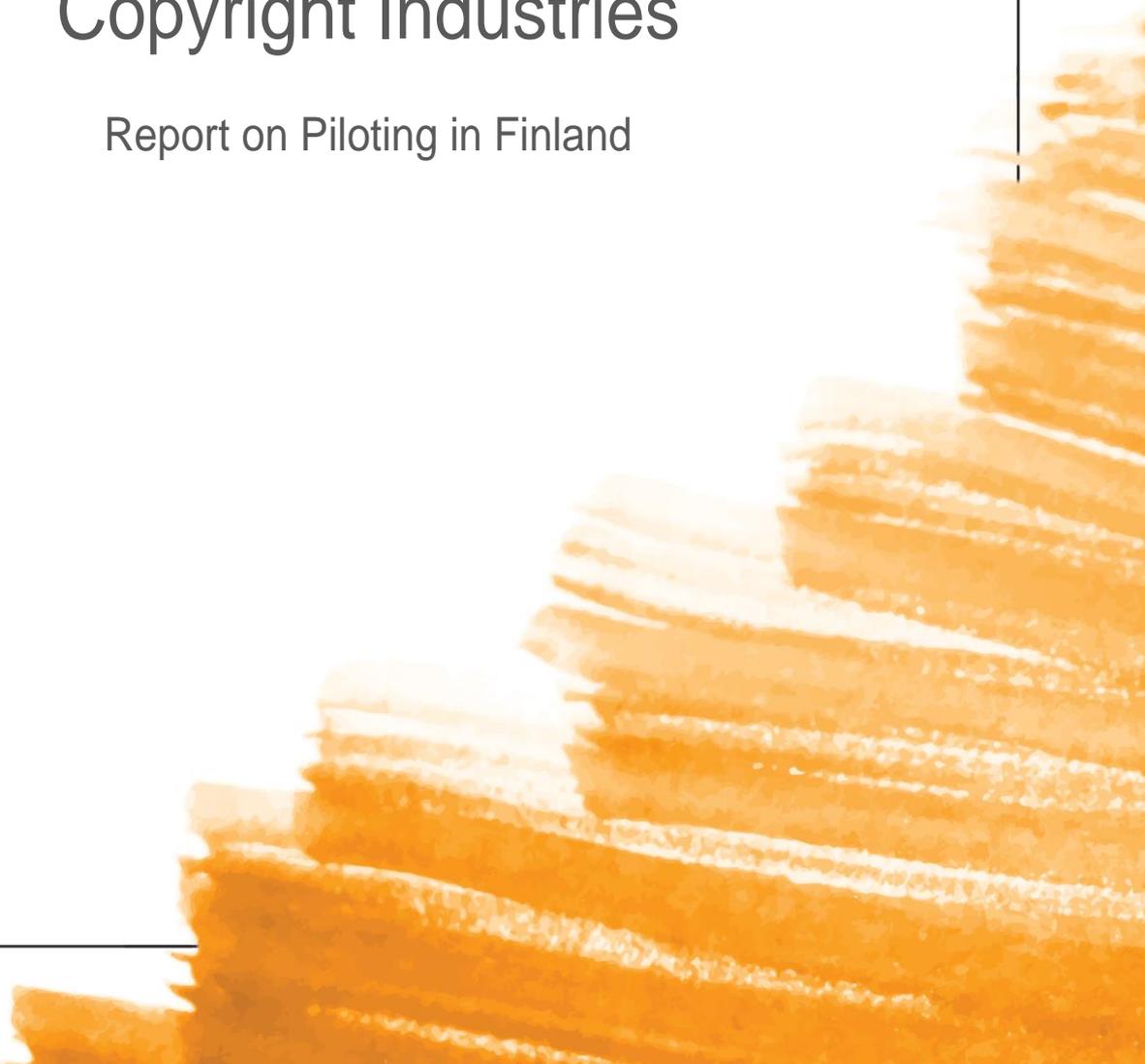


Assessing Copyright and Related Rights Systems

Macroeconomic Importance of Copyright Industries

Report on Piloting in Finland





cupore

Assessing Copyright and Related Rights Systems: Macroeconomic Importance of Copyright Industries. Report on Piloting in Finland.

This report is the result of the first pilot study implementing Methodology Card 1 – *Macroeconomic Importance of Copyright Industries*, one of the 37 indicators constituting a methodology framework for assessing the operation of national copyright and related rights systems. The methodology framework has been developed at the Foundation for cultural policy research (Cupore) in Finland as part of a project financed by the Finnish Ministry of Education and Culture. The pilot study was conducted by the core project team, Tiina Kautio and Nathalie Lefever, between May and December 2015 and its results were first published in December 2015 on the website of Cupore.

A handbook presenting the methodology framework is available on the website of Cupore at www.cupore.fi.

Cupore webpublications 39:4

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Executive summary

The report is part of the application in Finland of a methodology framework to assess the operation of copyright and related rights systems. More precisely, the information and analysis below correspond to the first methodology card presented in the methodology handbook, titled “Macroeconomic Importance of Copyright Industries”. This methodology card aims to assess the economic importance of copyright industries in the national economy.

The economic importance of copyright industries at macro-level has been studied in Finland by measuring the number of employees, contribution to gross domestic product, international trade, output and turnover in different industries. In addition, a pilot study has been conducted with an aim to evaluate the asset value of copyright.

The economic contribution of copyright industries has to date been studied in altogether six studies published between 1987 and 2014. Since the 2008 publication, the studies have been based on the World Intellectual Property Organization (WIPO) guidelines to assess the economic contribution of copyright-based industries. These studies indicate that between 2003 and 2012 the value added of copyright-based industries and core copyright industries¹ has slightly increased in real terms. The increase is however not as clear for the figures presenting value added as a percentage of GDP (varying between 4.51 % and 4.78 % for copyright-based industries, and between 3.48 % and 3.81 % for core copyright industries between 2003 and 2012). In the same period, the number of employees in copyright-based industries has remained relatively constant at around 120 000, representing more or less 5 % of the entire labor force (more or less 4 % for core copyright industries). As for core copyright industries’ contribution to foreign trade, both exports and imports have increased over the period analyzed. The trade balance for core copyright industries has been in surplus since 2008, after a substantial increase in the value of exports in computer services.

Another method used in Finland to evaluate the macroeconomic importance of copyright industries is the system of culture satellite accounts. The statistical system aims to describe the economic contribution of culture in the national economy. In Finland, culture satellite accounts have been produced by Statistics Finland since 2007, generating annual data on the output, gross value added and employment in cultural industries. According to this data, in the period between 2003–2013, the share of cultural industries in the value added of the whole Finnish economy has remained relatively stable at between 3.0 and 3.6 % of the GDP. The number of employees in cultural industries also varied only slightly between 4.0 % and 4.3 % of the employed labor force. The culture satellite accounts have also included figures on the output of the Finnish cultural industries. While the nominal output has slowly risen in nominal terms, its share in the output of the whole economy decreased during the period analyzed: in 2003, the output of cultural industries represented 9 774 million euros and 3.7 % of the output of the whole economy, while in 2013, it represented 11 265 million euros but only 2.9 % of the output of the economy as a whole.

In an earlier pilot study, the macroeconomic importance of copyright industries has been studied from the viewpoint of the asset value of copyright. In a pilot study by Sinervo & Toivonen (2012), the capital value of the Finnish copyright assets was estimated to amount to 16.4 billion euros. The Software and Databases industry had the largest copyright capital, evaluated at two thirds of the total value.

In conclusion, it seems that, even though the use of several calculation methods results in somewhat different sets of data, copyright industries represent a clear and stable contribution to the Finnish economy which has remained relatively stable since 2003.

¹ “Industries which are wholly engaged in the creation, production and manufacture, performance, broadcasting, communication and exhibition, or distribution and sale of works and other protected subject matter”, as specified in the WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition), p. 51.

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Introduction

A. CONTEXT OF THE PILOT STUDY

A methodology framework for assessing the operation of national copyright and related rights systems has been developed at the Foundation for cultural policy research (Cupore) in Finland. It is a collection of tools for achieving a systematic assessment of the functioning, performance and balanced operation of national copyright and related rights systems.

In the methodology, the assessment of the copyright and related rights system is determined through a framework consisting of so-called description sheets and methodology cards. The description sheets constitute guidelines to produce a comprehensive presentation and description of a country's copyright and related rights system and its operating environment. The methodology cards propose the collection of specific sets of data, either quantitative, descriptive or qualitative, that will be used as indicators of the functioning, performance and balanced operation of the system. Description sheets and methodology cards are accompanied by detailed information on the data to be collected, as well as analysis guidelines that will help connect them to each other.

