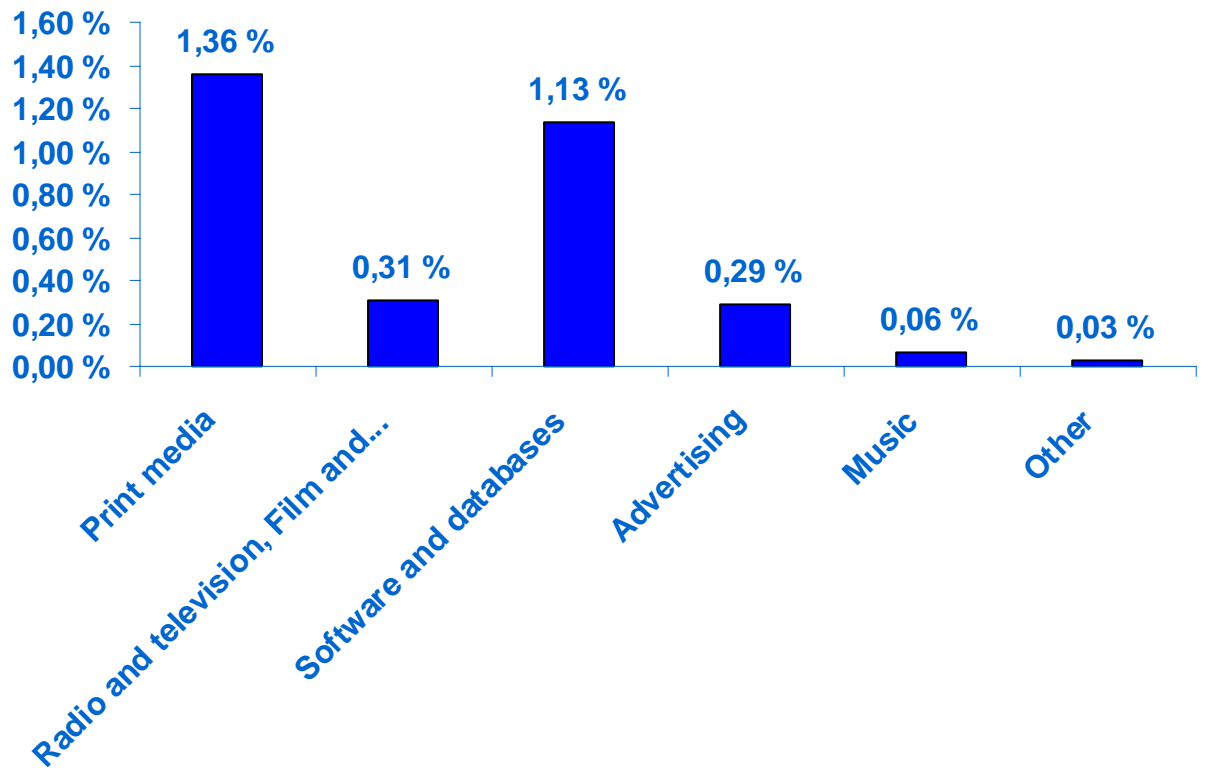
FIGURE 23. FINNISH CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

The Finnish print media sector is the greatest contributor of the core copyright sectors, followed by the software and databases sector.

FIGURE 24. CONTRIBUTIONS OF FINNISH CORE SECTORS TO GDP



Statistical Data

TABLE 12. FINNISH CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	5905	1781	0,014	38261	0,017
newspapers	1237	558		10004	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	695	221		4551	
books, maps	326	112		2079	
other publishing (cards, directories, etc.)	60	25		568	
pre-press, printing, and post press of published materials	1543	672		13317	
Retail of press and literatures	304	45		2238	
libraries	1740	148		5504	
Music, Theatrical Productions, Opera	392	80	0,001	3348	0,001
printing and publishing of music	52	20		286	
reproduction of recorded music	13	5		103	
whole and retail of recorded music	234	26		550	
Artistic and literary creation and interpretation	57	19		1843	
Performances and allied agencies (booking agencies, ticket agencies, etc)	36	10		566	
Film and Video	281	118	0,001	2319	0,001
motion picture and video production	121	65		1218	
motion picture and video distribution	80	20		139	
motion picture exhibition	60	28		578	
video rentals and sales	20	5		384	
Photography	83	38	0,000	830	0,000
Photographic Services, Studios, etc.	83	38		830	
Visual and Graphic Arts	12	N/A		57	0,000
art galleries and other wholesale and retail	12	N/A		57	
Radio and Television	844	288	0,002	12062	0,005
radio and television activities	742	253		11459	
transmission via cable and satellite networks	102	35		603	
Software and Databases	3420	1486	0,011	31700	0,014
Advertising	1424	377	0,003	9010	0,004
agencies, buying services	1424	377		9010	
Total	12361	4167	3,2 %	97587	4,3 %

TABLE 13. FINNISH COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	1813	231	0,002	4599	0,002
manufacture	301	61		1040	
Wholesale and retail of radio and television goods and musical instruments	1512	170	0,001	3559	0,002
Computers and Equipment	428	89	0,001	802	0,000
manufacture	428	89		802	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	115	3	0,000	699	0,000
manufacture	8	3		122	
wholesale and retail	107			577	
Photographic and cinematographic instruments	22	8	0,000	181	0,000
manufacture	22	8		181	
Manufacture of prepared unrecorded media	5	N/A		57	0,000
Manufacture of paper	11791	3509	0,027	33916	0,015
Manufacture of photographic equipment and materials	21	11	0,000	181	0,000
Total	14195	4020	3,1 %	43994	1,9 %

TABLE 14. FINNISH COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	7085	0.310 %
245 Writers and creative or performing artists	31561	1.381 %
313 Optical and electronic equipment operators	4628	0.203 %
347 Artistic, entertainment and sports associate professionals	9995	0.437 %
Total	53269	2.331 %

Data Notes and Gaps

Finnish statistical data are among the best in Europe but gaps in value added statistics for radio, television, film, video, photography and visual and graphic arts are not available. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

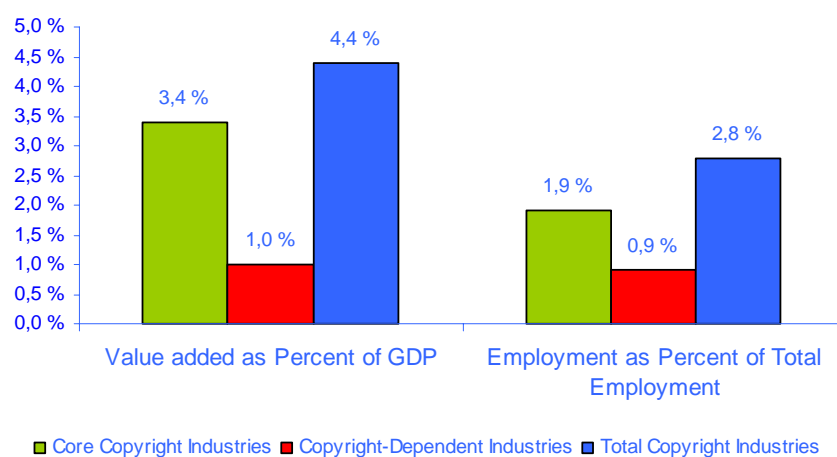
France

The copyright industries are less important as economic contributors to French life than as cultural contributors. Copyright industries contribute a total of 4.4 percent to total French value added and about 2.8 percent to overall employment. These contributions are slightly below the European-wide average level.

Comparison of Core and Dependent Copyright Activities and Industries

Core copyright activities and industries contribute three and a half times as much to GDP and about twice as much to overall employment as copyright-dependent industries and activities.

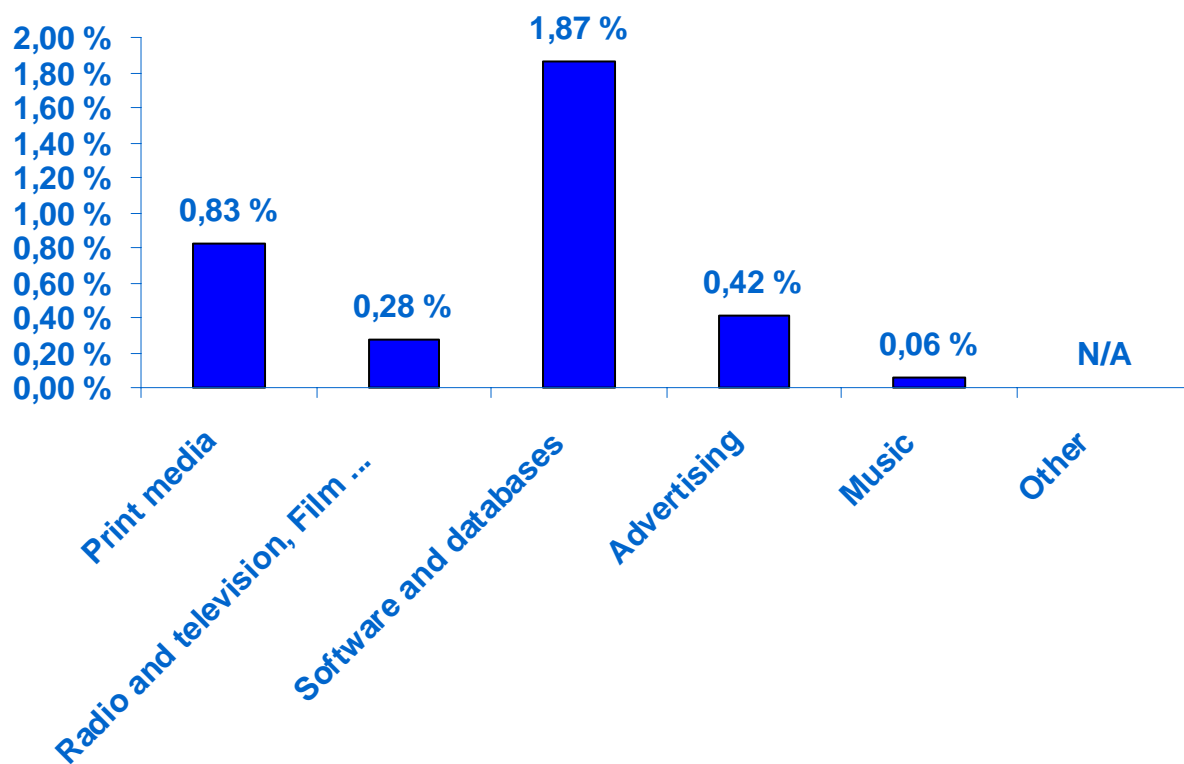
FIGURE 25. FRENCH CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

According to available statistics, software and databases and print media activities and industries provide the largest contribution to the French economy among the core sectors.

FIGURE 26. CONTRIBUTIONS OF FRENCH CORE SECTORS TO GDP



Statistical Data

TABLE 15. FRENCH CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	37473	11542	0,008	253796	0,011
newspapers	5296	1989		31498	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	7287	2236		31110	
books, maps	4781	1183		18318	
other publishing (cards, directories, etc.)	356	119		2665	
pre-press, printing, and post press of published materials	14136	5063		120978	
Retail of press and literatures	5297	779		32499	
libraries	321	174		16728	
Music, Theatrical Productions, Opera	4288	826	0,001	14368	0,001
printing and publishing of music	1787	422		5014	
reproduction of recorded music	286	99		1960	
whole and retail of recorded music	2216	305		7394	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	9847	3901	0,003	45000	0,002
motion picture and video production	5424	2749		31000	
motion picture and video distribution	2230	495		4000	
motion picture exhibition	1007	359		10000	
video rentals and sales	1186	298		N/A	
Photography	N/A	N/A		N/A	
Photographic Services, Studios, etc.	N/A	N/A		N/A	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	9803	0	0,000	0	0,000
radio and television activities	N/A	N/A		N/A	
transmission via cable and satellite networks	9803	N/A		N/A	
Software and Databases	47523	26052	0,019	31700	0,001
Advertising	21226	5789	0,004	101379	0,004
agencies, buying services	21226	5789		101379	
Total	130161	48110	3,4 %	446243	1,9 %

TABLE 16. FRENCH COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	18347	2992	0,002	72446	0,003
manufacture	18347	464		11222	
Wholesale and retail of radio and television goods and musical instruments	N/A	2528	0,002	61224	0,003
Computers and Equipment	N/A	2821	0,002	35915	0,001
manufacture	N/A	2821		35915	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	N/A	100	0,000	2492	0,000
manufacture	N/A	100		2492	
wholesale and retail					
Photographic and cinematographic instruments	N/A	663	0,000	14487	0,001
manufacture	N/A	663		14487	
Manufacture of prepared unrecorded media					
Manufacture of paper	7239	3612	N/A	25514	0,001
Manufacture of photographic equipment and materials	1876	1013	N/A	14487	0,001
Total	27462	13728	1,0 %	226565	0,9 %

TABLE 17. FRENCH COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	51627	0.215 %
245 Writers and creative or performing artists	144944	0.603 %
313 Optical and electronic equipment operators	49978	0.208 %
347 Artistic, entertainment and sports associate professionals	59735	0.249 %
Total	306284	1.274 %

Data Notes and Gaps

French statistical data are very good, but gaps in value added and employment for radio and television activities, and the absence of distinct data for photography and visual arts, limit full measurement of copyright industries contributions. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

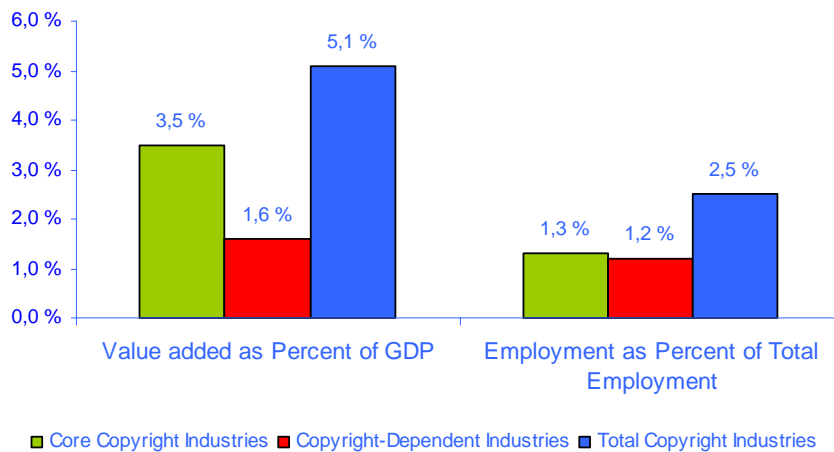
Germany

The German copyright industries contribute 5.1 percent of total value added in the nation and about 2.5 percent of national employment, performance consistent with Europe overall.

Comparison of Core and Dependent Copyright Activities and Industries

Value added produced by core copyright industries is more than twice that of the copyright-dependent industries but produces almost equal employment.

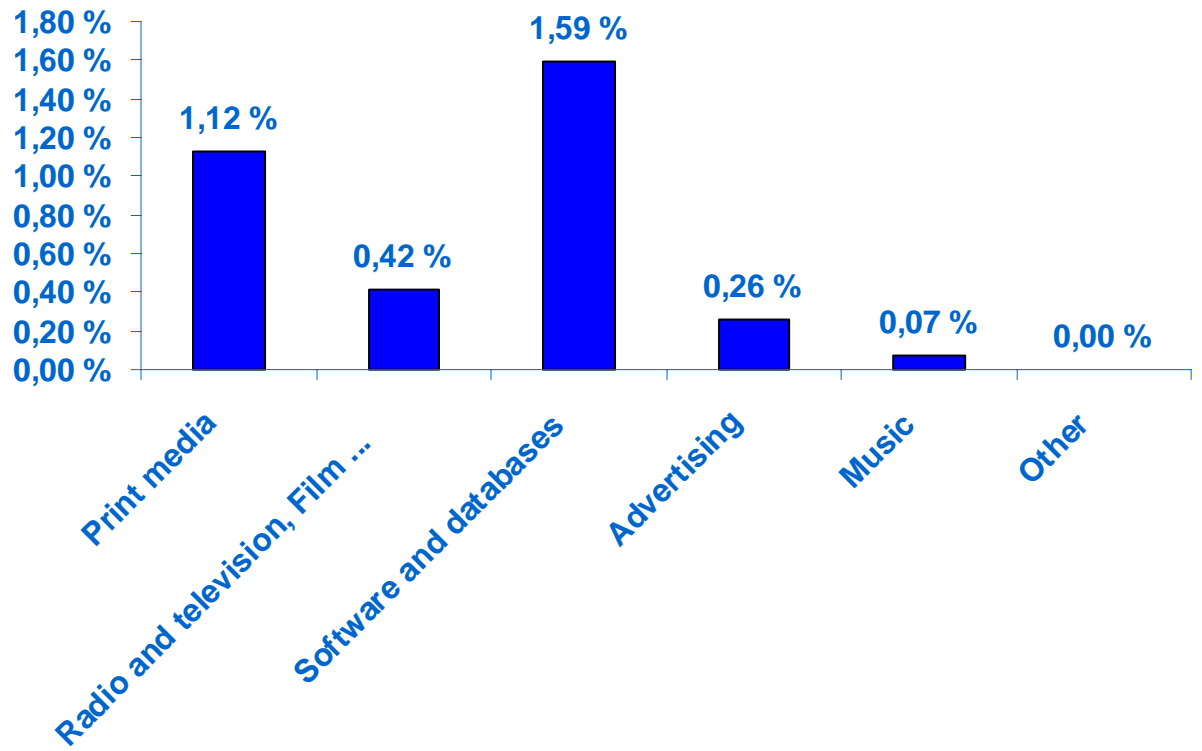
FIGURE 27. GERMAN CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

The primary contributors to the core sectors are the print media and software and databases sectors.

