

The Economic Contribution of Copyright-Based Industries in Canada



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The Economic Contribution of Copyright-Based Industries in Canada

THE 2004 REPORT

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Wall Communications Inc. is an economics consulting firm specializing in telecommunications, broadcasting, film and television production, new media, copyright and intellectual property and competition policy.

The firm provides policy and strategic planning advice, conducts economic research and analysis and prepares evidence for regulatory and other proceedings.

Wall Communications Inc.
Ottawa, Ontario

Contacts:

Gerry Wall	Phone: (613) 747 0555	E-mail: gerry.wall@sympatico.ca
Bernie Lefebvre	Phone: (613)235 1624	E-mail: lefebvre@rogers.com
Jana Nieto	Phone : (613)741 3613	E-mail: nieto.jana@rogers.com
Web:	www.wallcom.ca	

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Executive Summary

The economic contribution of copyright industries to the Canadian economy

There is a growing body of international research demonstrating that the economic contribution of copyright based (CB) industries is becoming increasingly important.

Copyright-Based (CB) industries, according to WIPO, are industries that are engaged in the creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter. WIPO also recognizes that economic impact can be related to both "core" CB industries (i.e. those that produce goods that are copyright protected) and "non-core" CB industries (i.e. those that support or are inter-related to core CB industries).

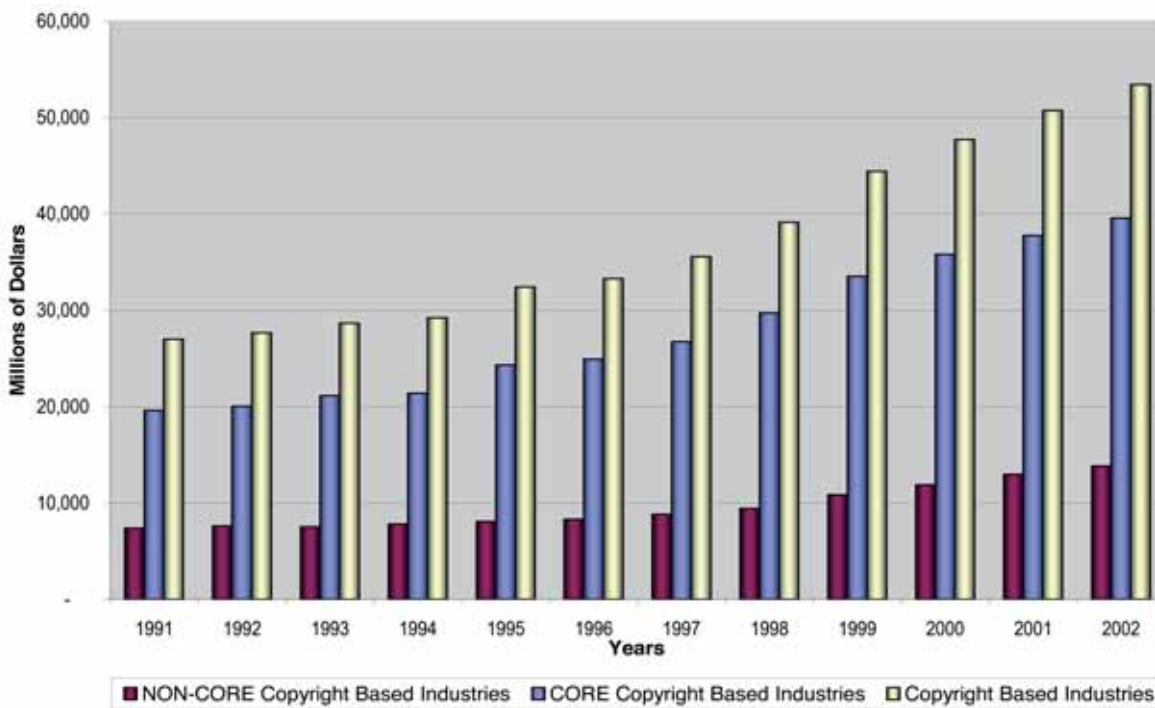
This study is intended to examine Canadian copyright based industries and determine their contribution over time to the Canadian economy. In addition to measuring GDP contribution, we also examine employment and trade levels and trends. Comparisons to other Canadian industry sectors are provided, as are comparisons with results from other countries.

We also examine the role and individual contributions of various industry sub-sectors including publishing, film, TV and sound recording, software and databases and broadcasting.

The Value Added (GDP) of Canadian Copyright-Based Industries

Much like the findings in studies from other countries, Canada's copyright based industries have seen a significant growth in the last decade. Core CB industries have grown from a value-added of \$19,598 million dollars in 1991 to \$39,561 million in 2002. When non-core industries are added, the totals become \$26,987 million in 1991 and \$53,408 million in 2002.

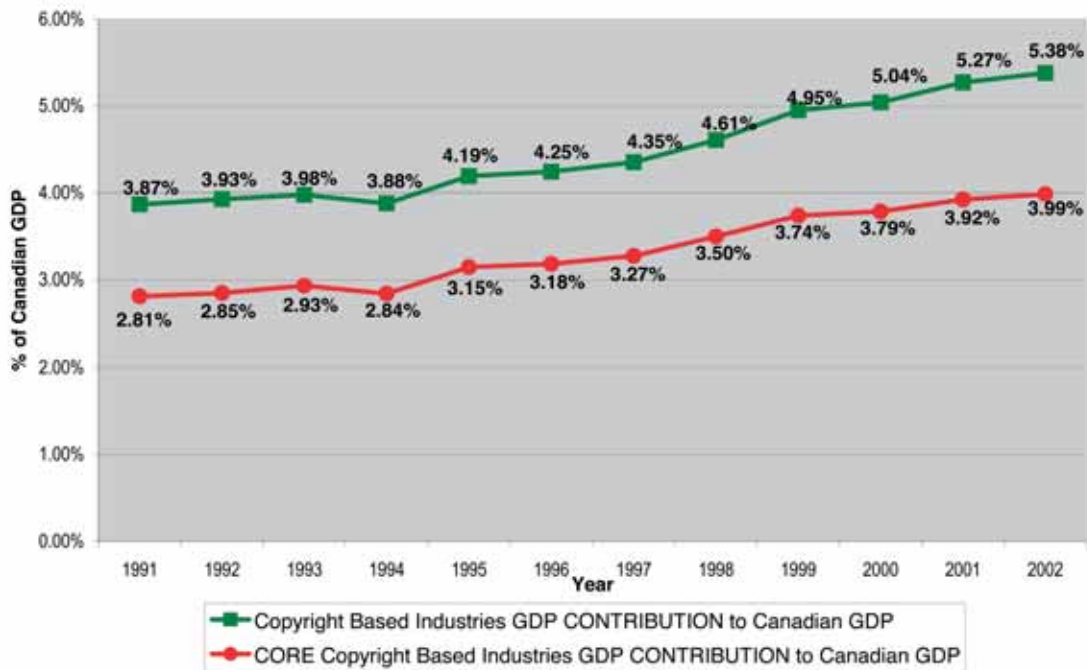
GDP: Copyright-Based Industries (1991-2002) Millions of Constant (1997) Dollars



Source: Wall Communications Inc. 2004

Calculated as a percentage of economy-wide GDP, CB industries have steadily increased their contribution to the economy. The 1991 contribution of 3.87% grew to 5.38% by 2002.

GDP: Copyright-Based Industries CONTRIBUTION to CANADIAN GDP (1991 to 2002)



Source: Wall Communications Inc. 2004

Two conclusions can be drawn when comparing growth in the CB industries with growth in the overall economy. First, the variability in growth from year to year is more extreme in the CB industries. Second, average annual rate of growth for the CB industries was approximately twice the rate of the general economy. Overall, the CB industries grew at an average annual rate of 6.46% between 1991 and 2002. This compares with an economy-wide average annual growth over the period of 3.27%.

Comparing the contribution of CB industries to other industries, CB industries now provide a significant contribution to overall GDP, contributing more than accommodation and food, agriculture, or mining.

Contribution of Copyright-Based Industries Compared to Selected Other Industries, 2002

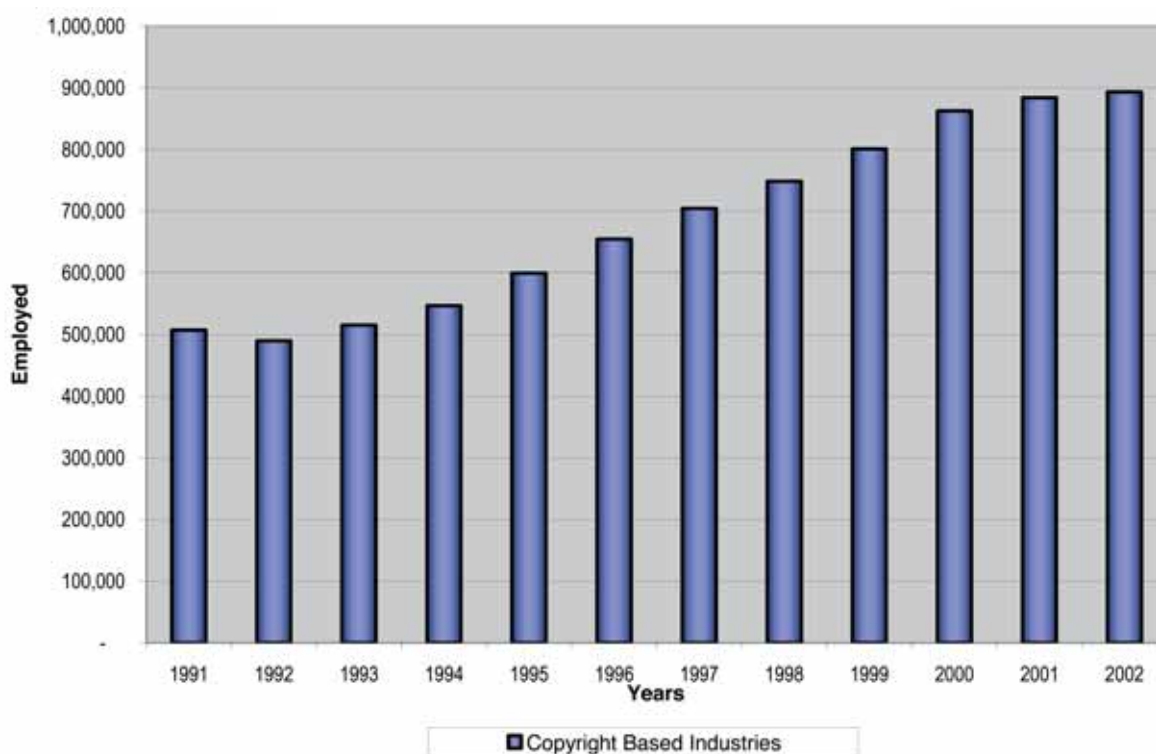
Industry	2002 Annual Growth Rate	GDP 1997 Chained \$
Copyright Based	6.5 %	53.4 billion
Agriculture, Forestry, Fishing and Hunting	-3.4 %	20.5 billion
Mining and Oil and Gas Extraction	1.9 %	37.4 billion
Utilities	4.2 %	28.3 billion
Accommodation and Food Services	4.7 %	23.5 billion
Retail Trade	1.9 %	53.9 billion

Source: The Daily, January 31, 2003 Statistics Canada, and Wall Communications Inc.

Employment in Copyright-Based Industries

Much like the GDP data, the employment numbers reflect the increasing importance of CB industries to the overall economy. From roughly 500,000 employees in 1991, the CB industries reached almost 900,000 employees by 2002.

Employment : Copyright-Based Industries (1991-2002)



Source: Wall Communications Inc. 2004

Compared to the Canadian economy, the CB industries outperformed the economy in general growing at more than three times the overall rate. Between 1991 and 2002, employment in the CB industries grew at about 5.3% while the national economy only grew at 1.4%. As should be expected, the growth rate of the economy displays less volatility than the CB industries.

Trade in Copyright-Based Industries

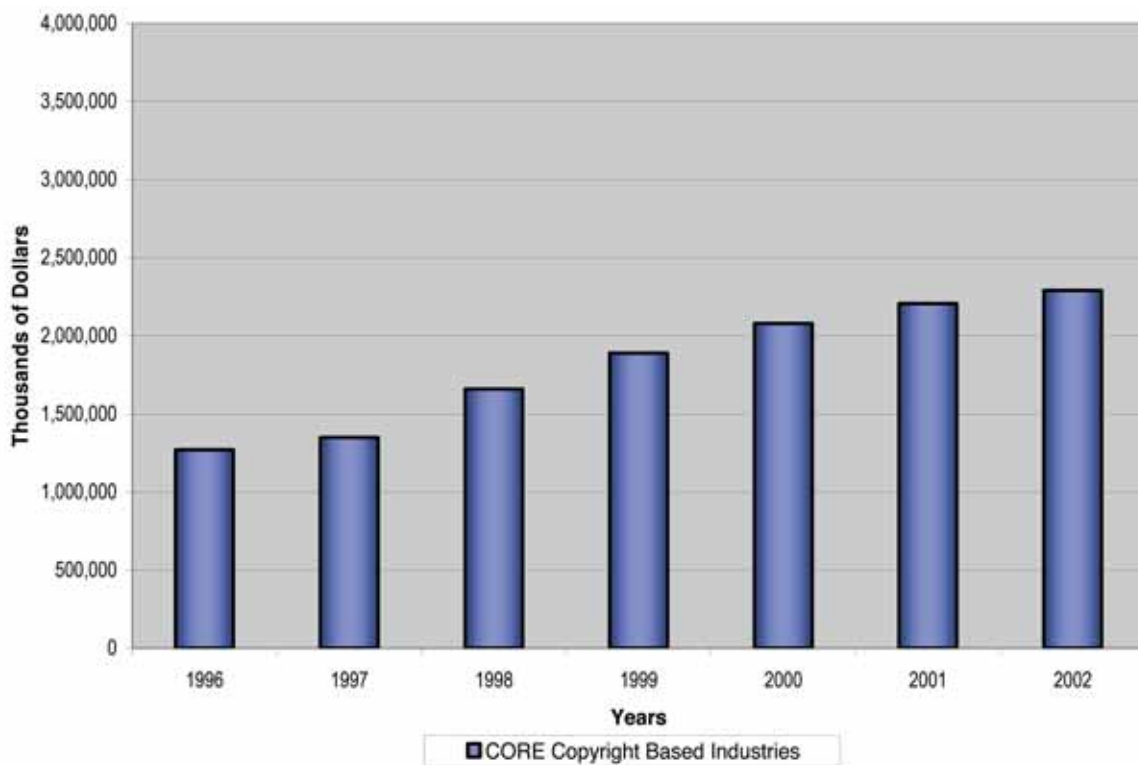
Valuations are on a "customs basis" in current dollars. Customs basis measures the change in the stock of material resources of the country resulting from the physical movement of merchandise into or out of Canada. When goods are imported in or exported from Canada, declarations giving information such as the description and value of goods, origin and port of clearance of shipments, and mode of transport must be filed with Canada Customs and Revenue Agency.

These estimates use the value of domestic exports and retained imports rather than the values of total exports and total imports (the typical measures used in measuring international trade). To calculate domestic exports and retained imports, the value of re-exports is deducted from both sides of the total.

As noted in other studies, export and import data generally fail to completely capture the full contribution of trade activities. A major factor to this is the recording of "goods" data only (i.e. "services" are not recorded). For example, a single master version of a copyrighted work (such as for a feature film) may only be valued at a few hundred dollars in trade statistics. However, copies and exhibition rights may generate millions of additional dollars in sales. It is not possible to adjust for this under-valuation so the trade statistics should be viewed with that in mind.

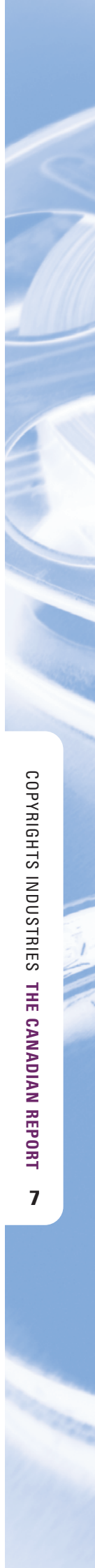
Putting measurement issues aside, exports of core CB goods have increased each year since 1996, reaching almost \$2.3 billion in 2002. This represents almost a doubling from the 1996 export level of \$1.2 billion.

CORE Copyright-Based Industries Domestic Exports (1996-2002) Thousands of Dollars

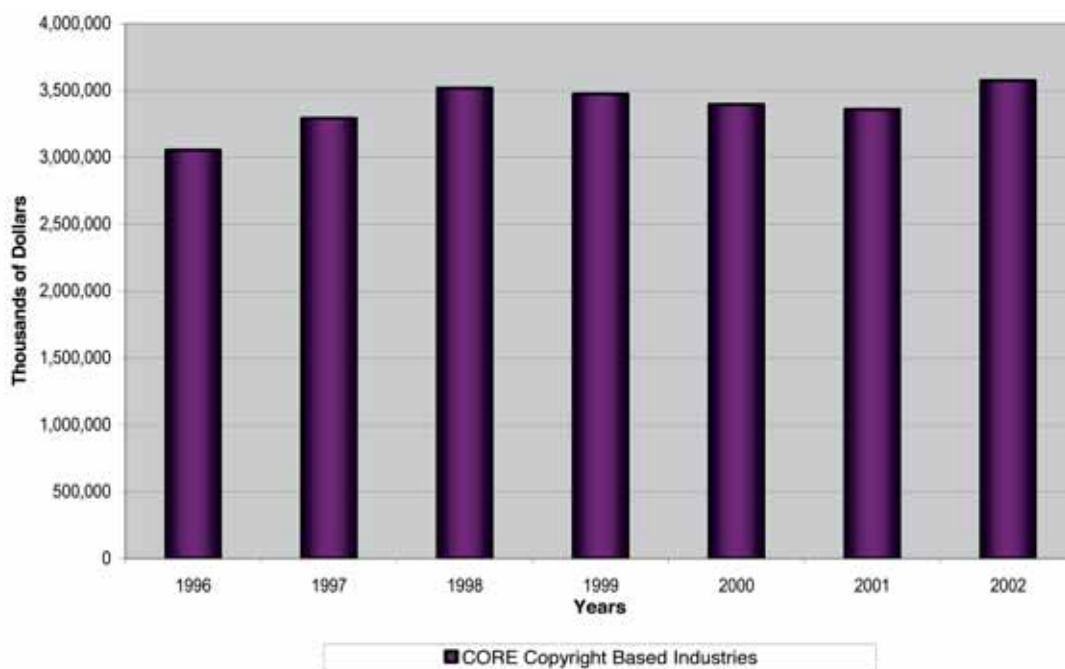


Source: Wall Communications Inc. 2004

Imports in the CB industries, which typically exceed exports, have generally been in the \$3 billion to \$3.5 billion range since 1996. A peak of \$3.5 billion was not surpassed until 2002 and only by a marginal amount. Imports increased between 1996 and 1998, and then declined until 2001.



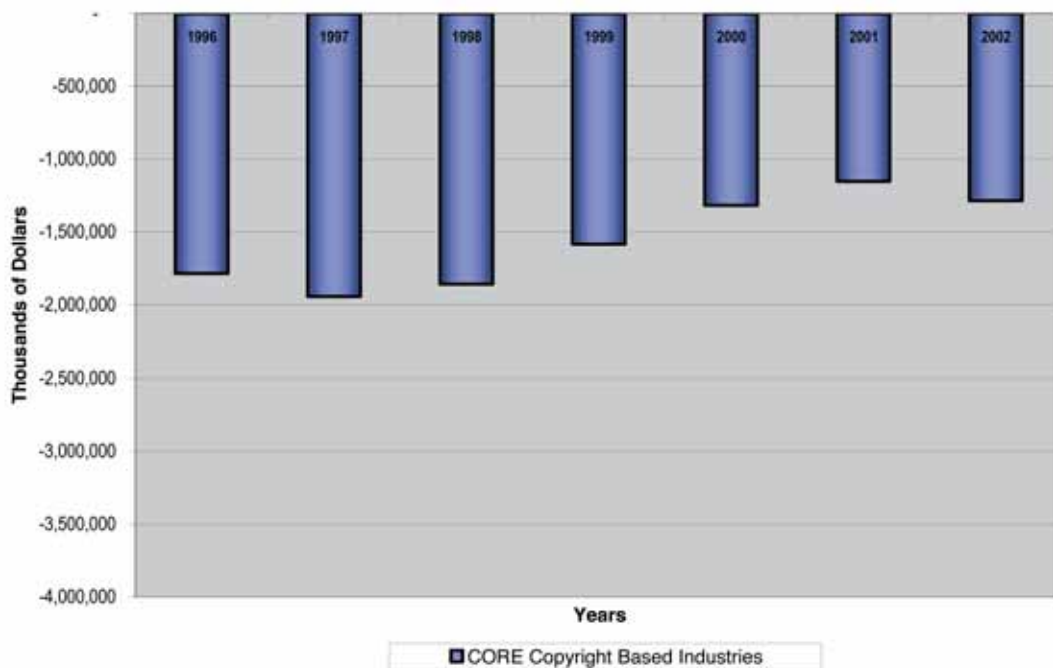
CORE Copyright-Based Industries Retained Exports (1996-2002) Thousands of Dollars



Source: Wall Communications Inc. 2004

Although Canada remains a net importer of CB goods, the gap between exports and imports has been decreasing since 1997 with the exception of 2002. The CB goods trade deficit decreased from almost \$2 billion in 1997 to about \$1.2 billion in 2001.

