

The Economic Contribution of Copyright-Based Industries in Latvia



Creative Industries Series No. 1



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The Economic Contribution of Copyright-Based Industries in Latvia

THE 2000 REPORT

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2004

With the support of the World Intellectual Property Organization, the Finnish Ministry of Education and Culture and the Dutch Copyright Federation.

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Printed by SIA „Apgāds Mantojums”

1. Executive Summary

Copyright industries are involved in the creation, production, and dissemination of materials covered by copyright laws and play increasingly important economic roles in contemporary societies. This study considers the economic contribution of copyright based industries to the Latvian economy in 2000, a base year now being employed for international comparisons.

This study was undertaken in cooperation with the Ministry of Culture of the Republic of Latvia and the Central Statistical Bureau of Latvia, with support from the World Intellectual Property Organization, the Finnish Ministry of Education and Culture and the Dutch Copyright Federation. The report was produced by Prof. Robert G. Picard of the Media Management and Transformation Centre, Jönköping International Business School, Jönköping University, Sweden, and Timo E. Toivonen of the Media Group, Business Research and Development Centre, Turku School of Economics and Business Administration, Finland.

The research was overseen by a steering committee that provided support, advice, and evaluation of the study. Members of the steering committee were Dimiter Gantchev, World Intellectual Property Organization, Switzerland; Guntis Jekabsons, Ministry of Culture, Latvia; Jukka Liedes, Ministry of Education and Culture, Finland; and Willem Wanrooij, Dutch Copyright Federation, the Netherlands.

The study reveals that core and interdependent copyright industries contributed 4 percent of GDP and 4.4 percent of employment to the Latvian economy in the year 2000. Print media, advertising, and software and databases made the most important economic contributions.

Copyright industries:

- **produced a turnover of €832 million;**
- **contributed value added of €315 million;**
- **provided employment to 41,225 persons**

Copyright industries in Latvia make a larger contribution to GDP than those in Austria, Belgium, Greece, Ireland, Luxembourg, Portugal, and Spain.

The contribution of the core and interdependent copyright industries exceeds those of many other industries in the Latvian economy:

Copyright industries contribute:

- **2 and a half times more value to GDP than the manufacture of textiles and textile products;**
- **8 times more than the manufacture of machinery and equipment;**
- **7 times more employment than the manufacture of transport equipment**
- **almost 9 times more employment than the production of meat products***

* These differences are based on comparisons of the total value of the core and interdependent copyright industries contribution to data on the other industries compiled by the Central Statistical Bureau of Latvia and Eurostat.

In addition to the clear contribution of the core and interdependent copyright industries, other industries whose activities involve partial use, transport, and other support of copyrighted products and goods also contribute to the economy. Based on rough estimates in this study, these contribute an additional €93.27 million in value added and 11,218 in employment to the Latvian economy.

Due to the nature of trade statistics, full data regarding copyright industries was not available. However, data for four major copyright industries revealed that Latvian exports related to copyright account for more than €35 million and produce a trade surplus of nearly €17 million. Latvian copyright industries show negative trade balances for books and newspapers and periodicals, but positive trade balances for other printed matter and art.

2. Introduction

The object of copyright is a work. The work is a product of the human mind that exemplifies the original creative input of its designer. The copyrighted part of a copyright good is consumed in the mind of the consumer. Copyright products and goods have important social and cultural functions, but they also make a significant economic contribution by creating economic value.

Copyright and neighbouring rights (sometimes called related rights) are a part of intellectual property rights that are created in the legal system to enhance the creation and to protect the ownership of the original creator. In the legal system, copyright and neighbouring rights constitute only a part of intellectual property rights. The other part consists of industrial property rights, such as patents. What distinguishes copyright from other intellectual property rights is that copyright follows the creation of a work without a separate recognition process of that right.

This study concentrates on copyright and neighbouring rights. Copyright covers creative work such as a writer putting words down on paper, a photographer taking a photograph, or a software designer creating a code. Neighbouring rights include rights of performing artists, rights of television and radio broadcasters, rights of producers of phonograms, and rights of producers of motion pictures. In this study the term 'copyright' is used in most cases to cover both copyright and neighbouring rights.

Works protected by copyright and other subject matter protected by neighbouring rights and industries exploiting material protected by copyright are important factors in the economies of industrialised countries. The economic impact of the copyright industries exceeds that of many more traditional industries. In several countries works and other subject matter are also an important source of export income.

The ability to exploit the economic values related to the work or other subject matter is important for the right holder of protected material. Some protected material, such as literary works, phonograms or computer software, can be copied and reproduced relatively easily. Moreover, the growth of the Internet has made it possible to distribute works rapidly and extensively at little or no cost. Copyright and neighbouring rights protection is needed to ensure that the creator of a work or the right holder of other subject matter is rewarded for the exploitation of the work or other production. By creating legal safeguards for protected material and by enforcing these protective legislative measures, laws, and legal enactments, nations can promote the development of copyright industries into important business sectors.

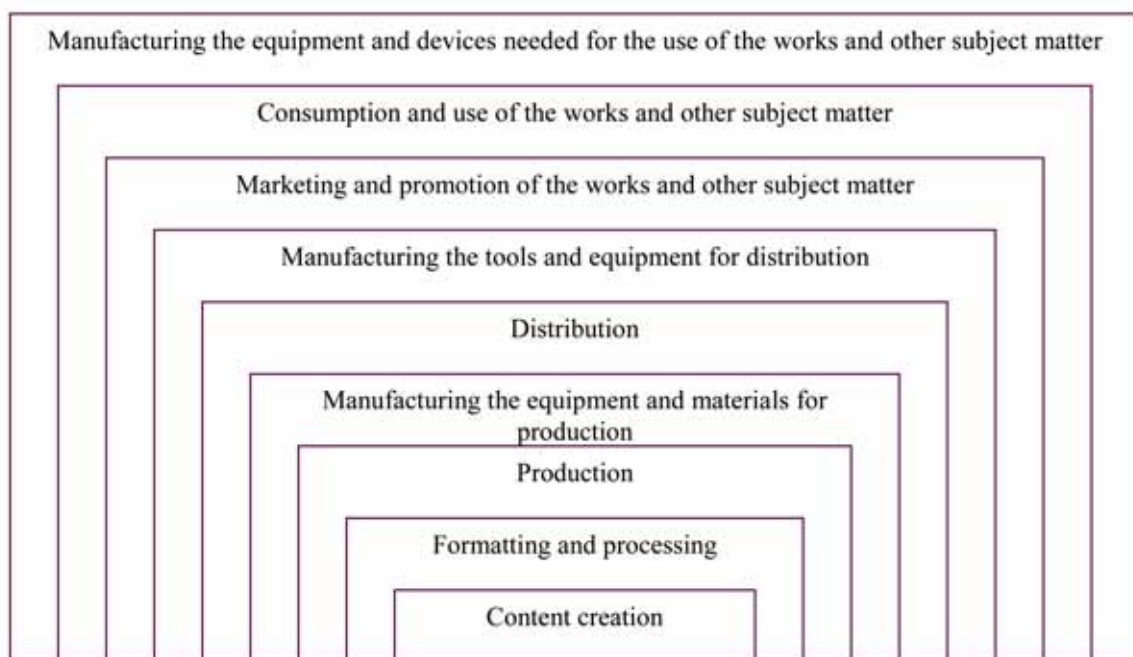
In each country, the concept of copyright and neighbouring rights protection is defined in the legislation. A high degree of international consistency is achieved through international conventions.