FIGURE 28. CONTRIBUTIONS OF GERMAN CORE SECTORS TO GDP



Statistical Data

TABLE 18. GERMAN CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	58250	23031	0,011	397199	0,010
newspapers	13515	5935		105313	
news and feature agencies, etc.	1667	663		N/A	
magazines and periodicals	8169	2635		45999	
books, maps	6739	2073		33270	
other publishing (cards, directories, etc.)	392	160		4081	
pre-press, printing, and post press of published materials	21338	9744		196489	
Retail of press and literatures	5089	748		N/A	
libraries	1340	1072		12047	
Music, Theatrical Productions, Opera	11214	1397	0,001	16352	0,000
printing and publishing of music	217	54		1329	
reproduction of recorded music	624	281		4190	
whole and retail of recorded music	8568	573		10833	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	1805	489		N/A	
Film and Video	10749	4530	0,002	32751	0,001
motion picture and video production	5355	2886		N/A	
motion picture and video distribution	3290	826		N/A	
motion picture exhibition	1355	630		N/A	
video rentals and sales	749	188		751	0,000
Photography	N/A	N/A		N/A	
Photographic Services, Studios, etc.	N/A	N/A		N/A	
Visual and Graphic Arts	260	0	0,000	N/A	N/A
art galleries and other wholesale and retail	260	N/A		N/A	
Radio and Television	11670	4043	0,002	N/A	N/A
radio and television activities	8614	3001		N/A	
transmission via cable and satellite networks	3056	1042		N/A	
Software and Databases	45130	32640	0,016	31700	0,001
Advertising	15235	5339	0,003	15235	0,000
agencies, buying services	15235	5339		15235	
Total	152507	70980	3,5 %	493237	1,3 %

TABLE 19. GERMAN COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	118644	9665	0,005	178369	0,005
manufacture	12124	2545		43687	
Wholesale and retail of radio and television goods and musical instruments	106520	7119	0,003	134682	0,003
Computers and Equipment	16762	3650	0,002	37341	0,001
manufacture	16762	3650		37341	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	534	269	0,000	7395	0,000
manufacture	534	269		7395	
wholesale and retail	N/A	N/A		N/A	
Photographic and cinematographic instruments	4177	1663	0,001	29982	0,001
manufacture	4177	1663		29982	
Manufacture of prepared unrecorded media	N/A	N/A		N/A	
Manufacture of paper	14647	7309	0,004	45853	
Manufacture of photographic equipment and materials	4179	2257	0,000	29982	
Total	158943	31932	1,6 %	463603	1,2 %

TABLE 20. GERMAN COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	33148	0.086 %
245 Writers and creative or performing artists	248758	0.643 %
313 Optical and electronic equipment operators	80920	0.209 %
347 Artistic, entertainment and sports associate professionals	161342	0.417 %
Total	524168	1.354 %

Data Notes and Gaps

German statistical data are excellent, but there are gaps in photography data, value added and employment for visual and graphic arts, and employment in radio and television. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

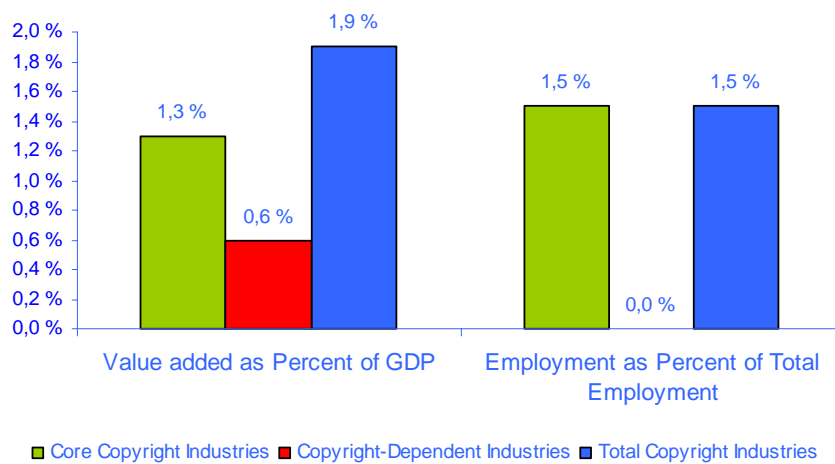
Greece

Available statistics indicate that the Greek copyright industries contribute only about 1.9 percent of total value added and about 1.5 percent of total employment. These figures are well below that for Europe overall and are affected by significant gaps in statistical data.

Comparison of Core and Dependent-Copyright Activities and Industries

The primary contributions to value added and employment result from activities in core copyright sectors.

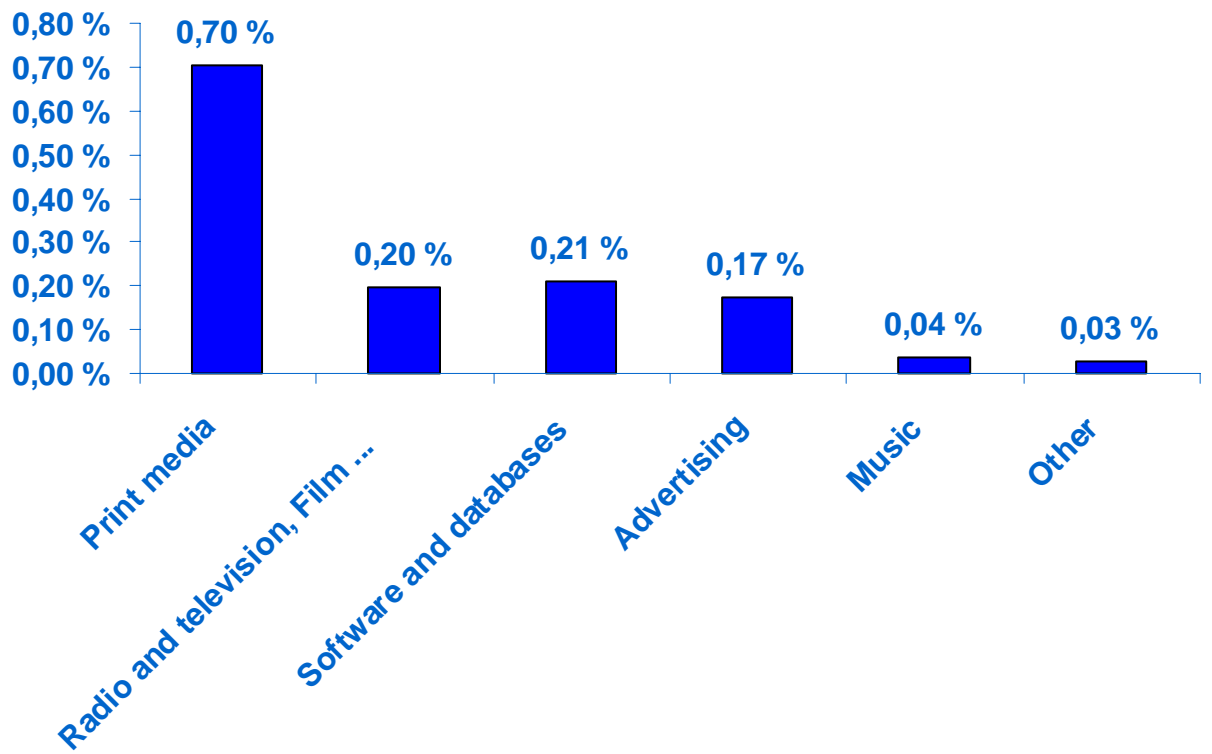
FIGURE 29. GREEK CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

The largest contribution to the core copyright industries is made by print media activities and industries, according to available data.

FIGURE 30. CONTRIBUTIONS OF GREEK CORE SECTORS TO GDP



Statistical Data

TABLE 21. GREEK CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (mil.) €	Value added (mil.) €	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	1959	842	0,007	7365	0,002
newspapers	254	107		N/A	
news and feature agencies, etc.	11	4		424	
magazines and periodicals	136	47		N/A	
books, maps	20	7		N/A	
other publishing (cards, directories, etc.)	6	2		N/A	
pre-press, printing, and post press of published materials	319	137		N/A	
Retail of press and literatures	366	54		4187	
libraries	847	483		2754	
Music, Theatrical Productions, Opera	204	46	0,000	389	0,000
printing and publishing of music	N/A	N/A		N/A	
reproduction of recorded music	N/A	N/A		N/A	
whole and retail of recorded music	98	11		N/A	
Artistic and literary creation and interpretation	92	31		389	
Performances and allied agencies (booking agencies, ticket agencies, etc)	14	4		N/A	
Film and Video	269	124	0,001	2636	0,001
motion picture and video production	180	97		1782	
motion picture and video distribution	35	9		470	
motion picture exhibition	22	10		384	
video rentals and sales	32	8		N/A	
Photography	77	35	0,000	1783	0,000
Photographic Services, Studios, etc.	77	35		1783	
Visual and Graphic Arts	1	0	0,000	242	0,000
art galleries and other wholesale and retail	1	N/A		242	
Radio and Television	329	112	0,001	8200	0,002
radio and television activities	329	112		8200	
transmission via cable and satellite networks					
Software and Databases	540	252	0,002	31700	0,008
Advertising	841	208	0,002	4289	0,001
agencies, buying services	841	208		4289	
Total	4220	1619	1,3 %	56604	1,5 %

TABLE 22. GREEK COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	31	6	0,000	N/A	N/A
manufacture	31	6			
Wholesale and retail of radio and television goods and musical instruments	N/A	N/A		N/A	
Computers and Equipment	1116	655	0,005	N/A	N/A
manufacture	54	11			
wholesale and retail	1062	644			
Musical Instruments	1	1	0,000	N/A	N/A
manufacture	1	1		N/A	
wholesale and retail	N/A	N/A		N/A	
Photographic and cinematographic instruments	3	1	0,000	N/A	N/A
manufacture	3	1		N/A	
Manufacture of prepared unrecorded media	N/A	N/A		N/A	
Manufacture of paper	N/A	N/A		N/A	
Manufacture of photographic equipment and materials	N/A	N/A		N/A	
Total	1151	663	0,6 %	N/A	N/A

TABLE 23. GREEK COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	1691	0.043 %
245 Writers and creative or performing artists	15853	0.407 %
313 Optical and electronic equipment operators	7914	0.203 %
347 Artistic, entertainment and sports associate professionals	21844	0.560 %
Total	47302	1.213 %

Data Notes and Gaps

Greek data for turnover is good, but large data gaps for value added exist in categories for music, theatrical productions, opera, film and video, photography, visual arts, radio, television, advertising, and all the copyright-dependent industries. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

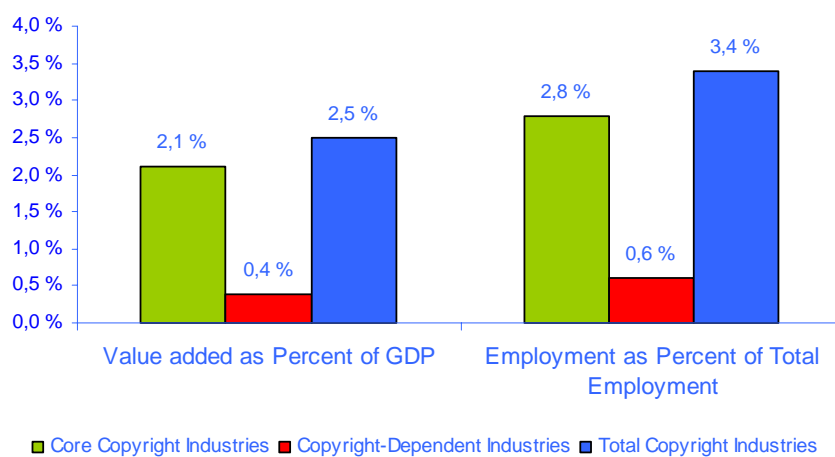
Ireland

Copyright industries contribute 2.5 percent of the total value added produced in Ireland and 3.4 percent of national employment. The contribution to GDP is below European-wide averages, but this appears to be due primarily to data gaps.

Comparison of Core and Dependent Copyright Activities and Industries

Core copyright industries contribute 5 times as much as copyright-dependent industries to GDP and more than 6 times as much to national employment.

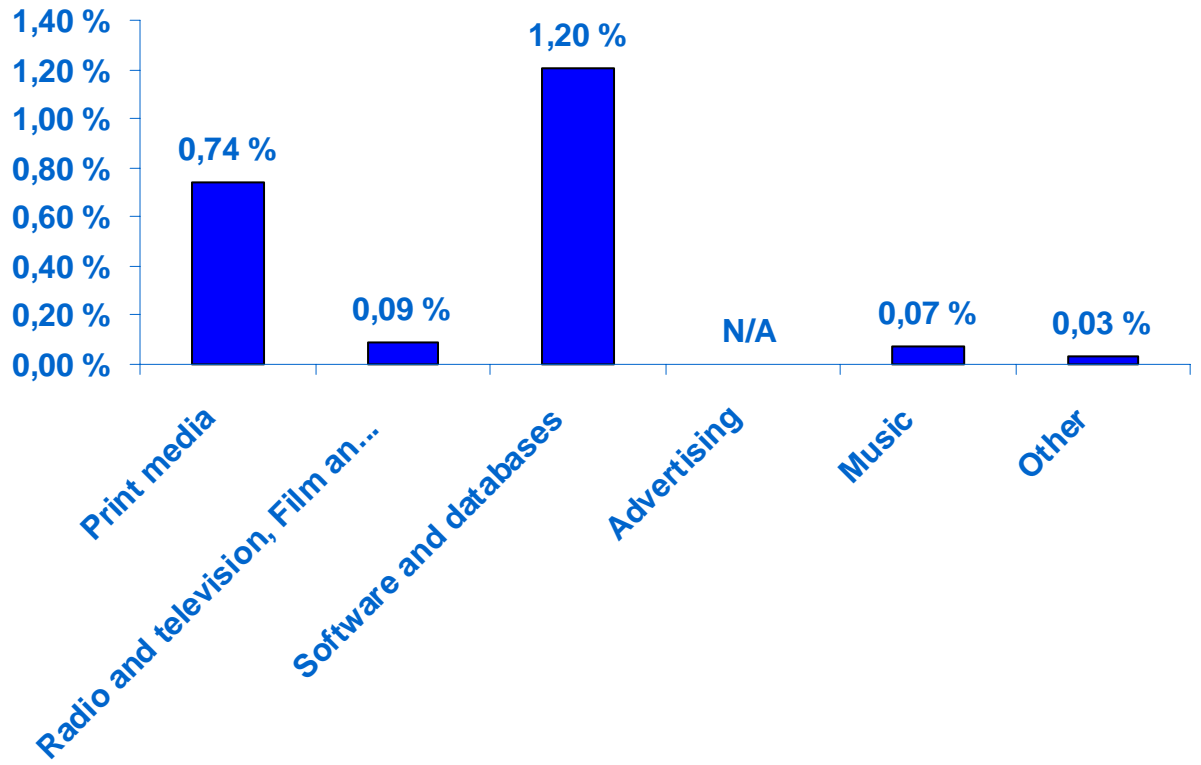
FIGURE 31. IRISH CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

Software and databases activities and industries are the largest sector in the core copyright contribution to GDP, followed by print media activities.

FIGURE 32. CONTRIBUTIONS OF IRISH CORE SECTORS TO GDP



Statistical Data

TABLE 24. IRISH CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	1794	749	0,007	14760	0,009
newspapers*	374	208		2617	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals*	109	68		826	
books, maps*	50	18		396	
other publishing (cards, directories, etc.)					
pre-press, printing, and post press of published materials*	888	381		9159	
Retail of press and literatures	329	48			
libraries	44	26		1762	
Music, Theatrical Productions, Opera	312	71	0,001	879	0,001
printing and publishing of music	N/A	N/A		N/A	
reproduction of recorded music*	82	30		N/A	
whole and retail of recorded music*	230	41		879	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	113	53	0,001	0	0,000
motion picture and video production	N/A	N/A		N/A	
motion picture and video distribution	N/A	N/A		N/A	
motion picture exhibition	N/A	N/A		N/A	
video rentals and sales	113	53		N/A	
Photography	71	31	0,000	542	0,000
Photographic Services, Studios, etc.*	71	31		542	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	104	35	0,000	N/A	
radio and television activities	N/A	N/A		N/A	
transmission via cable and satellite networks	104	35		N/A	
Software and Databases*	2977	1222	0,012	31700	0,019
Advertising	N/A	N/A		N/A	
agencies, buying services	N/A	N/A		N/A	
Total	5372	2161	2,1 %	47881	2,8 %

*Turnover and value added for 2000 in this category were not yet available. Data from 1999 was used and adjusted by average growth of GDP for the previous 10-year period to provide an estimate for 2000.