The methodology framework is envisaged to be continuously improved through application feedbacks. For more information, see the Cupore website, www.cupore.fi/copyright.php.

This report presents data collected in application of Methodology card 1 of the methodology framework, titled "The macroeconomic importance of copyright industries". It is the result of the first pilot study applying this indicator in Finland.

This pilot study was conducted by the core project team, Tiina Kautio and Nathalie Lefever, between May and December 2015.

B. PRESENTATION OF THE INDICATOR

The indicator implemented here is intended to present one of the copyright system's elements. It is part of the first pillar of the methodology framework, "Copyright Environment", and its first area, "The context in which the copyright system operates". It is a methodology card which aims to assess the economic importance of copyright industries in the national economy as a whole.

As explained in the methodology handbook, Methodology card 1 outlines certain measurables to estimate the macroeconomic importance of industries that are likely to be highly affected by copyright². These include value added, the number of employees as well as the value of exports and imports in copyright industries. Alternatively, the research can focus on cultural or creative industries³, or take a

² Copyright industries are defined in the *WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition)*, p. 30, as "those which function under the protection of copyright and related rights." The guide is available at http://www.wipo.int/edocs/pubdocs/en/copyright/893/wipo_pub_893.pdf. Visited on 16.12.2015.

³ A definition of cultural industries as specified in the Convention on the protection and promotion of the diversity of cultural expressions adopted by UNESCO in 2005, Article 4: "industries producing and distributing cultural goods or services" which are defined as "those activities, goods and services, which at the time they are considered as a specific attribute, use or purpose, embody or convey cultural expressions, irrespective of the commercial value they may have." See the website of UNESCO at http://portal.unesco.org/en/ev.php-URL_ID=31038&URL_DO=DO_TOPIC&URL_SECTION=201.html. Visited on 23.11.2015.

more limited approach by including only core or primary copyright industries⁴. For the purposes of interpreting the results, these figures can be proportioned to other macroeconomic figures, such as gross domestic product, total national foreign trade and the total employed labor force. The figures can be estimated through information available in national and international statistical databases and, when necessary, complemented with industry data.

The last element of the methodology card comprises an estimation of the capital value of national copyright assets. As one method for determining its value, the amount of future income flows of national copyright assets can be studied. For an evaluation model and an example of making such estimation, see a report by Sinervo & Toivonen (2012).

It should be noticed that these figures will only provide an estimation of the economic contribution of certain industries. They are limited to those industries that are defined as copyright industries and not measuring all activities in the economy that are affected by copyright such as activities depending on exceptions and limitations to copyright or that are not reported in national statistics. For example, they do not show the value of voluntary work and user-generated content. Therefore, they can't directly be interpreted as indicating the economic impact of copyright. The data is likely to be affected by economic trends as well as changes in the markets and the industry structure. Concerning international comparability of the results, it should be remembered that there are differences in national statistics in terms of the definition of industry categories as well as the methods and frequency of data collection.

The methodology card presenting the indicator can be found in Appendix A of this report.

C. METHODS

The first three parameters defined in the methodology card are piloted here through a desktop study based on previous studies on the topic. Detailed instructions for the measurement of the value added of copyright industries, the value of their exports and imports, and the number of their employees can be found in the WIPO methodology for the assessment of the economic contribution of copyright industries. Parameter 4, focusing on the capital value of copyright assets (in terms of future income flows), was piloted at an earlier phase of the project and a separate report is available on the project website. The study is summarized in section C of the Results chapter.

A list of national and international information sources used for this report can be found in Appendix B.

According to a definition by the Finnish Ministry of Education's cultural industry committee (1999) referred to in the final report of the pilot project to develop culture satellite account in Finland (Ministry of Education and Culture, 2009, p. 8), cultural industries cover "...both the traditional and new fields of art and culture from a creative act in various forms of art to distribution (artist's creative work, its development and productisation to a work of art, presenting or performing it, distribution and reception – in addition to creative arts, also production and distribution systems, programme production, galleries, art markets, libraries, museums, radio and TV)".

The creative industries approach has been adopted for example by the Department for Culture, Media and Sport (DCMS) in the UK. The Creative Industries were defined in the *2001 Creative Industries Mapping Document* as "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property". The document is available at <https://www.gov.uk/government/publications/creative-industries-mapping-documents-2001>. Visited on 23.11.2015.

⁴ A definition of core copyright industries as specified in the *WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition)*, p. 51: "The core copyright industries are industries which are wholly engaged in the creation, production and manufacture, performance, broadcasting, communication and exhibition, or distribution and sale of works and other protected subject matter."

Results

The macroeconomic importance of copyright industries has been studied in Finland by measuring the number of employees, contribution to value added, output, turnover, international trade, as well as the asset value of copyright in different industries. In this chapter, an overview of studies made in Finland is presented, with a focus on the development since 2003.

A. STUDIES ON THE ECONOMIC CONTRIBUTION OF COPYRIGHT INDUSTRIES IN FINLAND

The economic contribution of copyright industries has to date been studied in six studies in Finland. The studies were published in 1987 (data from 1985), 1991 (data from 1988), 2000 (data from 1997), 2008 (data from 2000, 2003, 2004 and 2005), 2010 (data from 2005-2008) and 2014 (data from 2009-2012). The studies have been commissioned by the Finnish Ministry of Education and Culture together with the Finnish Copyright Society.

Since the 2008 publication, the studies have been based on the World Intellectual Property Organization (WIPO) guidelines to assess the economic contribution of copyright industries⁵. The WIPO Guide on Surveying the Economic Contribution of the Copyright-based Industries⁶ was first published in 2003 and has since been used for studying the economic performance of the copyright sector in over 40 countries. The guide focused on measuring the economic contribution of copyright-based industries through three main indicators: the value added, the number of employees and the contribution to foreign trade generated by the copyright-based industries.⁷

Copyright industries are defined in the WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition), p. 30, as “those which function under the protection of copyright and related rights”.⁸ In the WIPO Guidelines, copyright industries are further divided into four categories: the core copyright industries, the interdependent copyright industries, the partial copyright industries and the non-dedicated support industries. In this chapter, the focus will be on the core copyright industries, which are “industries that are wholly engaged in creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter”⁹.

⁵ For more information on the work to assess the economic performance of copyright-based industries, see the website of WIPO at <http://www.wipo.int/copyright/en/performance/>. Visited on 16.12.2015.

⁶ *WIPO Guide on Surveying the Economic Contribution of the Copyright-Based Industries (2003)*, WIPO publication No 923.

⁷ A new version of the Guide, published in 2015, updates the guidelines based on the experience accumulated through their use in different countries in order to provide “comprehensive, integrated, and internationally agreed recommendations for the measurement and analysis of economic activity”. See the *WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition)*, p. 43, available at http://www.wipo.int/edocs/pubdocs/en/copyright/893/wipo_pub_893.pdf. Visited on 16.12.2015.

For information on the studies made in different countries based on the WIPO Guidelines, see *WIPO Studies on the Economic Contribution of the Copyright Industries – Overview* (2014), available at http://www.wipo.int/export/sites/www/copyright/en/performance/pdf/economic_contribution_analysis_2014.pdf. Visited on 16.12.2015.

⁸ See page 30; the guide is available online at http://www.wipo.int/edocs/pubdocs/en/copyright/893/wipo_pub_893.pdf. Visited on 16.12.2015.

In the previous version of the guidelines (published in 2003), copyright-based industries were defined as industries that are “fully or predominantly based on copyright”.

⁹ Definition in the *WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition)*, p. 51.

In the studies presented in this section¹⁰, the economic contribution of copyright industries has been evaluated through measuring the value added, the number of employees and the value of exports and imports in industries considered as copyright-based, as well as the royalties collected and distributed by collective management organisations¹¹. The data on value added and employment is gathered mostly from corporate annual statement statistics of Statistics Finland and the figures on exports and imports are based on Foreign trade of goods statistics by the Finnish Customs and the International trade in services statistics by Statistics Finland.

▪ **FIRST STUDIES MEASURING THE MACROECONOMIC IMPORTANCE OF COPYRIGHT INDUSTRIES IN 1985, 1988 AND 1997**

The economic importance of copyright industries has been measured in Finland since 1987. The report was made by Valtion teknillinen tutkimuskeskus¹² and covered the year 1985. The study discussed the level of turnover, value added as a percentage of gross domestic product, and the number of employees in different industries. The industries covered were Graphic industry, Computer systems design and programs, Radio and television industries, Advertising services, Architecture, Music industry, Theatrical productions, Movie and video industries, Photography, and Visual arts.¹³ The results of this first study were not published.