As content industries and new information and communication technologies keep increasing the overall importance of copyright-protected products and goods in post-industrial society, copyright has more and more been studied from the economic and business perspective. The subjects of these studies include the economic contribution of copyright to national economies.

The economic contribution of copyright has been studied in a number of nations, including Austria (1986), Australia (1981, 1986, 1993, 2001), Canada (1980, 2002), Finland (1991, 2000), Germany (1986), the Netherlands (1982, 1985, 1989, 1994 and 1998), New Zealand (1988), Norway (2002), Sweden (1978), the UK (1982, 1990, 2001), and the USA (1977, 1982, 1989, 1990, 1991, 1992, and annually since 1994). A Europe-wide study was carried out for the European Commission in 2003 covering all EU member states at that time.

The creation of works and other subject matter forms only part of the economic impact of copyright. One can, on good grounds, say that the creation of a work is the starting point in its exploitation. However, in many cases the work needs to be modified, packaged, duplicated and distributed for the use of consumers. Figure 1 outlines the activities related to the production, distribution (referring to all acts of dissemination or diffusion, including distribution of physical copies, communication to the public and broadcasting) and use of copyright-protected material. As can be seen, the activities involved are numerous. Works and other subject matter project their effects on the economy when they are created or produced, distributed and finally used.

Figure 1: Economic Activities Related to the Production, Packaging and Distribution of Material Protected by Copyright and Neighbouring Rights



Source: Economic Importance of Copyright Industries in Finland (2000)

Obviously the activities related to the creation, production, distribution and use of works and other subject matter vary in different categories of works, as well as other subject matter. For example, a literary work, such as a book in its traditional form, must be printed and physically distributed, but no special equipment is needed to use it. Phonograms, on the other hand, must also be stored in some format, for example on a C-cassette, a CD or in an MP3-file. Recorded music can be distributed either physically on CDs or cassettes through music stores or by mail delivery, or communicated in digital form via the Internet, in which case additional equipment is needed for transmission. The use, such as listening to recorded music, always requires a device, for instance a CD player.

The demand for material protected by copyright or neighbouring rights can be divided according to the use of the material. The demand can be either direct or indirect. Direct demand means that the work or other subject matter is "consumed" as it is by the purchaser. Indirect demand means that the work or other subject matter is used by the purchaser in other productions or in other works and that in some cases the material may be modified.

3. Copyright-Based Industries in the context of the National Economy

3.1. Latvian Copyright Law

The history of copyright protection in Latvia dates back to March 20, 1911 when the law "On author's rights" was adopted. Since then several laws have been passed based on political, legislative and technological developments:

- 1937 - "On author's rights" ;
- 1963 - "Authors rights" (part of the Civil Code);
- 1993 - "On copyright and neighbouring rights" .
- 2000 - "*Copyright Law*," the law in force, was adopted on April 6.

The 2000 *Copyright Law* incorporates all the principles of copyright that are found in all major international agreements to which Latvia is a signatory: the Berne Convention for the Protection of Literary and Artistic Works, the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention), the Geneva Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of Their Phonograms, the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.

Since May 1, 2004 Latvia has been a member of the European Union and EU directives have become a part of the Latvian legal system. The *Copyright Law* has been harmonized with EU directives: on the legal protection of computer programs (91/250/EEC), on rental rights and lending rights and on certain related rights (92/100/EEC), on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission (93/83/EEC), harmonizing the term of protection of copyright and certain related rights (93/98/EEC), on the legal protection of databases (96/9/EC), on the harmonisation of certain aspects of copyright and related rights in the information society (2001/29/EC), on the resale right for the benefit of the author of an original work of art (2001/84/EC).

Unlike all other previous laws, the *Copyright Law* recognizes and protects the rights of all works and all right holders that enjoy protection at international level. The *Copyright Law* defines protected works as the "result of an author's creative activities in the literary, scientific or artistic domain, irrespective of the mode or form of its expression and its value". There is no special registration or any other formality needed to receive copyright protection. Neighbouring rights are also protected under the *Copyright Law*.

3.2. Copyright-Based Industries

Four copyright industry groupings are recognised as making economic contributions and are defined and discussed in the WIPO *Guide on Surveying the Economic Contribution of the Copyright-Based Industries* (2003): Core Copyright Industries, Interdependent Copyright Industries, Partial Copyright Industries, and Non-Dedicated Support Industries.

The primary categories are the core copyright industries and the interdependent copyright industries. Core industries are wholly engaged in creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter. Interdependent industries are engaged in production, manufacture and sale of equipment whose function is wholly or primarily to facilitate the creation, production or use of works and other protected subject matter.

Two types of industry provide some economic contributions related to copyright but the industries themselves are not copyright industries. The partial copyright industries are industries in which a portion of the activities is related to protected works and subject matter, such as apparel, jewelry, wall coverings, and design. The non-dedicated support industries are industries in which a portion of the economic contribution involves copyrighted works and subject matter not included in the core and interdependent categories, such as transport, telephony, and retailing.

Copyright contributions in the secondary categories, namely the partial and the non-dedicated copyright industries, are not reported separately in national accounts statistics and require sophisticated sampling and estimation techniques that were beyond the scope of this analysis. Basic data for the industries covered by the partial and non-dedicated support categories that were available in Latvian statistics are presented in this report with rough estimates of the portion attributable to copyright industries.

3.2.1. Core Copyright Industries

As stated in the previous chapter, copyright protection projects or produces economic effects widely throughout the economy. Works and other subject matter make different contributions to different sectors of the economy. It is possible to identify sectors or industries where copyright and neighbouring rights have fundamental importance, that is to say industries which would not exist without copyright-protected works and other protected subject matter. These industries can be called core copyright industries. Additionally, other sectors or industries can be classified according to the importance of copyright. *Table 1* describes the industries that are considered to be the core copyright industries.

The core copyright industries operate almost exclusively with material protected by copyright and neighbouring rights. These industries create, produce or distribute works and other subject matter. All activities in these industries are tied to protected material, and their existence depends on copyright and neighbouring rights protection. In this study, all the activities of these industries are included in the measurement of the economic contribution of copyright and neighbouring rights unless some part of the operation is clearly identifiable as not copyright-related.