TABLE 25. IRISH COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (mil. €)	Value added (mil. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	1290	215	0,002	4587	0,003
manufacture	N/A	N/A		N/A	
Wholesale and retail of radio and television goods and musical instruments*	1290	215	0,002	4587	0,003
Computers and Equipment	N/A	N/A		N/A	
manufacture	N/A	N/A		N/A	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	N/A	N/A		N/A	
manufacture	N/A	N/A		N/A	
wholesale and retail	N/A	N/A		N/A	
Photographic and cinematographic instruments	N/A	N/A		N/A	
manufacture	N/A	N/A		N/A	
Manufacture of prepared unrecorded media	183	N/A		771	0,000
Manufacture of paper	36	N/A		194	0,000
Manufacture of photographic equipment and materials	N/A	N/A		N/A	
Total	1509	430	0,4 %	10140	0,6 %

TABLE 26. IRISH COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	2874	0.170 %
245 Writers and creative or performing artists	13716	0.810 %
313 Optical and electronic equipment operators	3311	0.196 %
347 Artistic, entertainment and sports associate professionals	10057	0.594 %
Total	29958	1.770 %

Data Notes and Gaps

Although Irish data are generally good regarding turnover, its data on gross value added and employment is spotty. Noticeable gaps exist for radio, television, film, video, and advertising in the core industries. Large gaps for categories in copyright-dependent activities such as computers, musical and photographic instruments also exist. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

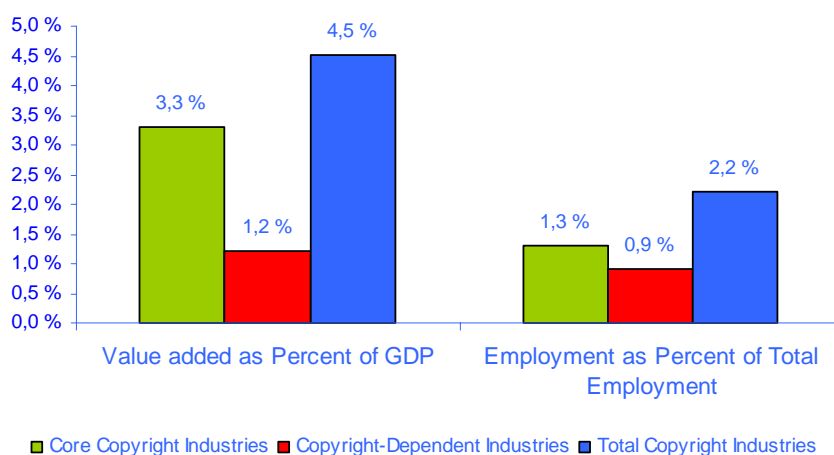
Italy

The Italian copyright industry contributes 4.5 percent of gross domestic product and about 2.2 percent of total national employment.

Comparison of Core and Dependent Copyright Activities and Industries

The core industries and activities contributed almost three times as much to GDP as copyright-dependent industries and one and a half times as much to Italian employment.

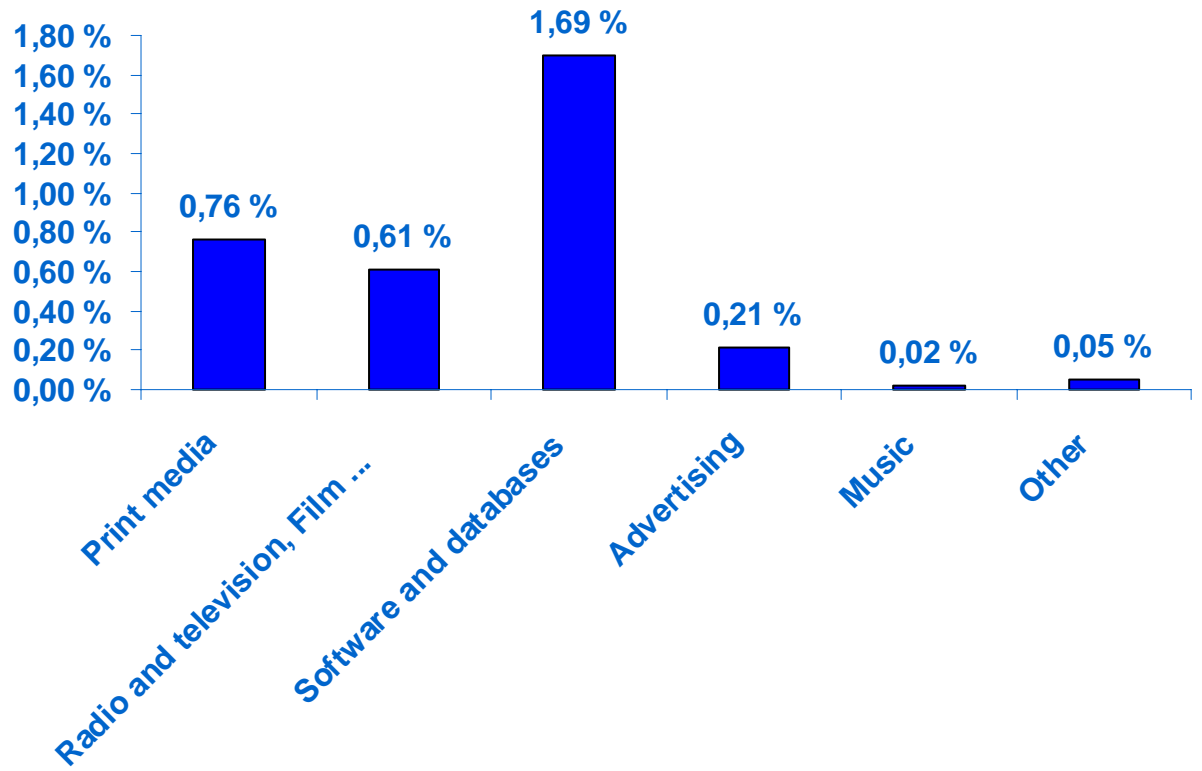
FIGURE 33. ITALIAN CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

The strongest contributor to the core copyright industries in Italy is software and databases activities, followed by print media and audiovisual media.

FIGURE 34. CONTRIBUTIONS OF ITALIAN CORE SECTORS TO GDP



Statistical Data

TABLE 27. ITALIAN CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	29039	8798	0,008	173326	0,007
newspapers	3275	1225		12229	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	2870	715		9496	
books, maps	4691	1350		13075	
other publishing (cards, directories, etc.)	303	123		700	
pre-press, printing, and post press of published materials	12852	4644		99099	
Retail of press and literatures	5049	742		9776	
libraries				28951	
Music, Theatrical Productions, Opera	1193	178	0,000	2753	0,000
printing and publishing of music	230	52		588	
reproduction of recorded music	113	31		395	
whole and retail of recorded music	850	95		1770	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	8414	5001	0,004	24675	0,001
motion picture and video production	6454	4475		18275	
motion picture and video distribution	1078	245		1638	
motion picture exhibition	404	161		4762	
video rentals and sales	478	120		N/A	
Photography	1065	531	0,000	7510	0,000
Photographic Services, Studios, etc.	1065	531		7510	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	6653	2103	0,002	24700	0,001
radio and television activities	6635	2097		24700	
transmission via cable and satellite networks	18	6		N/A	
Software and Databases	31207	19633	0,017	31700	0,001
Advertising	11830	2478	0,002	25668	0,001
agencies, buying services	11830	2478		25668	
Total	89400	38722	3,3 %	290332	1,3 %

TABLE 28. ITALIAN COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	30036	3468	0,003	66179	0,003
manufacture	1576	299		6946	
Wholesale and retail of radio and television goods and musical instruments	28461	3169	0,003	59233	0,003
Computers and Equipment	4381	595	0,001	12084	0,001
manufacture	4381	595		12084	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	178	68	0,000	1769	0,000
manufacture	178	68		1769	
wholesale and retail	N/A	N/A		N/A	
Photographic and cinematographic instruments	3389	1246	0,001	22199	0,001
manufacture	3389	1246		22199	
Manufacture of prepared unrecorded media	149			437	0,000
Manufacture of paper	5462	2726		17033	0,001
Manufacture of photographic equipment and materials	4360	2354		25170	0,001
Total	47955	13626	1,2 %	204104	0,9 %

TABLE 29. ITALIAN COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	20457	0.088 %
245 Writers and creative or performing artists	166595	0.720 %
313 Optical and electronic equipment operators	46062	0.199 %
347 Artistic, entertainment and sports associate professionals	90992	0.393 %
Total	324106	1.401 %

Data Notes and Gaps

Italian data on the copyright industries is excellent with gaps existing only for visual and graphic arts. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

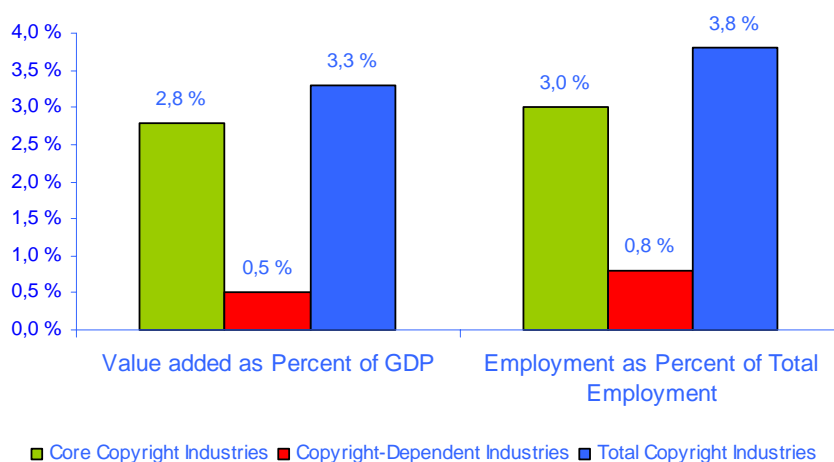
Luxembourg

Copyright industries contribute 3.3 percent to gross domestic product and about 3.8 percent to national employment. Value added is somewhat below and employment somewhat above the European-wide average levels.

Comparison of Core and Dependent Copyright Activities and Industries

The nation's core copyright activities contribute almost 6 times as much to GDP as its copyright-dependent activities and 3.5 times as much to employment.

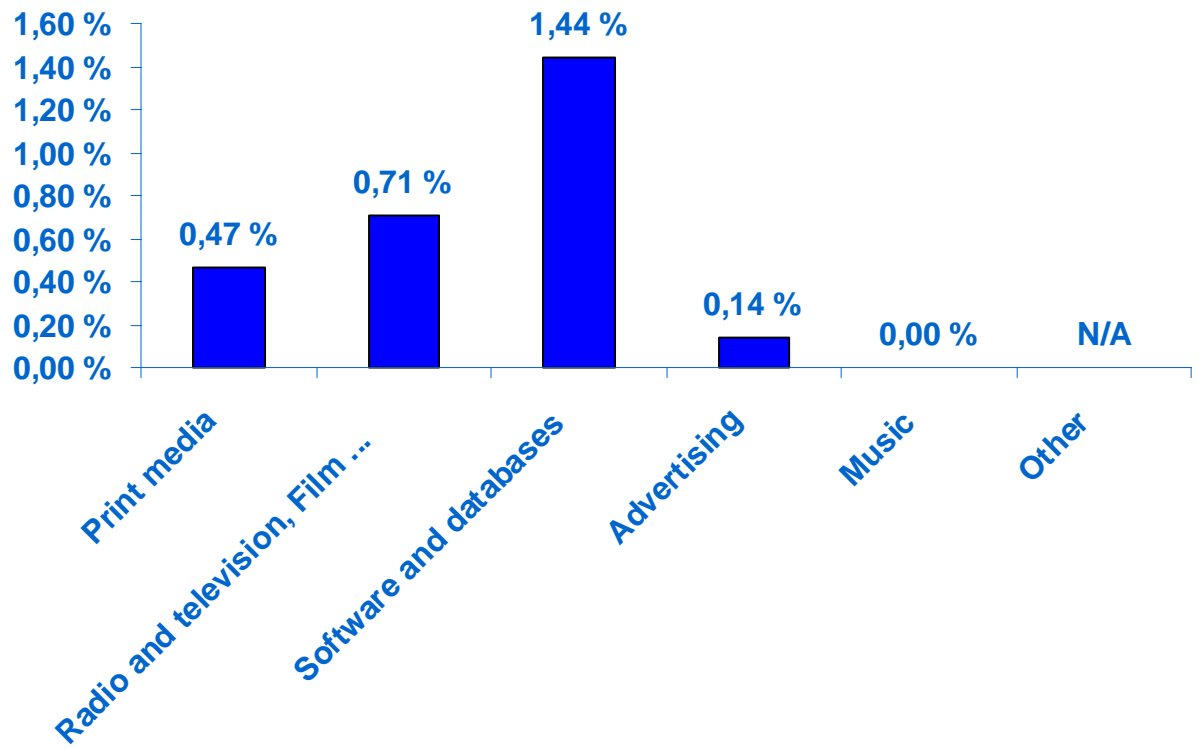
FIGURE 35. LUXEMBOURG'S CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

Software and databases make the largest contribution to the core sector, followed by audiovisual media.

FIGURE 36. CONTRIBUTIONS OF LUXEMBOURG'S CORE SECTORS TO GDP



Statistical Data

TABLE 31. LUXEMBOURG'S CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	264	93	0,005	1929	0,007
newspapers	N/A	N/A		N/A	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	19	5		164	
books, maps	N/A	N/A		N/A	
other publishing (cards, directories, etc.)	2	1		17	
pre-press, printing, and post press of published materials	135	75		1141	
Retail of press and literatures	110	12		454	
libraries	N/A	N/A		153	
Music, Theatrical Productions, Opera	1	0	0,000	806	0,003
printing and publishing of music	1	0		7	
reproduction of recorded music	N/A	N/A		N/A	
whole and retail of recorded music	N/A	N/A		799	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	148	33	0,002	N/A	
motion picture and video production	145	33		N/A	
motion picture and video distribution	N/A	N/A		N/A	
motion picture exhibition	N/A	N/A		N/A	
video rentals and sales	3	1			
Photography	N/A	N/A		N/A	
Photographic Services, Studios, etc.	N/A	N/A		N/A	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	667	108	0,005	N/A	
radio and television activities	655	108		N/A	
transmission via cable and satellite networks	12	N/A		N/A	
Software and Databases	561	286	0,014	31700	0,121
Advertising	128	27	0,001	804	0,003
agencies, buying services	128	27		804	
Total	1769	547	2,8 %	35239	13,5 %

TABLE 32. LUXEMBOURG'S COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	145	54	0,003	1055	0,004
manufacture	145	54		1055	
Wholesale and retail of radio and television goods and musical instruments	377	53	0,003	1055	0,004
Computers and Equipment	N/A	N/A		N/A	
manufacture	N/A	N/A		N/A	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	N/A	N/A		N/A	
manufacture	N/A	N/A		N/A	
wholesale and retail	N/A	N/A		N/A	
Photographic and cinematographic instruments	N/A	N/A		N/A	
manufacture	N/A	N/A		N/A	
Manufacture of prepared unrecorded media	N/A	N/A		N/A	
Manufacture of paper	N/A	N/A		N/A	
Manufacture of photographic equipment and materials	N/A	N/A		N/A	
Total	377	106	0,5 %	2110	0,8 %

TABLE 33. LUXEMBOURG'S COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	223	0.099 %
245 Writers and creative or performing artists	709	0.315 %
313 Optical and electronic equipment operators	330	0.147 %
347 Artistic, entertainment and sports associate professionals	592	0.263 %
Total	1854	0.824 %

Data Notes and Gaps

Statistical data from Luxembourg is generally good but gaps exist for categories involving photography, visual and graphic arts, computers, musical and photographic instruments, and some other copyright-dependent activities. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

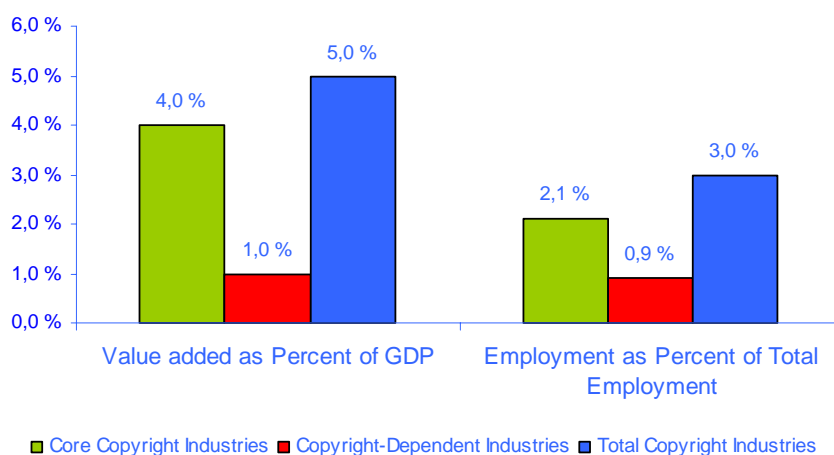
Netherlands

Copyright industries contribute 5 percent of total value added in the Netherlands and provide about 3 percent of the nation's employment. The both figures are equal to the European-wide averages.