CORE Copyright-Based Industries Trade Balance (1996-2002) Thousands of Dollars



Source: Wall Communications Inc. 2004

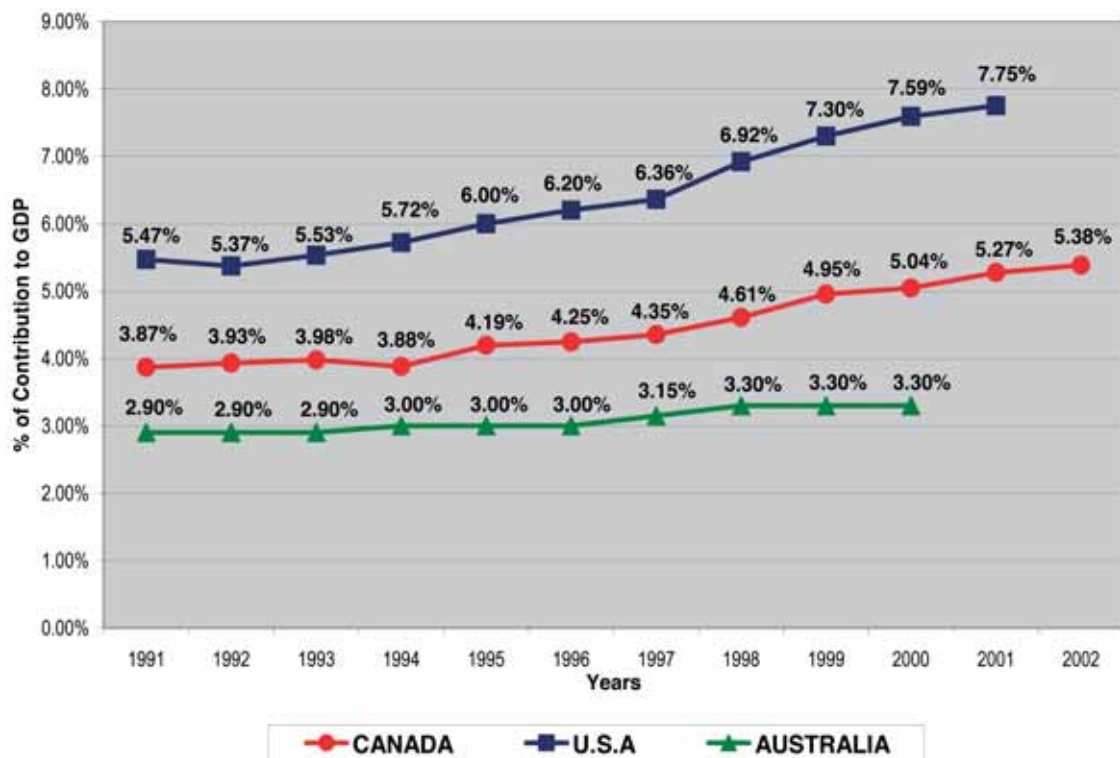
Comparisons with other Countries

The key comparable studies come from the United States and Australia. It should be noted at the outset that even though the approach of the U.S. and Australian studies contain many similarities to this study, significant differences still remain. These differences mainly arise in the area of CB category definitions. Consequently the data does not measure exactly the same activities in each study. In fact, both the U.S. and Australian studies were conducted prior to the WIPO guidelines and can therefore not possibly employ the exact methodology adopted for this study.

The following comparisons can therefore only provide a rough indication of any country's CB activities vis a vis any other country.

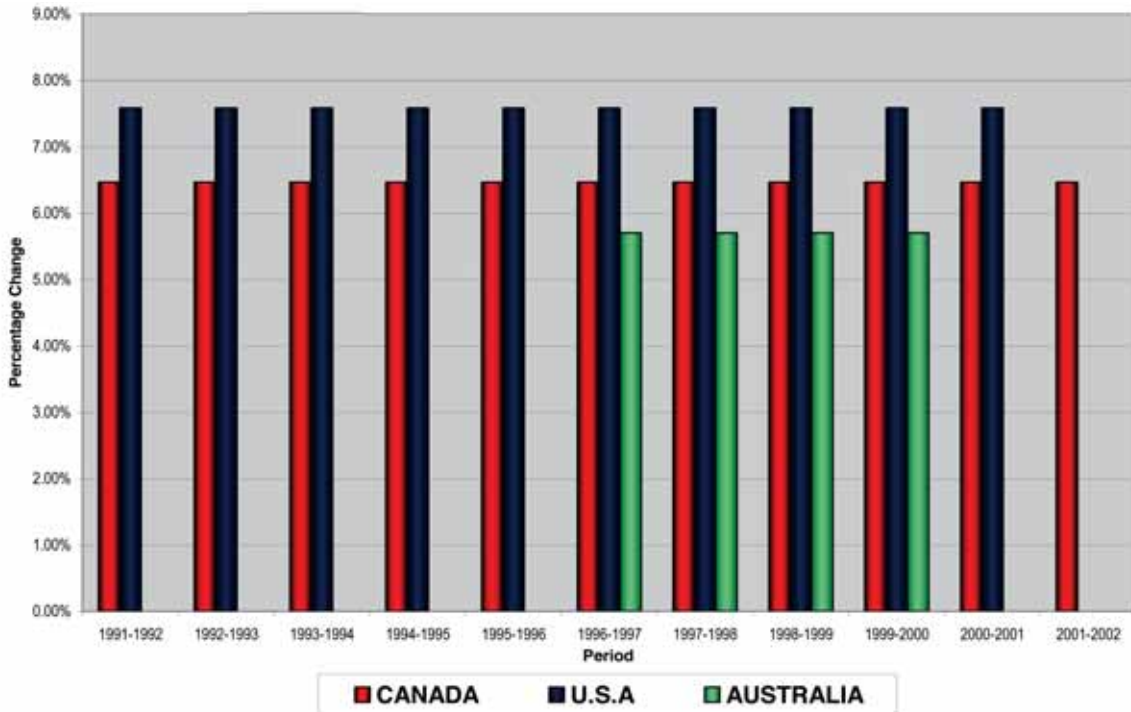
While the U.S. has led the way in terms of percentage of national GDP attributable to copyright based industries, Canada has also seen the importance of these industries grow. The U.S. study estimates that in 2002 7.75 % of U.S. national GDP was related to copyright industries while Canada stood at 5.4 % in 2002. Australia has remained in the 3% range.

Canadian, American and Australian Copyright-Based Industries GDP CONTRIBUTION to National GDP



Source: Wall Communications Inc. 2004

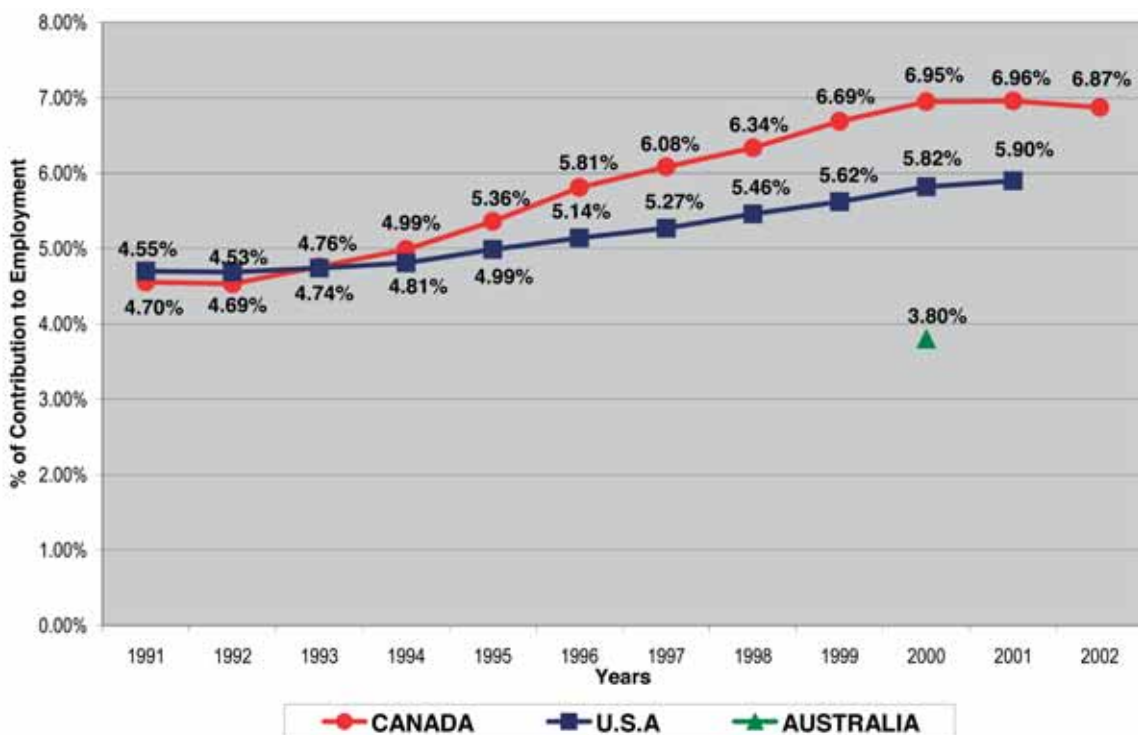
**Canadian, American and Australian
Copyright-Based Industries GDP AVERAGE Annual Growth**



Source: Wall Communications Inc. 2004

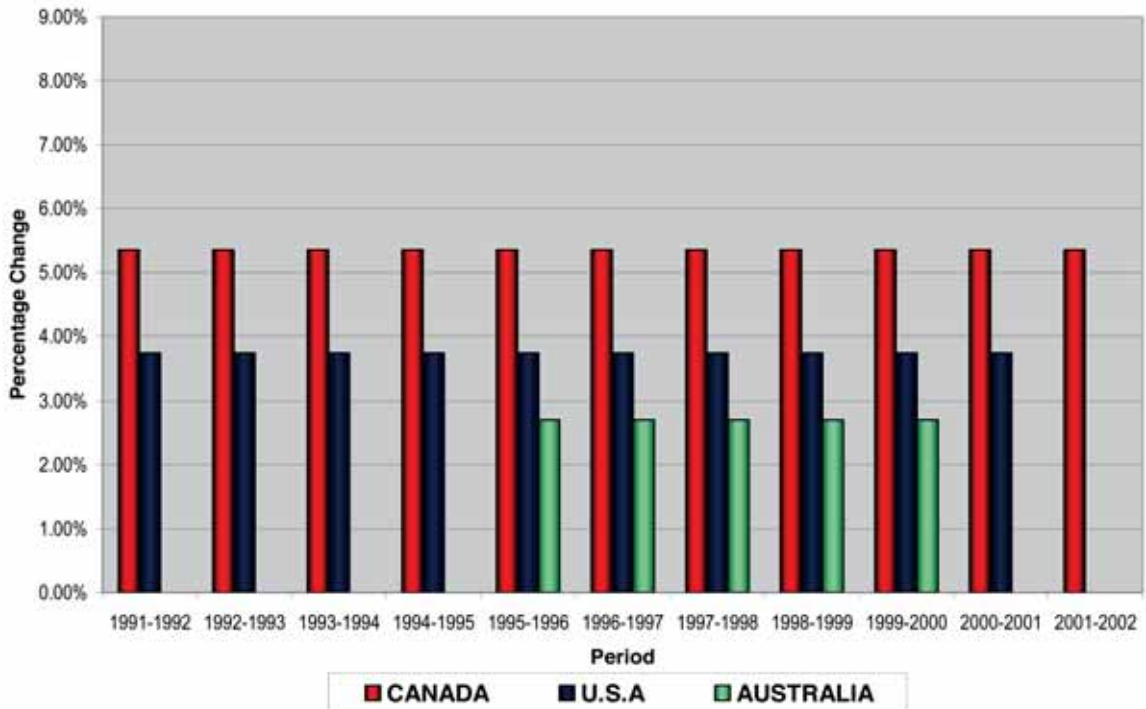
In the employment area, Canadian growth exceeds that of the U.S. after 1993.

**Canadian, American and Australian
Copyright-Based Industries CONTRIBUTION to National Employment**



Source: Wall Communications Inc. 2004

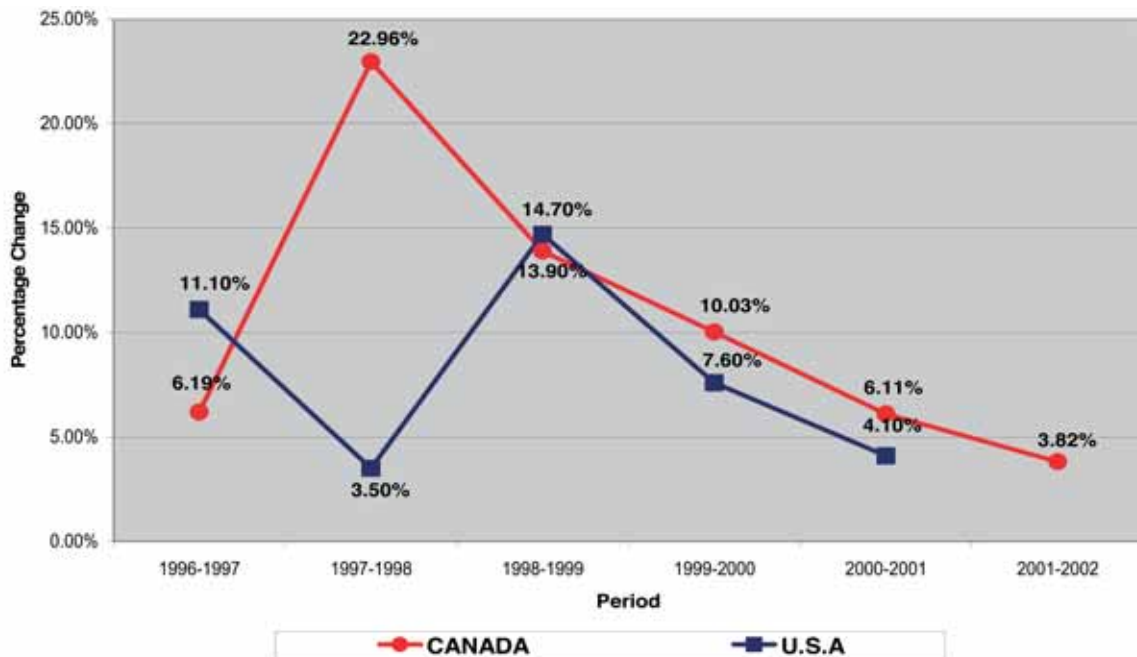
**Canadian, American and Australian
Copyright-Based Industries Employment AVERAGE Annual Growth**



Source: Wall Communications Inc. 2004

The rate of growth in Canadian exports has generally exceeded the growth rate of U.S. exports. Both growth rates have tailed off in the last few years.

Canadian and American EXPORTS : CORE Copyright-Based Industries Annual Growth

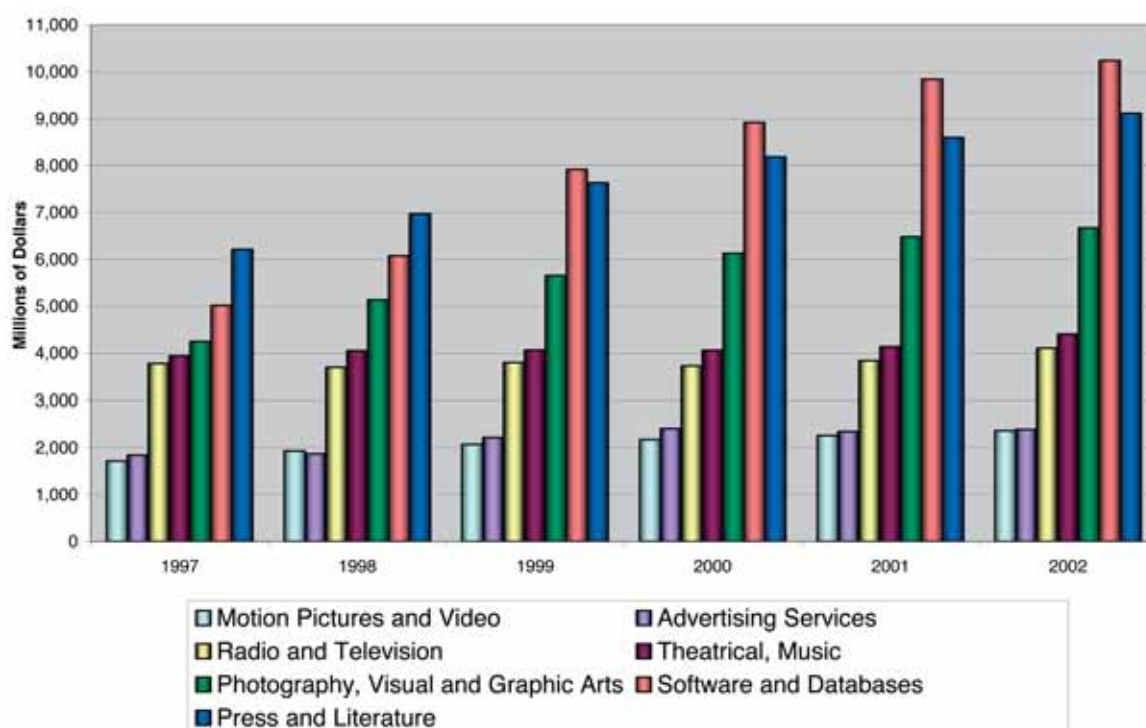


Source: Wall Communications Inc. 2004

Analysis of CORE Sub-sectors and Environmental Considerations

Of all the core copyright based sub-sectors, Press and Literature (publishing) began the decade as the most important contributor. By 1999, software and databases had surpassed publishing to become the largest sub-sector. The Motion Picture and Advertising sub-sectors remained the smallest contributors. Publishing, photography, visual and graphic arts and software were noticeably larger than the other sub-sectors by 2002.

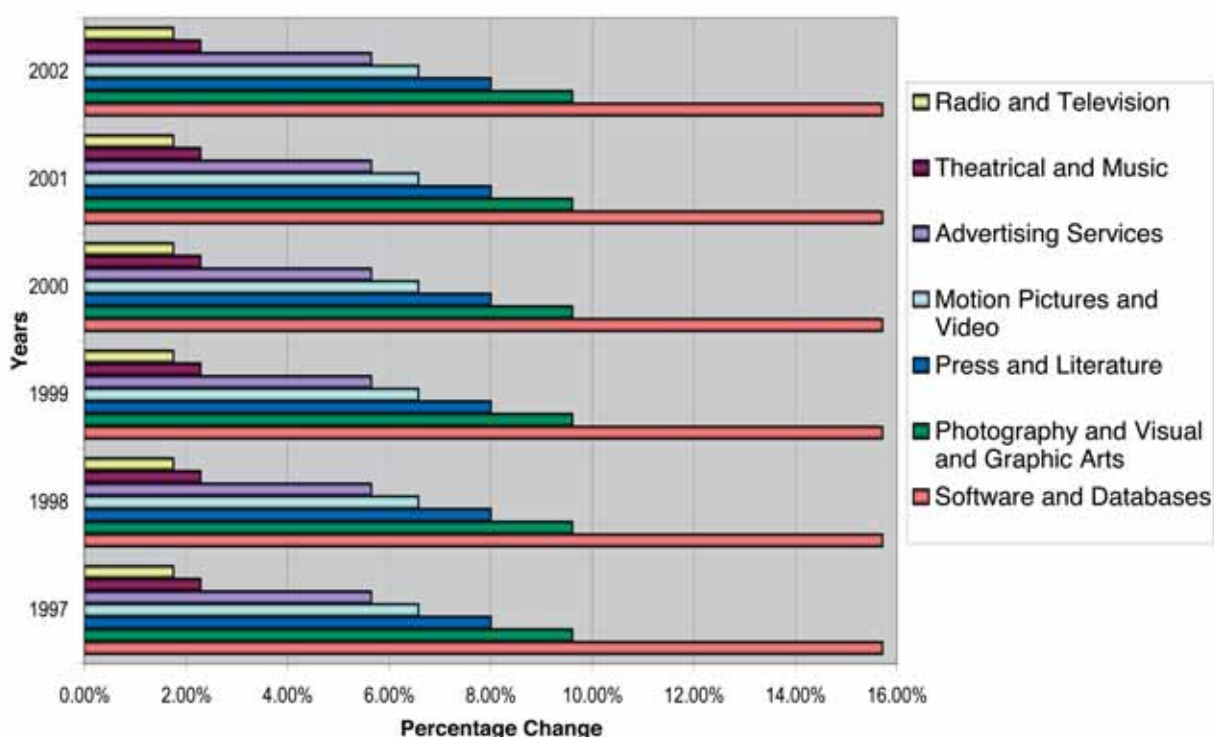
GDP: CORE Copyright-Based Industries (1997-2002) By Subcategory Millions of Chained 1997 Dollars



Source: Wall Communications Inc. 2004

The growth trend that is implied above is displayed explicitly in the following chart where the growth in software dominates the period. This category achieved close to 16% annual average growth over the period. By comparison, Broadcasting grew at just under 2% on average over the period. Four sub-sectors (Software, Photography/Graphic and Professional Services, Press and Motion Pictures each achieved at least 6% annual growth on average.

GDP: CORE Copyright-Based Industries (1997-2002) By Subcategory AVERAGE Annual Growth



Source: Wall Communications Inc. 2004

Looking at the core sub-sectors, software and databases (including new media services) has grown to become the largest contributor to GDP. Press and Literature (publishing) held the lead until 1999

According to industry views, the main issues and challenges facing sub-sectors have a degree of commonality but also individuality. Technological change and regulation/policy matters seem to be key issues for virtually all sub-sectors. On the other hand, no two sub-sectors have exactly the same priorities or concerns.

In terms of what factor has been most important in shaping the financial health of each industry over the last decade, government regulation and policy ranked first (1) followed by technological change (2), access to financing (3), global competition (4) and access to skilled labour (5).