Table 1: Core Copyright Industries

Type of Copyright Industry	Main Groups of Industries	Subgroups
Core copyright industries	Press and literature	<ul style="list-style-type: none"> • Authors, writers, translators • Newspapers • News and feature agencies • Magazines/periodicals • Book publishing • Cards and maps, directories and other published material • Pre-press, printing and post-press of books, magazines, newspapers and advertising materials • Wholesale and retail of press and literature • Libraries
	Music, theatrical productions and opera	<ul style="list-style-type: none"> • Composers, lyricists, arrangers, choreographers, directors, performers and other personnel • Printing and publishing of music • Production/manufacturing of recorded music • Wholesale and retail of recorded music • Artistic and literary creation and interpretation • Performances and allied agencies
	Motion pictures and video	<ul style="list-style-type: none"> • Writers, directors, actors etc. • Motion pictures and video production and distribution • Motion picture exhibition • Video rentals and sales, video on demand • Allied services
	Radio and television	<ul style="list-style-type: none"> • National radio and television broadcasting companies • Other radio and television broadcasters • Independent producers • Cable television (systems and channels) • Satellite television • Allied services
	Photography	<ul style="list-style-type: none"> • Studios and commercial photography • Photo agencies and libraries
	Software and databases	<ul style="list-style-type: none"> • Programming, development and design, manufacturing • Wholesale and retail of pre-packaged software • Database processing and publishing
	Visual and graphic arts	<ul style="list-style-type: none"> • Artists • Art galleries, other wholesale and retail • Picture framing and other allied services • Graphic design
	Advertising services	<ul style="list-style-type: none"> • Agencies, buying services
	Copyright collecting societies	

3.2.2. Interdependent Copyright Industries

Interdependent copyright industries are industries that are engaged in production, manufacture and sale of equipment whose function is wholly or primarily to facilitate the creation, production or use of works and other protected subject matter. The interdependent industries can be divided on the basis of their complementarities with the core copyright industries into core interdependent and partially interdependent copyright industries. The first group includes industries that produce goods that are jointly consumed with the products of core copyright industries. The second group includes industries that produce goods that to some extent contain some part of copyright material but to a lesser extent than core interdependent industry products. The core interdependent copyright industries and partial interdependent copyright industries are described in *Table 2*.

Table 2: Interdependent Copyright Industries

Type of Copyright Industry	Main Groups of Industries	Subgroups
Core interdependent copyright industries	TV sets, radios, VCRs, CD players, DVD players, cassette players, electronic game equipment, and other similar equipment	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail
	Computers and equipment	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail
	Musical instruments	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail
Partial interdependent copyright industries	Photographic and cinematographic instruments	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail
	Photocopiers	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail
	Blank recording material	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail
	Paper	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail

Interdependent copyright industries are closely associated with copyright-protected material, either with their production or exploitation. These industries produce and manufacture hardware used in the creation, production, transmission in the networks or consumption of works and other subject matter. Obviously, the hardware can also be used in connection with material, which is not protected by copyright or neighbouring rights, although such use is only a fraction of the total.

3.2.3. Partial Copyright Industries

The industries in which activities and production partially depend on material protected by copyright or neighbouring rights are called partial copyright industries. Material protected by copyright and neighbouring rights generates part of the production value of such industries. However, the impact of works and other subject matter on the total production value and employment of these industries is difficult to calculate accurately and the proportion varies between industries and nations. In this study, the contributions of these industries are separated from the more direct copyright contribution calculations for precision, but data on partial industries and the estimated copyright contributions are included in section 4.3.

3.2.4. Non-Dedicated Copyright Industries

Industries whose contribution is enhanced because they provide support to copyright industries — such as transportation, telephony, and general retailing — are called non-dedicated support industries. As is the case with partial copyright industries, the impact of copyright products and goods on the production value and employment of these industries is difficult to calculate accurately and the proportions vary between industries and nations. In this study, the contributions of these industries are separated from the more direct copyright contribution calculations for precision, but data on non-dedicated support industries and the estimated copyright contribution are included in section 4.4.

3.3. Measurement of the Economic Contribution of Copyright and Neighbouring Rights

The size of an industry can be described in many ways: net sales, turnover, number of employees, value of assets and net profits. When estimating the contribution of an industry to the total economy, one can obviously calculate the industry's relative share of the total employment, the total profit of the industry, etc., but these indicators have some weaknesses. They do not measure accurately the economic contribution of the industry but rather some other aspects. Turnover, for example, actually measures the gross output of an industry. Gross output in turn contains double counting of certain activities. For example, the printing and publishing sector turnover (and thus gross output) includes the cost of paper, which is also included in the gross output of the paper industry.

The best method for assessing the economic contribution of an industry is to use value added or the Gross Value Added (GVA). The contribution of an industry is the share of its value added of the Gross Domestic Product (GDP). The value added of an industry can be calculated in different ways. One way is to deduct other costs except labour and capital costs from net revenues. Another method is to add labour costs (including all social security contributions and taxes) to operating profit. The value added of an industry is obviously the sum of the figures for all the companies in that sector.

All the previous studies on the economic contribution of copyright and neighbouring rights have used value added or GVA and its share of GDP as the main indicator. In addition to value added, the studies present the labour force figures for the copyright based industries and their share of total employment.

3.4 Study Methods

In this study the economic contribution of copyright and neighbouring rights is measured according to the guidelines drawn up by the World Intellectual Property Organization (WIPO).

The study includes core copyright industries and interdependent copyright industries (copyright hardware). The categories of "partial copyright industries" and "non-dedicated support industries" are only partially included in the calculations because of the inability to adequately estimate portions of their contribution related to copyright.

The indicators for the contribution of Latvian copyright industries to the national economy are turnover, value added and the number of employees. The value added is obtained when labour costs (including social security contributions and taxes) are added to the operating margin and the income from the sale of fixed assets is deducted from this sum. The GDP share of GVA is calculated to reveal the economic contribution of the copyright industries to the domestic economy. In addition to the value added, the work force of the copyright industries is calculated and compared with the total work force in Latvia. The study also presents some values of the foreign trade of copyrighted goods in Latvia.

All the previous studies in this field have used the same approach: they identify and classify copyright industries and calculate their value added. Revenues, the number of employees and exports have been presented as additional information in some studies.

The data were collected primarily from Eurostat industrial statistics. In order to fill the rather substantial gaps in the Eurostat data some additional sources were used including European Audiovisual Observatory and OECD and UNESCO statistics. Assistance was also provided by the staff of the Central Statistical Bureau of Latvia.

The Eurostat data source used is New Cronos database, theme 4: Industry, Trade and Services: Annual Enterprise Statistics. The values for turnover are the indicator 12110 Turnover, the values for value added are the indicator 12150 Value Added at Factor Cost, and the values for number of employees are the indicator 16130 Number of Employees.