Contributions of Core and Dependent Copyright Activities and Industries

The core copyright activities and industries contribute 4 times more to GDP than the copyright-dependent industries and provide over 2 times as much employment.

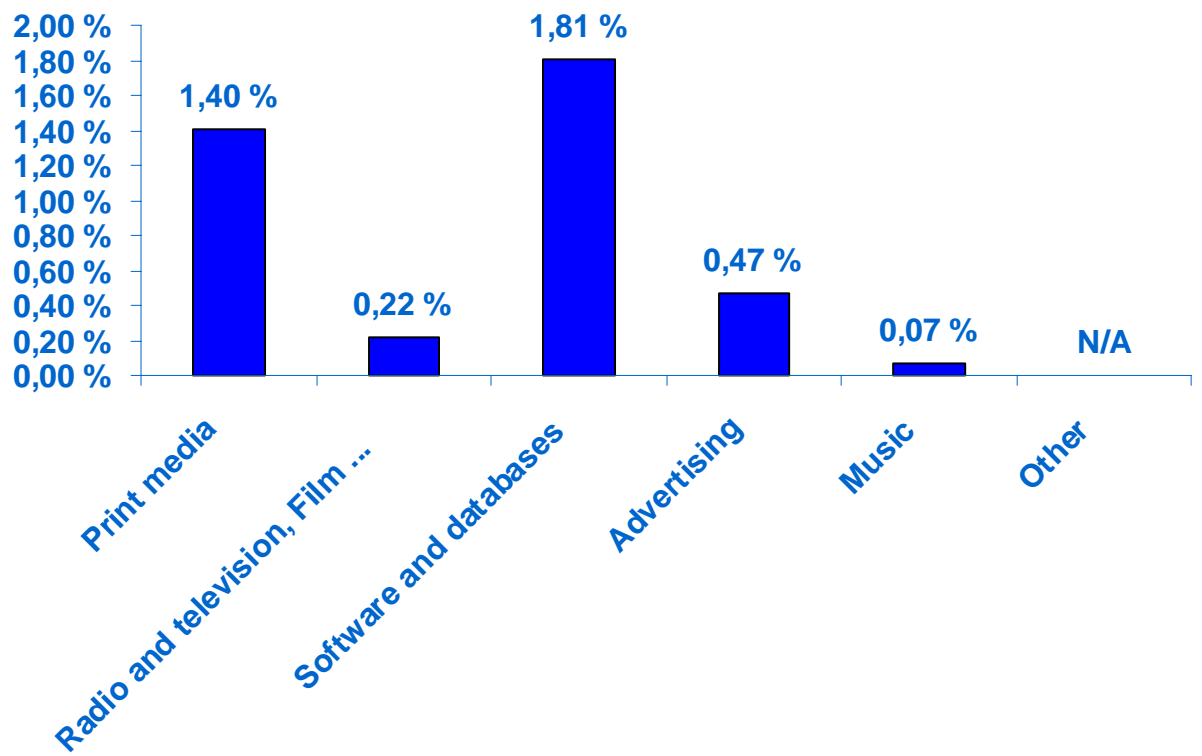
FIGURE 37. DUTCH CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

Software and databases activities are the primary contributor of the core sectors to the national economy, followed by print media.

FIGURE 38. CONTRIBUTIONS OF DUTCH CORE SECTORS TO GDP



Statistical Data

TABLE 34. DUTCH CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	14181	5545	0,014	102028	0,013
newspapers	2574	1187		17275	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	2214	926		10632	
books, maps	1980	763		8190	
other publishing (cards, directories, etc.)	95	31		696	
pre-press, printing, and post press of published materials	5886	2446		45836	
Retail of press and literatures	1433	192		10991	
libraries				8408	
Music, Theatrical Productions, Opera	1400	279	0,001	4176	0,001
printing and publishing of music	234	64		693	
reproduction of recorded music	449	138		1592	
whole and retail of recorded music	718	77		1891	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	209	52	0,000	N/A	
motion picture and video production	N/A	N/A		N/A	
motion picture and video distribution	N/A	N/A		N/A	
motion picture exhibition	N/A	N/A		N/A	
video rentals and sales	209	52		N/A	
Photography	N/A	N/A		N/A	
Photographic Services, Studios, etc.	N/A	N/A		N/A	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	2429	828	0,002	N/A	
radio and television activities*	1839	627		N/A	
transmission via cable and satellite networks	590	201		N/A	
Software and Databases	11504	7158	0,018	31700	0,004
Advertising	6653	1866	0,005	29763	0,004
agencies, buying services	6653	1866		29763	
Total	36377	15729	4,0 %	167667	2,1 %

*Turnover and value added for 2000 in this category were not yet available. Data from 1999 was used and adjusted by average growth of GDP for the previous 10-year period to provide an estimate for 2000.

TABLE 35. DUTCH COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (mil. €)	Value added (mil. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	12049	1300	0,003	31731	0,004
manufacture	12049	1300		31731	
Wholesale and retail of radio and television goods and musical instruments	12049	1300	0,003	31731	0,004
Computers and Equipment	N/A	N/A	0,000	0	0,000
manufacture	N/A	N/A		N/A	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	61	24	0,000	530	0,000
manufacture	61	24		530	
wholesale and retail					
Photographic and cinematographic instruments	375	165	0,000	2045	0,000
manufacture	375	165		2045	
Manufacture of prepared unrecorded media	N/A	N/A		249	0,000
Manufacture of paper	2049	1022		6590	0,001
Manufacture of photographic equipment and materials	375	203		2045	0,000
Total	14908	4013	1,0 %	74922	0,9 %

TABLE 36. DUTCH COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	8278	0.102 %
245 Writers and creative or performing artists	93663	1.153 %
313 Optical and electronic equipment operators	29201	0.360 %
347 Artistic, entertainment and sports associate professionals	59490	0.732 %
Total	190632	2.347 %

Data Notes and Gaps

Statistical data regarding copyright industries in the Netherlands is good, but some gaps exist for photography, visual and graphic arts, contribution of audiovisual media to GDP and employment, and computer equipment manufacturing and sales. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

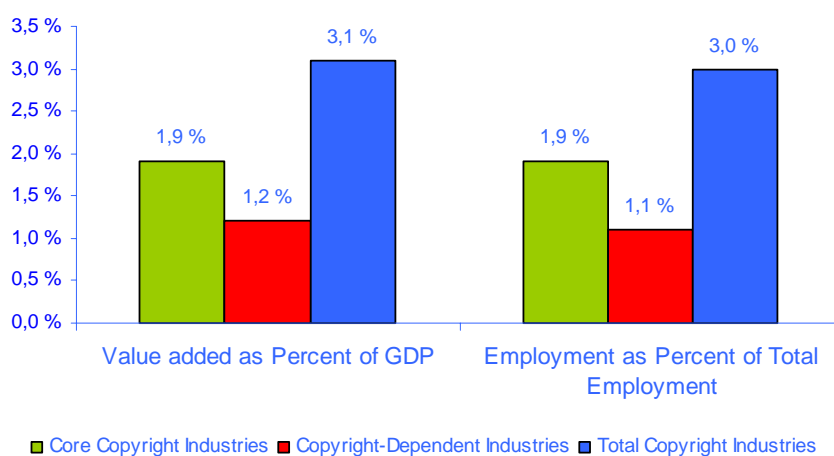
Portugal

Copyright industries contribute 3.1 percent to the Portuguese gross domestic product and provide 3 percent of national employment.

Comparison of Core and Dependent Copyright Activities and Industries

The core copyright industries contribute about 1.3 third times as much to GDP as dependent industries and nearly 2 times as much to employment.

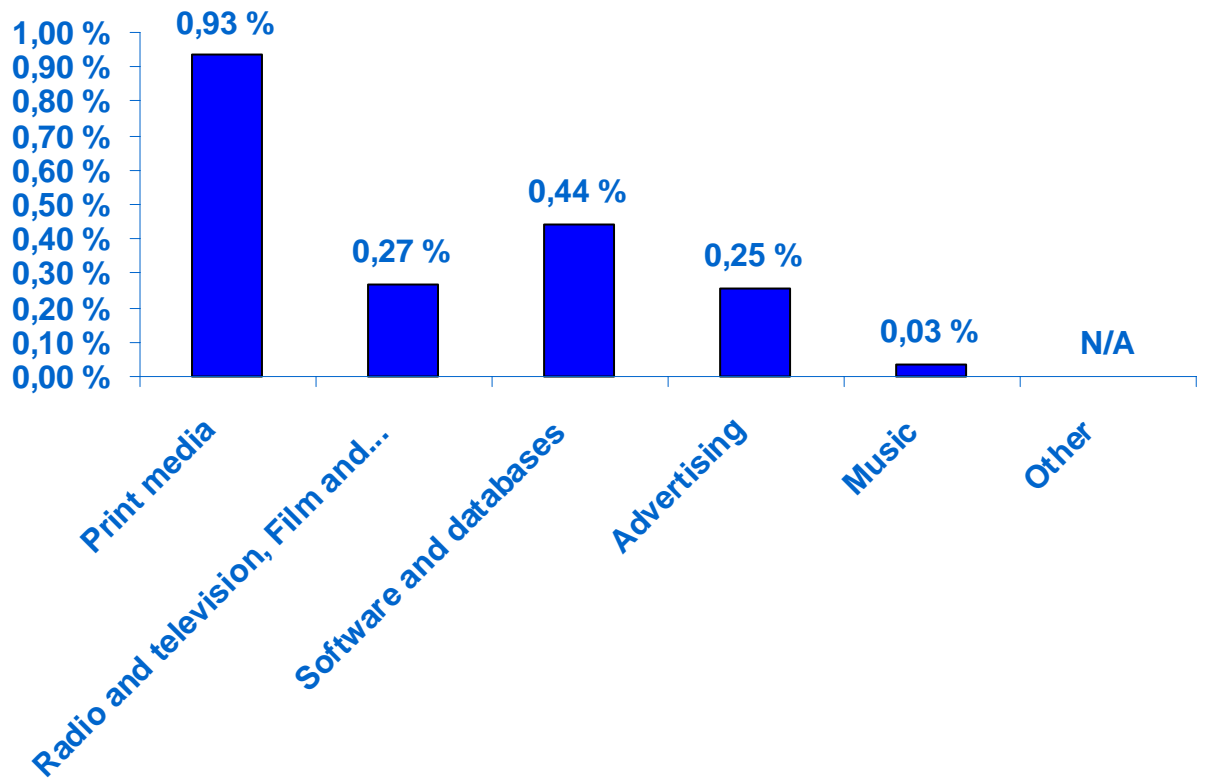
FIGURE 39. PORTUGUESE CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

Print media industries and activities are the primary contributors to the Portuguese economy, followed distantly by software and databases activities.

FIGURE 40. CONTRIBUTIONS OF PORTUGUESE CORE SECTORS TO GDP



Statistical Data

TABLE 37. PORTUGUESE CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	3233	1055	0,009	45124	0,009
newspapers	341	132		3652	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	362	99		3456	
books, maps	400	135		3358	
other publishing (cards, directories, etc.)	24	3		247	
pre-press, printing, and post press of published materials	1299	571		24588	
Retail of press and literatures	784	102		8427	
libraries	23	13		1396	
Music, Theatrical Productions, Opera	282	38	0,000	1766	0,000
printing and publishing of music	21	3		179	
reproduction of recorded music	11	3		144	
whole and retail of recorded music	251	32		1443	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	377	85	0,001	N/A	
motion picture and video production	N/A	N/A		N/A	
motion picture and video distribution	N/A	N/A		N/A	
motion picture exhibition	N/A	N/A		N/A	
video rentals and sales	44	11		N/A	
Photography	N/A	N/A		N/A	
Photographic Services, Studios, etc.	N/A	N/A		N/A	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	689	214	0,002	6400	0,001
radio and television activities	509	153		6400	
transmission via cable and satellite networks	180	61		N/A	
Software and Databases	1277	497	0,004	31700	0,006
Advertising	2127	287	0,003	9036	0,002
agencies, buying services	2127	287		9036	
Total	7985	2177	1,9 %	94026	1,9 %

TABLE 38. PORTUGUESE COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	4873	155	0,001	28131	0,006
manufacture	932	154		5491	
Wholesale and retail of radio and television goods and musical instruments	3941	1	0,000	22640	0,005
Computers and Equipment	86	12	0,000	348	0,000
manufacture	86	12		348	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	2	1	0,000	57	0,000
manufacture	2	1		57	
wholesale and retail					
Photographic and cinematographic instruments	116	42	0,000	1663	0,000
manufacture	116	42		1663	
Manufacture of prepared unrecorded media					
Manufacture of paper	249	79	0,001	1899	0,000
Manufacture of photographic equipment and materials	116	42	0,000	1663	0,000
Total	5443	332	0,3 %	56401	1,1 %

TABLE 39. PORTUGUESE COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	2085	0.042 %
245 Writers and creative or performing artists	12260	0.249 %
313 Optical and electronic equipment operators	15494	0.315 %
347 Artistic, entertainment and sports associate professionals	10394	0.212 %
Total	40233	0.819 %

Data Notes and Gaps

Portuguese data on the copyright industries is generally excellent, but gaps exist for the contributions of photography and visual and graphic arts. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

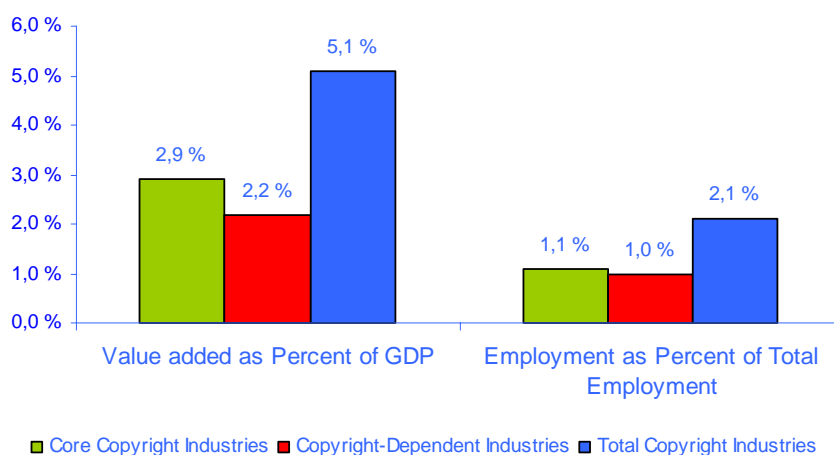
Spain

The Spanish copyright industries contribute 4 percent to the nation's total value added and 3.2 percent to national employment, close to the European-wide average contributions.

Comparison of Core and Dependent Copyright Activities and Industries

The core copyright industries and activities contribute more than 2.5 times as much to GDP and 2 times as much employment as the copyright-dependent industries.

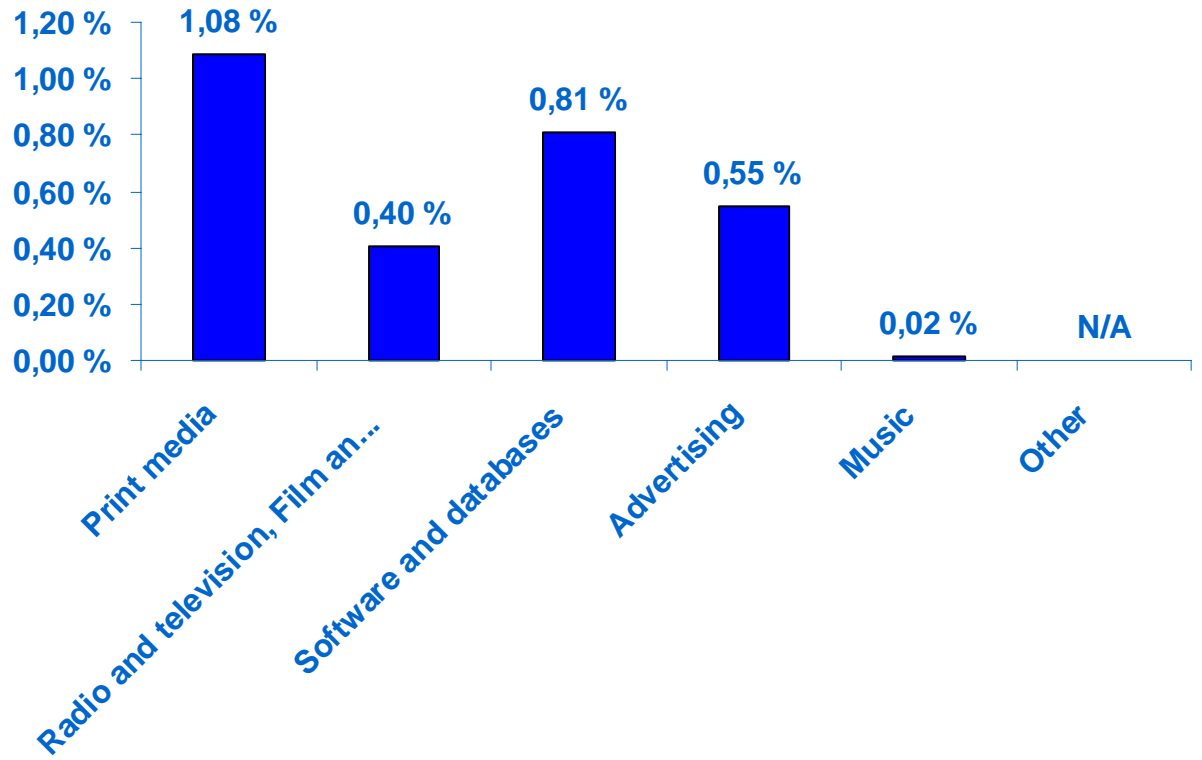
FIGURE 41. SPANISH CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

The primary contributions to the Spanish core copyright sector come from print media activities and industries, followed by software and databases.