This study was followed by another report by Valtion teknillinen tutkimuskeskus, published in 1991.¹⁴ The study used data from 1988 and includes an evaluation of the level of turnover, value added and the number of employees in different industries. In addition, the value of exports and imports in certain industries in 1988 as well as the remunerations and compensations for private copying by the Finnish collective management organizations were estimated. The study covered the following industries: Graphic industry, Computer programs, Radio and television industries, Advertising, Architecture, Music industry, Theatrical productions, Movie and video industries, Photography, Industrial arts and design, Visual arts, and Databases.¹⁵ At the time, the total turnover of the industries covered amounted to 24 875 million Finnish Marks (FIM)¹⁶, their value added was evaluated at 12 807 million FIM (representing about 2,92 % of the GDP) and the number of employees in these industries was estimated at 71 928.

In 2000, the Finnish Copyright Institute published a study on the economic importance of copyright industries in Finland.¹⁷ The study was based on data from 1997. The figures concerned the level of turnover, value added as a percentage of gross domestic product, and the number of employees as a percentage of the employed labor force. The methodology took into account the comparability of the results to those of the previous study published in 1991. The definition of core copyright industries

¹⁰ The two latest publications are available on the website of the Finnish Copyright Society, <http://www.copyrightsociety.fi/index.php?id=104>. Visited on 18.5.2015.

¹¹ For more information concerning the amounts of royalties collected and distributed by Finnish collective management organisations, see the pilot report on Methodology card 9 – *Efficiency of collective management organizations*, available at <http://www.cupore.fi/Pilotreports.php>.

¹² Päivi Esala & Sirkka Manni Loukkola, *Tekijänoikeudellisten alojen taloudellinen merkittävyys*, Vtt, Graaфинen Laboratorio (1987).

¹³ Original list of industries in Finnish: Graaфинen ala, Atk-suunnittelu ja ohjelmat, Radio- ja tv-toiminta, Mainonnan tuotanto ja suunnittelu, Arkkitehtityö, Musiikkiteollisuus, Teatteritoiminta, Elokuva- ja videoteollisuus, Valokuvaus, and Kuvataiteet

¹⁴ Päivi Esala & Sirkka Manni Loukkola, *Tekijänoikeuden merkitys Suomen kansantaloudessa vuonna 1988*, Opetusministeriön työryhmien muistioita 1991:30. Helsinki 1991.

¹⁵ Original list of industries in Finnish: Graaфинen teollisuus, Atk-ohjelmistot, Radio- ja tv-toiminta, Mainonta, Arkkitehtityö, Musiikkiteollisuus, Teatteritoiminta, Elokuva- ja videoteollisuus, Valokuvaus, Taideteollinen muotoilu ja suunnittelu, Kuvataiteet, and Tietokannat

¹⁶ The Finnish Mark (FIM) was replaced with the Euro (EUR) on January 1, 1999. According to a fixed conversion rate, one EUR is equivalent to 5.94573 FIM.

¹⁷ Petteri Sinervo & Robert Picard, *Economic Importance of Copyright Industries in Finland, Finnish Copyright Industries in 1997. Final Report*, The Finnish Copyright Society / The Finnish Copyright Institute Publications No 20 (2000).

included press and literature, music, theatre and opera, film and video, photography, visual arts, radio and television, software and databases, architecture, advertising and industrial design. At the time, the total turnover of the core copyright industries amounted to 56 551 million FIM, their value added was evaluated at 26 274 million FIM (representing about 4.13 % of the GDP) and the number of employees in these industries was estimated at 86 410 or 3.98 % of the total work force.

These first studies used different methodologies and the industry categories covered were different for each one of them. As a result, their findings are not directly comparable to those of the studies published in later years.

▪ 2000 AND 2003 - 2005

The study published in 2008¹⁸ was the first Finnish study basing on the WIPO Guidelines. It covers data from 2000, 2003, 2004 and 2005. The study used the WIPO Guidelines only partially: the categories of partial copyright industries and non-dedicated support industries were not included in the calculations. It also applied the methodology of the earlier study made in Finland (based on the 1997 figures), and presented two sets of results.

The 2008 study focused on core copyright industries only, and not on the broader set of copyright-based industries. According to its findings based on the WIPO methodology, the value added of core copyright industries increased from 4 344 million euros in 2000 to 5 544 million euros in 2005¹⁹. The number of employees in core copyright industries increased slightly from 92 423 in 2000 to 94 005 in 2005²⁰. Foreign trade in core copyright industries increased on the same period from 1 652 million euros to 2 653 million euros for exports and from 1 563 million euros to 2 946 million euros concerning imports²¹. The data concerning 2005 was analysed again in more detail in a later study presented below.

▪ 2005-2008

The study on the Economic Contribution of Copyright-based Industries in Finland in 2005-2008 was carried out by Business and Innovation Development BID, part of the Turku School of Economics. The report was published in 2010.²²

Over this time period, the combined value added of the copyright-based industries rised from 7 265 million euros (in 2005) to 8 720 million euros (in 2008). On average, this represented 4.6 % of the Finnish GDP. The share of core copyright industries was on average 3.6 % of the Finnish GDP.

Furthermore, the total number of employees in the copyright-based industries rised from 116 811 (in 2005) to 129 496 (in 2008). On average, this represented 4.9 % of the employed labor force in Finland. Comparatively, the share of core copyright industries from the employed labor force was on average 4%.

¹⁸ Lotta Häkkinen & Saara L. Taalas, *Economic Contribution of Copyright-based industries in Finland 2000, 2003, 2004 and 2005*, Study by the Media Group at the Turku School of Economics, The Finnish Copyright Society / The Finnish Copyright Institute Publications No 28 (2008).

¹⁹ The 2005 figure was updated in the study published in 2010 at 5 680 million euros.

²⁰ The 2005 figure was updated in the study published in 2010 at 94 702 employees.

²¹ The 2005 figures were updated in the study published in 2010 at 2 620 million euros for exports and 3 125 million euros for imports.

²² Mikko Grönlund, Veijo Pönni, Timo E. Toivonen, Petteri Sinervo & Antti Paasio, *Economic Contribution of Copyright-based Industries in Finland 2005–2008*, The Finnish Copyright Society / The Finnish Copyright Institute Publications No 29 (2010).

In 2008, the two largest core copyright industries in Finland were Software and Databases, constituting 51.3 % of the value added of the core copyright industries, and Press and Literature, accounting for 29.3 % of the total.

During this period, the trade balance of core copyright industries varied: in 2008, the trade surplus was 2 331 million euros, while the figures of 2005-2007 show a trade deficit. The jump in export figures in 2008 is due to the industry category of computer services where the value of exports increased from 1 335 million euros in 2007 to 5 650 million euros in 2008.

▪ 2009-2012

The latest study on the economic contribution of copyright-based industries in Finland was published in 2014 and covers the years 2009-2012.²³ It was carried out by the Brahea Centre at the University of Turku²⁴.

According to the results, the combined value added of copyright-based industries represented 4.73 % of Finnish GDP in 2012 (which is estimated at 199,8 billion euros at current prices²⁵) and amounted to 9.1 billion euros. Copyright-based industries employed 5.1 % of the total employed workforce in 2012.

In the period 2009-2012, the share of value added of the copyright-based industries was on average 4.7 % of the Finnish GDP. Even though the value added of copyright-based industries (in real terms) was rising over the period, the total number of employees showed a decrease from 125 601 in 2009 to 122 312 in 2010, followed by a rise to 124 052 in 2012. On average, this represented 5.1 % of the employed labor force in Finland.

In 2012, the combined value added of core copyright industries amounted to 7.3 billion euros which represented 3.8 % of the Finnish GDP. The core copyright industries employed 4.1 % of the total employed workforce that year. Over the time period 2009-2012, the share of core copyright industries was on average 3.7 % of the Finnish GDP and the share of core copyright industries from the employed labor force was on average 4.1 %.

The study also included industry-specific data on value added and employment. In 2012, the largest core copyright industry was Software and Databases with a 60.6 % share of the total value added in the core copyright industries, and Press and Literature, with a 23.1 % share. Software and Databases employed 52.5 % of the total workforce of the core copyright industries; Press and Literature came second with 25.5 %.

In 2012, trade balance in core copyright industries in 2012 was 2 350 million euros in surplus: core copyright industry related exports amounted to 7 545 million euros and imports to 5 195 million euros. The majority of core copyright industry related export revenue comes from computer services.

▪ SUMMARY

The following tables present the results of the studies on the economic contribution of copyright-based industries and core copyright industries in Finland between 2003 and 2012. In the first table, the value added, the number of employees and the contribution to foreign trade are presented as Millions of

²³ Mikko Grönlund, Veijo Pönni, Timo E. Toivonen & Petteri Sinervo, *Economic Contribution of Copyright-based Industries in Finland 2009–2012*, The Finnish Copyright Society / The Finnish Copyright Institute Publications No 32 (2014).