For some industries the turnover data was available but the value added data was unobtainable. In those cases the assessment of the value added was made by calculating the average value added to turnover share in the EU-15 countries for that particular industry and using that average share to calculate the value added from the turnover of that particular Latvian industry.

Data for the artistic and literary creation and performances category was not available from the standard data sources. This category is an important one for both cultural and economic reasons. We suggest that follow-up activities seek information from professional and trade organizations, as this was not possible within the framework of the current study.

This study does not include copyright piracy or other illegal uses of copyright-protected works and other protected subject matter, because such activities are not included in the official or other statistics used.

4. Economic contribution of Copyright Industries in the Latvian economy

4.1. Contribution of the Core Copyright Industries

This section presents the figures for the core copyright industries in Latvia. The year chosen for the analysis is 2000. *Table 3* shows that the reported combined turnover of the core copyright industries was €532 million and the reported combined value added was €228 million, which is 2.9% of GDP. The combined reported number of employees in the core copyright industries was 34,556, which represents 3.7% of the total workforce. The difference in the share of GDP and the share of workforce is partly explained by the fact that in some industries data on the number of employees were available whereas the turnover and value added data were not.

Data with which to assess the economic contributions of photography and visual and graphic arts was not available. The situation is rather similar to the EU-15 countries where the problems of data availability were encountered for the same industries.

Table 3: Economic Contribution of Latvian Core Copyright Industries in 2000

CORE COPYRIGHT INDUSTRIES	Turnover (million €)	Value added (million €)	Value added / GDP	Number of employees	Employees / total employment
Press and Literature	272.1	105.7	0.014	15,794	0.017
Newspapers	30.1	15.6		1,865	
News and feature agencies, etc.					
Magazines and periodicals	46.2	24.2		1,854	
Books, maps	24.1	8.6		835	
Other publishing (cards, directories, etc.)	0.7	0.1		80	
Pre-press, printing, and post press of published materials	80.1	40.2		3,609	
Retail of press and literatures	77.0	10.5		2,901	
Libraries ¹	13.9	6.5		4,650	
Music, Theatrical Productions, Opera	7.5	0.9	0.000	573	0.01
Printing and publishing of sheet music	0.7	0.1		60	
Reproduction of recorded music				279	
Wholesale and retail of recorded music ²	6.8	.,8		234	
Artistic and literary creation and interpretation					
Performances and allied agencies (booking agencies, ticket agencies, etc)					

Table 3 (continued)

¹ Source: UNESCO library statistics.

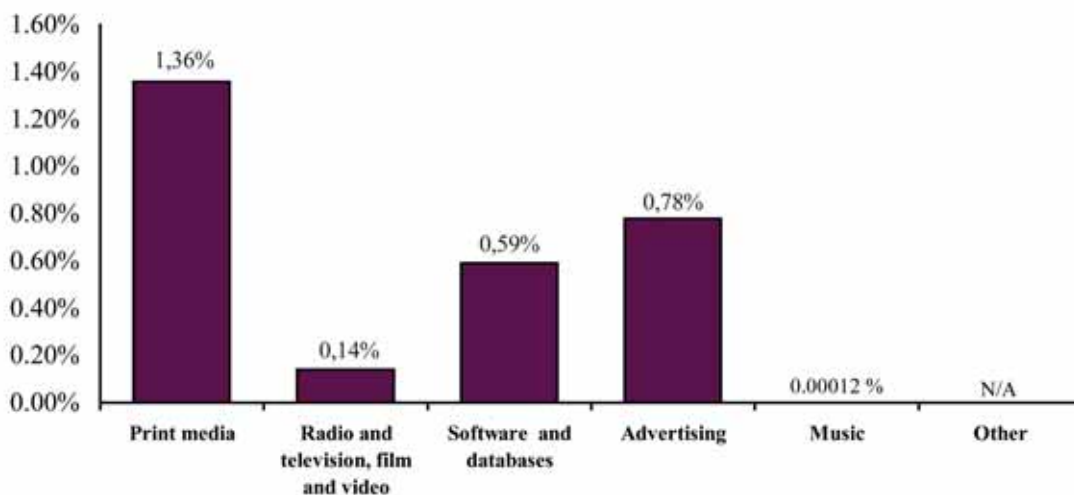
² Turnover from the recording industry data, estimated value added based on the average EU-15 value added to turnover ratio in music sales. Sources: Eurostat New Cronos and Factors and Impacts in the Information Society. A Prospective Analysis in the Candidate Countries. Report on Latvia, March 2004.

Table 3 (continued)

Film and Video	7.3	3.4	0.000	2,951	0.003
Motion picture and video production				1,572	
Motion picture and video distribution				180	
Motion picture exhibition ³	5.3	2.4		1,199	
Video rentals and sales	2.0	1.0			
Photography					
Photographic Services, Studios, etc.					
Visual and Graphic Arts					
Art galleries and other wholesale and retail					
Radio and Television	43	11	0.001	8,900	0.009
Radio and television activities ⁴	43.0	11.1		8,900	
Transmission via cable and satellite networks					
Software and Databases⁵	97.9	45.9	0.006	3,947	0.004
Advertising	104.3	60.7	0.008	2,401	0.003
TOTAL	532	228	2.9%	34,566	3.7%

The economic contribution of copyright industries is not evenly distributed between them. The two largest copyright industries, the press and literature and advertising, account for more than two thirds of the total value added of the core copyright industries.

Figure 2: Contribution of Latvian Core Copyright Sectors to GDP



³ Estimated from gross box office for year 2000. Source: European Audiovisual Observatory Yearbook 2002, vol. 3.

⁴ Value added estimated according to average value added to turnover share in the EU-15.

⁵ Sources: Eurostat New Cronos and Factors and Impacts in the Information Society. A Prospective Analysis in the Candidate Countries. Report on Latvia, March 2004.

4.2. Contribution of the Interdependent Copyright Industries

Table 4 shows the economic impact of the interdependent copyright industries (copyright hardware). The turnover of these industries amounted to €300.7 million. The value added of these industries was €86.8 million, which represents 1.1% of GDP.

The total contribution to GDP is the aggregate of core copyright industries (2.9%) and interdependent copyright industries (1.1%), which makes 4.0%. In comparison, the corresponding figure for the EU-15 industries in 2000 was 5.3%.