FIGURE 42. CONTRIBUTIONS OF SPANISH CORE SECTORS TO GDP



Statistical Data

TABLE 40. SPANISH CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	18473	6524	0,011	158675	0,010
newspapers	2638	1196		17475	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	1571	545		8068	
books, maps	2565	1020		18763	
other publishing (cards, directories, etc.)	184	83		2115	
pre-press, printing, and post press of published materials	7827	3066		87209	
Retail of press and literatures	3547	521		19571	
libraries	141	93		5474	
Music, Theatrical Productions, Opera	919	91	0,000	1795	0,000
printing and publishing of music	183	50		810	
reproduction of recorded music	99	30		691	
whole and retail of recorded music	638	11		294	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	3515	1320	0,002	26458	0,002
motion picture and video production	1529	773		15299	
motion picture and video distribution	971	220		2377	
motion picture exhibition	671	241		8782	
video rentals and sales	344	86		N/A	
Photography	N/A	N/A		N/A	
Photographic Services, Studios, etc.	N/A	N/A		N/A	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	5278	1105	0,002	29600	0,002
radio and television activities	5223	1086		29600	
transmission via cable and satellite networks	55	19		N/A	
Software and Databases	6633	4877	0,008	31700	0,002
Advertising	16143	3303	0,005	96391	0,006
agencies, buying services	16143	3303		96391	
Total	50961	17221	2,9 %	344619	2,2 %

TABLE 41. SPANISH COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	130277	2420	0,004	66694	0,004
manufacture	2673	263		7864	
Wholesale and retail of radio and television goods and musical instruments	127604	2156	0,004	58830	0,004
Computers and Equipment	3936	536	0,001	7004	0,000
manufacture	3936	536		7004	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	43	19	0,000	691	0,000
manufacture	43	19		691	
wholesale and retail	N/A	N/A		N/A	
Photographic and cinematographic instruments	296	101	0,000	2663	0,000
manufacture	296	101		2663	
Manufacture of prepared unrecorded media	14	N/A		94	0,000
Manufacture of paper	3194	1594		12535	0,001
Manufacture of photographic equipment and materials	N/A	N/A		3292	0,000
Total	137760	6825	1,1 %	151803	1,0 %

TABLE 42. SPANISH COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	13312	0.085 %
245 Writers and creative or performing artists	71139	0.455 %
313 Optical and electronic equipment operators	39005	0.250 %
347 Artistic, entertainment and sports associate professionals	89996	0.576 %
Total	213452	1.365 %

Data Notes and Gaps

Spanish copyright industry data are excellent and no significant gaps affect the calculation of the overall contribution to the nation's economy. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

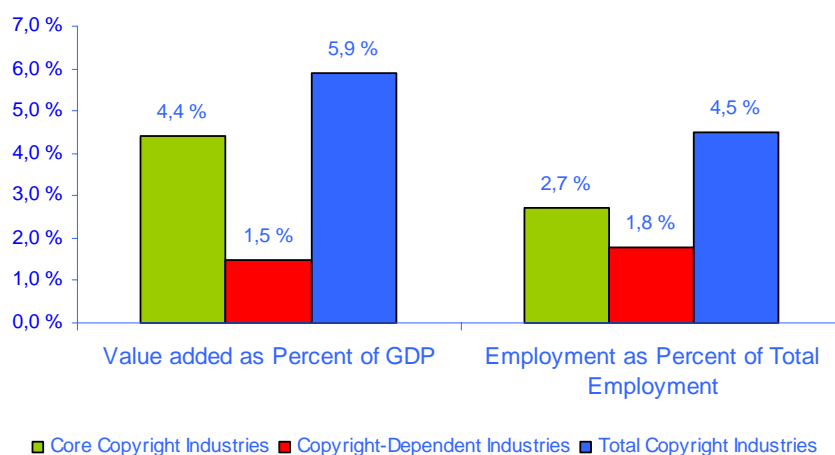
Sweden

Swedish copyright industries and activities contribute 5.9 percent to the nation's total value added and 4.5 percent to employment.

Comparison of Core and Dependent Copyright Activities and Industries

The core copyright industries contribute 3 times as much to gross domestic product and one third as much to employment as copyright-dependent industries and activities.

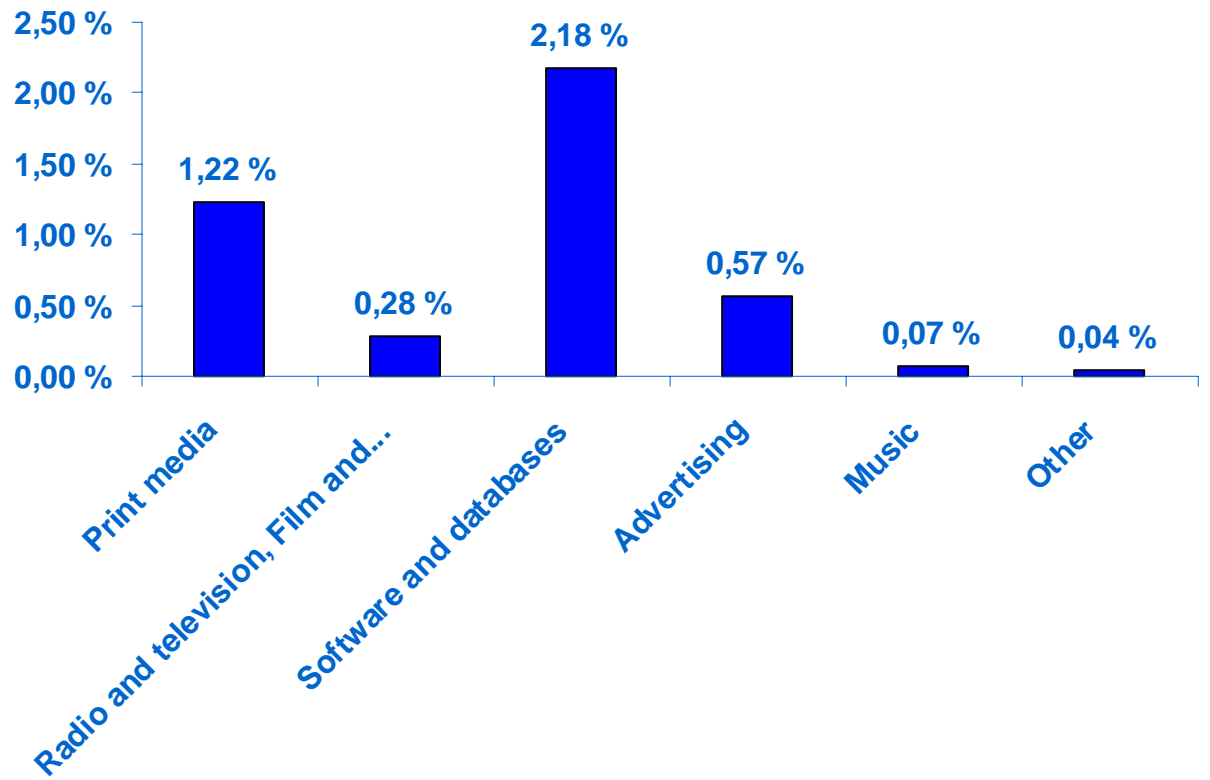
FIGURE 43. SWEDISH CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

Software and databases industries and activities are the primary contributor to the core copyright industries and are nearly twice as large as print media activities, which provide the second largest contribution.

FIGURE 44. CONTRIBUTIONS OF SWEDISH CORE SECTORS TO GDP



Statistical Data

TABLE 43. SWEDISH CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	8634	3016	0,012	60963	0,014
newspapers	2206	877		15572	
news and feature agencies, etc.	149	32		1198	
magazines and periodicals	970	243		4671	
books, maps	908	268		4915	
other publishing (cards, directories, etc.)	171	44		1085	
pre-press, printing, and post press of published materials	3285	1241		24314	
Retail of press and literatures	620	138		3685	
libraries	326	173		5523	
Music, Theatrical Productions, Opera	1038	176	0,001	4525	0,001
printing and publishing of music	341	77		1449	
reproduction of recorded music	6	2		45	
whole and retail of recorded music	476	64		1132	
Artistic and literary creation and interpretation	215	32		1899	
Performances and allied agencies (booking agencies, ticket agencies, etc)					
Film and Video	1030	297	0,001	6591	0,002
motion picture and video production	419	156		4172	
motion picture and video distribution	299	52		824	
motion picture exhibition	154	49		1595	
video rentals and sales	158	40		N/A	
Photography	407	94	0,000	3201	0,001
Photographic Services, Studios, etc.	407	94		3201	
Visual and Graphic Arts	N/A	N/A		N/A	
art galleries and other wholesale and retail	N/A	N/A		N/A	
Radio and Television	1667	390	0,002	8400	0,002
radio and television activities	1364	390		8400	
transmission via cable and satellite networks	303	N/A		N/A	
Software and Databases	12938	5382	0,022	31700	0,007
Advertising	5162	1410	0,006	1345	0,000
agencies, buying services	5162	1410		1345	
Total	30876	10764	4,4 %	116725	2,7 %

TABLE 44. SWEDISH COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	9228	1364	0,006	24021	0,006
manufacture	1319	296		5233	
Wholesale and retail of radio and television goods and musical instruments	7909	1069	0,004	18788	0,004
Computers and Equipment	354	94	0,000	2023	0,000
manufacture	354	94		2023	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	13	6	0,000	157	0,000
manufacture	13	6			
wholesale and retail	N/A	N/A			
Photographic and cinematographic instruments	288	96	0,000	1577	0,000
manufacture	288	96	0,000	1577	
Manufacture of prepared unrecorded media	6	N/A	N/A	54	0,000
Manufacture of paper	2293	824	0,000	27638	0,007
Manufacture of photographic equipment and materials	289	156	0,000	1583	0,000
Total	12470	3610	1,5 %	75841	1,8 %

TABLE 45. SWEDISH COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	10658	4.735 %
245 Writers and creative or performing artists	59554	26.457 %
313 Optical and electronic equipment operators	18344	8.149 %
347 Artistic, entertainment and sports associate professionals	29683	13.187 %
Total	118239	52.527 %

Data Notes and Gaps

Swedish statistical data on the copyright industries is very good but minor gaps exist for visual and graphic arts. When the turnover data was available the value added was estimated based on the European average. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

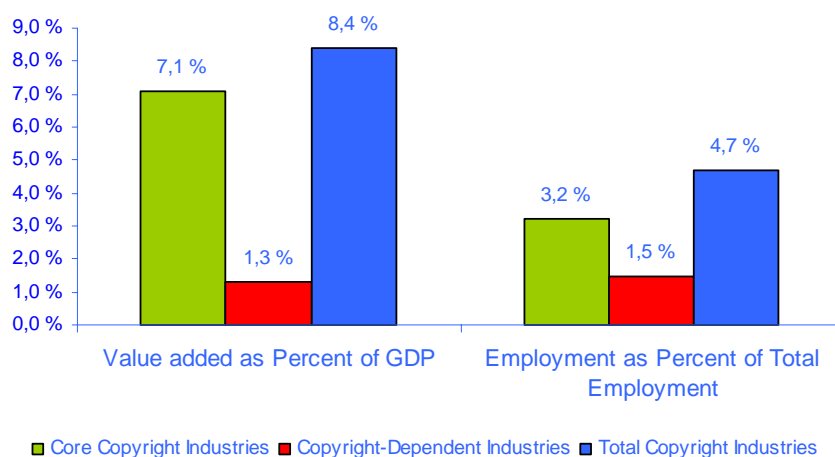
United Kingdom

Copyright industries and activities contribute 8.4 percent to gross domestic product in the United Kingdom and account for 4.7 percent of employment. This is above the European averages.

Comparison of Core and Dependent Copyright Activities and Industries

Core industries contribute about 5 times as much to GDP and more than 2 times as much to employment as copyright-dependent industries.

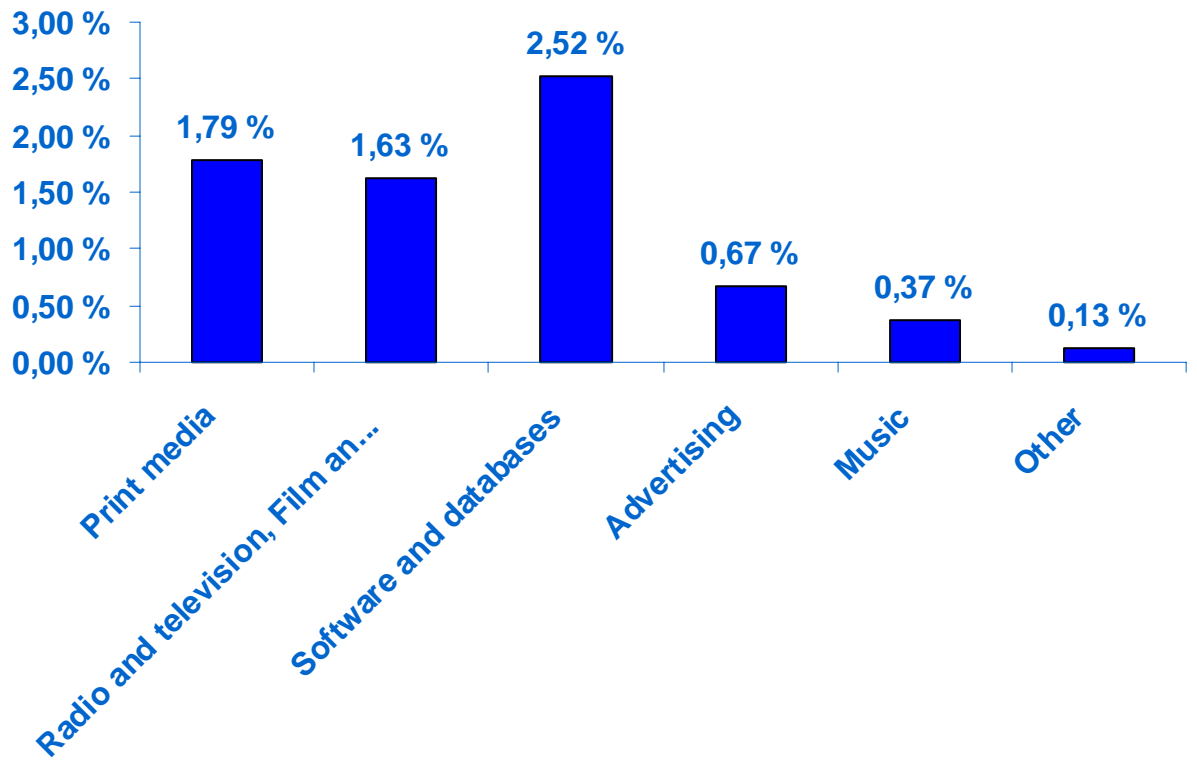
FIGURE 45. BRITISH CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

The primary contributors to the success of the core sector are software and databases activities, followed by print and audiovisual media activities and industries.