²⁴ Earlier Business and Innovation Development BID, at the Turku School of Economics

²⁵ Source: Official Statistics of Finland (OSF): Annual national accounts [e-publication]. ISSN=1798-0623. 2014, Appendix table 1. Gross domestic product (GDP) at market prices 1975-2014*. Helsinki: Statistics Finland. http://www.stat.fi/til/vtp/2014/vtp_2014_2015-03-02_tau_001_en.html. Visited on 21.5.2015.

euros. In the second table, the figures are shown as percentual figures of the Finnish GDP. Illustrations of the development in the studied ten-year period are presented in Figures 1-6.

The figures presented in tables 1 and 2 are based on the last three studies made in Finland concerning the economic contribution of copyright-based industries. At the time of making the research, part of the necessary data was available as estimates only, and therefore certain figures used in the calculations might have been corrected or complemented afterwards.

Table 1. Value added, number of employees, exports and imports in copyright-based industries and core copyright industries in 2003 - 2012²⁶											
		2003²⁷	2004	2005²⁸	2006	2007	2008	2009²⁹	2010	2011	2012
Value added, M €											
	<i>Copyright-based industries</i>			7 265	7 710	8 105	8 720	8 115	8 547	8 722	9 096
	<i>Core copyright industries</i>	5 075	5 437	5 680	6 069	6 546	6 815	6 561	6 638	6 850	7 254
Number of employees											
	<i>Copyright-based industries</i>			116 811	119 325	122 591	129 496	125 601	122 312	122 518	124 052
	<i>Core copyright industries</i>	93 536	93 136	94 702	96 868	100 312	102 672	99 807	99 096	99 546	101 914
Foreign trade³⁰, M €											
Exports	<i>Core copyright industries</i>	1 423	1 762	2 620	2 452	2 706	7 085	6 688	6 980	7 602	7 545
Imports	<i>Core copyright industries</i>	1 745	2 094	3 125	3 251	3 786	4 754	5 437	4 702	4 307	5 195

Table 2. Value added, number of employees, exports and imports in copyright-based industries and core copyright industries in 2003 - 2012, %³¹											
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Value added, as % of GDP											
	<i>Copyright-based industries</i>			4.62	4.61	4.51	4.73	4.71	4.78	4.62	4.73

²⁶ The figures presented in the table are based on the last three studies made in Finland concerning the economic contribution of copyright-based industries. The figures used in the calculations for the studies are partly based on estimates, and therefore might have been corrected or complemented afterwards.

²⁷ The figures from years 2003 and 2004 are based on a study by the Media Group at Turku School of Economics (Häkkinen & Taalas 2008).

In the study, only the categories of core copyright industries and interdependent copyright industries were included in the calculations. Therefore, the values concerning all copyright-based industries are not available. Moreover, the figures concerning exports and imports in 2003 and 2004 were presented separately for products and services: In 2003, the value of exported products was 340 Million euros and the value of exported services was 1 083 Million euros. The figures for imports were 377 M € for products and 1 368 M € for services. In 2004, the value of exported products was 331 Million euros and the value of exported services was 1 431 million euros. The figures for imports were 415 M € for products and 1 679 M € for services.

²⁸ The figures from 2005-2008 come from a study conducted at Business and Innovation Development BID, at Turku School of Economics (Grönlund et al. 2010).

²⁹ The data on years 2009-2012 is based on a study carried out by Brahea Centre at University of Turku (Grönlund et al. 2014).

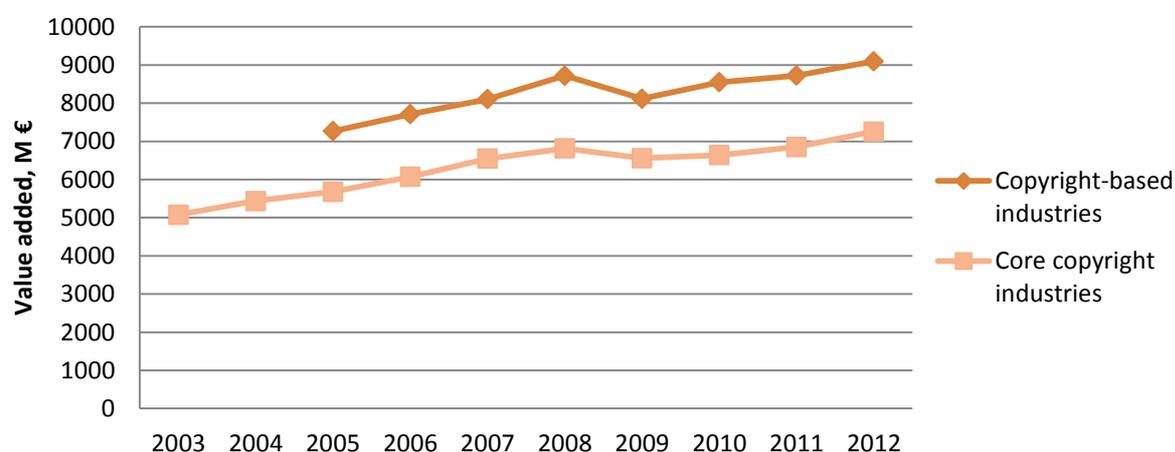
³⁰ The only data on exports and imports available for the whole time series concerned core copyright industries.

³¹ The figures presented in the table are based on the last three studies made in Finland concerning the economic contribution of copyright-based industries. The figures used in the calculations for the studies are partly based on estimates, and therefore might have been corrected or complemented afterwards.

	<i>Core copyright industries</i>	3.48	3.58	3.61	3.63	3.64	3.70	3.81	3.71	3.63	3.77
Number of employees, as % of employed labor force											
	<i>Copyright-based industries</i>			4.86	4.87	4.93	5.12	5.11	5.10	4.95	5.14
	<i>Core copyright industries</i>	3.96	3.94	3.94	3.96	4.03	4.06	4.06	4.05	4.02	4.10
Foreign trade, as % of total exports and imports³²											
Exports	<i>Core copyright industries</i>	2.69	3.08	4.22	3.45	3.49	8.65	11.07	10.33	10.60	10.46
Imports	<i>Core copyright industries</i>	4.30	4.65	5.71	5.17	5.56	6.41	9.77	7.44	6.02	7.15

The value added of core copyright industries has shown a slight increase in the studied ten-year period. Its share in the gross-domestic product was 3.48 % in 2003 and 3.77 % in 2012.³³

Figure 1. Value added in copyright-based industries and core copyright industries in 2003 – 2012



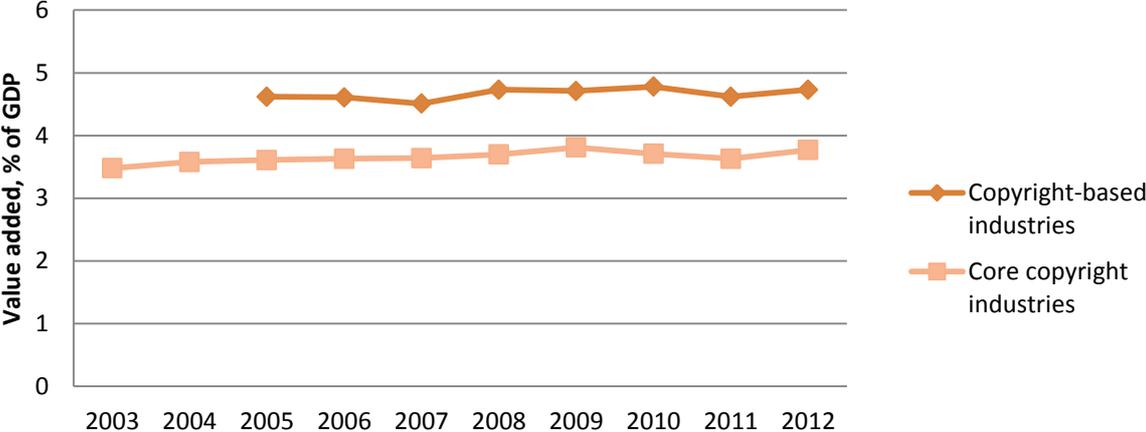
³² The sums of Foreign trade of goods (statistics by the Finnish Customs) and the International trade in services (statistics by Statistics Finland):

- 2005: Exports 62.095 M € and Imports 54.765 M €
- 2006: Exports 71.029 M € and Imports 62.831 M €
- 2007: Exports 77.602 M € and Imports 68.151 M €
- 2008: Exports 81.918 M € and Imports 74.173 M €
- 2009: Exports 60.424 M € and Imports 55.656 M €
- 2010: Exports 67.540 M € and Imports 63.161 M €
- 2011: Exports 71.743 M € and Imports 71.567 M €
- 2012: Exports 72.139 M € and Imports 72.654 M €

Sources: Official Statistics of Finland (OSF): Foreign trade of goods [e-publication]. Helsinki: Customs, available online at http://www.stat.fi/til/tavu/index_en.html. Visited on 11.12.2015; Official Statistics of Finland (OSF): International trade in services [e-publication]. ISSN=1798-3525. Helsinki: Statistics Finland, available online at http://www.stat.fi/til/pul/tau_en.html. Visited on 11.12.2015.