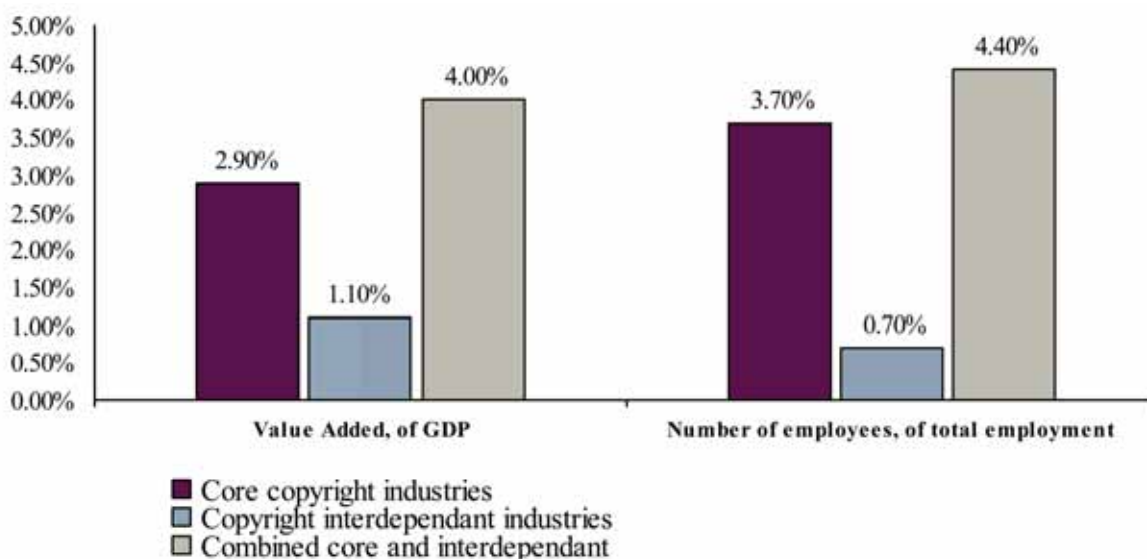
The total share of employment is the sum of core copyright industries (3.7%) and interdependent copyright industries (0.7%), which makes 4.4%.

Table 4: Economic Contribution of Latvian Interdependent Copyright Industries in 2000

COPYRIGHT DEPENDENT INDUSTRIES	Turnover (million €)	Value added (million €)	Value added / GDP	Number of employees	Employees / total employment
TV sets, radio sets, VCRs, CD players, cassettes, and other equipment	3.0	0.3	0.000	356	0.000
Manufacture	3.0	0.3		356	
Wholesale and retail of radio and television goods and musical instruments	203.0	42.0	0.005	6,069	0.006
Computers and Equipment	42.0	18.1	0.002	143	0.000
Manufacture	15.8	2.2		143	
Wholesale and retail ⁶	26.2	15.9			
Musical Instruments	0.1	0.1	0.000	26	0.000
Manufacture	0.1	0.1		26	
Photographic and Cinematographic Instruments	1.0	0.6	0.000	65	0.000
Manufacture	1.0	0.6		65	
Manufacture of prepared unrecorded media					
Manufacture of paper	51.6	25.7			
TOTAL	300.7	86.8	1.1%	6,659,0	0.7%

⁶ Includes wholesale only. Source: Factors and Impacts in the Information Society. A Prospective Analysis in the Candidate Countries. Report on Latvia, March 2004.

Figure 3: Latvian Core and Interdependent Contributions Compared and Combined



4.3. Contribution of the Partial Copyright Industries

Data on partial copyright industries was collected for this study, however, independent estimates for the portions directly attributable to copyright in Latvia have not been made. The contributions for those overall industries are:

Table 5. Turnover, Value-Added, and Employment in Partial Copyright Industries

	Turnover	Value added	Number of employees
Manufacture of textiles and textile products	274	115.2	24,963
Manufacture of wearing apparel; dressing; dyeing of fur	111.6	52.6	14,301
Manufacture of footwear	5.1	1.1	653
Manufacture of wallpaper	: cp	: cp	53 p
Manufacture of furniture	106.2	41.6	7,335
Striking of coins	: cp	: cp	1
Manufacture of jewellery and related articles n.e.c.	: cp	: cp	159 p
Manufacture of games and toys	6	3.8	728
Miscellaneous manufacturing n.e.c.	16	6.5	1439
Total	518.9	220.8	49,632

c=confidential data; p = provisional data

In two recent studies, Singapore and the USA, estimates of the contribution of the partial copyright industries were made. No independent estimate has been made for Latvia.⁷ However, using an averaged factor based on the Singapore and USA studies to establish the potential percentage of the partial copyright industry in Latvia attributable to copyright, this industry can be considered to have contributed an additional value added of €22.47 million and 4,182 employees in 2000.

⁷ Creation of accurate factors to estimate the copyright-related value requires survey work and discussion with industry personnel which was beyond the scope of this study. Appropriate factors will vary from country to country depending upon industry structure, production methods, costs for resources and production, and prices for goods and services sold.

Table 6. Calculation of Partial Copyright Industry Contributions

	Averaged Factor*	Latvian Value-Added million €	Latvian Employment
Manufacture of textiles and textile products	0.42%	0.48	105
Manufacture of wearing apparel; dressing; dyeing of fur	0.46%	0.24	66
Manufacture of footwear	0.42%	0.00	3
Manufacture of wallpaper	1.65%		1
Manufacture of furniture	41.00%	17.06	3,007
Striking of coins	8.25%		0
Manufacture of jewellery and related articles n.e.c.	9.13%		15
Manufacture of games and toys	45.50%	1.73	331
Miscellaneous manufacturing n.e.c.	45.50%	2.96	655
Total		22.47	4,182

*This factor is an average based on factors used in studies recently completed in Singapore and the USA.

4.4. Contribution of the Non-Dedicated Support Industries

Data on non-dedicated support industries was collected for this study; however, independent estimates for the portions directly attributable to copyright in Latvia have not been made. The contributions for those industries overall are:

Table 7. Turnover, Value-Added, and Employment in Non-Dedicated Support Industries

	Turnover	Value added	Number of employees
Wholesale trade and commission trade, except motor vehicles and motorcycles	5159.3	605.8	42,169
Retail trade, except motor vehicles, motorcycles; repair of personal and household goods	2179.6	250.6	8,2879
Land transport; transport via pipelines	533.1	256.2	38,574
Water transport	5.8	1.7	355
Air transport	59.5	11.4	577
Support and ancillary transport activities; activities of travel agencies	953.5	350.3	14,860
Post and courier activities	: c	: c	7,352
Telecommunications	: cp	: cp	6,771
Total	8890.8	1476	193,537

c = confidential data; p = provisional data

The direct contribution of the non-dedicated support industries to the Latvian economy has not been surveyed independently in this study. However, on the basis of the averaged factor derived from similar surveys in other countries it has been possible to estimate that the non-dedicated support industries in 2000 contributed an additional value €60.80 million and 7036 employees in 2000.