FIGURE 46. CONTRIBUTIONS OF BRITISH CORE SECTORS TO GDP



Statistical Data

TABLE 46. BRITISH CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	63185	27442	0,018	458277	0,016
newspapers	9016	4079		45652	
news and feature agencies, etc.	1929	1121		9000	
magazines and periodicals	11013	4998		65587	
books, maps	6663	2683		30525	
other publishing (cards, directories, etc.)	1626	721		13689	
pre-press, printing, and post press of published materials	23639	11439		186205	
Retail of press and literatures	7963	1725		81101	
libraries	1336	675		26518	
Music, Theatrical Productions, Opera	15290	5704	0,004	110258	0,004
printing and publishing of music	864	233		2266	
reproduction of recorded music	883	467		5044	
whole and retail of recorded music	4944	682		16948	
Artistic and literary creation and interpretation	7587	4049		76000	
Performances and allied agencies (booking agencies, ticket agencies, etc)	1012	274		10000	
Film and Video	9711	4621	0,003	44970	0,002
motion picture and video production	3741	1857		28875	
motion picture and video distribution	2988	1752		4381	
motion picture exhibition	852	477		11714	
video rentals and sales	2130	535		N/A	
Photography	2930	1650	0,001	62000	0,002
Photographic Services, Studios, etc.	2930	1650		62000	
Visual and Graphic Arts	1012	274	0,000	10000	0,000
art galleries and other wholesale and retail	1012	274		10000	
Radio and Television	1313	20457	0,013	72700	0,003
radio and television activities		20457		72700	
transmission via cable and satellite networks	1313				
Software and Databases	66627	38750	0,025	31700	0,001
Advertising	32175	10305	0,007	95865	0,003
agencies, buying services	32175	10305		95865	
Total	192242	109203	7,1 %	885770	3,2 %

TABLE 47. BRITISH COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	46793	7040	0,005	165738	0,006
manufacture	7813	1666		32106	
Wholesale and retail of radio and television goods and musical instruments	38980	5374	0,003	133632	0,005
Computers and Equipment	23218	3108	0,002	44022	0,002
manufacture	23218	3108		44022	
wholesale and retail					
Musical Instruments	141	66	0,000	1508	0,000
manufacture	141	66		1508	
wholesale and retail					
Photographic and cinematographic instruments	1860	843	0,001	19400	0,001
manufacture	1860	843		19400	
Manufacture of prepared unrecorded media	533	162	0,000	1812	0,000
Manufacture of paper	5249	2619	0,002	23999	0,001
Manufacture of photographic equipment and materials	3189	1327	0,001	25119	0,001
Total	80983	20540	1,3 %	415231	1,5 %

TABLE 48. BRITISH COPYRIGHT OCCUPATIONS ACCORDING TO ISCO CLASSIFICATION

Occupation	Nr of persons	% of the total employment
243 Archivists, librarians and related information professionals	37827	0.136 %
245 Writers and creative or performing artists	170743	0.612 %
313 Optical and electronic equipment operators	75325	0.270 %
347 Artistic, entertainment and sports associate professionals	350143	1.255 %
Total	634038	2.272 %

Data Notes and Gaps

Statistical data on copyright industries in the United Kingdom are comprehensive and exemplary. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

Japan

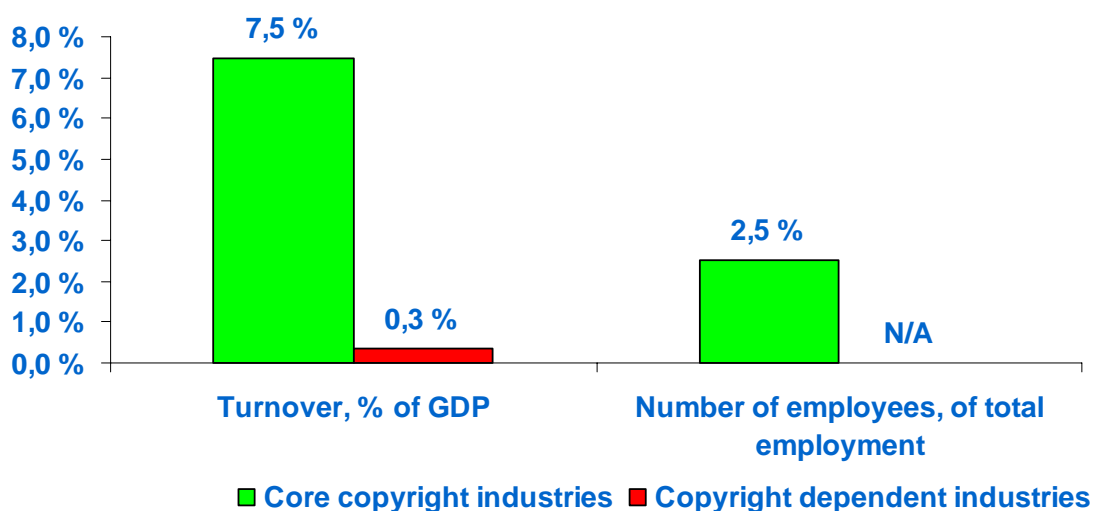
Japan is a significant global player in copyright industries with highly active core and copyright-dependent activities. However, because of differences in its national accounts system, statistical data are not directly comparable to data from EU nations. A major difference is that value added figures are not reported in national statistical data.

Available data indicate that turnover in the core sector is comparable to 7.5 percent of GDP. The result for the copyright-dependent sector-based on available data is 0.3 percent. However, due to aggregation of unsegregable manufacturing categories, data for manufacturing of TV sets, VCRs, CDs, and other equipment for which Japanese manufacturing is a prime global player are not included in that result.

In terms of employment, data reveals that core copyright industries account for 2.5 percent of total Japanese employment. Data for the copyright-dependent industries were not reported in segregable means.

Comparison of Core and Dependent Copyright Activities and Industries

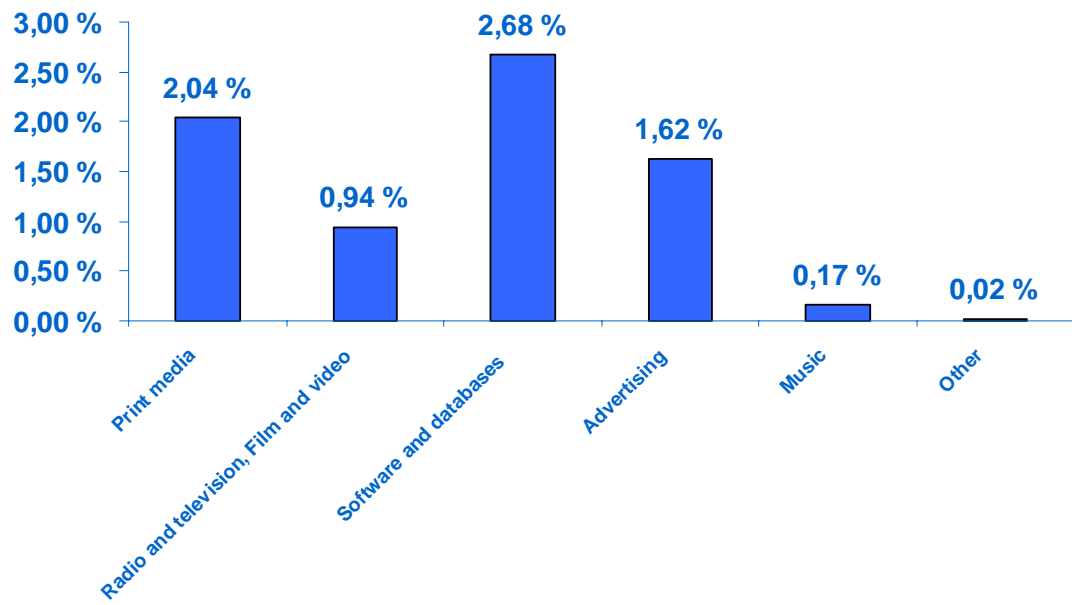
FIGURE 47. JAPANESE CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

Software and databases represent the largest contribution to the core sector, followed by advertising and print media activities and industries.

FIGURE 48. CONTRIBUTIONS OF JAPANESE CORE SECTORS' TURNOVER TO GDP



Statistical Data

TABLE 49. JAPANESE CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	105329	0	0,000	752698	0,012
newspapers	N/A	N/A		77167	
news and feature agencies, etc.	7190	N/A		21198	
magazines and periodicals	N/A	N/A		N/A	
books, maps	N/A	N/A		N/A	
other publishing (cards, directories, etc.)	N/A	N/A		94158	
pre-press, printing, and post press of published materials	N/A	N/A		560175	
Retail of press and literatures	N/A	N/A		N/A	
libraries	N/A	N/A		N/A	
Music, Theatrical Productions, Opera	8587	N/A		N/A	
printing and publishing of music	1508	N/A		N/A	
reproduction of recorded music	N/A	N/A		N/A	
whole and retail of recorded music	N/A	N/A		N/A	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	20048			123472	0,002
motion picture and video production	24701			55856	
motion picture and video distribution	N/A	N/A		N/A	
motion picture exhibition	2181	N/A		12767	
video rentals and sales	N/A	N/A		54849	
Photography	N/A	N/A		N/A	
Photographic Services, Studios, etc.	N/A	N/A		N/A	
Visual and Graphic Arts	1269	N/A		N/A	
art galleries and other wholesale and retail	1269	N/A		N/A	
Radio and Television	28320	N/A		71618	0,001
radio and television activities	25444	N/A		49640	
transmission via cable and satellite networks	2877	N/A		18898	
Software and Databases	138274	N/A		515462	0,008
Advertising	83981	N/A		146595	0,002
agencies, buying services	83981			146595	0,002
Total	385808	N/A		1609845	2,5 %

TABLE 50. JAPANESE COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	N/A	N/A		N/A	
manufacture	N/A	N/A		N/A	
Wholesale and retail of radio and television goods and musical instruments					
Computers and Equipment	17656	N/A		N/A	
manufacture	17656	N/A		N/A	
wholesale and retail	N/A	N/A		N/A	
Musical Instruments	N/A	N/A		N/A	
manufacture	N/A	N/A		N/A	
wholesale and retail	N/A	N/A		N/A	
Photographic and cinematographic instruments	0	N/A		N/A	
manufacture	N/A	N/A		N/A	
Manufacture of prepared unrecorded media	N/A	N/A		N/A	
Manufacture of paper	N/A	N/A		N/A	
Manufacture of photographic equipment and materials	N/A	N/A		N/A	
Total	17656	N/A		N/A	

Data Notes and Gaps

As noted above, there is a lack of value-added statistics and segregable industry data for many of the copyright-dependent industries in Japan. Employment is fairly well reported for the core sectors, but not for dependent industries. Turnover is reported only for service industries.

The authors are unable to estimate the effects of these gaps.

Canada

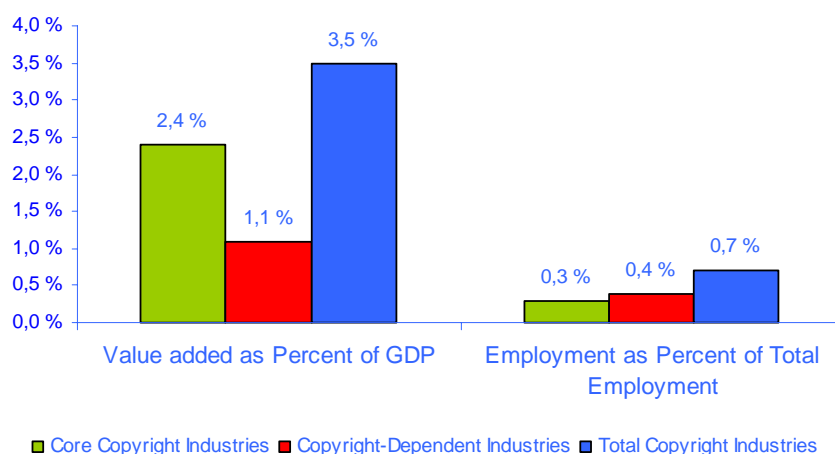
Data on Canadian copyright performance is not directly comparable to EU data because of differences in Canada's national accounts system. A major difference in available data are that value added figures for 2000 are poorly reported in publicly available data.

Assessed value added data indicate that the contribution to the GDP produced in copyright industries is about 3.5 percent in copyright industries and activities. The reported share of work force of the total employment is 0.7 percent. This low figure is due to the significant gaps in the employment data

Comparison of Core and Dependent Copyright Activities and Industries

The core copyright industries contribute little more than twice as much turnover per gross domestic product as Canada's copyright-dependent industries. The data on employment is inadequate for reliable comparison between copyright and copyright-dependent industries.

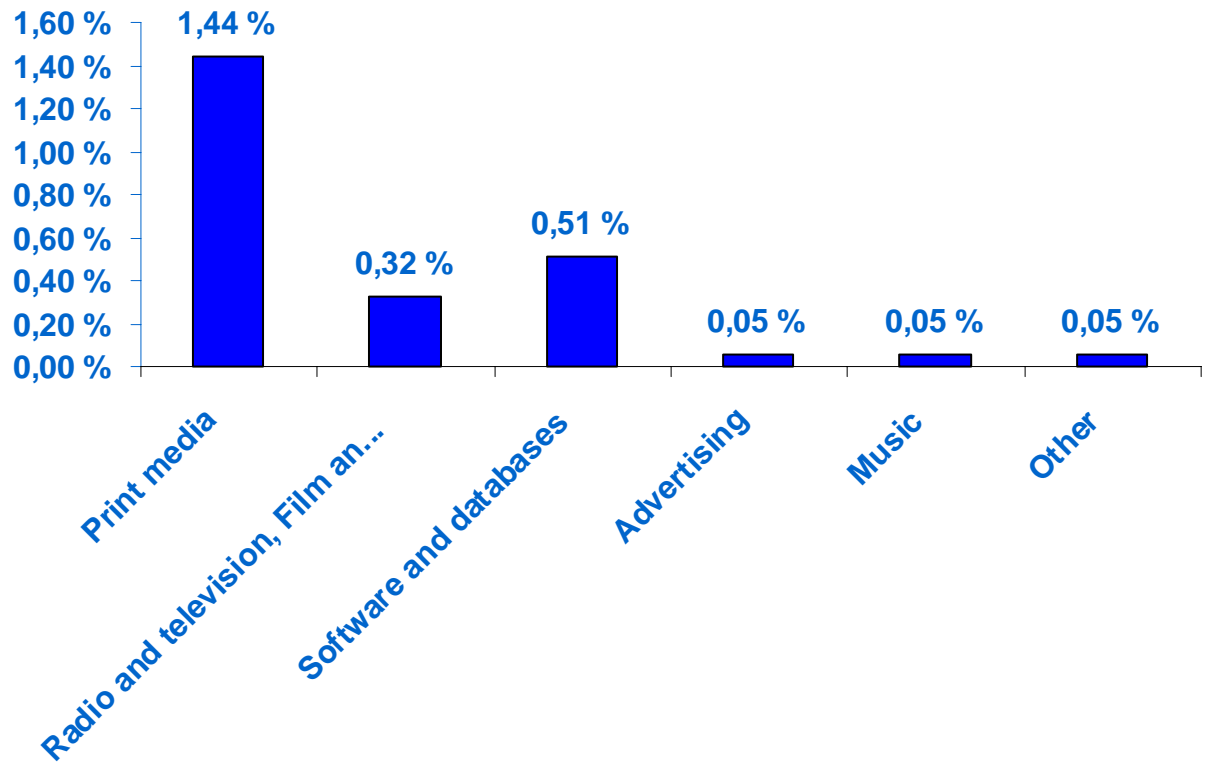
FIGURE 49. CANADIAN CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

According to available data, the main contributors to the core copyright sector are print media followed distantly by the software and databases activities.