³³ The value added of core copyright industries has increased around 43 % in the studied ten-year period. The figure was € 5.075 M in 2003 and € 7.254 M in 2012. In this period, the Finnish GDP has increased from € 151 569 M in 2003 to € 199 793 M in 2012 (information on gross domestic product at current prices from Statistics Finland, *National Accounts 2014* (2015), available online at http://tilastokeskus.fi/til/vtp/2014/vtp_2014_2015-03-02_en.pdf. Visited on 17.12.2015).

Figure 2. Value added in copyright-based industries and core copyright industries in 2003 - 2012, as % of GDP



The number of employees in core copyright industries rose from 93 536 in 2003 to 101 914 in 2012. The increase in the studied ten-year period was altogether 9 %. The figures of employees in the core industries were 3.96 % of the employed labor force in 2003 and 4.10 % in 2012.

Figure 3. Number of employees in copyright-based industries and core copyright industries in 2003 - 2012

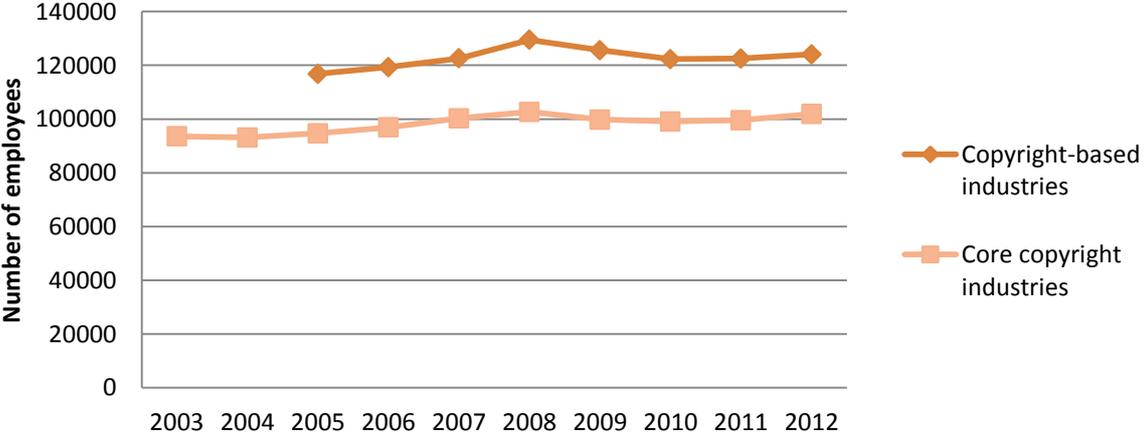
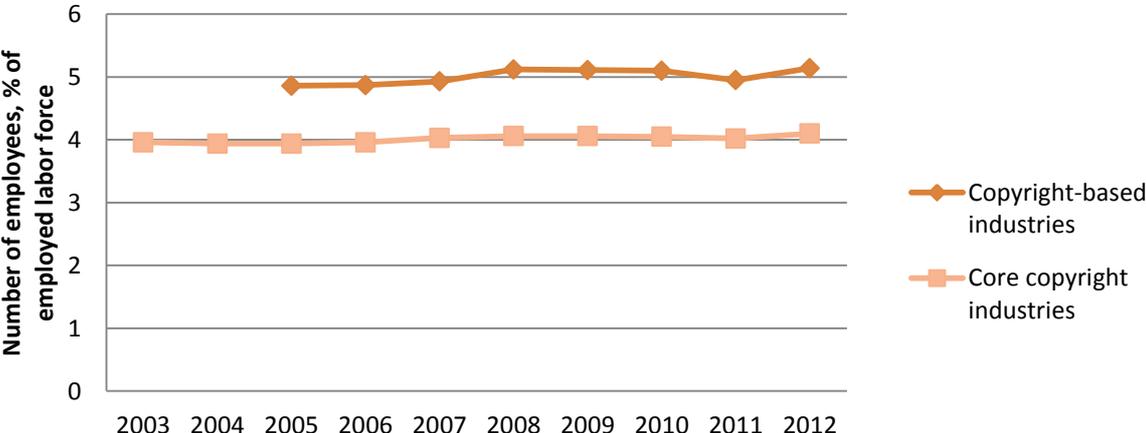


Figure 4. Number of employees in copyright-based industries and core copyright industries in 2003 - 2012, as % of employed labor force



The exports in core copyright industries showed a clear increase from 2.69 % of the total exports in 2003 to 10.46 % in 2012. The imports in core copyright industries have shown a less strong growth, the share of total imports being 4.30 % in 2003 and 7.15 % in 2012. As can be seen from Figure 5, the trade balance for core copyright industries has been in surplus since 2008.

The time series shows a significant increase in exports in core copyright industries between 2007 and 2008. The leap can at least partly be explained by changes in the industry category “Computer services”, which has become the most significant category of copyrighted material in terms of total export value. As described in Grönlund et al. 2010 (p. 30), “in 2008, the growth in foreign trade came especially from increased financial transactions of international groups and concentration of group activities into Finland from abroad. In exports the changes are visible especially in the exports of computer services.” In addition, since 2009, the Finnish international trade statistics has used the Statistical Classification of Products by Activity in the European Economic Community, 2008 version (CPA 2008), which might have influenced the consistency of the time series. Earlier statistics were based on an earlier version of the classification (CPA 2002).³⁴

Figure 5. Exports and imports in core copyright industries in 2003 – 2012

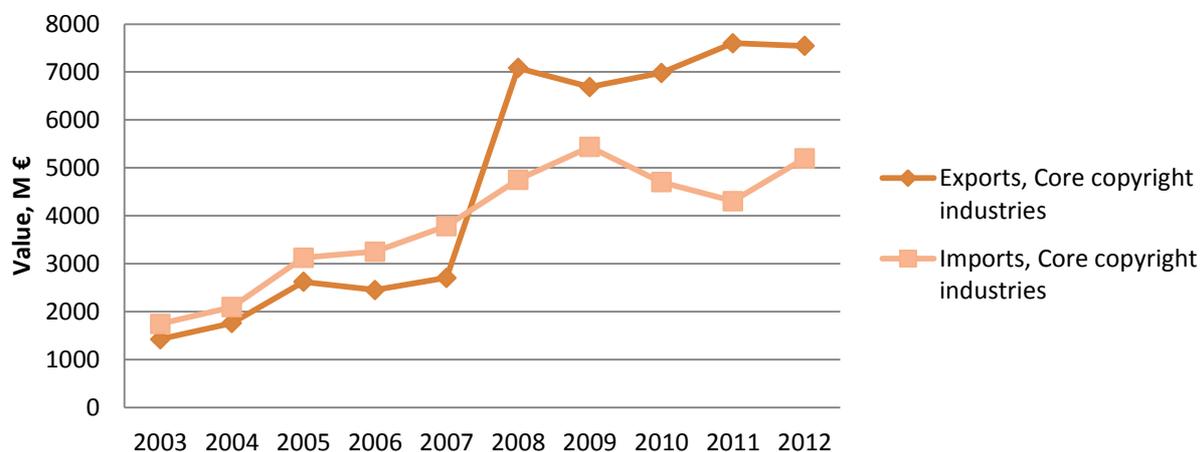
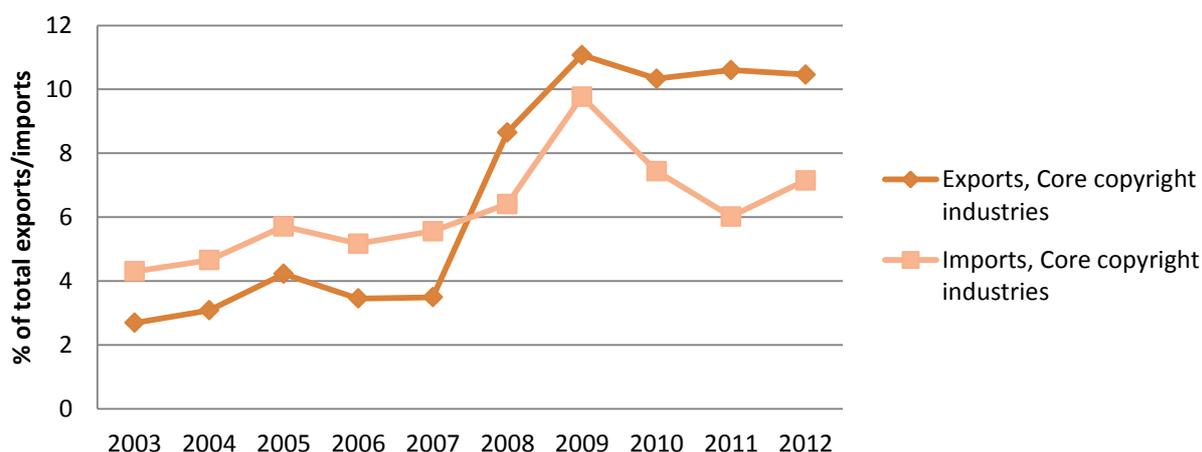