The factor that has caused the most significant change in the way business is conducted (over the last decade) was overwhelmingly identified as new (often digital) technology. The most significant change facing CB industries today brought a mixed response with respondents noting difficulty in getting financing, becoming more client-oriented, ability to influence government policy, variations in Canada's versus other countries copyright protection (and related competitive implications), falling demand, and dealing with fundamental technological change. Many of the sub-sectors noted the exceptional creative abilities of Canadians as a source of on-going strength in our CB industries.

As a final matter, we believe that the contribution estimates in this study are conservative. While there are undoubtedly some sub-sector core industry data that include activities that are not particularly related to copyright, they are not likely to be too significant since the NAICS categories which have been used are quite well-defined. On the other hand, we can point to several instances where the data used in this study exclude relevant activities.

Perhaps the most important of these exclusions is in wholesale and retail trade. Due to the way in which retail and wholesale data is recorded in NAICS accounts, it is not possible to add it to the relevant core CB GDP categories. In addition, the WIPO guidelines identify several types of core activity that only appear within larger NAICS aggregates and could therefore not be reasonably estimated for this study. We expect that with more granular data, even higher estimated levels and rates of growth are likely.

1. Introduction

There is a growing body of international research demonstrating that the economic contribution of copyright based (CB) industries is becoming increasingly important. It was aptly noted in a recent Australian study "While the value of copyright has traditionally been seen in cultural and social terms, the rise of the information economy and the services sector is changing this traditional perception so that copyright is increasingly being seen as core infrastructure underpinning a number of (Australian) industries"¹. This is equally true of the Canadian situation and for many other countries as evidenced by examinations conducted in the United States (1990-2002), Australia (2001) and elsewhere.²

Copyright-Based (CB) industries, according to WIPO, are industries engaged in the creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter³. WIPO also recognizes that economic impact can be related to both "core" CB industries (i.e. those that produce goods that are copyright protected) and "non-core" CB industries (i.e. those that support or are inter-related to core CB industries).

This study is intended to examine Canadian copyright based industries and determine their contribution over time to the Canadian economy⁴. In addition to measuring GDP contribution, we also examine employment and trade levels and trends. Comparisons to other Canadian industry sectors are provided, as are comparisons with results from other countries.

To the extent that the data allow, we examine the role and individual contributions of various industry sub-sectors including publishing, motion pictures, television and sound recording, software and databases and broadcasting. These sub-sector examinations also benefit from a survey of CB related national and regional associations. Further, personal interviews were conducted with key industry representatives to provide context to the quantitative results.

The methodology for this study is described more fully in the next section, but it should be noted at the outset that there have been several approaches to measuring the economic contribution of CB industries. Most approaches recognize that economic impact can be related to both "core" CB industries (i.e. those that depend totally or mostly on the existence of copyright laws) and "non-core" CB industries (i.e. those that support or are inter-related to CB industries). WIPO has published a comprehensive set of guidelines that includes a set of definitions pertaining to "core" and "non-core" CB industries. With some minor exceptions⁵, we have adopted the WIPO definitional framework, which is as follows:

¹ Allen Consulting Group, *The Economic Contribution of Australia's Copyright Industries*, 2001, Page 1.

² Identified in WIPO Guide on Surveying the Economic Contribution of the Copyright-Based Industries, WIPO, 2003. Other countries include the United Kingdom (1993), India (2000), Netherlands (2000), Finland (2000), Japan (2001) and South America (2002).

³ *Ibid.* They might also, as an economic consideration, be seen as those industries that materially rely on copyright protection for their commercial viability.

⁴ See Charles, S., G. McDougall and J. Tran, "The Importance of Intellectual Property Industries in the Canadian Economy", Industry Canada, May, 2001 for an earlier study and background on the role of the Copyright Act.

⁵ Differences between our final core categorizations and the WIPO categories are necessary due to the way data is collected and recorded in Canada. A detailed description of the categories, as well as the differences, is provided in the next section on Methodology and in the Appendices.

Core Industries

- a) *Press and literature* (including authors, writers, translators, newspapers, magazines, book publishing⁶, music publishing, software publishing and libraries);
- b) *Music, theatrical productions, opera* (including choreographers, directors, acting and musical performers and allied agencies);
- c) *Motion picture, video and sound* (including writers, directors, actors, production, distribution and exhibition, sales and rentals);
- d) *Radio and television* (including conventional radio and television broadcasting, cable and DTH distribution);
- e) *Photography, visual and graphic arts, related professional and technical services* (including studios and professional photography, artists, art galleries, graphic design and specialized design,);
- f) *Software, databases and new media* (including programming, development and design, software and video games, database processing, web portals, on-line services and ISP's);
- g) *Advertising services* (including agencies and buying services); and
- h) *Copyright collective management societies*.

Non-core Industries

- a) *Interdependent copyright industries* (including manufacture, wholesale and retail of TV sets, radios, DVD players, electronic game consoles, computers, musical instruments, photographic instruments, blank recording material, paper);
- b) *Partial copyright industries* (including architecture, engineering and surveying, interior design, museums, and furniture); and
- c) *Non-dedicated support industries* (including general wholesale and retailing, general transportation, telephony and Internet).

Intellectual property is unique in that it requires well-defined property rights to allow its exploitation, to permit commercial transactions and to allow optimal levels of effort to be directed to its creation. Copyright legislation, which defines rights for creative works, allows creators to market the manifestations of their creative efforts and to disseminate information and knowledge in a well-organized and predictable manner.

The benefits to society are multifold. This study examines one of the key benefits: the economic contribution of copyright based activities in Canada.

⁶Book publishing includes book publishing and publications printing.

2. Methodological Approach

2.1 Data Collection - Core Industries

The collection and categorization of data for this project represents a sizeable and complex chore. Statistics Canada played an invaluable role in helping to collect and understand various data series. It is important to maintain data measurement methodology consistency over time series and across industries. The use of Statistics Canada industry and sub-industry data for core CB industries provides a significant degree of comfort regarding consistency in data collection and measurement methodology and therefore in the accuracy of our conclusions.

It should be noted however that while the underlying data comes primarily from Statistics Canada sources, we have had to apply WIPO mandated categorizing and related methodologies to estimate the value and quantitative characteristics of the CB industries. As such, the estimates in this study represent the views of Wall Communications and do not necessarily reflect the views of Statistics Canada or any other government agency.

Beginning with the WIPO CB industry definitions, we were able to map various NAICS industry classifications into the WIPO framework. Statistics Canada uses the NAICS data classification system, most recently revised in 2002. The system, which is used by Canada, the United States and Mexico is revised every five years and supersedes the Standard Industrial Classification utilized prior to 1997. For purposes of this project, the 1997 NAICS data provided the most comprehensive data set and was utilized.

The WIPO categorization has been adopted with a few minor exceptions. At the most aggregate level, our definition and measurement of the core industries is exactly the same as that of WIPO. However, the definitions in certain sub-sectors may have slight variations. Specifically, WIPO groups "music" (which includes composers, lyricists, arrangers, printing and publishing of music, production/manufacturing of recorded music and wholesale and retail of recorded music) into a category with theatrical productions and operas. We have followed the Statistics Canada practice of placing the sound recording portion of "music" in the "Motion Picture and Video" (including sound recording) category⁷.

The category that is most comparable to WIPO's "Music, Theatrical Performances and Opera" is NAICS 71, Arts, Entertainment and Recreation. Subcategory 713 (Amusement, Gambling and Recreation) has been removed, leaving Performing Arts, Spectator Sports and Related Industries as well as Heritage Institutions and Independent artists, writers and performers.

In addition, WIPO puts software publishing in its "Software and Databases" category while Statistics Canada incorporates software publishing within the "Publishing" category (NAICS 511). Since it is not possible to accurately separate software publishing from other publishing activities in the Statistics Canada data, we have retained the Statistics Canada approach.

Finally, WIPO has two separate categories for "Photography" and "Visual Arts and Graphic Arts". These

⁷The Statistics Canada NAICS category 512 includes motion picture and video industries (5121) and sound recording (5122), but excludes musical groups and artists and songwriters (which appear in category 711) and wholesaling of sound recordings (which appears in category 411 Wholesale Trade).

categories include studios and commercial photography and photo agencies (photography) and artists, art galleries and other wholesale and retail, picture framing and other allied services and graphic design (visual and graphic arts). In Statistics Canada classifications, photographic and some graphic design activities are buried in Professional, Scientific and Technical Services (NAICS 54) while Artists and gallery activities appear under "Arts, Entertainment and Recreation" (NAICS 71). These sub-sector activities cannot be obtained directly and must therefore be estimated as a portion of a larger category. They have been grouped into a single category of "Photographic, Visual and Graphic Arts and Professional Services".

We would also point out that most CORE industry GDP measures should (according to WIPO guidelines) include wholesale and retail activity specific to an area (e.g. book wholesaling and retailing, wholesale and retail of recorded music, etc.). However, wholesale and retail figures for all industries (including CB industries) are reported in aggregate wholesale and retail classifications (NAICS 41 and 44-45). As a result, our estimates of the CORE GDP will be understated. A discussion of this omission and other possible omissions (as well as possible impacts) is provided in Chapter 8: Conclusions and Suggestions for Further Research.

A complete mapping of the WIPO to Statistics Canada categorizations is provided in Appendix 1. Detailed descriptions of the relevant Statistics Canada NAICS categorizations are provided in Appendix 2.

2.2 Data Collection – Non-Core Industries

While the contribution of core copyright industries can be measured directly from the NAICS base data, it is necessary to adjust the non-core copyright industries to reflect the fact that only a portion of their output, employment and trade is derived from copyright. The proportion of activity that is attributable to copyright is a much less rigorous and less precise exercise than the determination of core CB industries, primarily because core industries have been directly measured (for the most part) by Statistics Canada whereas non-core industries have not. As a result, we would note that contribution estimates for non-core CB industries are ultimately less precise than core industry estimates.⁸

As noted earlier, WIPO has defined three types of non-core industries: Interdependent, Partial and Non-dedicated Support. Regarding Interdependent industries, WIPO has noted:

"There is no close correspondence between the different national studies in respect of the interdependent copyright industries. When undertaking the analysis it has to be borne in mind that statistically, the interdependent copyright industries add a relatively little portion – in average between 1% to 1.5% GDP over and above what the core industries contribute."⁹

Interdependent industries include the manufacture, wholesale and retail of primary equipment and appliances such as TV sets, radios, DVD players, electronic game equipment, computers, musical instruments as well as secondary devices and materials (in part) such as photographic instruments, blank recording media and paper.

⁸The lesser pedigree of non-core CB industry estimates appears to be common to all studies conducted in this field. However, for purposes of maintaining a standardized approach with studies

conducted in other countries and because the contribution of non-core industries is clearly important (even though the level is less precise), we have included estimates and analysis of both core and non-core CB industries.

⁹WIPO Guide on Surveying the Economic Contribution of the Copyright-Based Industries, WIPO, 2003.

Partial industries are those in which a portion of the activities relates to works and other protected subject matter and may involve creation, production and manufacturing, performance, broadcast, communication and exhibition or distribution and sales. Only the portion attributable to works and other protected subject matter should be included in the contribution calculation. WIPO has identified the following industries as being candidates for “partial” non-core industries¹⁰:

- Apparel, textiles and footwear;
- Jewelry and coins;
- Other crafts;
- Furniture;
- Household goods, china and glass;
- Wall coverings and carpets;
- Toys and games;
- Architecture, engineering and surveying;
- Interior design; and
- Museums.

For purposes of this study, the only categories from the list above that are separately identified in NAICS relate to architectural and engineering and museums. Architecture and engineering appears as part of NAICS 54 (5413 Professional, Scientific and Technical Services). Similarly, museums are reported in the NAICS category 71, where subcategory 7121 is Heritage institutions.

Non-dedicated Support industries are industries in which a portion is related to facilitating broadcast, communication, distribution or sales of works and other protected subject matter, and whose activities have not been included in core industries. These industries include:

- General wholesaling and retailing¹¹;
- General transportation; and
- Telephony and Internet.

These industries support many industries, including CB industries, and therefore should only be accorded a partial contribution. For certain services, such as ISP services, the share may be relatively large.

In summary, the contribution of non-core industries may be sizable in total, but the available data is considerably less precise than for core CB industries. Certain non-core industry data is available (most notably architecture, engineering and survey, as well as telecommunications and general retailing and wholesale). However, these constitute only a portion of the total non-core industries described in the WIPO guidelines. Perhaps more importantly, there is no obvious way to determine the relevant percentages attributable to the non-core industries. Consequently, there is no satisfactory means of estimating the GDP (or employment) of non-core industries based on available NAICS data.

¹⁰In our view, it is not apparent how all these items substantively relate to copyright. However, they are noted for completeness in describing the WIPO approach.

¹¹Note that this category differs from the wholesale and retail activities associated with specific CORE industries (discussed in Data Collection – Core Industries). “General Wholesaling and Retail” refers to those operations that may include sales of recorded music (for example) by a department store or other non-dedicated outlet.

However, the relative size of non-core to core can be determined from previous studies. By way of comparison, the Australian study estimated that non-core CB industries contributed roughly 30% to overall economic contribution, the U.S. study estimated that non-core (in 2001) added 32% and an earlier Canadian study¹² estimated that in the year 2000 non-core CB industries contributed 35% of the overall CB value-added.

For purposes of this study, we have adopted a non-core value of 35% (of total CB GDP) for the year 2002. The annual growth rates for Telecommunications (NAICS 5133) were then used to back-cast non-core GDP for the years 1991 to 2001¹³.

2.3 Sub-sector Estimation and Analysis

GDP data is available for the core CB sub-sectors for the period 1997 to 2002 in chained 1997 dollars, often at the 3 and 4 digit NAICS code level.¹⁴ Because the 1997 to 2002 data is of the highest quality, we have focused on this period for sub-sector analysis.

In addition to the quantitative analysis related to the collection and analysis of data, the study employed two sampling vehicles.

The first involved an electronic questionnaire that was sent to approximately sixty national and regional associations representing various sub-sectors in the CB core industries. The reason for the "written" questionnaire is to ensure consistency and to achieve a degree of standardization with respect to topics, format and responses. A listing of the surveyed agencies is provided in Appendix 4 and the questionnaire is provided in Appendix 5. 25% of the agencies responded.

The second survey exercise involved personal interviews with key industry representatives across the country. A listing of interviewees is provided in Appendix 6. The areas discussed involved identification and discussion of major economic and competitive issues facing each sub-sector, the perceived appropriateness of the policy environment (including support and funding programs as well as copyright legislation and tariff-setting processes), and the impact of globalization and/or global trade. The purpose of the interviews was to allow for a fuller exploration of industry-specific issues as well as providing an opportunity for more free-ranging consideration of hypothetical scenarios and expected future developments.

¹²Charles, S., G. McDougall and J. Tran, "The Importance of Intellectual Property Industries in the Canadian Economy", Industry Canada, May, 2001.

¹³See Chapter 8 for a more complete discussion of how this approach might still undervalue the contribution of non-core industries.

¹⁴See Appendix 2 for a more complete description of NAICS classifications used in this Study.

2.4 Other Methodological Issues

The time series for core CB industries is available from 1997 to 2002 in all cases. Furthermore, most of the core industries are also available back to 1991. In order to provide the most comprehensive snapshot of the core industries and to better assess trends, we have extrapolated the publishing and some other smaller sub-sectors from 1997 backwards to 1991. This was done by using the employment growth rates in those years applied to the base year of 1997 GDP series. It should be noted that most of the core data is directly obtainable back to 1991.

Aggregate core CB industry data for the period 1991 to 2002 is constant 1997 dollars. Disaggregated data for core sub-sectors for the period analysis 1997 to 2002 is chained 1997 dollars.

Employment data is derived from the Statistics Canada Labour Force Survey at the 4 digit NAICS code level.

Trade data is derived from the Statistics Canada Culture trade and investment project 2002 and data tables in November 2003, catalogue no. 87-007-XIE.

3. The Value Added (GDP) of Canadian Copyright-Based Industries

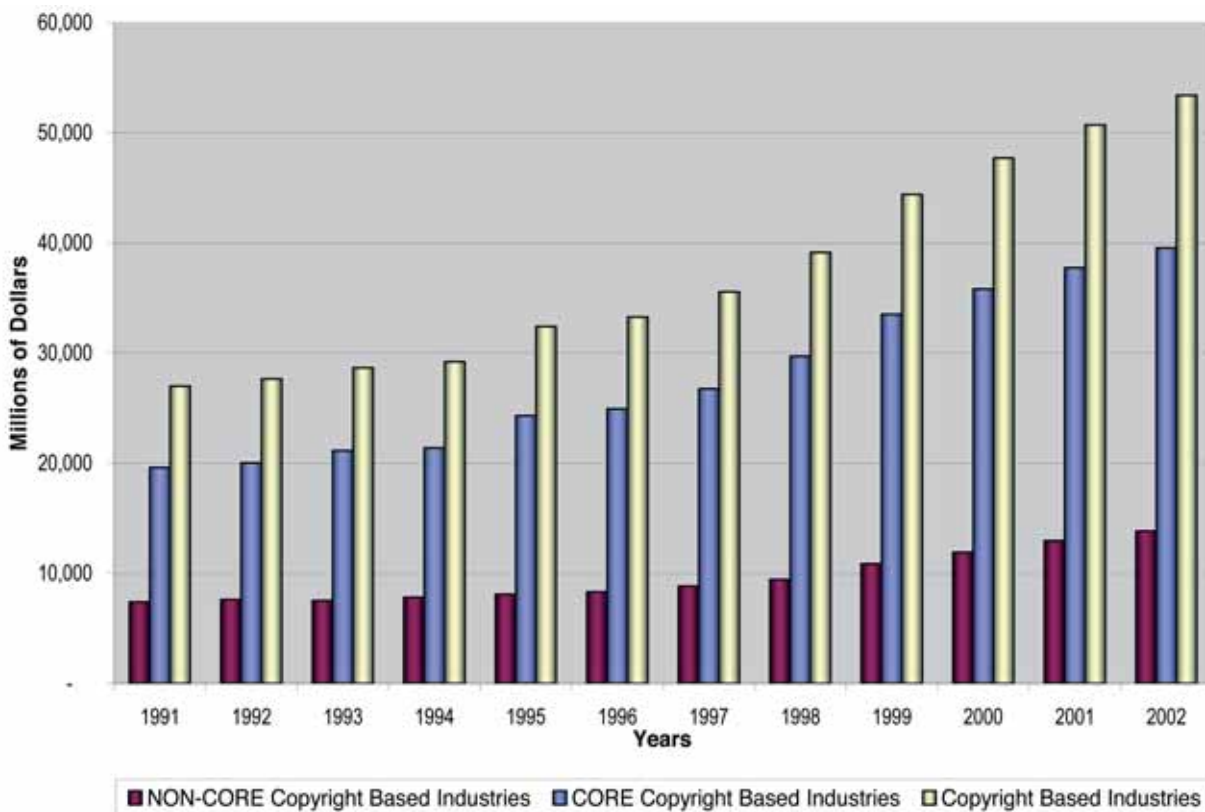
Contribution of CB Industries 1991 to 2002

Much like the findings in studies from other countries, Canada's copyright based industries have seen a significant growth in the last decade. Core CB industries have grown from a value-added of \$19,598 million dollars in 1991 to \$39,561 million in 2002. When non-core industries are added, the totals become \$26,987 million in 1991 and \$53,408 million in 2002 (see Chart 1).

Chart 1

GDP: Copyright-Based Industries (1991-2002)

Millions of Constant (1997) Dollars

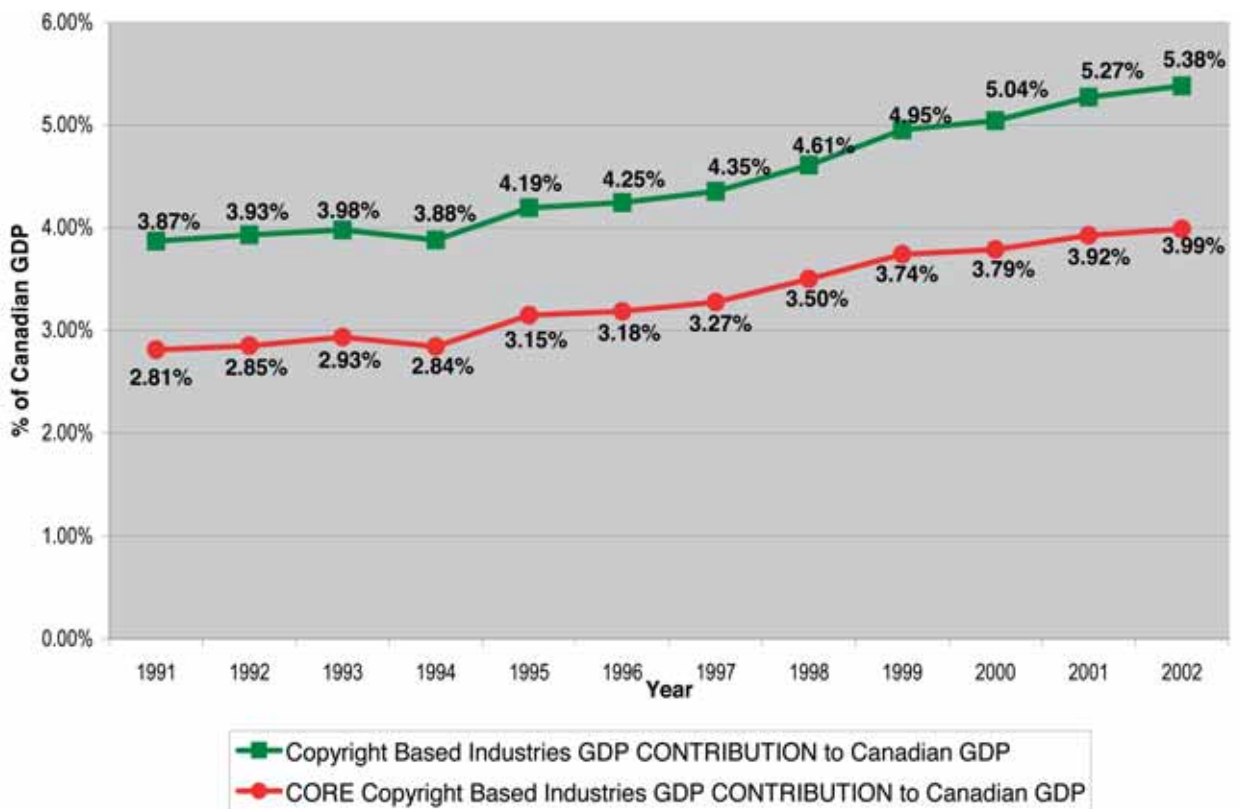


Source: Wall Communications Inc. 2004

Calculated as a percentage of economy-wide GDP, CB industries have steadily increased their contribution to the economy. The 1991 contribution of 3.87% grew to 5.38% by 2002 (See Chart 2).