Table 8. Calculation of Non-Dedicated Support Industry Contribution

	Averaged Factor *	Latvian Value-Added, million €	Latvian Employment
Wholesale trade and commission trade, except motor vehicles and motorcycles	3.55%	21.51	1497
Retail trade, except motor vehicles, motorcycles; repair of personal and household goods	4.15%	10.40	3439
Land transport; transport via pipelines	3.08%	7.88	1186
Water transport	5.80%	0.10	21
Air transport	5.30%	0.60	31
Support and ancillary transport activities; activities of travel agencies	5.80%	20.32	862
Post and courier activities	5.80%		
Telecommunications	4.25%		
Total		60.80	7036

*This factor is an average based on factors used in studies recently completed in Singapore and the USA.

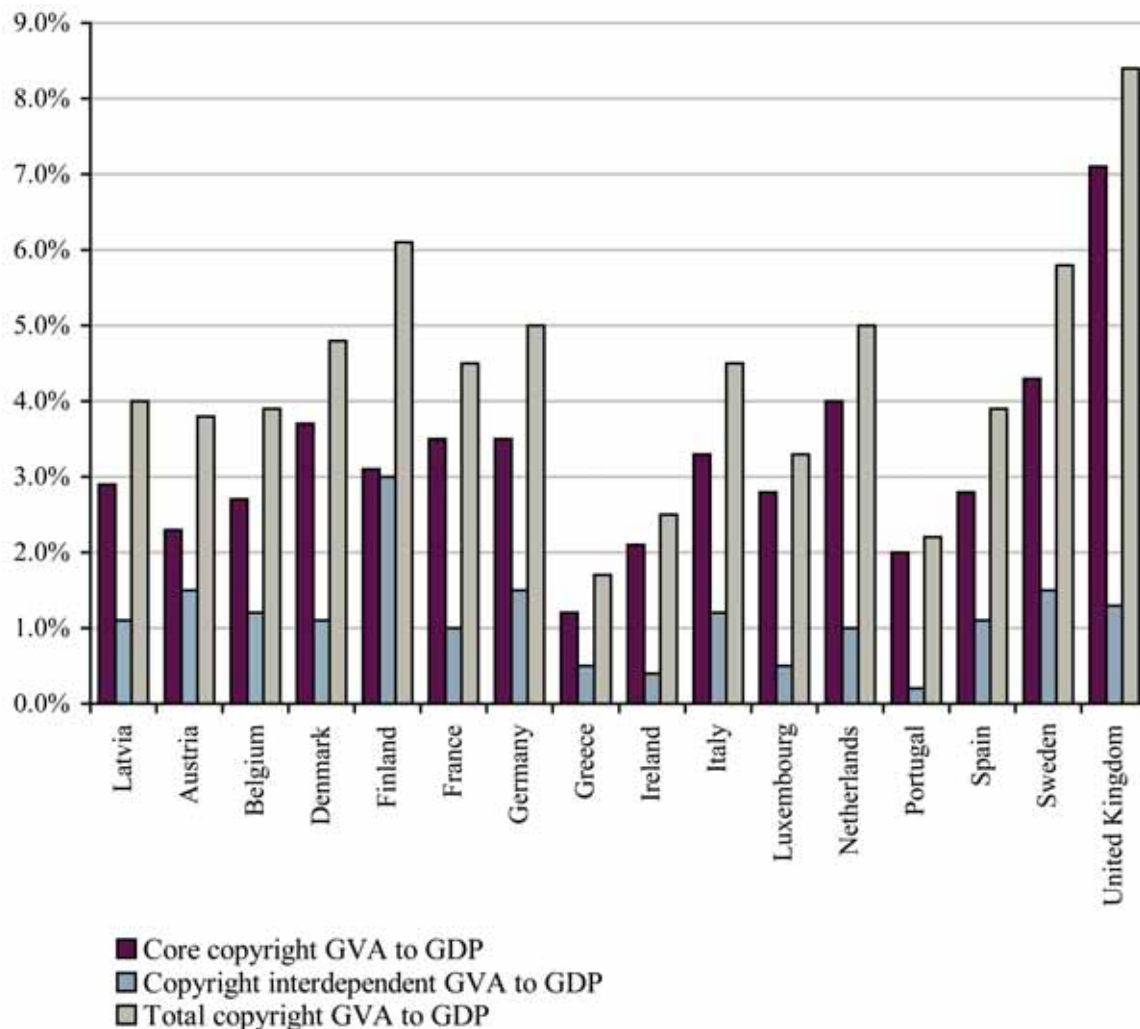
5. International Comparisons

Figure 4 compares the economic contributions of Latvian and the EU-15 copyright industries. For the core copyright industries, Latvia shows a larger contribution to GDP than Austria, Belgium, Greece, Ireland, Luxembourg, Portugal, and Spain.

The interdependent copyright industry contribution exceeds that of France, Greece, Ireland, Luxembourg, the Netherlands and Portugal and approximates that of Belgium, Denmark, Italy, and Spain. Only eight of the EU-15 member states show higher contributions for core and interdependent contributions combined.

It should be noted that research on contributions in other nations was based on a slightly different category of copyright industry. For a general comparison of contributions, however, these differences are not significant.

Figure 4: Comparison of the Economic Contribution of the Core and Interdependent Copyright Industries in Latvia and the EU-15 countries as a percentage of GDP.