Figure 6. Exports and imports in core copyright industries in 2003 - 2012, as % of total exports/imports



³⁴ Source: Email from Mikko Grönlund and Petteri Sinervo, Brahea Centre at the University of Turku (23.11.2015)

B. CULTURE SATELLITE IN FINLAND

Satellite accounts are an extension of national accounts (a statistical system systematically and comprehensively describing a national economy). Their purpose is to provide statistical information concerning specific fields or aspects, as more detailed datasets are needed for reflecting the development in special areas of interest.³⁵ Culture satellite accounts in particular are a statistical system with an aim to describe the economic contribution of culture in the national economy.³⁶

In Finland, a pilot project to develop culture satellite account was conducted by Statistics Finland in 2007, producing data for 1995-2005.³⁷ Since then, annual data on the output, gross value added and employment in cultural industries has been produced by Statistics Finland. In addition, data on private and public consumption expenditure to culture has been collected since 2008. Finland's Culture Satellite Accounts and the National Accounts are both based on the same basic classifications and source data.³⁸

Table 3 presents a summary of the results of the Finnish Culture Satellite Accounts over a period of ten years. They concern the output, gross value added and employment in cultural industries in 2003-2013. The figures concerning 2003-2007 and 2008-2013 are based on different industry classifications, a difference which needs to be taken into account when studying the time-series.

As can be seen from the data, the share of cultural industries in the value added of the whole Finnish economy has remained relatively stable in the past ten years. In 2008 and 2009 the share of cultural industries was 3.6 % and in the period 2010-2013 the share has decreased, being 3.0 % in 2013. Over the period 2008-2013, the industry categories Newspapers, periodicals and news agencies, Radio and television, Printing and related activities, Photography, and Manufacture and sale of entertainment electronics went through a decrease in their share in the total value added of cultural industries. On the other hand, the categories Artistic, theatre and concert activities, Libraries, archives, museums, etc., Production and distribution of books, Production and distribution of motion pictures and videos, Sound recordings, Advertising, and Education and cultural administration increased their share in the total value added.

In 2013, the number of employees in cultural industries was 4.0 % of employed labor force. In the whole ten year period the number of employees in cultural industries has slowly risen until a decrease in 2013. The share of total employed labor force has varied between 4.0 and 4.3 %.

In the period 2003-2013 the nominal output of the Finnish cultural industries has slowly risen. The share in output of the whole economy shows however a slight decrease. In 2013, the output of cultural industries amounted to 2.9 % of the total output in the Finnish economy.

³⁵ Definition of satellite accounts by OECD Glossary of statistical terms: "Satellite accounts provide a framework linked to the central accounts and which enables attention to be focussed on a certain field or aspect of economic and social life in the context of national accounts; common examples are satellite accounts for the environment, or tourism, or unpaid household work." See <https://stats.oecd.org/glossary/detail.asp?ID=2385>, Visited on 6.11.2015.

³⁶ Culture satellite accounts have been compiled in different countries but no methods have been internationally agreed on. Therefore, the industry selections vary between countries and the results are not directly comparable.

³⁷ The project was financed by the Ministry of Education and Culture. The final report of the pilot project was published both in Finnish (Opetusministeriön julkaisuja 2008:20) and in English (Publications of the Ministry of Education, Finland 2009:13), see http://www.minedu.fi/OPM/Julkaisut/2009/culture_satelite.html?lang=en. Visited on 27.8.2015.

³⁸ Statistics Finland, http://www.stat.fi/meta/til/klts_en.html. Visited on 28.4.2014.

Table 3. Output, gross value added and employment in cultural industries in 2003 – 2012³⁹											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Value added, M €	3 936	4 213	4 409	4 610	4 936	6 087	5 741	5 355	5 459	5 489	5 155
% of GDP	3.1	3.2	3.2	3.2	3.2	3.6	3.6	3.3	3.2	3.2	3.0
Number of employees	99 100	98 800	100 300	102 200	105 800	106 900	105 800	104 600	105 200	104 100	99 500
% of employed labor force	4.2	4.2	4.2	4.2	4.3	4.2	4.2	4.2	4.2	4.1	4.0
Output, M €	9 774	9 792	10 332	10 729	11 452	11 457	10 681	11 036	11 519	11 598	11 265
% of output of the whole economy	3.7	3.5	3.5	3.3	3.2	3.0	3.2	3.1	3.0	3.0	2.9

C. THE VALUE OF COPYRIGHT ASSETS

The economic importance of copyright industries could be studied from the viewpoint of the asset value of copyright. In order to make a pilot study concerning this parameter, Cupore commissioned a study from Business and Innovation Development (BID), a special unit operating within the University of Turku as a contribution to this project on the assessment of the operation of the copyright system. The study was published in 2012 by Cupore and the Finnish Copyright Society⁴⁰.

In the study, income-based valuation techniques were applied to determine the value of copyright assets. The Discounted Cash Flow (DCF) method was used to calculate the present value of future earnings from a portfolio of assets. According to Sinervo and Toivonen (p. 16), when calculating the value of a single copyright, it is useful to estimate the future income streams for a determined time period during which the copyright asset is expected to create revenues. If, however, the scope of the study is to estimate the value of the total portfolio of copyright assets in an industry, the value must be calculated without time limits. The discount rate should reflect the risks connected to the future earnings and therefore can be calculated using the expected or required rate of return.

The study covered the eight core copyright industries defined by WIPO⁴¹. The figures were based on data from 2008. The calculation was based on three variables: the earnings to be discounted, the discount rate, and the time span. The copyright revenue streams of the copyright industries⁴² were used to determine the levels of earnings.

Two alternative calculations for determining the capital value of copyright were applied in the study. Using the discounted cash flow method and applying the Capital Asset Pricing Model (CAPM), the capital value of copyright was estimated to amount to 16.4 billion € for the entire copyright capital in Finland.

³⁹ Source: Statistics Finland, http://pxnet2.stat.fi/PXWeb/pxweb/fi/StatFin/StatFin__kan__klts/?tablelist=true. Visited on 27.8.2015. Figures concerning years 2003-2007 are based on industry classification TOL 2002. Since 2008, the figures use the industry classification TOL 2008 as their basis.

⁴⁰ The study on the capital value of copyright assets in Finland (Sinervo & Toivonen 2012) is available on the project website, <http://www.cupore.fi/documents/CapitalValue.pdf>.

⁴¹ Definition of the core copyright industries in the *WIPO Guide on Surveying the Economic Contribution of the Copyright-based Industries* (2003): Press and Literature; Music, Theatre and Opera; Motion Picture and Video; Radio and Television; Photography; Software and Databases; Visual and Graphic Arts; and Advertising.

⁴² See Koskinen-Olsson (2010), Koskinen-Olsson & Muikku (2014) and Methodology card 13 – *Direct copyright revenue streams for different stakeholders*.

Software and databases was by far the most valuable industry: it alone represented some two thirds of the total value.

Table 4. Capital value of copyright in 2008 using the discounted cash-flow method	
Industry	Copyright Capital (M €)
Press and Literature	943
Music, Theatre and Opera	732
Motion Picture and Video	935
Radio and Television	1 821
Photography	504
Software and Databases	11 089
Visual and Graphic Arts	57
Advertising	366
Total	16 447

As a secondary method⁴³, the returns of capital employed in core copyright industries in 2008 were used to calculate the capital value of copyright. The calculations were made by using a sample of 250 firms from each core copyright industry, and it was estimated that the total value of the Finnish copyright assets amounts to 13.2 billion €. Software and Databases industry had, again, the largest copyright capital but now with 44 % of the total capital, followed more closely by the Radio and Television industry.