Chart 2

GDP: Copyright-Based Industries CONTRIBUTION to CANADIAN GDP (1991 to 2002)

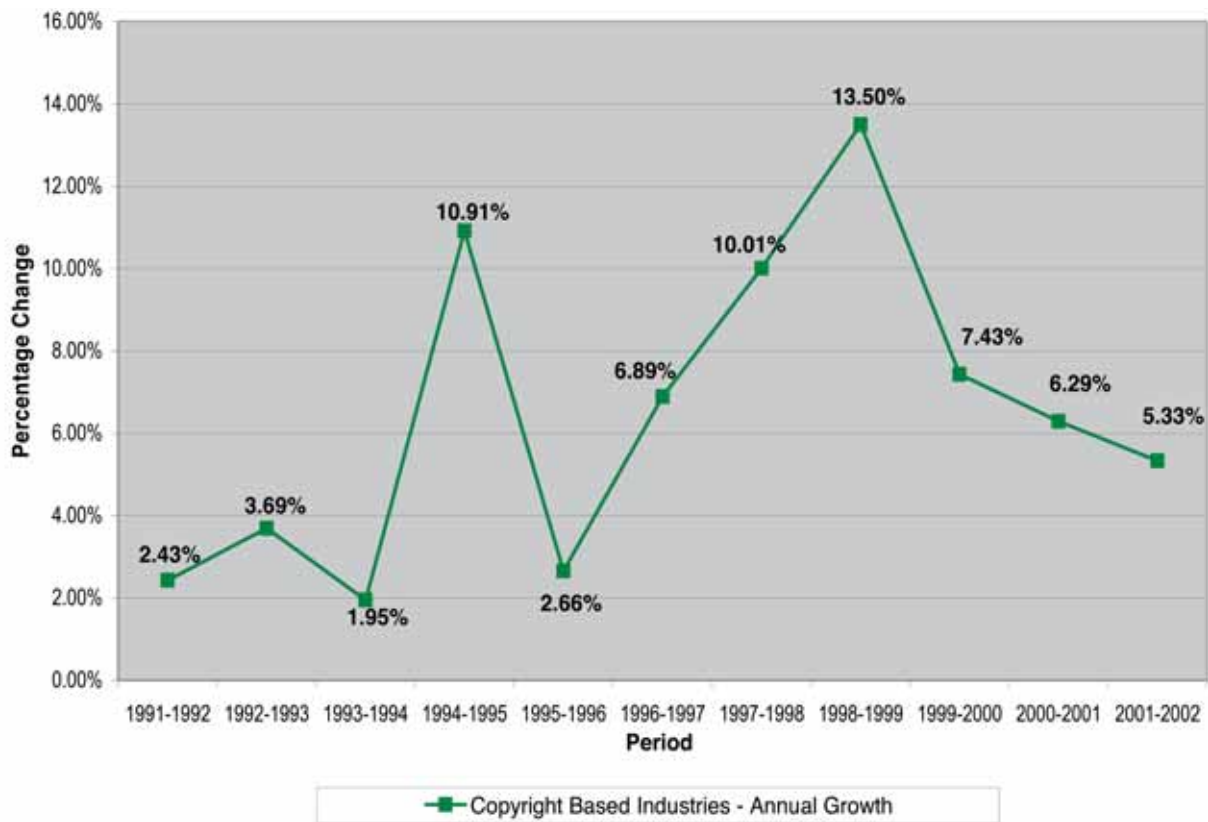


Source: Wall Communications Inc. 2004

This becomes especially clear when examining the rates of growth of CB industries versus the general economy. Although somewhat erratic, the CB industries grew at relatively high rates throughout the period, ranging from a period low of 2.43% in 1991 to a period high of 13.5% in 1999 (see Chart 3). It should be noted that the slower rates of growth in the early 1990's coincides with the general economy-wide slowdown.

Chart 3

GDP: Copyright-Based Industries (1991-1992 to 2001-2002) Annual Growth



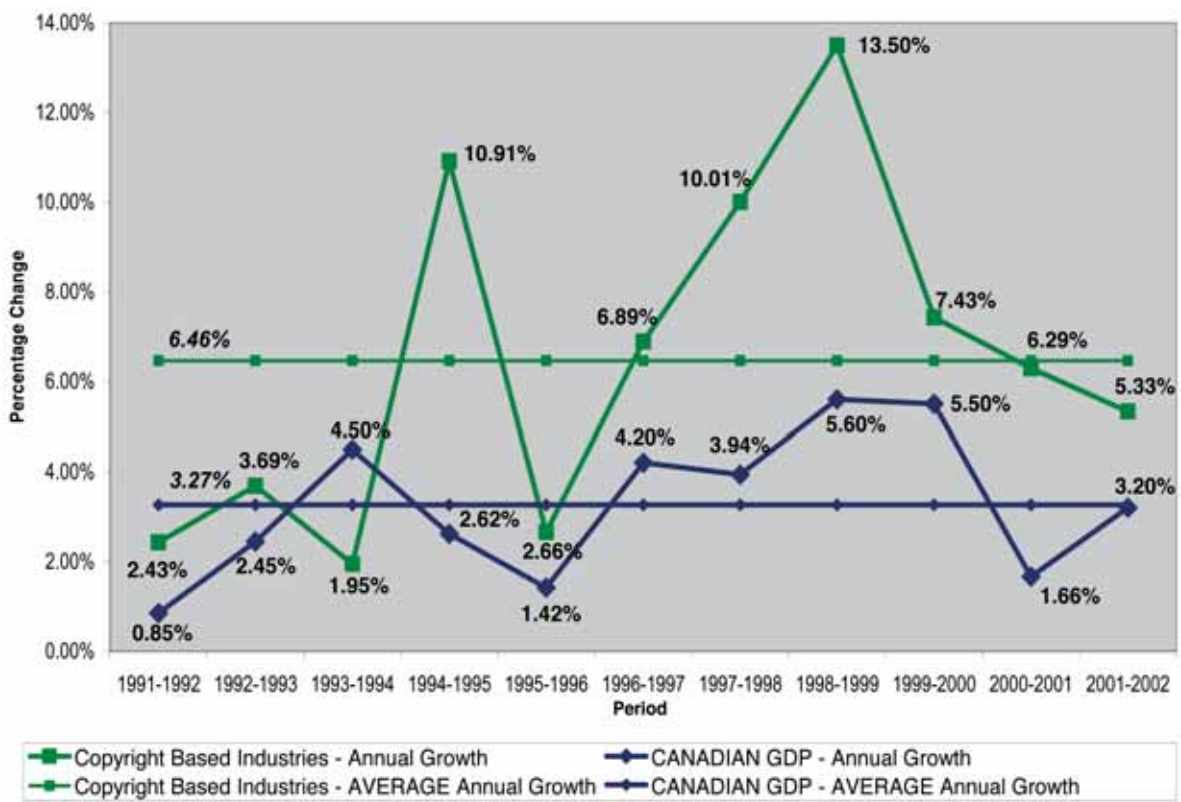
Source: Wall Communications Inc. 2004

Two conclusions can be drawn when comparing growth in the CB industries with growth in the overall economy. First, the variability in growth from year to year is more extreme in the CB industries. Second, average annual rate of growth for the CB industries was approximately twice the rate of the general economy. Overall, the CB industries grew at an average annual rate of 6.46% between 1991 and 2002. This compares with an economy-wide average annual growth over the period of 3.27% (see Chart 4).

Chart 4

Canadian GDP and Copyright-Based Industries GDP (1991-1992 to 2001-2002)

Annual Growth/AVERAGE Annual Growth



Source: Wall Communications Inc. 2004

Comparing the contribution of CB industries to other industries, CB industries now provide a significant contribution to overall GDP, contributing more than accommodation and food, agriculture, or mining.

Table 1

Contribution of Copyright-Based Industries Compared to Selected Other Industries, 2002

Industry	2002 Annual Growth Rate	GDP 1997 Chained \$
Copyright Based	6.5 %	53.4 billion
Agriculture, Forestry, Fishing and Hunting	-3.4 %	20.5 billion
Mining and Oil and Gas Extraction	1.9 %	37.4 billion
Utilities	4.2 %	28.3 billion
Accommodation and Food Services	4.7 %	23.5 billion
Retail Trade	1.9 %	53.9 billion

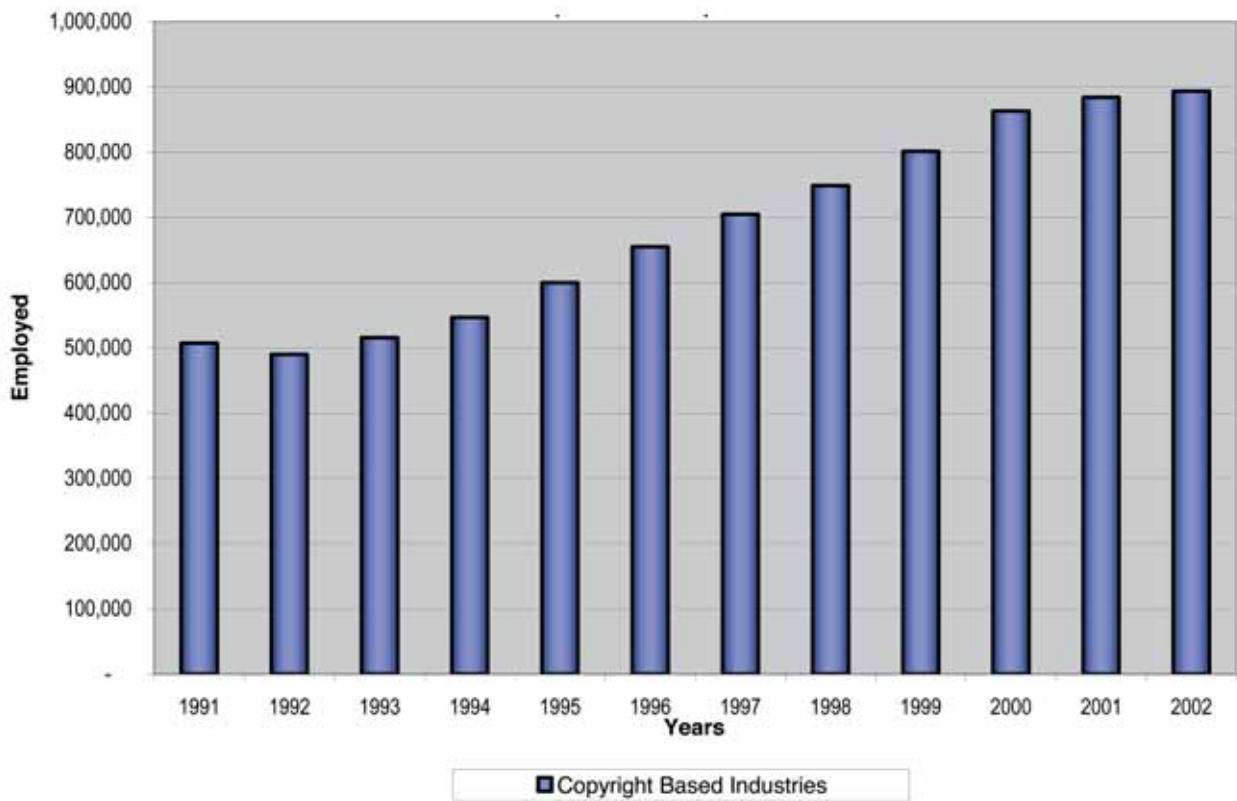
Source: *The Daily*, January 31, 2003 Statistics Canada, and Wall Communications Inc.

4. Employment in Copyright-Based Industries

Much like the GDP data, the employment numbers reflect the increasing importance of CB industries to the overall economy. From roughly 500,000 employees in 1991, the CB industries reached almost 900,000 employees by 2002 (see Chart 5).

Chart 5

Employment: Copyright-Based Industries (1991-2002)

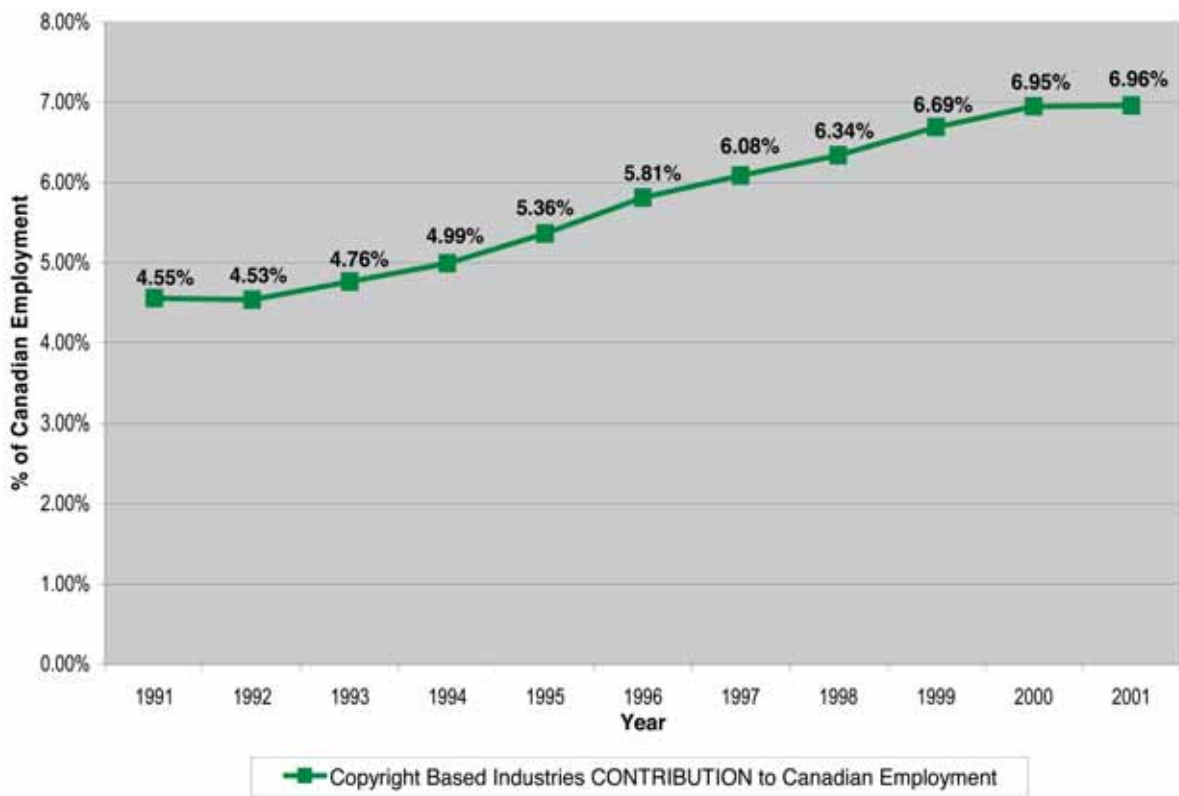


Source: Wall Communications Inc. 2004

In terms of contribution to economy-wide employment, the CB industries have continued to increase their share. Beginning in 1991 with a share of roughly 4.5%, the CB industries reached a share of 6.9% in 2002. It should be noted that employment share growth was not significant between 2002 and 2001. In fact, it declined nominally in 2002 (see Chart 6). This is not necessarily a case of employment falling off in the CB industries. Employment in CB industries actually grew in 2002 over 2001 (by over 5%). However, the rest of the economy simply outperformed the CB industries in generating jobs.

Chart 6

Employment: Copyright-Based Industries CONTRIBUTION to CANADIAN Employment (1991-2002)



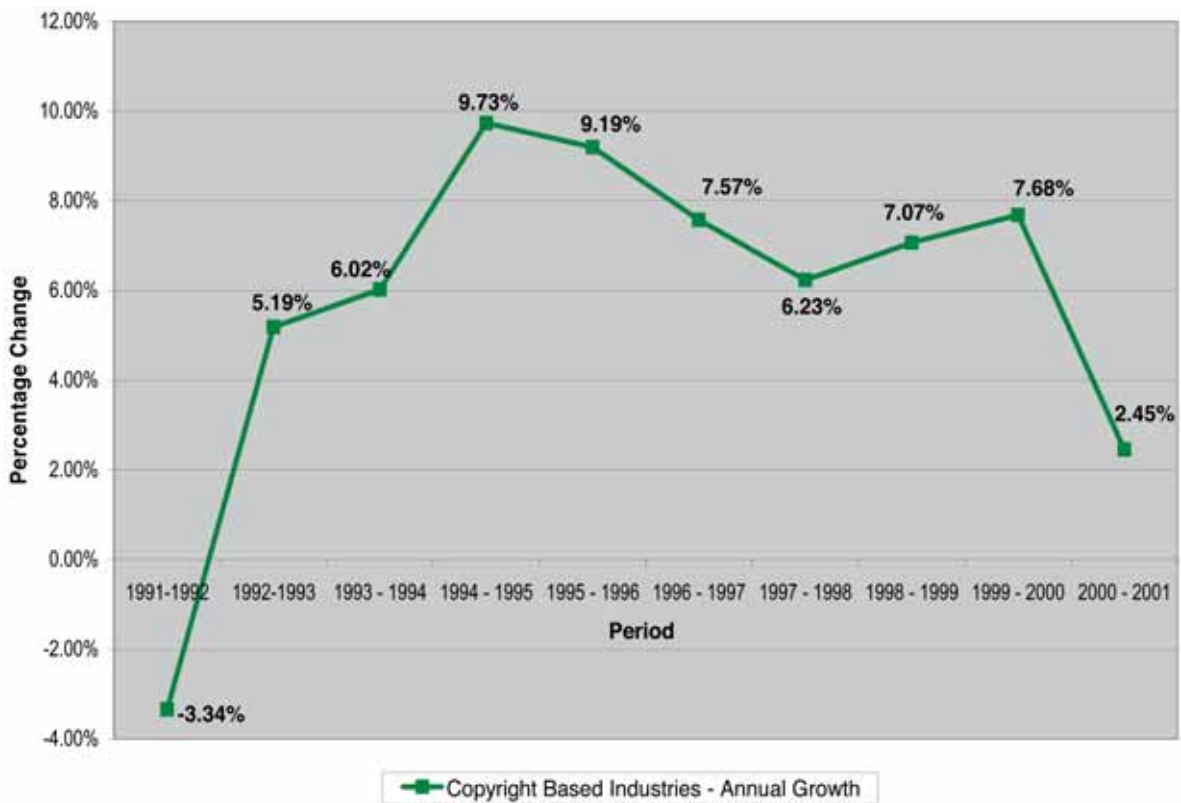
Source: Wall Communications Inc. 2004

When examining the growth of employment in the CB industries, it is interesting that growth has been continual since 1992. In fact for the years 1992 through to 2000, the industry experienced growth rates in excess of 5%, peaking at a rate of 9.7% in 1993.

Chart 7

Employment: Copyright-Based Industries (1991-1992 to 2001-2002)

Annual Growth



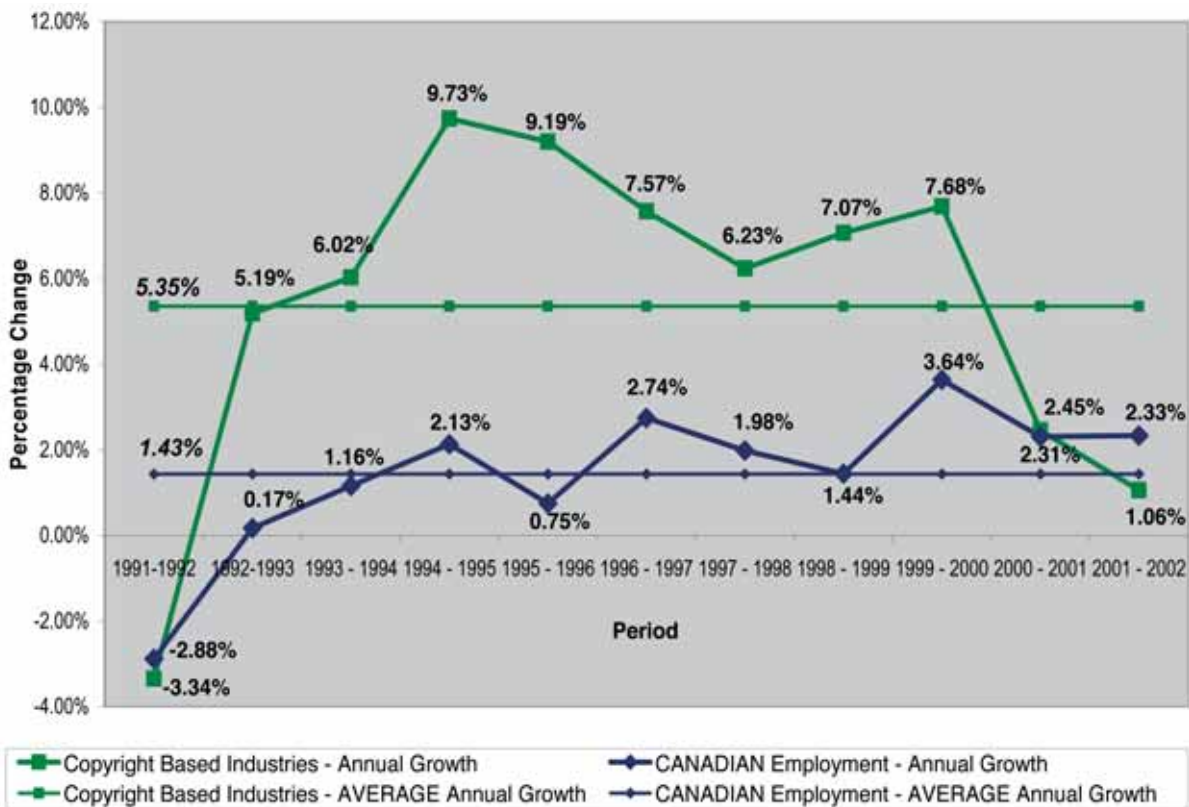
Source: Wall Communications Inc. 2004

Compared to the Canadian economy, the CB industries outperformed the economy in general growing at more than three times the overall rate. Between 1991 and 2002, employment in the CB industries grew at about 5.3% while the national economy only grew at 1.4% (see Chart 8). As should be expected, the growth rate of the economy displays less volatility than the CB industries.