FIGURE 50. CONTRIBUTIONS OF CANADIAN CORE SECTORS TO GDP



Statistical Data

TABLE 51. CANADIAN CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	19820	15157	0,014	78251	0,005
newspapers	4752	2005		N/A	
news and feature agencies, etc.	N/A	N/A		N/A	
magazines and periodicals	1042	314		N/A	
books, maps	N/A	N/A		N/A	
other publishing (cards, directories, etc.)	N/A	6430		N/A	
pre-press, printing, and post press of published materials	11664	6408		78251	
Retail of press and literatures	2362	N/A			
libraries	N/A	N/A		N/A	
Music, Theatrical Productions, Opera	190	551	0,001	N/A	N/A
printing and publishing of music	1323	335		N/A	
reproduction of recorded music	N/A	N/A		N/A	
whole and retail of recorded music	1911	216		N/A	
Artistic and literary creation and interpretation	N/A	N/A		N/A	
Performances and allied agencies (booking agencies, ticket agencies, etc)	N/A	N/A		N/A	
Film and Video	1283	2226	0,002	N/A	N/A
motion picture and video production	N/A	1601		N/A	
motion picture and video distribution	N/A	N/A		N/A	
motion picture exhibition	N/A	303		N/A	
video rentals and sales	1283	322		N/A	
Photography	N/A	N/A	N/A	N/A	N/A
Photographic Services, Studios, etc.	N/A	N/A		N/A	
Visual and Graphic Arts	1226	570	0,001	N/A	N/A
art galleries and other wholesale and retail	1226	570		N/A	
Radio and Television	2330	1160	0,001	18820	0,001
radio and television activities	1996	681		11487	0,001
transmission via cable and satellite networks	1407	480		7333	0,000
Software and Databases	12186	5350	0,005	31700	0,002
	N/A	N/A		N/A	
Advertising	2260	558	0,001	0	0,000
agencies, buying services	2260	558		N/A	
Total	18683	25572	2,4 %	50520	0,3 %

TABLE 52. CANADIAN COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	216	112	0,000	1148	0,000
manufacture	216	112		1148	0,000
Wholesale and retail of radio and television goods and musical instruments	3027	348		N/A	
Computers and Equipment	9907	2722	0,003	15889	0,001
manufacture	6840	1931		15889	
wholesale and retail	3067	791		N/A	
Musical Instruments	1902	219	0,000	N/A	
manufacture	N/A	N/A		N/A	
wholesale and retail	1902	219		N/A	
Photographic and cinematographic instruments	0	0	0,000	N/A	
manufacture	N/A	N/A		N/A	
Manufacture of prepared unrecorded media	N/A	N/A		N/A	
Manufacture of paper	16915	8241		37060	0,002
Manufacture of photographic equipment and materials	N/A	N/A		N/A	N/A
Total	28940	11294	1,1 %	54097	0,4 %

Data Notes and Gaps

The absence of value added data are a significant limitation to comparability. Absence of value added and employment data for the press and literature category, photograph sector, computer and unrecorded media categories further limits the comparability of the data. When the turnover data was available the value added was estimated based on industry sample. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

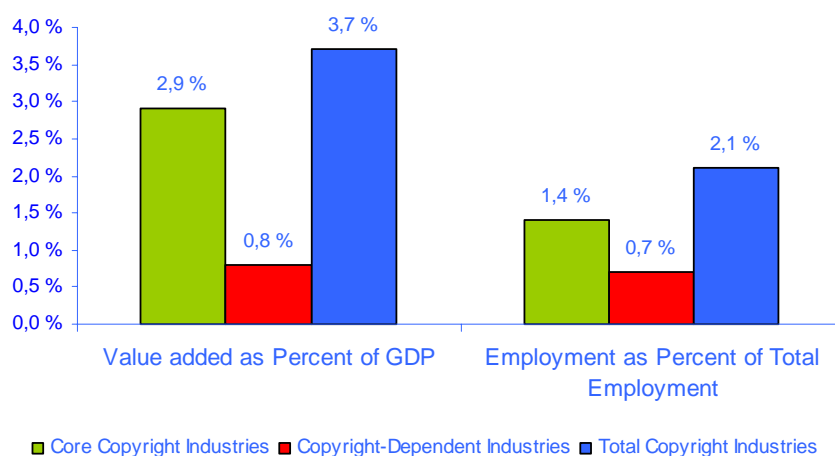
United States of America

The United States of America is a large global player in many copyright industries. The ability to compare its performance directly to that of EU nations is limited because value added data and much employment data are not available for most core copyright industries for 2000 (see data notes at end of section).

Comparison of Core and Dependent Copyright Activities and Industries

Value added data indicated that value added for copyright industries is about 3.7 percent of gross domestic product. The employment in copyright industries contributes about 2.1 percent to the total employment. The contribution of copyright industries to GDP is over 3 times as much as the contribution of copyright-dependent industries. The employment in copyright industries is twice the employment in copyright-dependent industries.

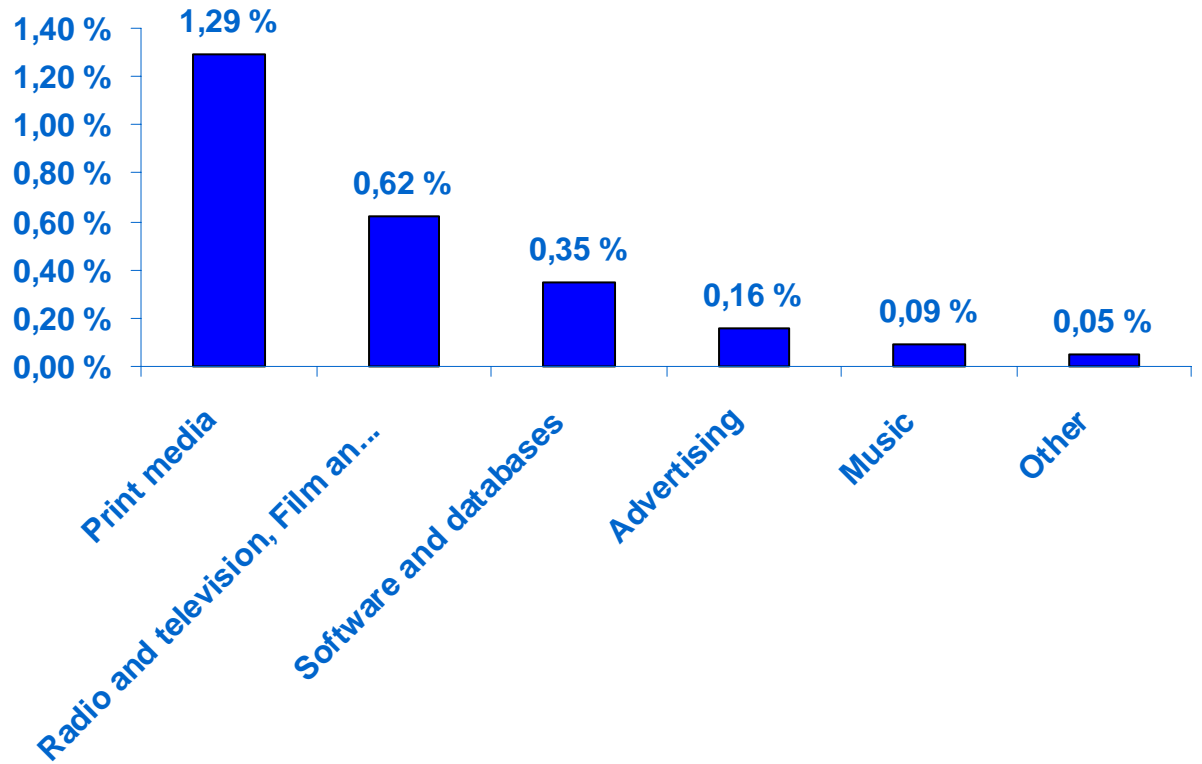
FIGURE 51. AMERICAN CORE AND COPYRIGHT-DEPENDENT CONTRIBUTIONS COMPARED



Significance of Core Sectors

Available data indicate that audiovisual media and print media and software and databases are the primary contributors to the core copyright sector.

FIGURE 52. CONTRIBUTIONS OF AMERICAN CORE SECTORS TO GDP



Statistical Data

TABLE 53. AMERICAN CORE COPYRIGHT ACTIVITY AND INDUSTRY DATA, ADJUSTED TO 2000

CORE COPYRIGHT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
Press and Literature	272726	126575	0,013	1527897	0,011
newspapers	51874	21891		400818	0,003
news and feature agencies, etc.	1755	699		9483	0,000
magazines and periodicals	37525	13021		137865	0,001
books, maps	28390	9908		90170	0,001
other publishing (cards, directories, etc.)	13492	4884		33113	0,000
pre-press, printing, and post press of published materials	122051	73107		834404	0,006
Retail of press and literatures	16561	2435		N/A	N/A
libraries	1077	631		22044	0,000
Music, Theatrical Productions, Opera	25942	8866	0,001	112253	0,001
printing and publishing of music	13946	3528		21514	0,000
reproduction of recorded music					
whole and retail of recorded music	9222	1042			
Artistic and literary creation and interpretation	6599	2250		51802	0,000
Performances and allied agencies (booking agencies, ticket agencies, etc)	7547	2045		38937	0,000
Film and Video	64746	24224	0,002	221262	0,002
motion picture and video production	25230	13599		83558	0,001
motion picture and video distribution	15660	3931		12663	0,000
motion picture exhibition	9511	4423		125041	0,001
video rentals and sales	9051	2272			
Photography	6975	3160	0,000	93905	0,001
Photographic Services, Studios, etc.	6975	3160		93905	0,001
Visual and Graphic Arts	3756	2066	0,000	19510	0,000
art galleries and other wholesale and retail	3756	2066		19510	0,000
Radio and Television	131361	36637	0,004	424066	0,003
radio and television activities	50612	17259		249715	0,002
transmission via cable and satellite networks	56827	19378		174351	0,001
Software and Databases	77247	33911	0,003	266380	0,002
Advertising	61711	15243	0,002	417214	0,003
agencies, buying services	61711	15243		417214	0,003
Total	644464	250682	2,6 %	1554590	2,2 %

TABLE 54. AMERICAN COPYRIGHT-DEPENDENT ACTIVITY AND INDUSTRY DATA, ADJUSTED TO 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (milj. €)	Value added (milj. €)	Value added / GDP	Nr of employees	Employees / total employment
TV sets, radio sets, VCR, CD, Cassettes, and other equipment	10299	2970	0,000	30306	0,000
manufacture	10299	2970		30306	0,000
Wholesale and retail of radio and television goods and musical instruments					
Computers and Equipment	71508	27678	0,003	838554	0,006
manufacture	71508	27678		240307	0,002
wholesale and retail	N/A	N/A		598247	0,004
Musical Instruments	9513	1950	0,000	18155	0,000
manufacture	1658	1047		13249	0,000
wholesale and retail	7855	903		4906	0,000
Photographic and cinematographic instruments	9122	4927	0,001	24143	0,000
manufacture	9122	4927		24143	0,000
Manufacture of prepared unrecorded media	N/A	N/A		N/A	
Manufacture of paper	60299	30901	0,003	138985	0,001
Manufacture of photographic equipment and materials	10379	5606	0,001		
Total	80630	74031	0,8 %	1050143	0,7 %

Data Notes and Gaps

Because of the scheduling of data studies in the U.S., the Economic Census is undertaken only every 5 years and includes value added, employment, and productivity data for manufacturing industries only. The last census was conducted for the year 1997, so official data for 2000 are not available. The data reported in this section are estimated from 1997 data and adjusted by the GDP growth. When the turnover data was available the value added was estimated based on industry sample. The estimations are printed in *italic* font and when no data have been available it has been noted with N/A.

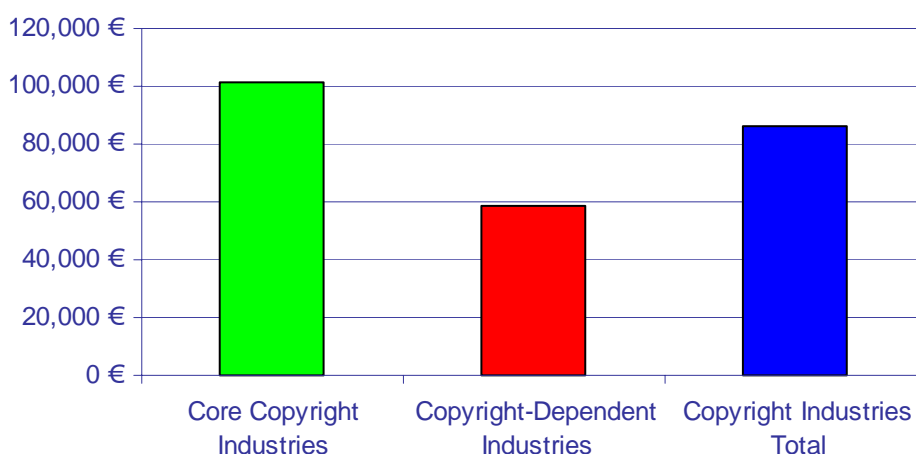
Productivity of Copyright Industries

Productivity is a concept used to measure the level of efficiency with which an industry or firm operates. It relates the wealth generated by activities to a particular resource (in this case employees) and is useful in comparing industries or firms and in determining changes over time.

A primary measure of productivity is value added per employee and it is relevant to this study as a means of assessing the overall performance of the copyright industry and the performance of the core and copyright-dependent industries and activities.

The copyright industries produced a combined value added of €6,173 per employee in 2000 (Figure 48). Productivity for core copyright industries was one third higher than that of the copyright-dependent industries. The core copyright industries achieved a value added per employee of €101,538. The copyright-dependent industries produced value added of €6,173 per employee.

FIGURE 53. COPYRIGHT INDUSTRY PRODUCTIVITY AS MEASURED BY VALUE ADDED PER EMPLOYEE



This indicates that investments in the core produce more productivity and wealth than investments in the copyright-dependent industries. In terms of policy, promotion and support of investment in software and databases sectors or newspaper and magazine sectors will produce more wealth for the economy than investments in computer equipment manufacturing or paper manufacturing.

Comparisons Among Countries

In comparing nations, one must keep in mind that higher or lower contributions to GDP and employment may result not merely from the copyright industry performance but may be affected by the strength or weakness of other industries and sectors in national economies that affect total GDP.

Comparisons Among EU Nations

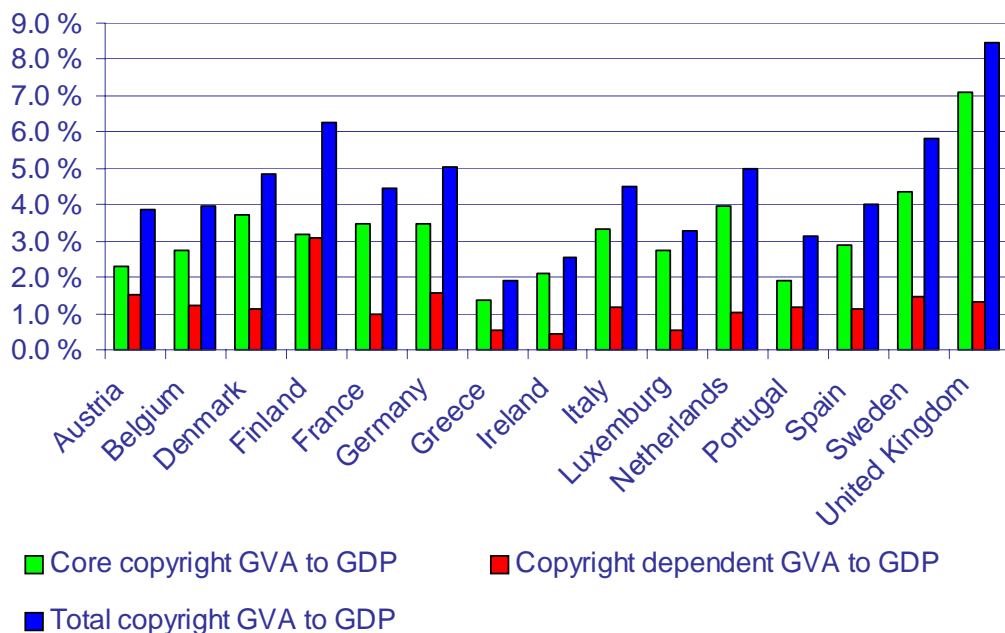
Comparison of Core and Dependent Industries Contributions to GDP

Performance of copyright industries in EU nations in terms of contributions to their national economies varies widely, with countries such as Denmark, Netherlands, Sweden, and United Kingdom achieving results well above average. Greece performs well below average.

Core copyright sectors' contributions clearly drive overall performance, with Denmark, Netherlands, Sweden, and United Kingdom performing above average in core copyright contributions. Greece and Portugal scored noticeably below average in terms of core contributions (Figure 49).

In terms of contributions of gross value added (GVA) to GDP by copyright-dependent industries, Austria, Belgium, Denmark, Finland, Germany, and United Kingdom perform very well, whereas contributions in France Greece, Ireland, Luxembourg, Netherlands, and Portugal are relatively low.

FIGURE 54. CORE, DEPENDENT, AND TOTAL COPYRIGHT INDUSTRIES CONTRIBUTIONS TO GDP



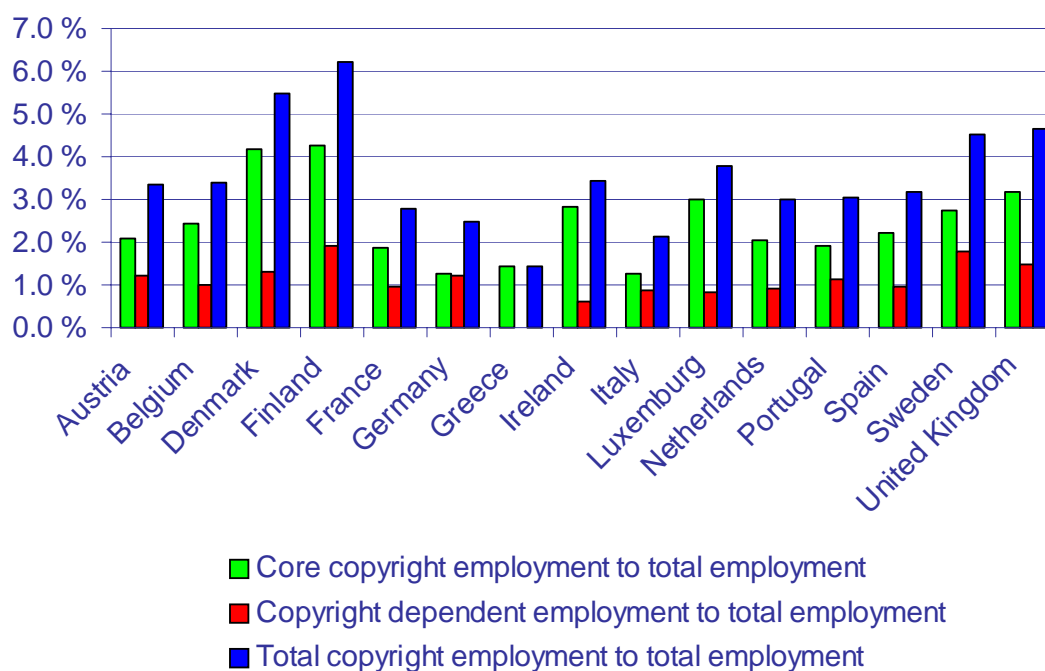
Core and Dependent Industries Contributions to Employment Compared

In terms of employment, copyright industries provide unusually high employment in countries such as Denmark and Finland, and to a lesser degree in Sweden and the United Kingdom (Figure 50).