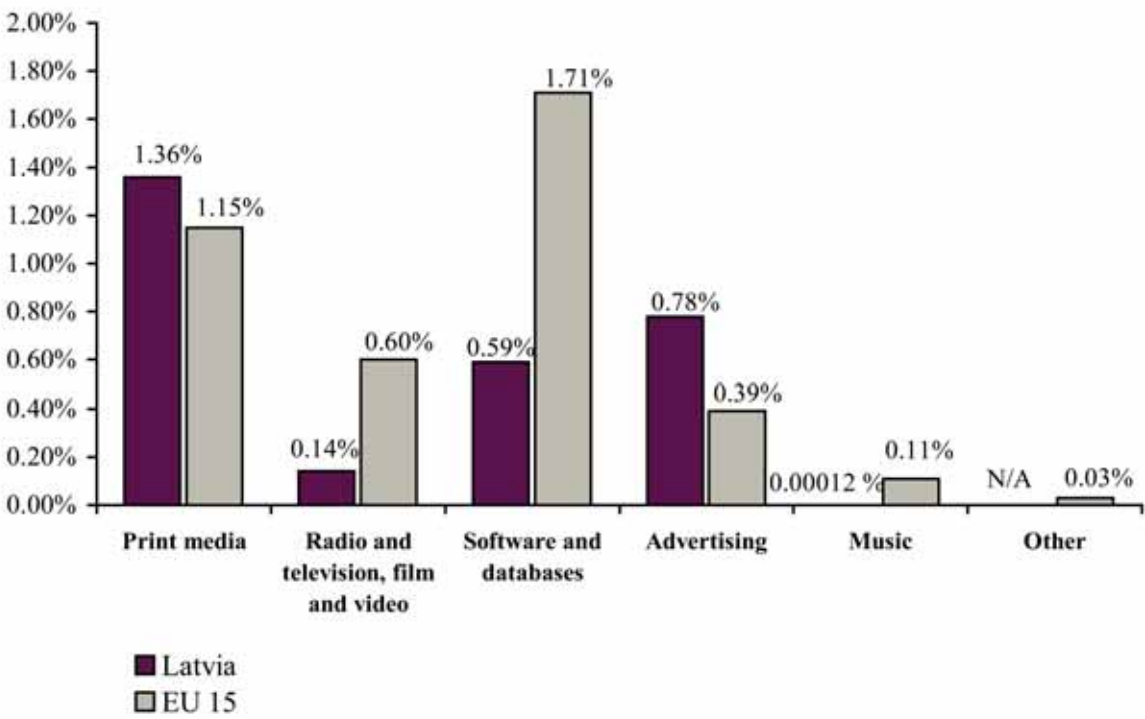


The comparison between core copyright industries in Latvia and the EU-15's total contribution to total GDP (Figure 5) indicates that

- the contribution of the category "print media" exceeds that of the EU-15 countries,
- falls short in the categories of
- "radio and television" where the contribution of Latvia is only one sixth of the EU-15's average,
- and "software and databases" where the contribution of Latvia is about one third.

Advertising has become an important contributor to the Latvian economy in a very short period of time. In 2000 it contributed 0.78% to GDP; that is twice the average share of advertising in the EU-15.

Figure 5: Comparison of the Economic Contribution of Sub-Categories of the Core Copyright Industries between Latvia and the EU-15

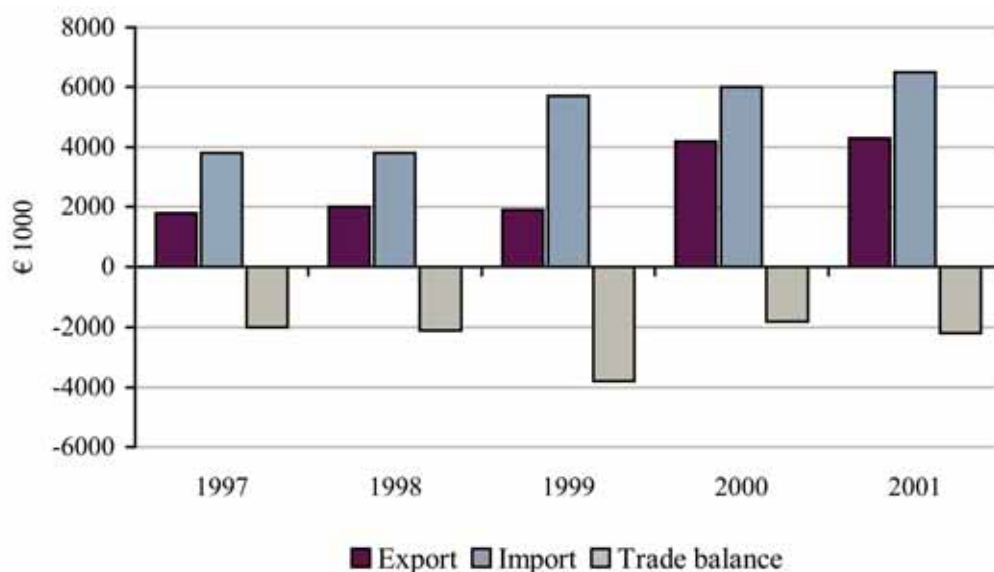


6. Foreign Trade in some Copyrighted Goods

This section documents the foreign trade in some copyrighted goods. The goods presented are books, newspapers and magazines, other printed matter (including other published print works and commercial printed material, such as advertising) and art works. The categories included here are limited by comparison to the overall copyright industries and are products rather than services. Limitations in categories used in available trade statistics did not permit the compilation of data for the full range of copyright industries. For the four categories of material for which data was available, overall exports amounted to a total value of €35.15 million and overall imports had a value of €18.4 million. This produced an overall trade surplus of €16.7.

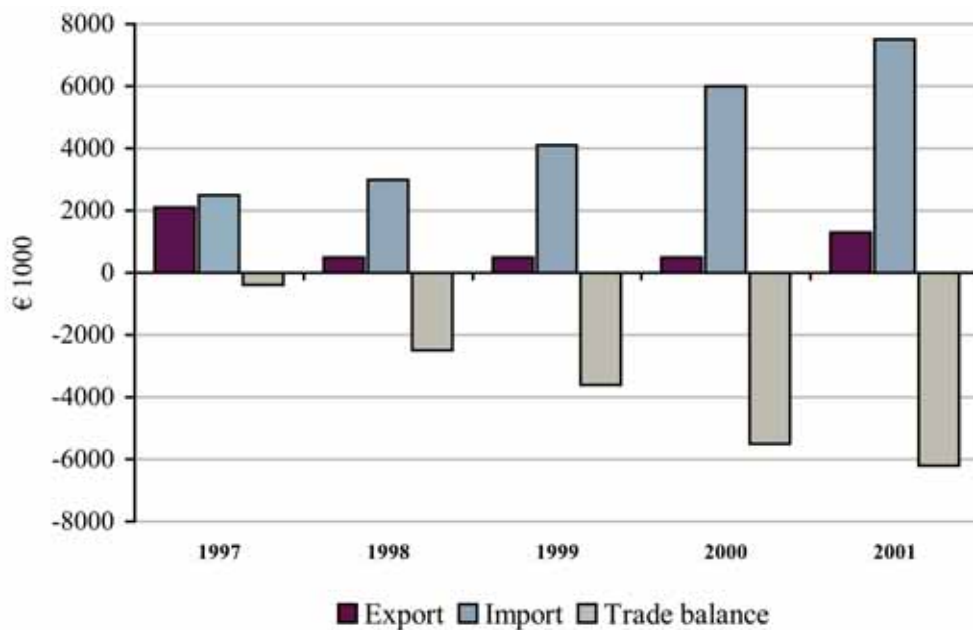
For books, both imports and exports have increased annually from 1997 to 2001. The trade balance shows a deficit for each year studied. It does not show an increasing trend but a declining share of the total international trade. In 2000, exports were valued at €4 million and imports were valued at €6 million, producing a negative trade balance of €1.8 million. This phenomenon is found in many small nations because they usually have smaller export potential for books in their national languages and often utilize scientific, technical and other imported books in other foreign languages.