Chart 8

CANADIAN Employment and Copyright-Based Industries (1991-1992 to 2001-2002)

Annual Growth/AVERAGE Annual Growth



Source: Wall Communications Inc. 2004

Employment in CB industries was 863,000 in 2000. This compares with about 499,000 in Construction and 871,000 in Accommodation and Food Services. Retail Trade, traditionally a large employer, employed just under a million and a half people.

Table 2:

Employment in Copyright-Based Industries Compared to Selected Other Industries, 2000¹⁵

Industry	Employment (000's)
Copyright Based	863
Construction	499
Mining and Oil and Gas Extraction	141
Utilities	909
Accommodation and Food Services	871
Retail Trade	1,463

Source: Catalogues 72-002-XIB, XPB Statistics Canada, and Wall Communications Inc

¹⁵ Data for 2000 was the most recently available for cross industry comparisons.

5. Trade in Copyright-Based Industries

Valuations are on a customs basis in current dollars¹⁶. Customs basis measures the change in the stock of material resources of the country resulting from the physical movement of merchandise into or out of Canada. When goods are imported in or exported from Canada, declarations giving information such as the description and value of goods, origin and port of clearance of shipments, and mode of transport must be filed with Canada Customs and Revenue Agency.

These estimates use the value of domestic exports and retained imports rather than the values of total exports and total imports (the typical measures used in measuring international trade). To calculate domestic exports and retained imports, the value of re-exports is deducted from both sides of the total.

As noted in other studies¹⁷, export and import data generally fail to completely capture the full contribution of trade activities. For example, a single master version of a copyrighted work (such as for a feature film) may only be valued at a few hundred dollars in trade statistics. However, copies and exhibition rights may generate millions of additional dollars in sales. It is not possible to adjust for this under-valuation so the trade statistics should be viewed with that in mind. The under-valuation may be most pronounced in the Motion Picture sub-sector and the Broadcasting sub-sector.¹⁸

Culture services (as opposed to products), which are intangible products such as performances and broadcasts, are not included in these estimates.¹⁹

However, exports of core CB goods have increased each year since 1996, reaching almost \$2.3 billion in 2002. This represents almost a doubling from the 1996 export level of \$1.2 billion. (see Chart 9)

The export of core CB goods, while increasing each year, has been slowing (in growth rate) since 1997. Although the pace of growth has been diminishing, it still was a healthy 3.8% between 2001 and 2002. Growth in 1997/98 reached a high of almost 23%. (see Chart 10)

¹⁶Data description provided by Jamie Carson of Statistics Canada.

¹⁷See Siwek, *op.cit.*, page 17.

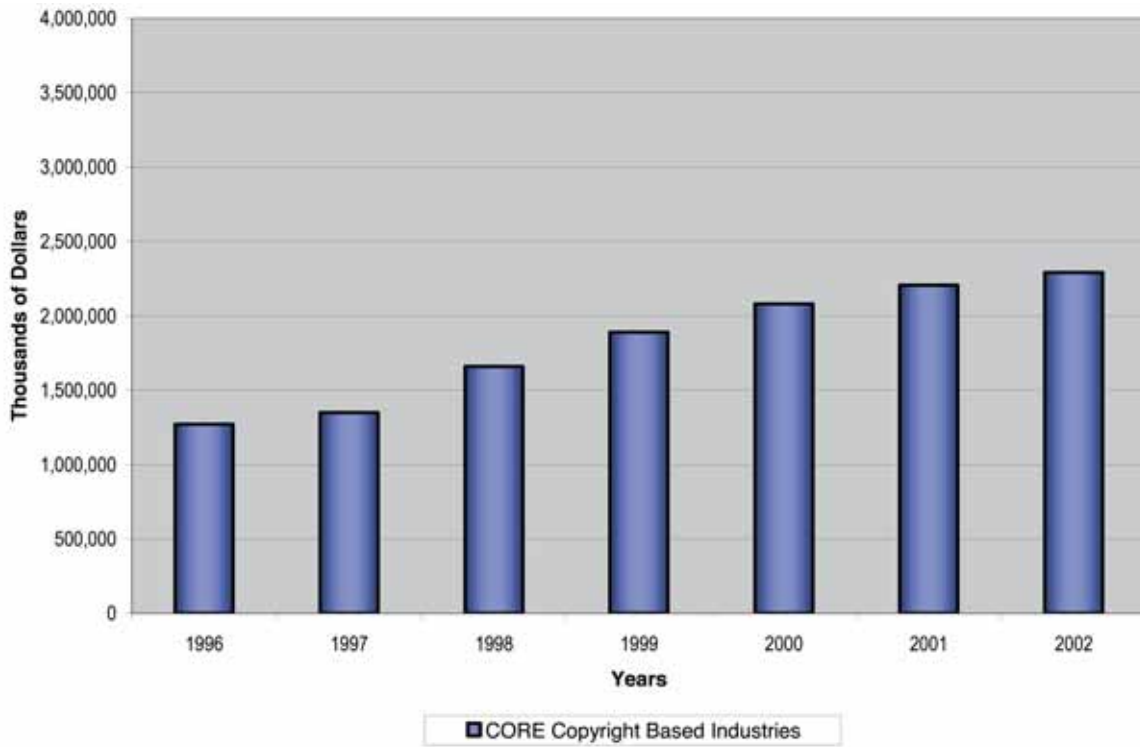
¹⁸See Appendix 7 for some examples.

¹⁹See Appendix 8 for a more complete description of cultural goods trade data.

Chart 9

CORE Copyright-Based Industries Domestic Exports (1996-2002)

Thousands of Dollars

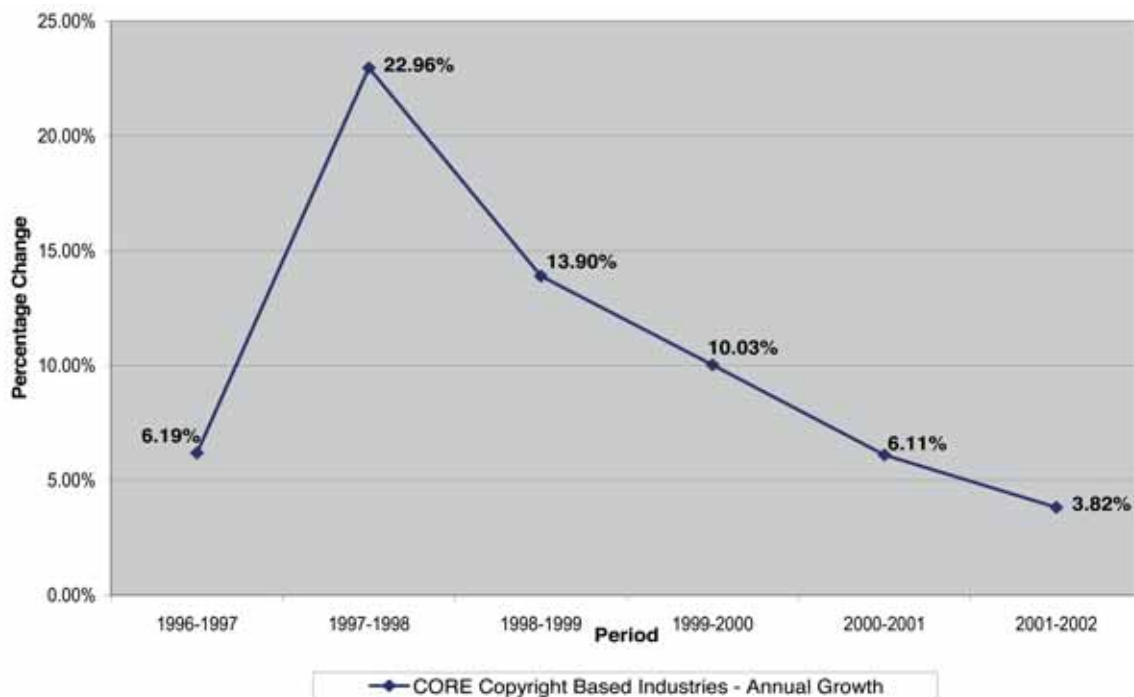


Source: Wall Communications Inc. 2004

Chart 10

CORE Copyright-Based Industries Domestic Exports

Annual Growth



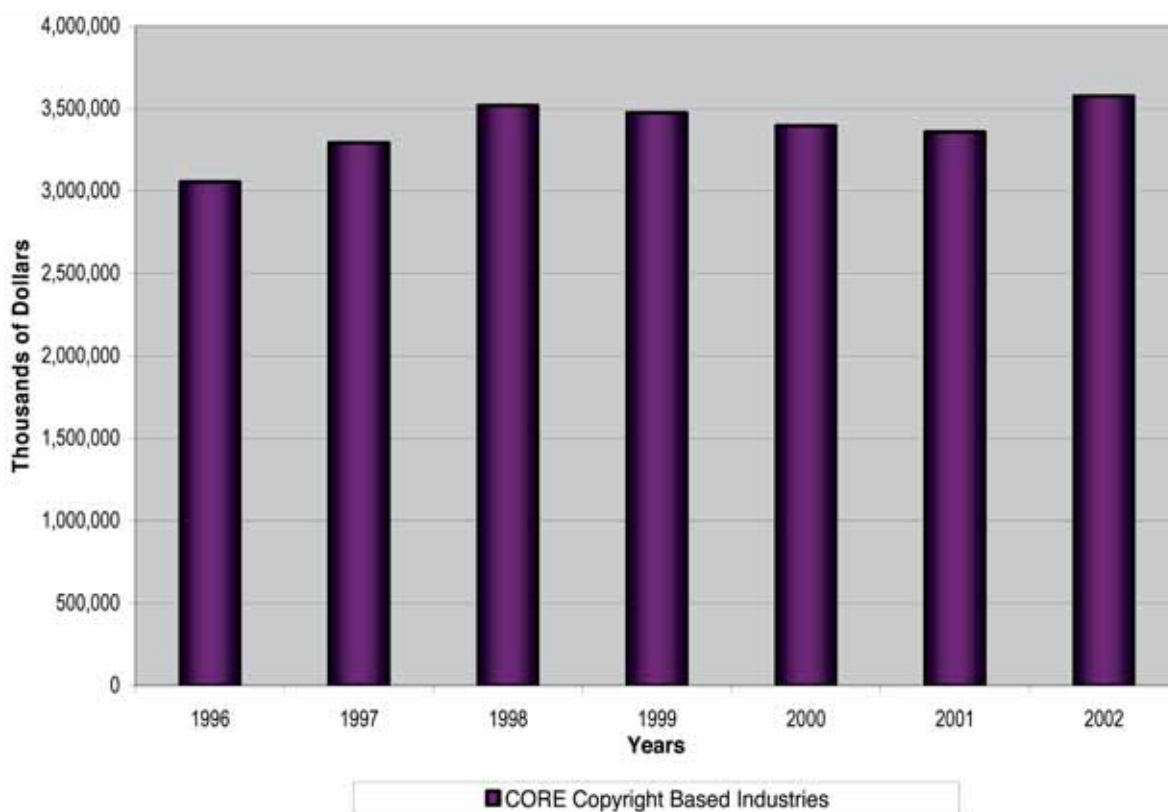
Source: Wall Communications Inc. 2004

Imports in the CB industries, which typically exceed exports, have generally been in the \$3 billion to \$3.5 billion range since 1996. A peak of \$3.5 billion was not surpassed until 2002 and only by a marginal amount. Imports increased between 1996 and 1998, and then declined until 2001.

Chart 11

CORE Copyright-Based Industries Retained Imports (1996-2002)

Thousands of Dollars

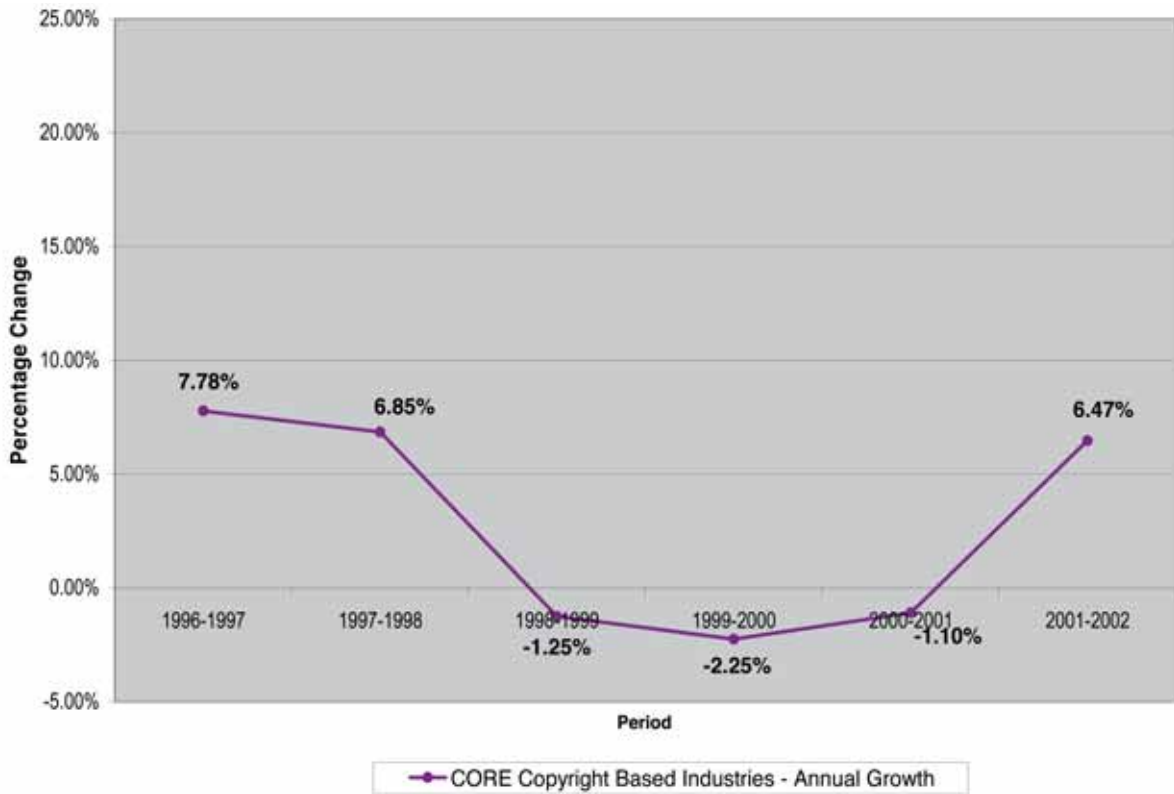


Source: Wall Communications Inc. 2004

Looking at rates of growth, imports have not hit the peaks achieved by the export sector. In fact, as noted previously, declines occurred in the years between 1998 and 2001. The most recent year for which data is available (2001/02) experienced a return to pre-1998 growth rates, reaching 6.5%.

Chart 12

CORE Copyright-Based Industries Retained Imports
Annual Growth



Source: Wall Communications Inc. 2004

Although Canada remains a net importer of CB goods, the gap between exports and imports has been decreasing since 1997 with the exception of 2002. The CB goods trade deficit decreased from almost \$2 billion in 1997 to about \$1.2 billion in 2001.

In 2002²⁰:

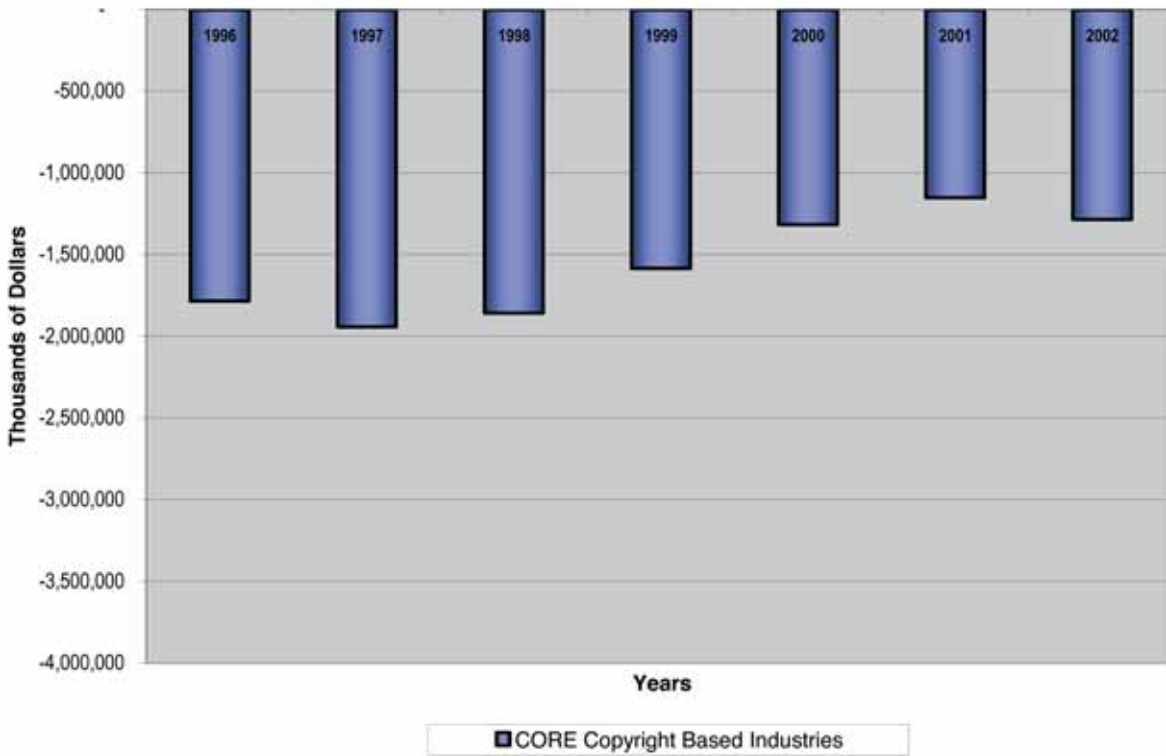
“The United States dominated Canada's international market for culture goods, accounting for 96% of exports and 80% of imports. In terms of exports, Canada continued to lose business in European markets, particularly the United Kingdom and France, as well as in Japan.”

²⁰ International Trade in Culture Goods”, Statistics Canada, 2003.

Chart 13

CORE Copyright-Based Industries TRADE BALANCE (1996-2002)

Thousands of Dollars



Source: Wall Communications Inc. 2004

Publishing and publications printing are key to the CB trade performance. Canada in 2002 exported just over \$1.2 billion worth of publishing and printed products (52% of total cultural goods exports). However, Canada imported just over \$2.9 billion in publishing products, which accounted for 81% of all imports. The resultant trade deficit for the printing and publishing category was \$1.7 billion, the largest of any culture goods category. Books accounted for \$1.0 billion of this deficit.

6. Comparisons with other Countries

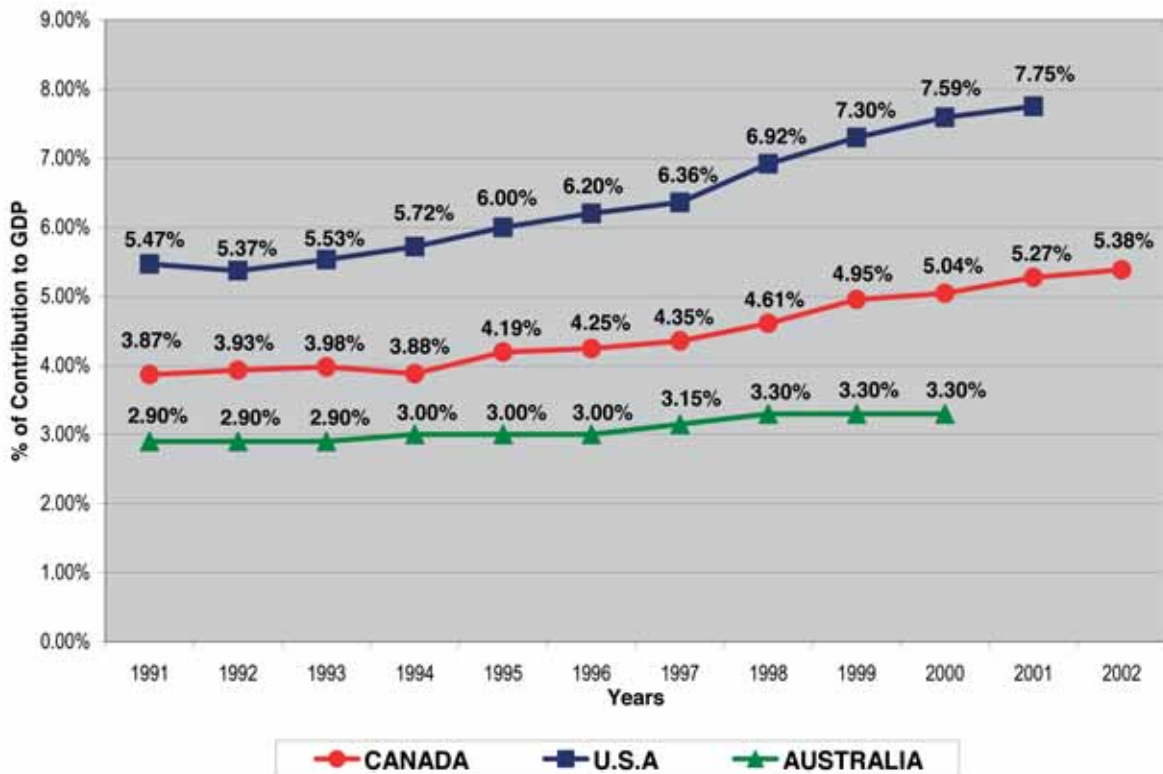
The key comparable studies come from the United States and Australia. It should be noted at the outset that even though the approach of the U.S. and Australian studies contain many similarities to this study, significant differences still remain. These differences mainly arise in the area of CB category definitions. Consequently the data does not measure exactly the same activities in each study. In fact, both the U.S. and Australian studies were conducted prior to the issuance of the WIPO guidelines and can therefore do not employ the exact methodology adopted for this study.