In the cases of Denmark, Finland, Sweden, and United Kingdom, core copyright industries are drivers of high copyright industry employment. Lower levels of core copyright contribution to national employment are seen in France, Germany, Greece, Italy, Luxemburg, and Portugal.

The highest contributions to employment from copyright-dependent industries are found in Finland and Sweden. Particularly low contributions are noted in Greece, Ireland, and Italy.

FIGURE 55. CORE, DEPENDENT, AND TOTAL COPYRIGHT INDUSTRIES EMPLOYMENT CONTRIBUTIONS AS PERCENTAGE OF TOTAL EMPLOYMENT



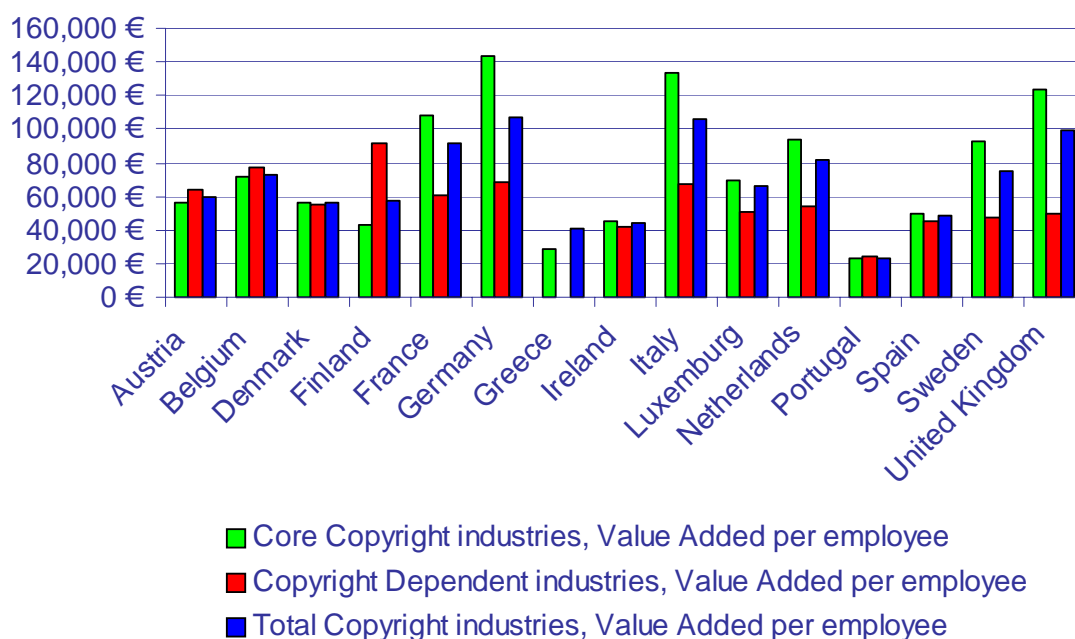
Productivity

Productivity of copyright industries varies considerably in member states (Figure 51). Total productivity averaged €86,173. Germany obtained a high of €107,554 value added per employee. Ireland, by comparison, had overall productivity of €44,659.

In the core copyright industries, the Germany achieved the highest productivity at €143,906 value added per employee, compared to €23,149 in Portugal.

In the copyright-dependent industries, Finland scored a high of €91,385 value added per employee, whereas Portugal produced €23,895.

FIGURE 56. PRODUCTIVITY OF CORE AND COPYRIGHT-DEPENDENT INDUSTRIES IN EU NATIONS
(MEASURED AS VALUE ADDED PER EMPLOYEE)



Statistical Data

TABLE 55. TURNOVERS, VALUES ADDED AND EMPLOYMENT OF COPYRIGHT INDUSTRIES IN EU15

	Total Core turnover	Total Dependent turnover	Total Turnover	Total Core GVA	Total Dependent GVA	Total GVA	Total GVA as % of GDP	Total Core employment	Total Dependent Employment	Total copyright employment
Austria	13063	8899	21963	4465	2312	6777	3.3 %	84737	34097	118834
Belgium	21623	19735	41357	5771	2120	7891	3.2 %	94702	26122	120824
Denmark	17333	6658	23991	6419	1517	7937	4.5 %	115544	25144	140688
Finland	12361	15908	28269	3650	242	3892	3.0 %	97587	40435	138022
France	89271	27462	116733	25858	6575	32434	2.3 %	446243	165341	611584
Germany	147341	158943	306284	52239	15247	67486	3.3 %	493237	328922	822159
Greece	3909	1151	5060	555	0	555	0.5 %	56604	0	56604
Ireland	5372	1509	6880	1995	215	2210	2.2 %	47881	5552	53433
Italy	64826	4360	69186	29851	0	29851	2.6 %	290332	25170	315502
Luxemburg	1706	377	2083	475	53	528	2.7 %	35239	1055	36294
Netherlands	38218	14908	53126	14629	1489	16118	4.1 %	167667	43190	210857
Portugal	7985	5443	13427	2115	331	2446	2.2 %	94026	33761	127787
Spain	50961	137760	188720	16594	3075	19669	3.3 %	344619	92973	437592
Sweden	30876	30675	61551	10724	1561	12285	5.0 %	116725	57053	173778
United Kingdom	212698	80983	293681	108668	12546	121214	7.9 %	885770	281598	1167368
TOTAL	717541	514769	1232310	284010	47282	331292	3.9 %	3370911	1160414	4531325

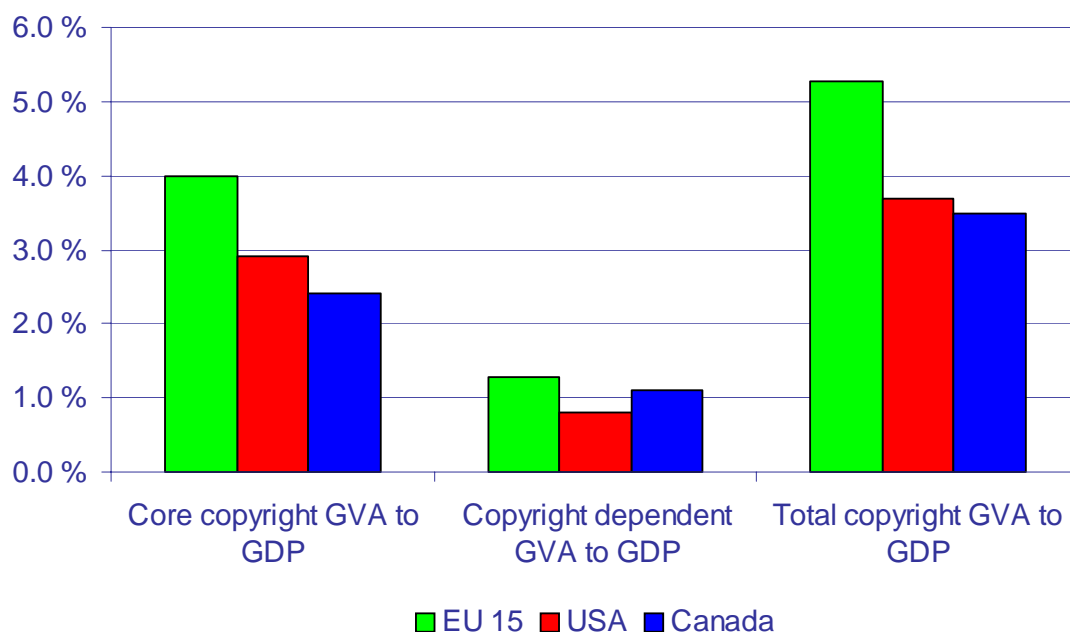
Comparisons of EU15 with Principal Competitors

As noted in the national discussions of Canada and the USA, differences in annual measurements systems and production schedules present notable comparability problems. In the case of Japan value added data are unavailable in all categories of national accounts statistics related to the copyright industries and the turnover data can be found only in aggregate levels for most industries. Comparisons for the value added contribution to GDP are therefore made only made for EU 15, USA and Canada.

Comparison of Core and Dependent Copyright Activities and Industries

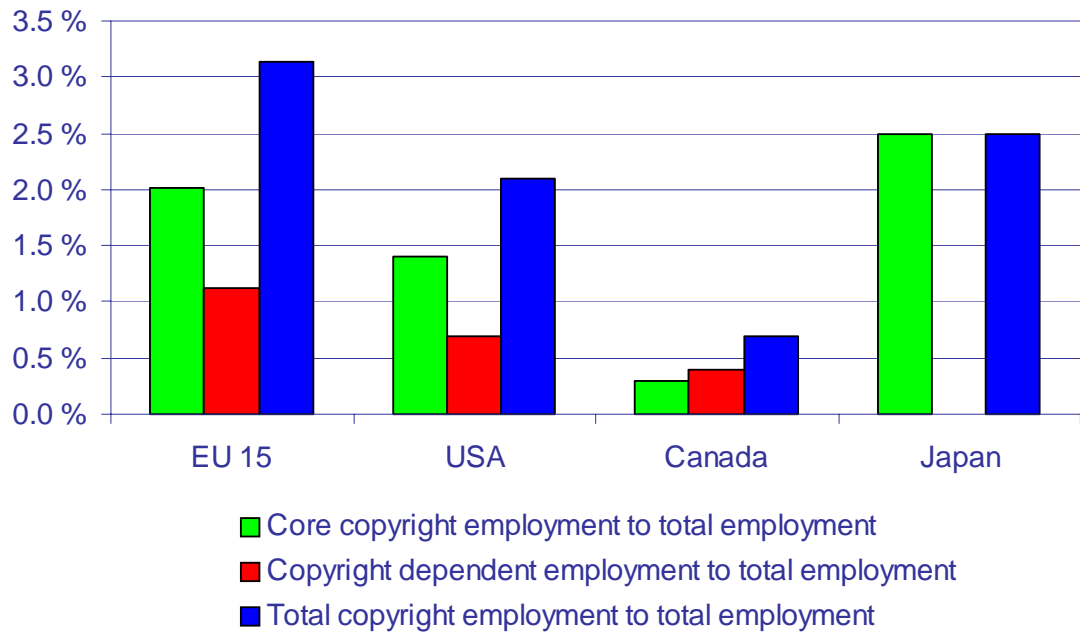
The available data indicate that value added per GDP in the EU15 is higher than that of the competitor nations. The total copyright value added contributed 5.3 percent to the GDP of EU15 compared to 3.7 percent in the USA and 3.5 percent in Canada (Figure 52). This indicates that EU nations produce more value from copyright business activities. The reasons for this result include the presence of multiple simultaneously operating domestic copyright industries that are not present in the competitor nations.

FIGURE 57. VALUE ADDED TO GDP OF CORE COPYRIGHT, COPYRIGHT-DEPENDENT, AND TOTAL COPYRIGHT INDUSTRY AS A PERCENT OF GDP IN EU15, USA, AND CANADA



Based on data, core copyright employment in the EU 15 is 3.1 percent of total employment, compared to 2.5 percent in Japan, 3.7 percent in USA and 3.5 percent in Canada (Figure 53). There was no data available on Japan's copyright-dependent industries' employment, so the total consists only that of core copyright industries.

FIGURE 58. EMPLOYMENT OF CORE COPYRIGHT, COPYRIGHT-DEPENDENT, AND TOTAL COPYRIGHT INDUSTRY AS A PERCENT OF TOTAL EMPLOYMENT IN EU15, USA, JAPAN, AND CANADA



Summary

The copyright industries are important economic contributors to the European economy both in terms of wealth creation and employment. Although their cultural, social, and political contributions have been well recognised in Community activities and policy, their economic significance has not been equally understood in the past.

A primary reason that the importance of the copyright industries has not been well evident in the past is that they have been treated in government activities and national account statistics as unrelated activities. Responsibility for their activities has been widely dispersed among ministries and agencies. Data, when it has been collected, has often been added into account statistics based on particular manufacturing or service characteristics of the activity rather than seeing the activities as a related whole.

This study shows that the copyright industries are significant contributors to the economy, providing nearly 5.3 percent of total value added in the EU and 3.1 percent of total employment. The contributions of the copyright industries are far greater than many other industries that receive significant attention from policy makers.

The core copyright industries—those in which copyright content is created, processed, and distributed—are the foundation and central economic generator of European copyright industries. Across the EU, the core industries and activities create the greatest wealth evidenced in higher value added from the core sectors than the copyright-dependent activities. The core industries also provide greater employment and produce higher productivity than the dependent industries.

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Information Sources¹³

International Sources

Eurostat

OECD

UNESCO Institute for Statistics

European Audiovisual Observatory

Other International Sources

Bureau International des Societes Gerant les Droits d'Enregistrement et de
Reproduction Mecanique

Confederation Internationale des societes d'Auteurs et Compositeurs (CISAC)

Coordination of European Picture Agencies Press and Stock

European Association of Directory and Database Publishers

European Federation of Magazine Publishers

European Publishers Council

European Visual Artists

Federation of European Publishers

Groupement Européen de sociétés d'auteurs et compositeurs

Independent Music Publishers and Label Association

International Federation of Phonogram Industry

International Intellectual Property Alliance

Screen Digest

Software and Information Industry Association

¹³ The choice of sources sought for statistics are based on data need and data gaps. Official international sources of data were initially consulted and then national statistics offices. Where specific gaps existed, the research then contacted non-official sources to determine whether they had the relevant data for the missing categories.

World Intellectual Property Organisation

National Information Sources

Austria

Austrian Film Commission

Austrian Photographers

IG Autoren - Interessengemeinschaft österreichischer Autorinnen und Autoren,
Austria

Statistik Austria

Belgium

National Institute of Statistics

Nationale Vereniging van Beroepsfotografen (NVB)

Societe d' Auteurs Belge

Canada

Statistics Canada

Denmark

The Danish Writers Association

Komponister i Danmark (KODA)

Pressefotografforbundet

Statistics Denmark

Finland

Statistics Finland

Suomen kirjailijaliitto

Suomen valokuvaajain liitto

Suomen mainosvalokuvaajat ry

France

INSEE Info Service

Groupement National de la Photographie Professionnelle

Ministère de la Culture et la Communication

Société des Auteurs et Compositeurs Dramatiques

Société des Gens de Lettres SGDL

Union des Ecrivains

Germany

CV - Centralverband deutscher Berufsphotographen

Federal Statistical Office

Gesellschaft für Musikalische Aufführungs- und Mechanische Vervielfältigungsrechte
(GEMA)

Verwertungsgesellschaft WORT

Verband deutscher Schriftsteller (VS) in ver.di

VG Bildkünstler r.V.

Greece

Hellenic Authors' Society

The National Statistical Service of Greece

Politis Research

Ireland

Central Statistics Office

Irish Music Rights Organisation

Irish Professional Photographers Association (IPPA)

Irish Writers' Union

Italy

Associazione nazionale fotografi professionisti

Italian National Statistical Institute

SIAF Associazione fotografi professionisti CAN

Sindacato Nazionale Scrittori

Japan

Statistics Bureau of Japan

Luxembourg

Letzebuenger Schreftstellerverband LSV

National Statistical Institute of Luxembourg

Netherlands

Beroeps Fotografen Nederlands

BUMA

Dutch Nature Photographers Association (NVN)

Netherlands Federation of Film Professionals

Netherlands Trade Association of Film and Television Makers

NVF, Sectie Fotojournalisten van de Nederlandse Vereniging van Journalisten

Photographers Association of Netherlands

Statistics Netherlands

Union of Flemish Writers

Portugal

Associação Portuguesa de Escritores

National Statistical Institute of Portugal

Spain

Asociacion de fotografos profesionalos de Espana

Asociación Colegial de Escritores de España (ACE)

Federacion Espanola de Profesionales de la Fotografia y de la Imagen (FEPFI)

National Statistical Institute of Spain

Sociedad General de Autores y Editores

Sweden

Statistics Sweden

Sveriges Författarförbund SFF, Sweden

Svenska fotografers förbund, Sweden

United Kingdom

The Association of Photographers

Authors' Licensing and Collecting Society

British Film Institute

British Institute of Professional Photography

Master Photographers Association

Office for National Statistics

Performing Rights Society

The Society of Authors

United States of America

Stat-USA

US Department of Labor