Figure 6: Latvian Export, Import and Trade Balance 1997-2001



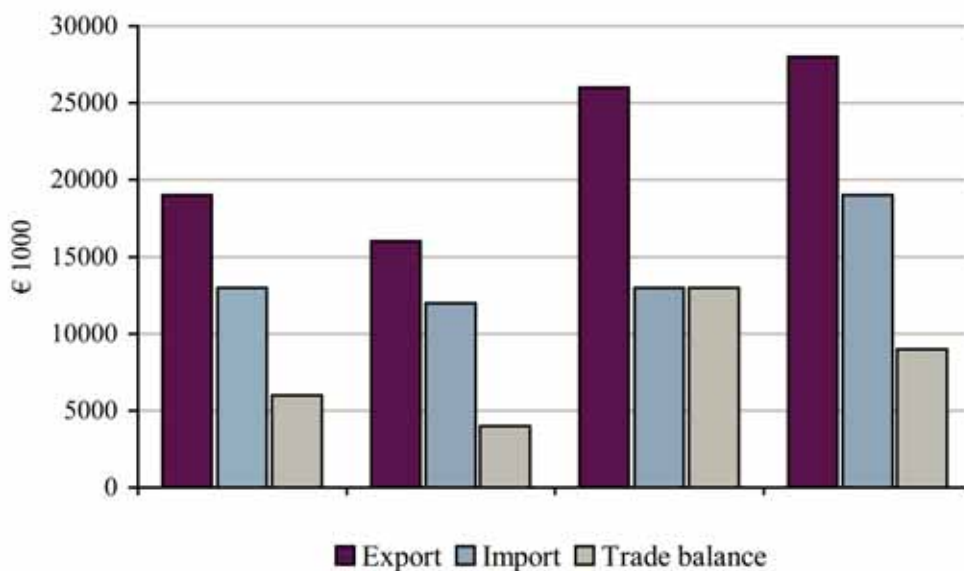
Newspapers and periodicals are combined in the trade statistics, so there is no way of distinguishing them separately. It is likely that the majority of the total trade consists of periodicals. Latvia shows a growing trend in trade deficit in this category. In 2000, the value of exports was €500,000, whereas import value totalled €6 million, producing a negative trade balance of €5.5 million.

Figure 7: Latvian Export, Import and Trade Balance of Newspapers and Periodicals 1997-2001



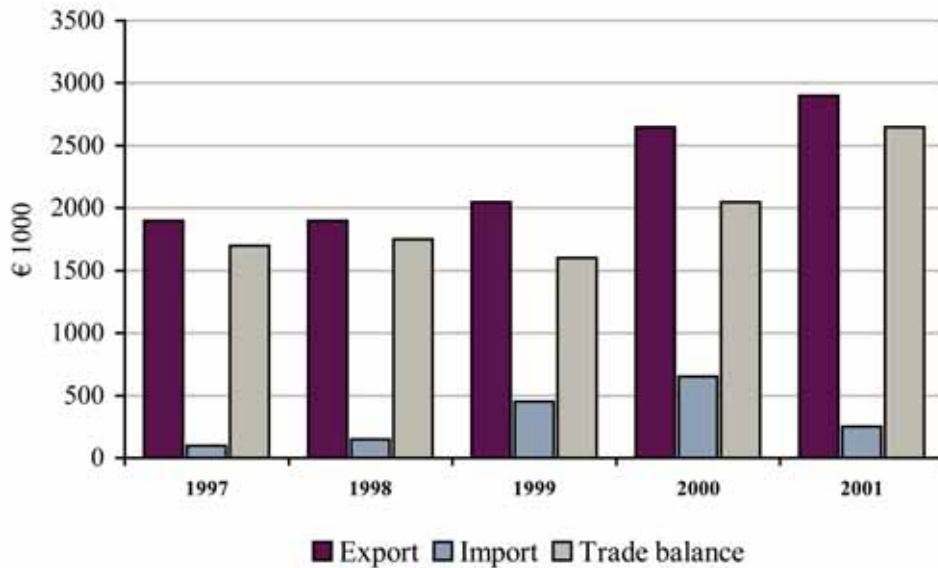
The development in the foreign trade of other printed matter shows an annual surplus from 1997 to 2001. Imports have risen steadily whereas for exports there was a period of decline from 1997 to 1999 and after that a sharp rise when the export of other printed matter nearly doubled from 1999 to 2000. In 2000, exports were valued at €28 million and imports at €19 million producing a positive trade balance of €9 million.

Figure 8: Latvian Export, Import and Trade Balance of Other Printed Matter 1997-2001



The foreign trade in art works shows a strong annual surplus for the five-year period studied. The total exports from 1997 to 2001 were over ten times higher than imports. In 2000 exports had a value of €2.7 million, whereas imports had a value of only €650,000, producing a trade surplus of €2.1 million.

Figure 9: Latvian Export, Import and Trade Balance of Art Work 1997-2001



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ANNEX II. Nace classification codes and other sources of data used in the study

CORE COPYRIGHT INDUSTRIES	Source
Press and Literature	
Newspapers	Nace 2212
News and feature agencies, etc.	
Magazines and periodicals	Nace 2213
Books, maps	Nace 2211
Other publishing (cards, directories, etc.)	Nace 2212
Pre-press, printing, and post press of published materials	Nace 222
Retail of press and literatures	Nace 5247
Libraries	UNESCO library statistics
Music, Theatrical Productions, Opera	
Printing and publishing of sheet music	Nace 2214
Reproduction of recorded music	
Wholesale and retail of recorded music	Recording industry data
Artistic and literary creation and interpretation	
Performances and allied agencies (booking agencies, ticket agencies, etc)	
Film and Video	
Motion picture and video production	
Motion picture and video distribution	
Motion picture exhibition	European Audiovisual Observatory, Yearbook 2002
Video rentals and sales	Nace 714 ; Cinema, TV and radio in the EU, Statistics on Audiovisual services
Photography	
Photographic Services, Studios, etc.	
Visual and Graphic Arts	
Art galleries and other wholesale and retail	
Radio and Television	
Radio and television activities	Nace 922
Transmission via cable and satellite networks	
Software and Databases	Nace 72; Factors and Impacts in the Information Society. A Prospective Analysis in The Candidate Countries. Report on Latvia, March 2004
Advertising	Nace 744

*NACE (*Nomenclature des Activités de la Communauté Européenne*) is the official classification for statistical data used in national and European statistics.

COPYRIGHT DEPENDENT INDUSTRIES	Source
TV sets, radio sets, VCRs, CD players, cassettes, and other equipment	
Manufacture	Nace 323
Wholesale and retail of radio and television goods and musical instruments	Estimated from Nace 5143; Nace 5147; Nace 5245
Computers and Equipment	
Manufacture	Nace 3002
Wholesale and retail	Factors and Impacts in the Information Society. A Prospective Analysis in the Candidate Countries. Report on Latvia, March 2004.
Musical Instruments	
Manufacture	Nace 363
Photographic and cinematographic instruments	
Manufacture	Nace 334
Manufacture of prepared unrecorded media	
Manufacture of paper	Nace 2112

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