The following comparisons accordingly only provide a rough indication of any country's CB activities vis a vis any other country.

While the U.S. has led the way in terms of percentage of national GDP attributable to copyright based industries, Canada has also seen the importance of these industries grow. The U.S. study estimates that in 2002 7.75 % of U.S. national GDP was related to copyright industries while Canada stood at 5.4 % in 2002. Australia has remained in the 3% range although its contribution slowly continues to grow.

Chart 14

Canadian, American and Australian Copyright-Based Industries GDP CONTRIBUTION to National GDP

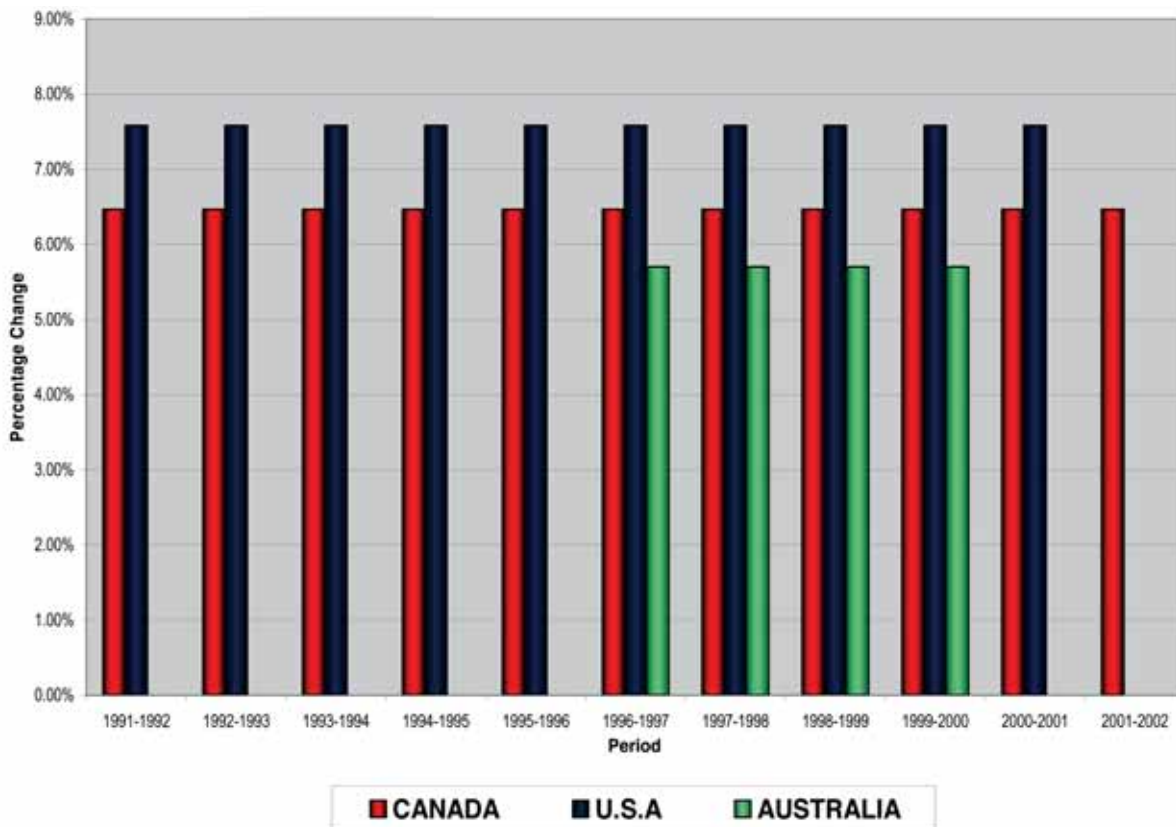


Source: Wall Communications Inc. 2004

The average annual growth of CB industry activity is relatively high in all three countries. The U.S. has experienced the highest growth rate at 7.7% while Canada's CB industries grew a point below that at 6.5%. Australia's growth between 1997 and 2000 was 5.8%

Chart 15

Canadian, American and Australian Copyright-Based Industries GDP AVERAGE Annual Growth

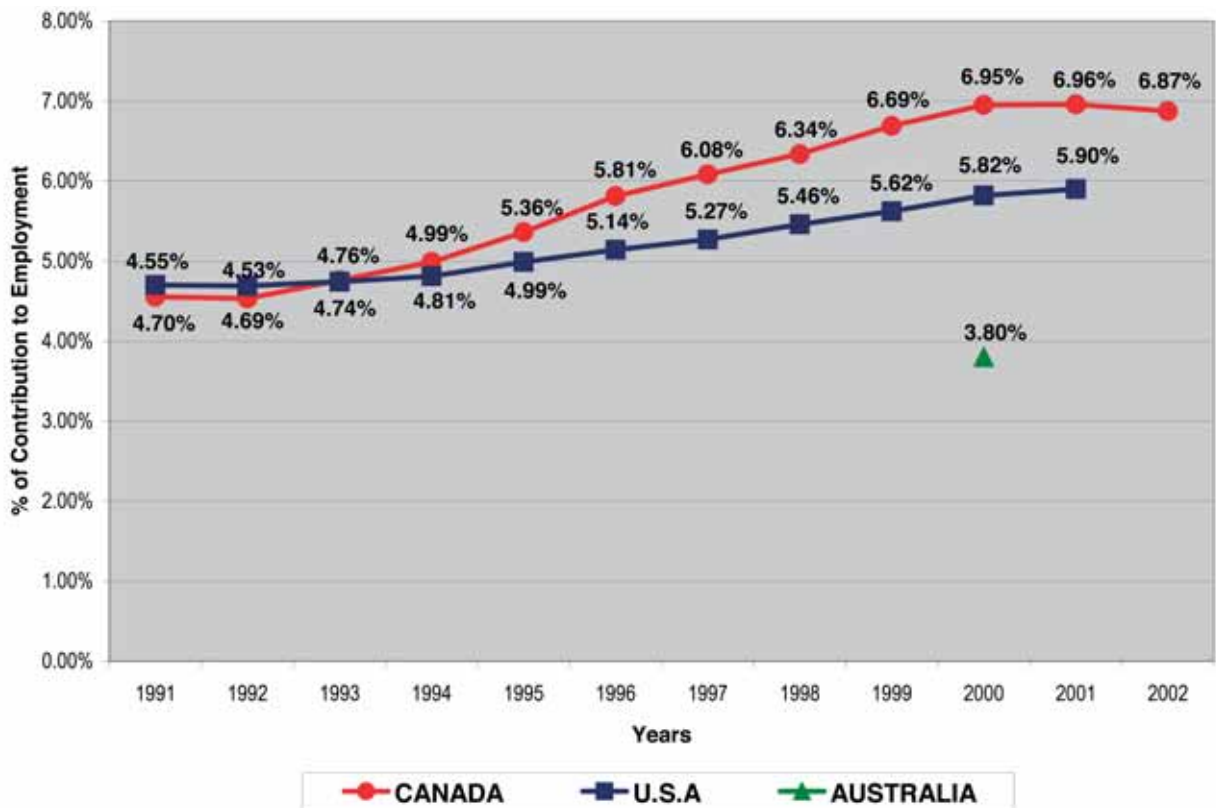


Source: Wall Communications Inc. 2004

In terms of employment, both Canada and the U.S. have been increasing the share of national employment attributable to copyright based industries. By the year 1999, Canada was a percentage point higher than the U.S. However, most recently, Canada appears to have slowed its share growth somewhat relative to the U.S. Nonetheless, the latest data indicates that the share of employment due to CB industries was almost 7% in the years 2000 through to 2002. Limited data for Australia indicates that the percentage of employees working in CB industries is just less than 4%.

Chart 16

Canadian, American and Australian Copyright-Based Industries CONTRIBUTION to National Employment

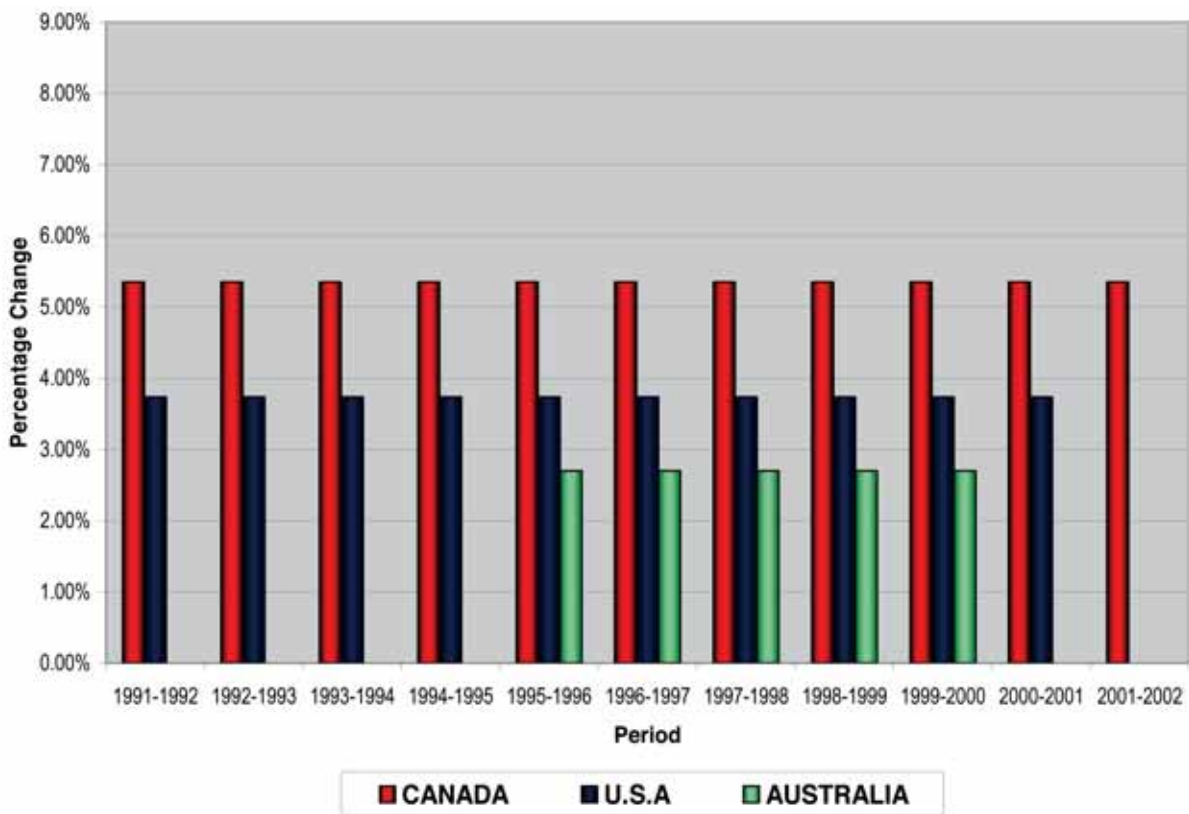


Source: Wall Communications Inc. 2004

The average annual growth of CB industry employment was 5.4% in Canada over the period 1991 to 2002 while it was 3.8% for the U.S. (1991-2001) and 2.8% for Australia (1995-2000).

Chart 17

Canadian, American and Australian Copyright-Based Industries Employment AVERAGE Annual Growth

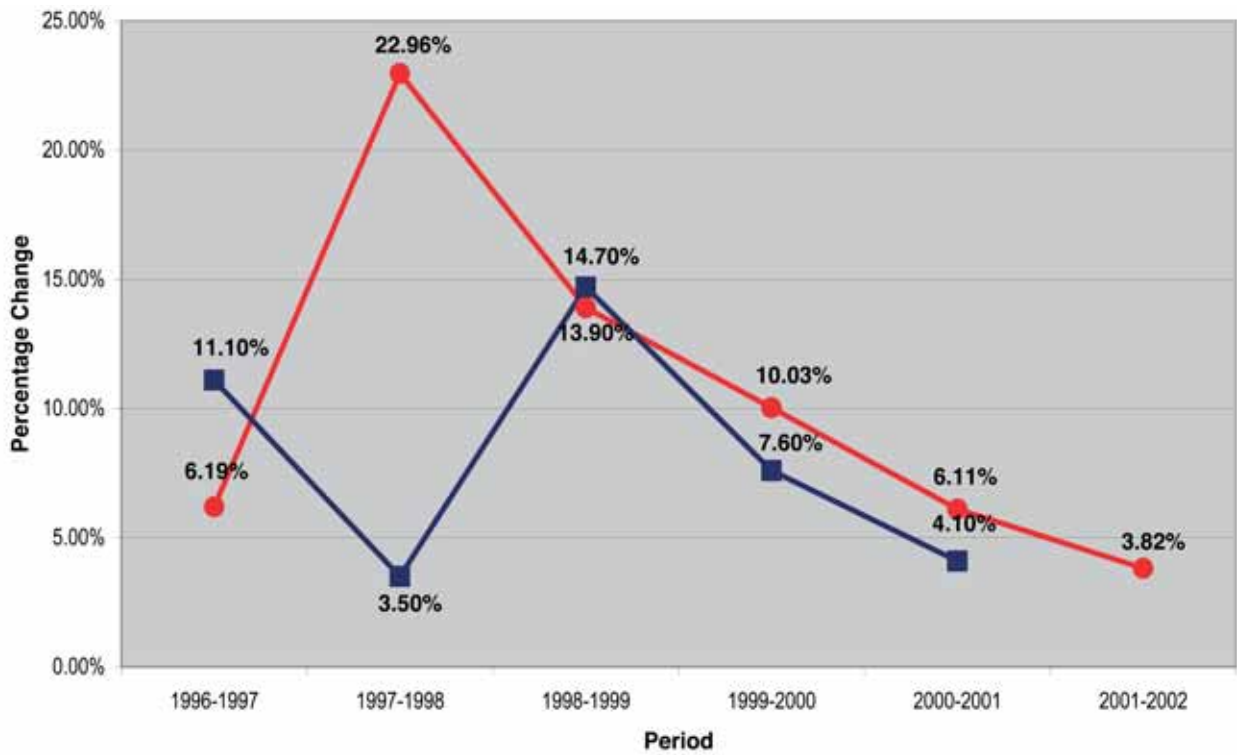


Source: Wall Communications Inc. 2004

While both the U.S. and Canada have experienced relatively high rates of growth in exports over the last five to six years, Canada's growth has typically been higher. Export growth peaked in Canada at almost 23% in 1997/98. The annual growth in both countries appears to be slowing in recent years, although the Canadian growth rate remains above the U.S. rate. This is an area that should be monitored closely in future years.

Chart 18

Canadian and American EXPORTS: CORE Copyright-Based Industries Annual Growth



Source: Wall Communications Inc. 2004

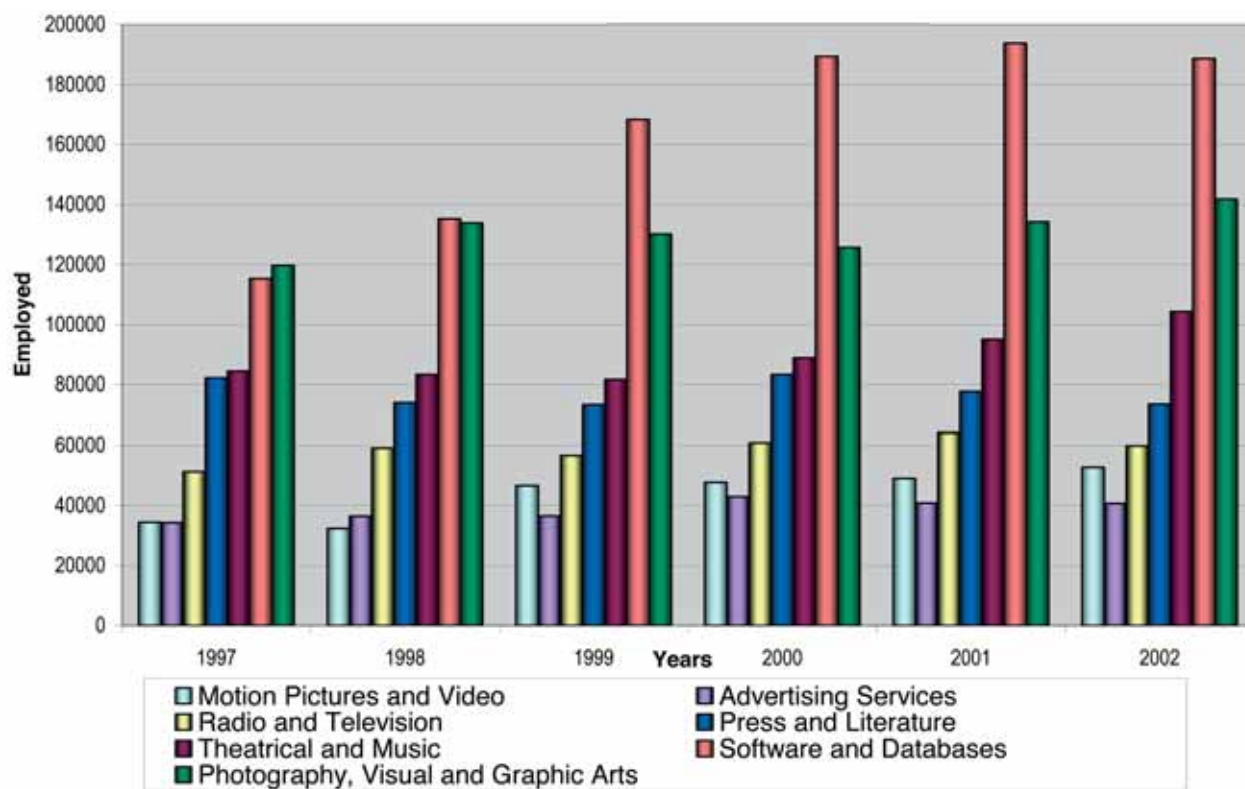
7. Analysis of CORE Sub-sectors and Environmental Considerations

Of all the core copyright based sub-sectors, Press and Literature (publishing) began the decade as the most important contributor. By 1999, software and databases had surpassed publishing to become the largest sub-sector. The Motion Picture and Advertising sub-sectors remained the smallest contributors. As can be seen from Chart 19, publishing, photography, visual and graphic arts and software were noticeably larger than the other sub-sectors by 2002.

Chart 19

GDP: CORE Copyright-Based Industries (1997-2002) By Subcategory

Millions of Chained 1997 Dollars

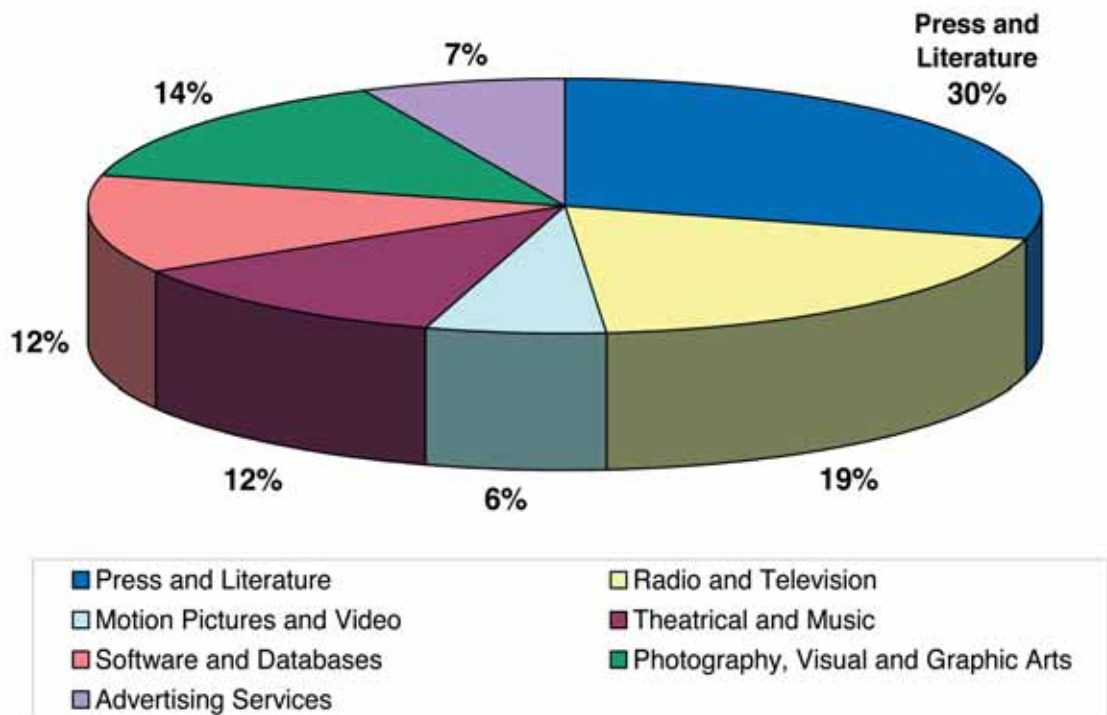


Source: Wall Communications Inc. 2004

The trend displayed in Chart 19 is most clearly seen in the following “snap shot” pie charts that depict 1991, 1997 and 2002.