The calculation of Sinervo and Toivonen (2012) concerns the repertoire which is in active use. Alternative approaches need to be considered to analyze the asset value of protected subject matter that is not in active use or creating money flows, and the value of works in the public domain. Possible ways to measure the value of these two categories of works are to concentrate on the costs of production or the potential future value in revenue, and to estimate the cultural or historical value of these works.

A detailed description of the pilot study and the methods used can be found in Sinervo and Toivonen (2012).

⁴³ According to Sinervo & Toivonen (p.23), “this method (using the returns of capital employed) gives a better picture of the actual required rate of return in the copyright industries than the CAPM method and reflects better the individual characteristics of the copyright industries. However, the rates of return on capital employed were available only for one year. To avoid the impact of economic cycles and industry-specific fluctuations to the return rates, data and calculation of the median over longer period of time is required. Therefore the method remained secondary in this study.”

Conclusions

A. ANALYSIS AND SUMMARY OF THE RESULTS

The economic contribution of copyright industries has to date been studied in a series of six studies in from 1987 to 2014. Since the 2008 publication, the studies have been based on the 2003 edition of the World Intellectual Property Organization (WIPO) guidelines to assess the economic contribution of copyright industries, which recommended measuring the value added, the number of employees and the value of exports and imports in copyright-based industries.

Culture satellite accounts are a statistical system with an aim to describe the economic contribution of culture in the national economy. In Finland, evaluation of culture satellite accounts has been conducted by Statistics Finland since 2007, producing annual data on the output, gross value added and employment in cultural industries.

The economic importance of copyright industries has also been studied from the viewpoint of the asset value of copyright in a study commissioned as part of the present methodology framework for assessing the operation of copyright and related rights systems. Income-based valuation techniques were applied to determine the value of copyright assets and the discounted Cash Flow (DCF) method was used to calculate the present value of future earnings from a portfolio of assets in eight core copyright industries as defined by WIPO⁴⁴, based on data from 2008.

▪ THE VALUE ADDED OF COPYRIGHT INDUSTRIES AS A SHARE OF GDP

The studies on the economic contribution of copyright industries indicate that between 2003 and 2012, the value added of copyright-based industries and core copyright industries have slightly increased in real terms, but the variation was very limited when presented as a part of the GDP. It was evaluated annually at between 4.51 % and 4.78 % for copyright-based industries and between 3.48 % and 3.81 % for core-copyright industries. The evaluation of culture satellite accounts also concluded that, in the period between 2003 and 2012, the share of cultural industries in the value added of the whole Finnish economy has remained relatively stable at between 3.1 % and 3.6 % of the GDP.

The studies on the economic contribution of copyright industries also included industry-specific data on value added. In the most recent set of data analyzed, concerning 2012, the largest core copyright industry was Software and Databases with a 60.6 % share of the total value added in the core copyright industries, and Press and Literature came second, with a 23.1 % share.

▪ THE NUMBER OF EMPLOYEES IN COPYRIGHT INDUSTRIES AS A SHARE OF THE TOTAL EMPLOYED LABOR FORCE

The studies on the economic contribution of copyright industries indicate that between 2003 and 2012, the number of employees in copyright-based industries has remained relatively constant at around 120 000 units, representing around 5 % of the entire labor force (employees in core copyright industries represent around 100 000 workers and 4 % of the entire labor force).

The evaluation of culture satellite accounts similarly concluded that in the period between 2003 and 2012, the number of employees in cultural industries has remained relatively stable at between 4.1 % and 4.3 % of the employed labor force.

⁴⁴ WIPO *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*, WIPO publication No 923 (2003).

The studies on the economic contribution of copyright industries also included industry-specific data on employment. In 2012, the largest core copyright industry in terms of employment was Software and Databases which employed 52.5 % of the total workforce employed by all core copyright industries; Press and Literature came second with 25.5 %.

▪ **THE VALUE OF EXPORTS AND IMPORTS IN COPYRIGHT INDUSTRIES AS A PERCENTAGE OF THE TOTAL NATIONAL FOREIGN TRADE**

The copyright-related industries' contribution to foreign trade was evaluated as part of the studies on the economic contribution of copyright industries in Finland. It was found that both exports and imports have increased between 2003 and 2012: imports of core copyright industries have represented between 4.3 % and 9.77 % of the total of imports, while exports have increased from 2.69 % to 10.46 % of total exports. The trade balance for core copyright industries has been in surplus since 2008, after an important increase in the value of exports of computer services.

▪ **THE OUTPUT OF CULTURAL INDUSTRIES**

The cultural satellite accounts evaluated the nominal output of the Finnish cultural industries. It was found to have slowly risen in nominal terms but decreased in terms of its part in the output of the whole economy during the period analysed: in 2003, the output of cultural industries represented 9 774 million euros and 3.7 % of the output of the whole economy, while in 2012, it represented 11 598 million euros but only 3 % of the output of the economy as a whole.

▪ **THE CAPITAL VALUE OF COPYRIGHT ASSETS**

The asset value of copyright in Finland was calculated using the discounted cash flow method and estimated to amount to 16.4 billion €. The Software and Databases industry had the largest copyright capital, evaluated at two thirds of the total value.

▪ **GENERAL CONCLUSIONS**

In conclusion, it seems that, whatever the calculation method used, copyright industries represent a clear and stable contribution to the Finnish economy. Although copyright industries and cultural industries do not perfectly overlap, the data collected concerning the value added and the number of employees in cultural industries is fairly consistent with the data collected as part of studies concerning the economic contribution of copyright industries. The data also indicates that the Software and Databases industry has the highest economic importance among the copyright industries in Finland.

The economic impact of copyright at the national level is however impossible to determine precisely: the results will depend on methodology used (in particular the definition of the industries to be included) and will not include certain categories of activities such as user-generated content. However, studies on the economic contribution of copyright industries have already been conducted in Finland for nearly three decades. These studies have demonstrated that the economic importance of copyright industries in the national economy, both in monetary terms and in terms of the share in overall employment, has remained relatively stable during the ten years period studied in this report.

B. METHODOLOGICAL FINDINGS

▪ **LIMITATIONS**

The purpose of this indicator is to collect information on the macroeconomic importance of industries which are likely to be highly affected by copyright. The results will depend on the methodology used and

the definition of “copyright industries”. Among the studies reviewed for this report, some focused on “copyright-based industries” (defined as those industries which are fully or predominantly based on copyright, following the definition of the WIPO Guide on Surveying the Economic Contribution of Copyright-based Industries published in 2003) and “core copyright industries” (industries which are wholly engaged in the creation, production and manufacture, performance, broadcasting, communication and exhibition, or distribution and sale of works and other protected subject matter)⁴⁵; others covered all “cultural industries” (which includes, “in addition to creative arts, also production and distribution systems, programme production, galleries, art markets, libraries, museums, radio and TV”⁴⁶); and in some other cases, studies opted for a broader scope covering “creative industries” (defined as “those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property”⁴⁷). As a result, the main limitation of this indicator is the possibility that the data available might not be directly comparable when different studies based on different methodologies and industry categories are used.

▪ GUIDELINES FOR FUTURE RESEARCH

Information concerning the values of exports and imports could be reported for products and services separately in order to get more detailed information on the structure of international trade. In Finland, the two sets of information are reported by different sources: the sums of foreign trade of goods are presented in statistics of the Finnish Customs, and the international trade in services is calculated by Statistics Finland.

The time needed for this pilot study will depend for each country on the availability of data. In the case of Finland, where a comprehensive set of data on the topic already exists, the workload for collecting data and drafting this report could be evaluated at six weeks of full-time work.

⁴⁵ Definition in the *WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition)*, p. 51, available at http://www.wipo.int/edocs/pubdocs/en/copyright/893/wipo_pub_893.pdf. Visited on 16.12.2015.

⁴⁶ Definition by the Finnish Ministry of Education in *Culture Satellite Account; Final report of pilot project*, Publications of the Ministry of Education 2009:13 (2009), p.8, available at http://www.minedu.fi/OPM/Julkaisut/2009/culture_satellite.html?lang=en. Visited on 15.12.2015.

⁴⁷ Definition by the UK Department for Culture, Media & Sport, in its 1998 and 2001 Mapping Documents. See for instance the *Creative Industries Mapping Documents 2001 - Foreword* (9 April 2001), available at <https://www.gov.uk/government/publications/creative-industries-mapping-documents-2001>. Visited on 15.12.2015.