Chart 20

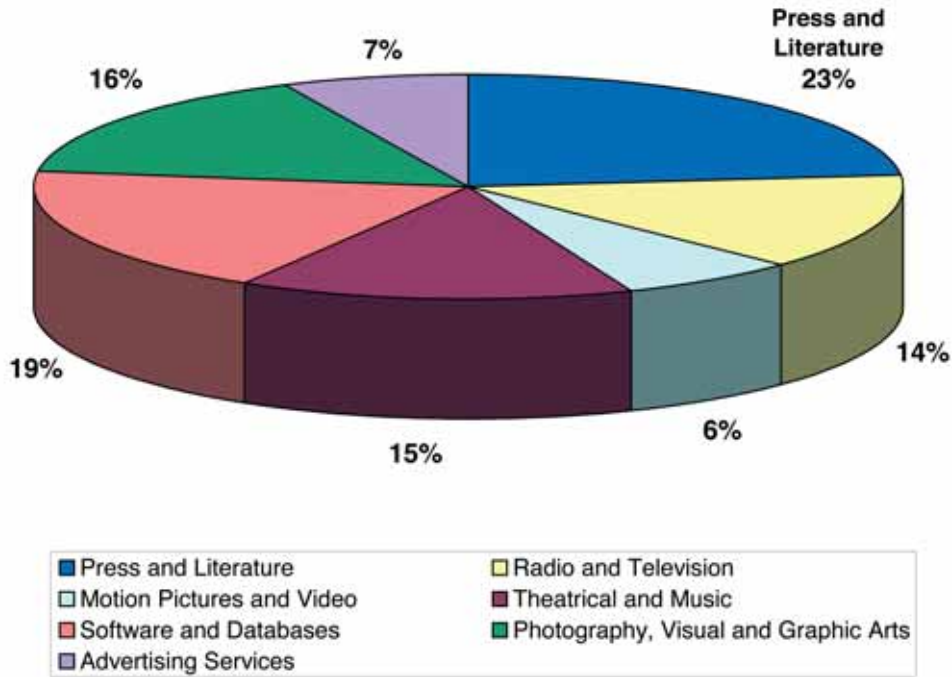
GDP: CORE Copyright-Based Industries 1991



Source: Wall Communications Inc. 2004

Chart 21

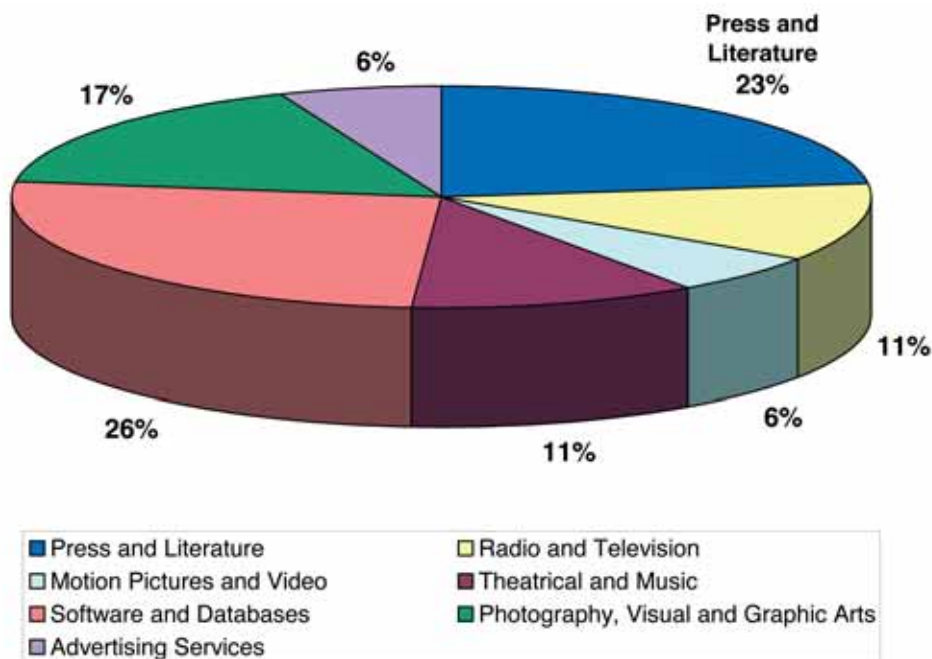
GDP: CORE Copyright-Based Industries 1997



Source: Wall Communications Inc. 2004

Chart 22

GDP: CORE Copyright-Based Industries 2002



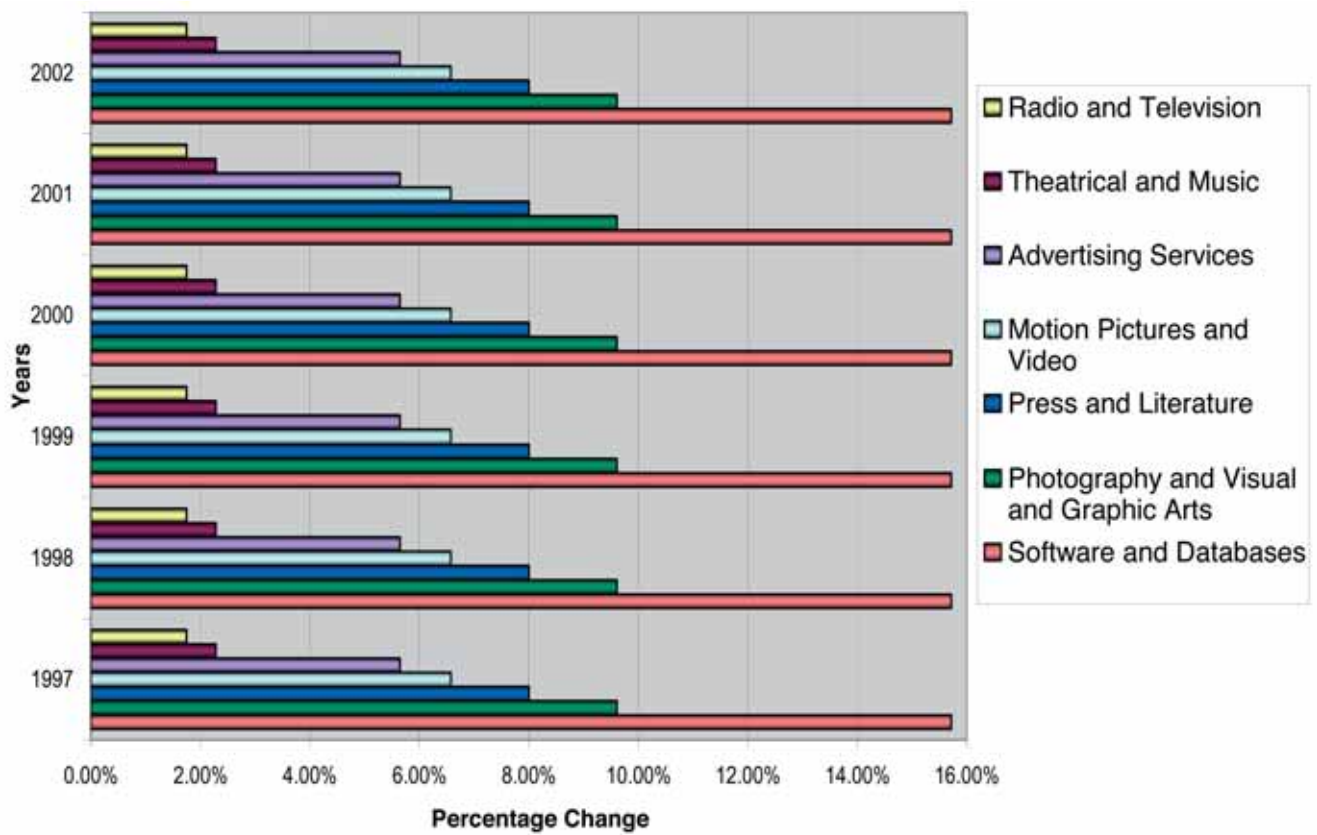
Source: Wall Communications Inc. 2004

The growth trend that is implied in the pie charts is displayed explicitly in Chart 23 where the growth in software dominates the period. This category achieved close to 16% annual average growth over the period. By comparison, Broadcasting grew at just under 2% on average over the period. Four sub-sectors (Software, Photography/Graphic and Professional Services, Press and Motion Pictures each achieved at least 6% annual growth on average.

Chart 23

GDP: CORE Copyright-Based Industries (1997-2002) By Subcategory AVERAGE

Annual Growth

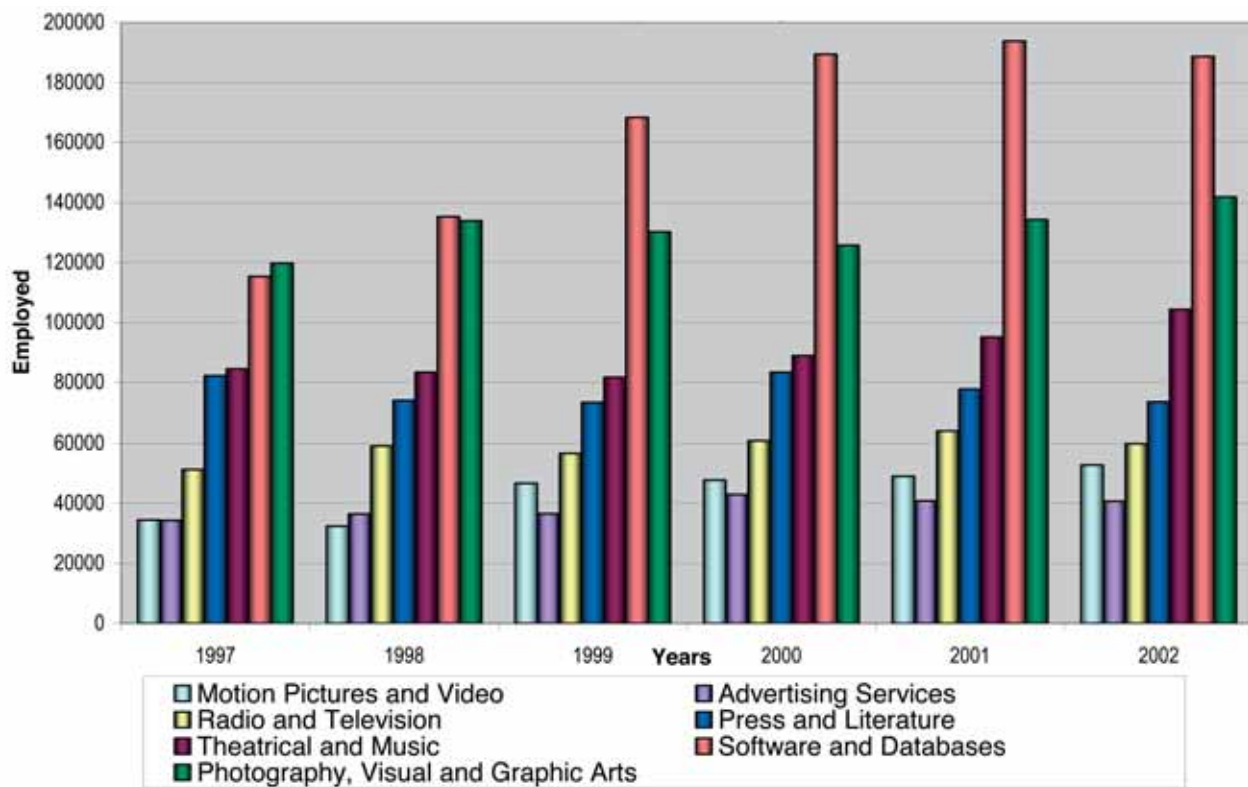


Source: Wall Communications Inc. 2004

In many respects, employment performance mirrors GDP performance for the core sub-sectors. Software employment, however, has become the clear industry leader by 1999 although it has dropped off in 2002.

Chart 24

Employment: CORE Copyright-Based Industries (1991-2002) By Subcategories



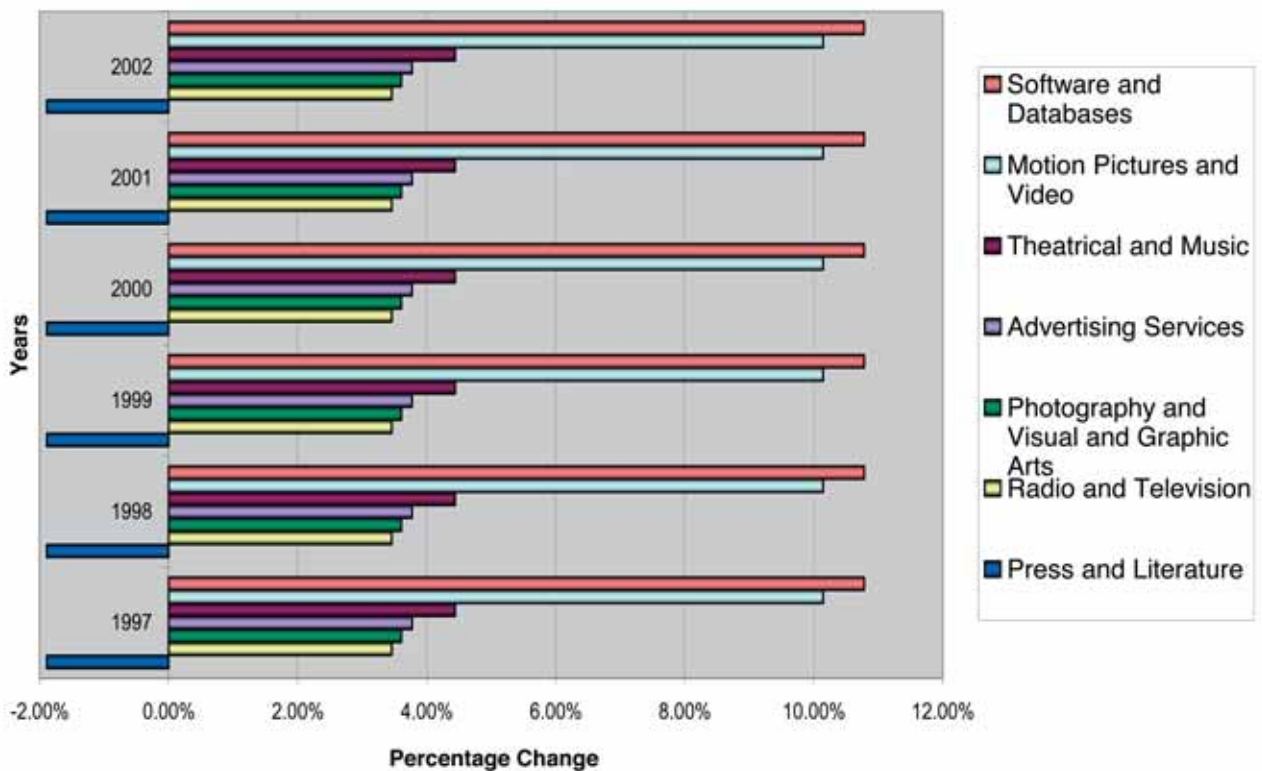
Source: Wall Communications Inc. 2004

Employment in software, as might be expected, led the CB sub-sectors in terms of growth. However, the average annual growth in Motion Pictures was not far behind at just over 10%. Press and Literature (publishing) actually experienced negative growth of almost 2% during the period.

Chart 25

Employment: CORE Copyright-Based Industries (1997-2002) By Subcategories AVERAGE

Annual Growth



Source: Wall Communications Inc. 2004

7.1 Press and literature (Publishing)

There are several distinct divisions within the publishing industries: newspapers, books and magazines (as well as others). Disaggregated GDP data is not available but there is no reason to expect that each of these industry divisions has performed in similar fashions. In fact, observations by key industry participants and partial revenue and related data suggest that the last decade has brought considerable variability to the performance of each (see below).

Statistics Canada reports that there were 627 book publishers in Canada in 2001.²¹ Revenues in that year were \$2.4 billion (of which \$1.8 billion was earned in Canada) with 10,273 full and part-time employees. Profitability for Canadian-controlled publishers was significantly lower in 2000/01 than it was for their foreign-owned competitors. Canadian-controlled firms generated a pre-tax profit of \$85.0 million in 2000/01, or 5.5% of revenues. On the other hand, their foreign competitors generated a pre-tax profit of \$82.8 million, or 9.5% of revenues. Overall, Canadian-controlled publishers generated 64% of total revenues for the industry in 2000/01, down from 66% in both 1996/97 and 1998/99.

In 2000/01, the industry sold products in Canada worth \$1.8 billion, up 7.6% from two years earlier. However, sales from exports reached \$154.8 million, up 16.2%. The large majority of these export sales, \$133 million, was generated from sales of publishers' own titles. The United States continued to be Canada's biggest foreign market.

The language of titles had a direct and obvious effect on the accessibility of markets for books. For English-language publishers, 78.8% of their export revenues were earned in the United States. For French-language publishers, France accounted for 63.5% of export sales, and the United States for 15.6%.

Periodical publishers in Canada earned about \$1.2 billion in 1999 with 2,027 periodicals²² in publication.²³ There were a reported 8,108 full and part-time Canadian employees. Advertising revenues accounts for twice the revenue of sale of copies of the periodicals. About 36% of periodical publishers were not profitable in 1999.

Ontario had the largest number of periodical publishers with 951 while Quebec had 489 and B.C. had 213.

While the 1990's seem to have been generally favourable to the newspaper industry, 2001 was a challenging year for the Canadian newspaper publishing industry²⁴ The Daily, Annual Survey of Newspaper Publishers, Statistics Canada, August 6, 2003., for several reasons including a slowing economy, declining advertising and circulation revenues, and rising newsprint costs. In Ontario, a very competitive market (described as a newspaper war) contributed to a steep decline in profits.

Operating revenues for the newspaper publishing industry were \$4.56 billion in 2001, down 2.4% from \$4.67 billion in 2000. Advertising revenues, the main source of revenue for the industry, decreased 2.6%. Circulation revenues also fell about 2% in 2001 after having remained steady the previous year.

²¹ Statistics Canada: Survey of Book Publishers and Exclusive Agents, 2000; *Book publishers and exclusive agents: data tables*, November 2003, catalogue no 87F0004XIE.

²² Statistics Canada track periodicals, newspapers and community newspapers separately. The 2,027 periodicals do not include Canada's newspapers.

²³ Periodical Publishing in Canada, 1998-1999, Statistics Canada

²⁴ The Daily, Annual Survey of Newspaper Publishers, Statistics Canada, August 6, 2003.

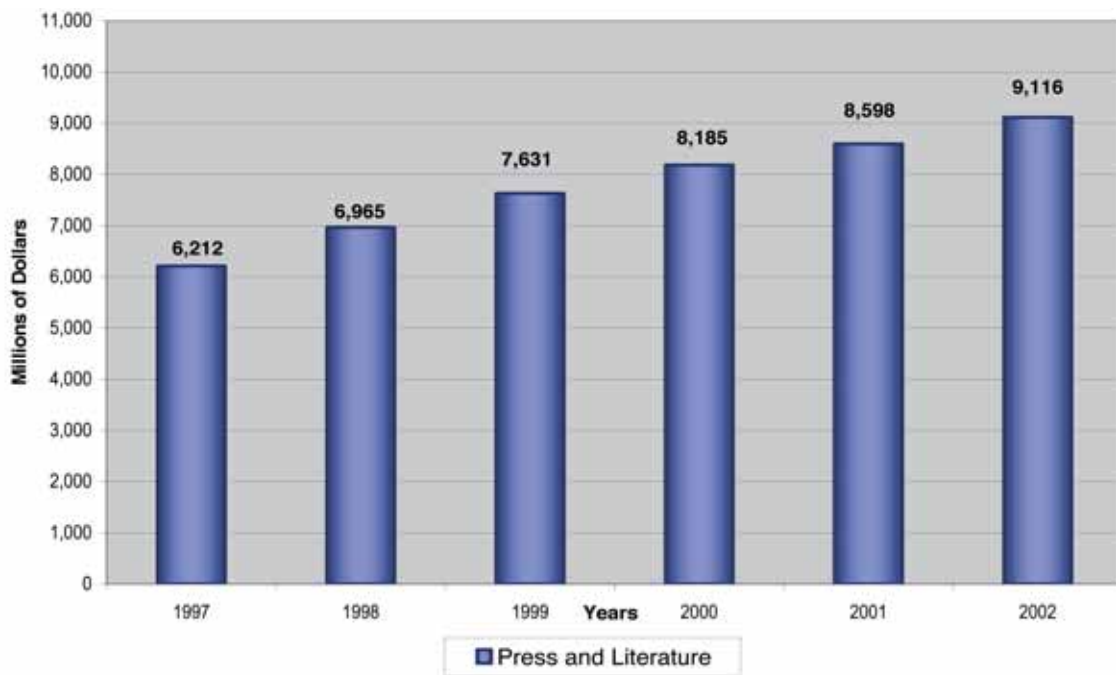
In recent years, the Canadian newspaper publishing industry has witnessed numerous changes in ownership. One result of these changes has been a decline in the proportion of nationwide operating revenues in the hands of the largest publishers. In 2001, the five largest newspaper owners generated 73% of total operating revenues for the industry, compared with 82% in 1999. Nonetheless, there is still a very high concentration of ownership in the Canadian newspaper business.