For a comparison of the different approaches (copyright, creative or cultural industries), see Lotta Häkkinen, *Keeping Count of Culture, Creativity and Copyright – A comparison of approaches assessing the economic contribution of copyright, creative and cultural industries*, Finnish Copyright Society / Finnish Copyright Institute, F©S Articles and Studies No 3 (January 2013), available at http://www.copyrightsociety.fi/ci/KEEPING_COUNT_OF_CULTURE_CREATIVITY_AND_COPYRIGHT.pdf. Visited on 15.12.2015.

Appendices

A. METHODOLOGY CARD

Methodology card as presented in the Methodology Handbook, draft version 16.12.2015.

Area: Context in which the copyright system operates	Methodology card 1. The macroeconomic importance of copyright industries	
Key question	What is the overall importance of copyright industries in the national economy?	
Type of data	<i>objective data</i>	
Description	The relative economic contribution or significance of those industries that are substantially dependant on copyright in the national economy, as compared to other macroeconomic figures such as gross domestic product, total national foreign trade and the total employed labor force.	
Parameters to measure	<ol style="list-style-type: none"> 1. The value added of copyright industries as a share of GDP 2. The number of employees in copyright industries as a share of the total employed labor force 3. The value of exports and imports in copyright industries as a percentage of total national foreign trade 4. The capital value of copyright assets: an estimation of the amount of future income flows of national copyright assets (at present value) 	
Guidelines for data collection	Information can be found from available national and international statistics and, when necessary, complemented with industry data. Detailed instructions for studies based on parameters 1, 2 and 3 can be found in the WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition). ⁴⁸ A method for evaluating the capital value of copyright assets (parameter 4) is described in a separate study by Sinervo and Toivonen (2012).	
Definitions	<i>Copyright industries</i>	Industries that “function under the protection of copyright and related rights”, as defined in the WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition), p. 30
	<i>Copyright asset</i>	Intangible right based on copyright that is owned by one or several copyright holders and has economic value
Limitations of the indicator	The data will only offer information on the relative importance of copyright industries in the whole economy. It can be affected to a large extent by economic trends as well as the industry structure.	

B. INFORMATION SOURCES

International:

- UK Department for Culture, Media & Sport, *Creative Industries Mapping Documents 2001 - Foreword* (9 April 2001), available at <https://www.gov.uk/government/publications/creative-industries-mapping-documents-2001>.

⁴⁸ WIPO publication No 893 E, available at <http://www.wipo.int/copyright/en/performance/>. Visited on 16.12.2015.

- *UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions* (2005), available at http://portal.unesco.org/en/ev.php-URL_ID=31038&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- *WIPO Guide on Surveying the Economic Contribution of the Copyright-Based Industries*, WIPO publication No 923 (2003).
- *WIPO Guide on Surveying the Economic Contribution of Copyright Industries (2015 Revised Edition)*, WIPO publication No 893 E, available at <http://www.wipo.int/copyright/en/performance/>.
- *WIPO Studies on the Economic Contribution of the Copyright Industries – Overview* (2014), available at http://www.wipo.int/export/sites/www/copyright/en/performance/pdf/economic_contribution_analysis_2014.pdf

Finland:

- *Culture Satellite Account; Final report of pilot project*. Publications of the Ministry of Education 2009:13 (2009), available at http://www.minedu.fi/OPM/Julkaisut/2009/culture_satelite.html?lang=en
- Esala P. & Manni Loukkola S., *Tekijänoikeudellisten alojen taloudellinen merkittävyys*. Vtt, Graafinen Laboratorio (1987).
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- Grönlund M., Pönni V., Toivonen T. E, Sinervo P. & Paasio A., *Economic Contribution of Copyright-based Industries in Finland 2005-2008*. Finnish Copyright Society / Finnish Copyright Institute Publications No 29 (2010), available at <http://www.cupore.fi/documents/Economic-net.pdf>.
- Grönlund M., Pönni V., Toivonen T. E. & Sinervo P., *Economic Contribution of Copyright-based Industries in Finland 2009-2012*. Finnish Copyright Society / Finnish Copyright Institute Publications No 32 (2014).
- Häkkinen L. & Taalas S. L., *Economic Contribution of Copyright-based Industries in Finland 2000, 2003, 2004 and 2005*. Finnish Copyright Society / Finnish Copyright Institute Publications No 28 (2008).
- Häkkinen L., *Keeping Count of Culture, Creativity and Copyright – A comparison of approaches assessing the economic contribution of copyright, creative and cultural industries*, Finnish Copyright Society / Finnish Copyright Institute, F@S Articles and Studies No 3 (January 2013), available at http://www.copyrightsociety.fi/ci/KEEPING_COUNT_OF_CULTURE_CREATIVITY_AND_COPYRIGHT.pdf
- Koskinen-Olsson T., *Direct Copyright Revenue Streams in Creative Industries in Finland – Evaluation Model*, Finnish Copyright Society / Finnish Copyright Institute, Publication No 30 (2010), available at http://www.copyrightsociety.fi/ci/TU1005_Direct-net.pdf
- Koskinen-Olsson T. & Muikku J., *Direct Copyright Revenue Streams in Creative Industries in Finland – An Evaluation*, Finnish Copyright Society / Finnish Copyright Institute, Publication No 31 (2014), available at http://www.copyrightsociety.fi/TU1302_Direct%20Copyright%20Revenue%20Streams_final%20%282%29.pdf
- Official Statistics of Finland (OSF):
 - *Annual national accounts*, Appendix table 1. Gross domestic product (GDP) at market prices 1975-2014*. Helsinki: Statistics Finland (2014). Available at http://www.stat.fi/til/vtp/2014/vtp_2014_2015-03-02_tau_001_en.html.

- *Culture satellite accounts* (description of statistics) (2013). Available at http://www.stat.fi/meta/til/klts_en.html
- *National Accounts 2014* (2015). Available at http://tilastokeskus.fi/til/vtp/2014/vtp_2014_2015-03-02_en.pdf.
- *PX-Web Statfin*, available at http://pxnet2.stat.fi/PXWeb/pxweb/fi/StatFin/StatFin__kan__klts/?tablelist=true
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- Sinervo P. & Toivonen T. E., *The Capital Value of Copyright Assets in Finland*. BID Business and Innovation Development (University of Turku), the Finnish Copyright Society, the Finnish Copyright Institute and Foundation for Cultural Policy Research Cupore (2012), available at <http://www.cupore.fi/documents/CapitalValue.pdf>
- *The Value of Culture? – Committee report on the contribution of culture to the national economy*. Publications of the Ministry of Education 2008:37 (2008), available at http://www.minedu.fi/OPM/Julkaisut/2008/Culture.html?lang=fi&extra_locale=en

C. CONSULTED PARTIES

Mikko Grönlund, Research Manager, and Petteri Sinervo, Head of Development and Deputy Director, Brahea Centre at the University of Turku (email on 23.11.2015)

Assessing Copyright and Related Rights Systems: Piloting of the methodology framework in Finland

Cupore webpublications 39:1	<i>National Context. Report on Piloting in Finland.</i>
Cupore webpublications 39:2	<i>International and Regional Context. Report on Piloting in Finland.</i>
Cupore webpublications 39:3	<i>Technological Development. Report on Piloting in Finland.</i>
Cupore webpublications 39:4	<i>Macroeconomic Importance of Copyright Industries. Report on Piloting in Finland.</i>
Cupore webpublications 39:5	<i>Markets for Copyrighted Products and Services – Focus: Literature (Book Publishing Industry). Report on Piloting in Finland.</i>
Cupore webpublications 39:6	<i>Volume of Domestic Production of Copyrighted Products and Services. Report on Piloting in Finland.</i>
Cupore webpublications 39:7	<i>Volume of Exported and Imported Copyrighted Products and Services. Report on Piloting in Finland.</i>
Cupore webpublications 39:8	<i>Development of Digital Business Models and Income Based on Digital Distribution. Report on Piloting in Finland.</i>
Cupore webpublications 39:9	<i>Copyright Law. Report on Piloting in Finland.</i>
Cupore webpublications 39:10	<i>Copyright Policy. Report on Piloting in Finland.</i>
Cupore webpublications 39:11	<i>Public Consultation on Law Proposals. Report on Piloting in Finland.</i>
Cupore webpublications 39:12	<i>Use of Impact Assessment and Research in Policy Development. Report on Piloting in Finland.</i>
Cupore webpublications 39:13	<i>Public Administration of Copyright. Report on Piloting in Finland.</i>
Cupore webpublications 39:14	<i>Enforcement by Public and Private Actors – Focus: Public Authorities. Report on Piloting in Finland.</i>
Cupore webpublications 39:15	<i>Enforcement by Public and Private Actors – Focus: Private Actors. Report on Piloting in Finland.</i>
Cupore webpublications 39:16	<i>Sanctions and Remedies for Copyright Infringement. Report on Piloting in Finland.</i>
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