As a sub sector, press and literature (publishing) provided the second highest contribution to GDP in 2002. Its average annual growth has been third highest from 1997 to 2002.

Chart 26

GDP: CORE Copyright-Based Industries Press and Literature

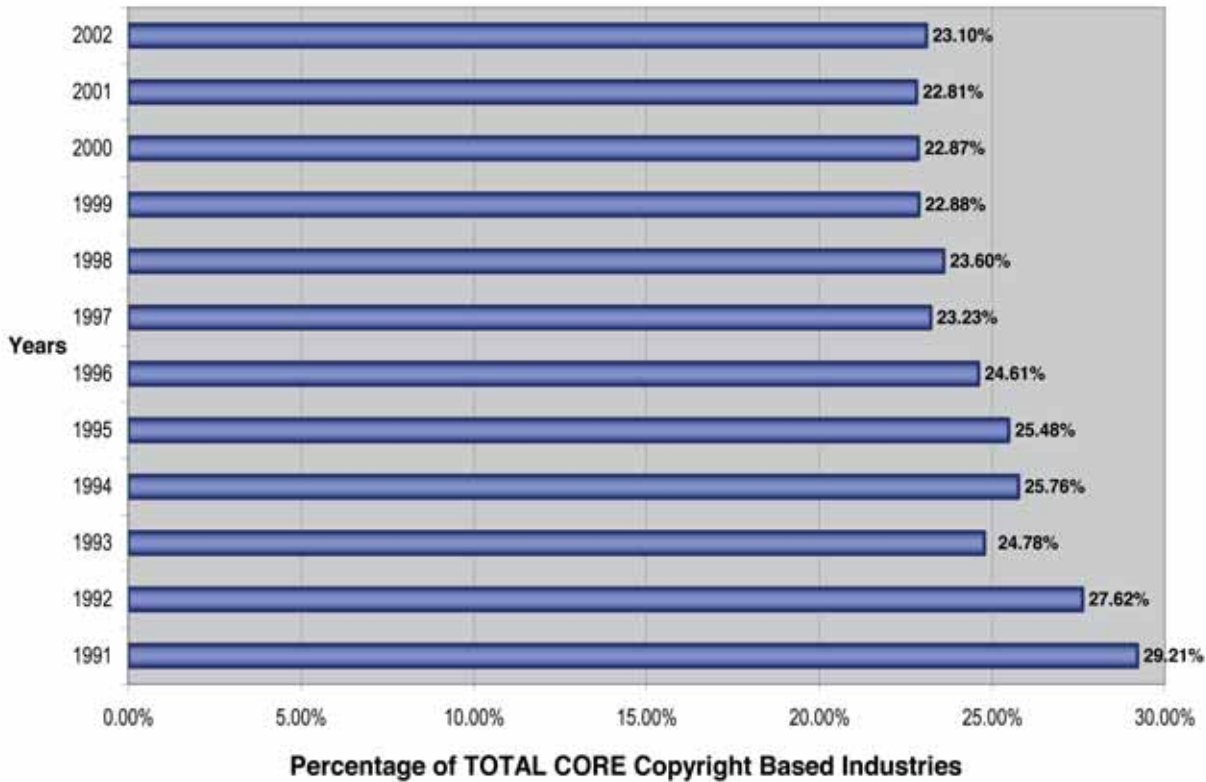
Millions of Dollars



Source: Wall Communications Inc. 2004

Chart 27

GDP: CORE Copyright-Based Industries Press and Literature

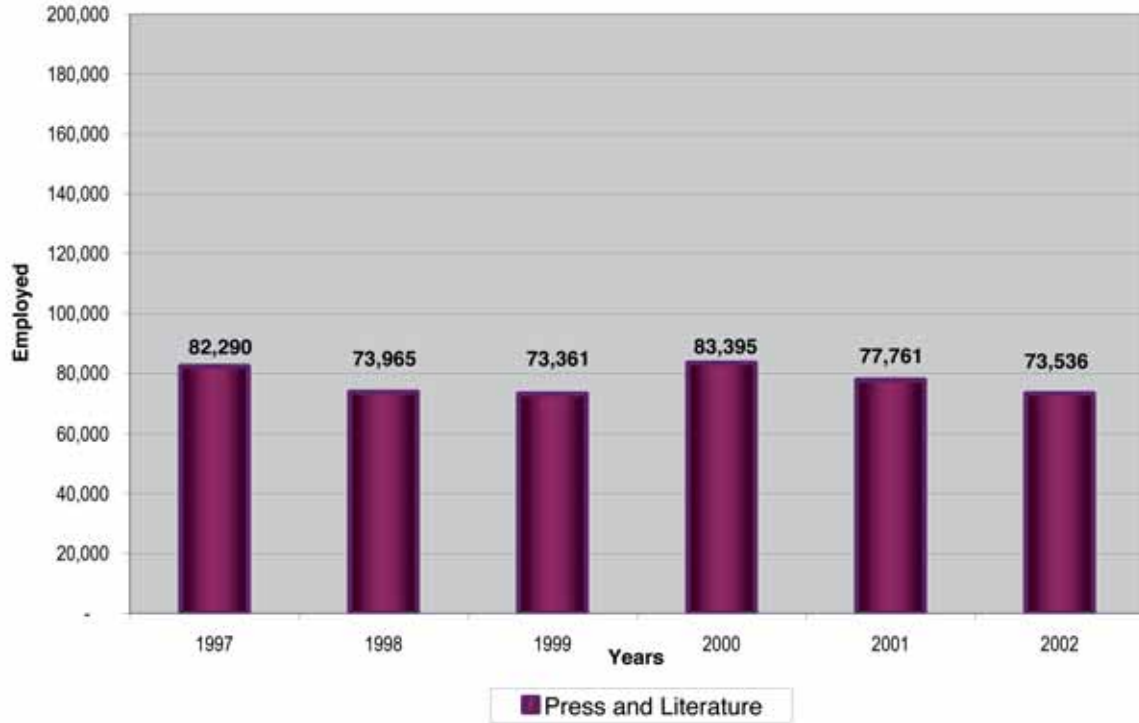


Source: Wall Communications Inc. 2004

The NAICS approach to recording publishing data includes both data base publishing and software publishing. It is likely that these two areas have contributed significantly to the performance of this sub-sector, particularly in terms of the relatively high growth rate. Industry comments on both the book and magazines/periodicals publishing areas suggest that they have not been particularly strong performers over the last decade. Newspapers seem to have performed relatively better than books or magazines.

Chart 28

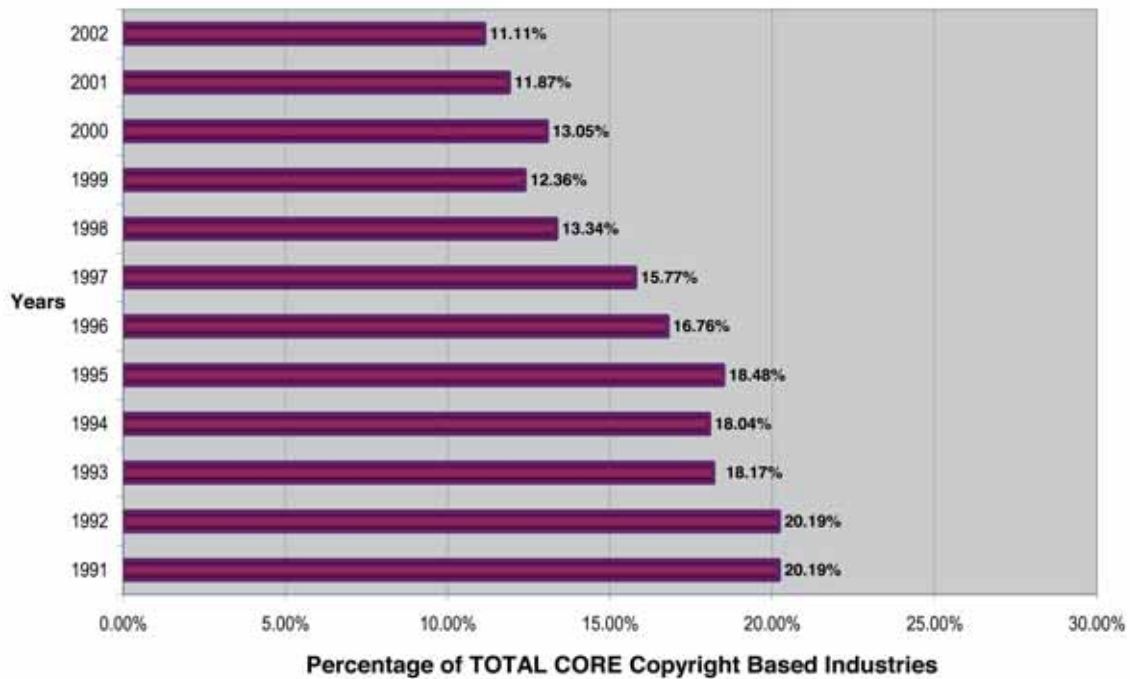
Employment: CORE Copyright-Based Industries Press and Literature



Source: Wall Communications Inc. 2004

Chart 29

Employment: CORE Copyright-Based Industries Press and Literature



Source: Wall Communications Inc. 2004



7.2 Theatrical and Music Performances (Performing Arts and Heritage Institutions)

This category contains a mix of performance arts (musical performances, theatrical performances, and dance performances) as well as the promoters, booking agents and management agents and related functions. Independent artists, writers and performers are also included. Heritage institutions are recorded here as well as part of NAICS 712.

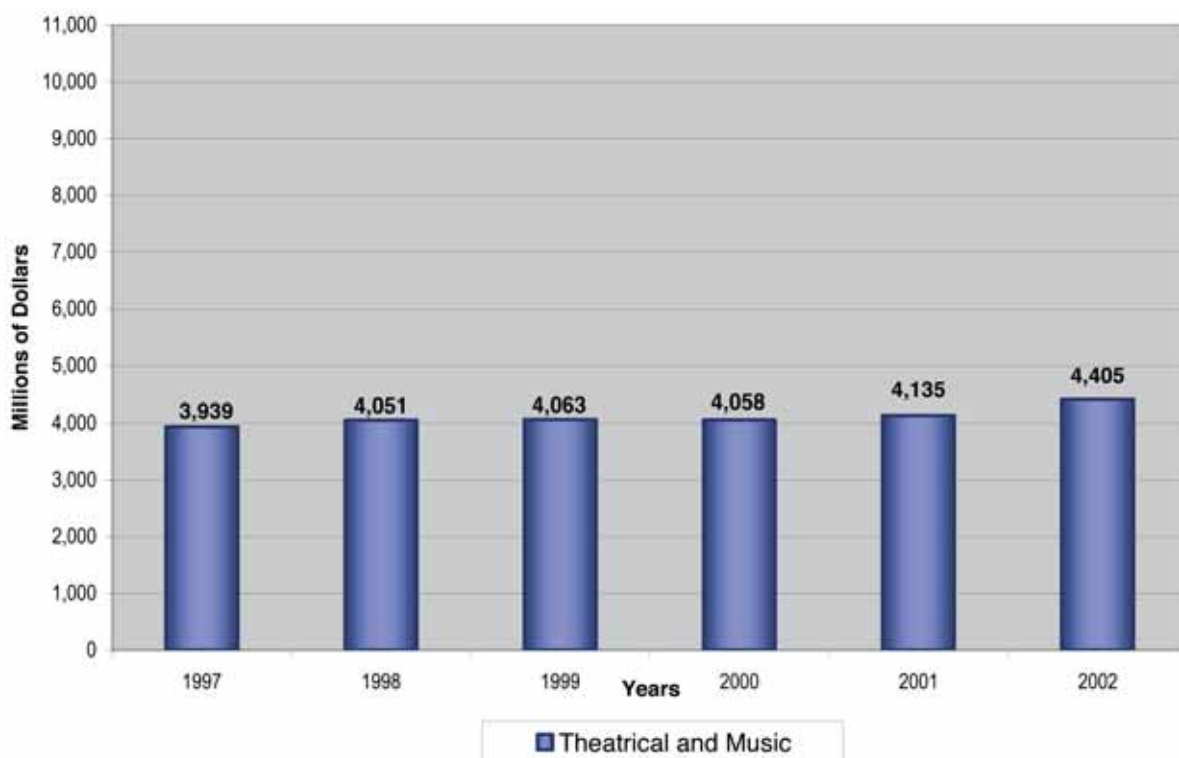
Consumer spending on performing arts tends to be less than spending on movies. The average annual household spent \$66 dollars on live performing arts versus \$90 dollars per household on movie theatres in 1999.²⁵

While this area is not the smallest (by its GDP contribution) it has been growing at the slowest rate (notwithstanding a sizeable jump in 2002). As a result its contribution as a percentage of CORE GDP has continued to diminish since 1993 (see Chart 31).

Chart 30

GDP: CORE Copyright-Based Industries Theatrical and Music

Millions of Dollars

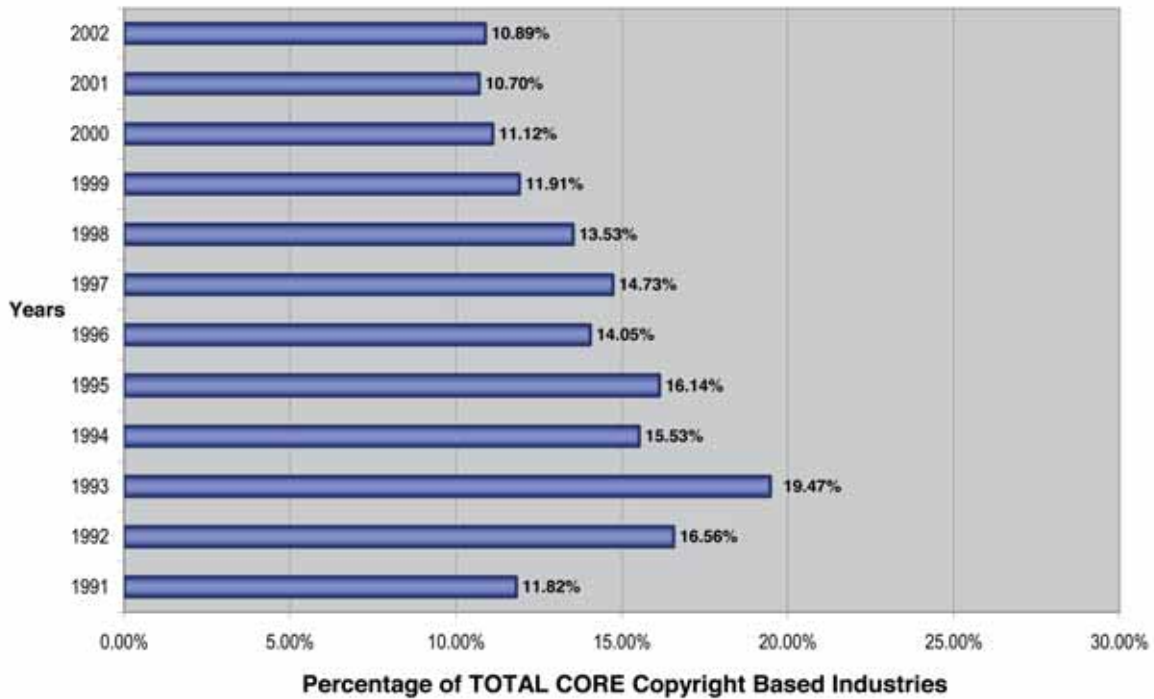


Source: Wall Communications Inc. 2004

²⁵ "Consumer Demand for Entertainment Services", Janine Stafford, Analytical Paper Series # 42, Statistics Canada, March 2003. Average annual household spending on museums was \$33 while live sports was \$39.

Chart 31

GDP: CORE Copyright-Based Industries
Theatrical and Music Performances



Source: Wall Communications Inc. 2004

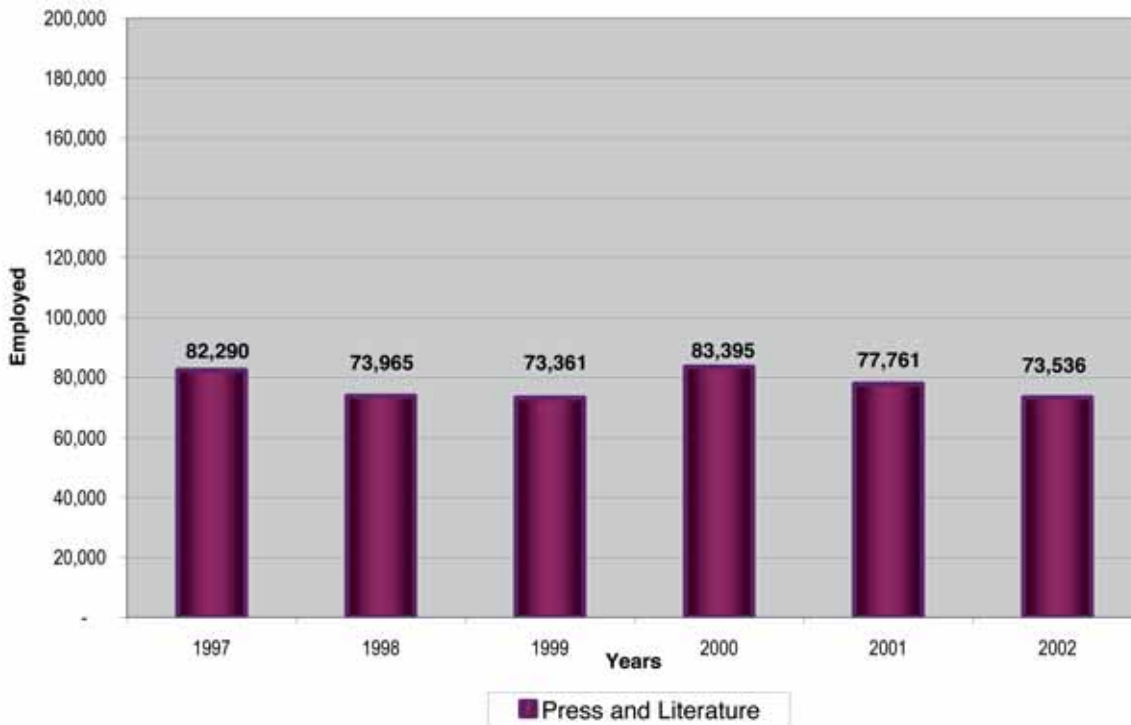
Employment, which fell off in the mid-nineties has climbed in the last few years. However, as a share of CORE industry employment it's much lower than the peak of 21% reached in 1993 (see Chart 33).

There are a number of possible explanations for the slow growth of this area. Observers of the music performance area point out that live concerts and local musical performances have suffered due to stronger sanctions and public opinion against the consumption of alcohol and driving²⁶. Stricter laws against smoking in public and private establishments are also identified as a cause of lower participation in live music events. Some observers point out that while the live performance business has suffered in a relative sense, there are more opportunities for performers to earn income from the recording of performances.

²⁶Please note that observers are attributing causal factors and are in no way arguing for a repeal of stricter DUI laws or disagreeing with the public attitude towards these laws.

Chart 32

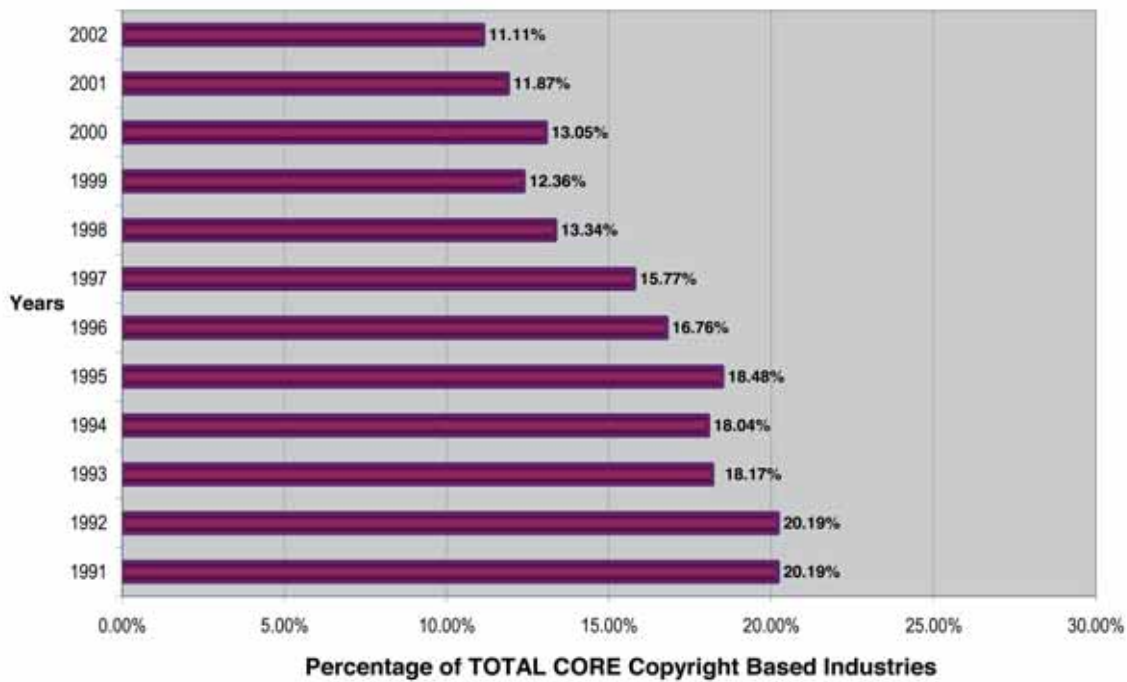
Employment: CORE Copyright-Based Industries Theatrical and Music Performances



Source: Wall Communications Inc. 2004

Chart 33

Employment: CORE Copyright-Based Industries Theatrical and Music Performances



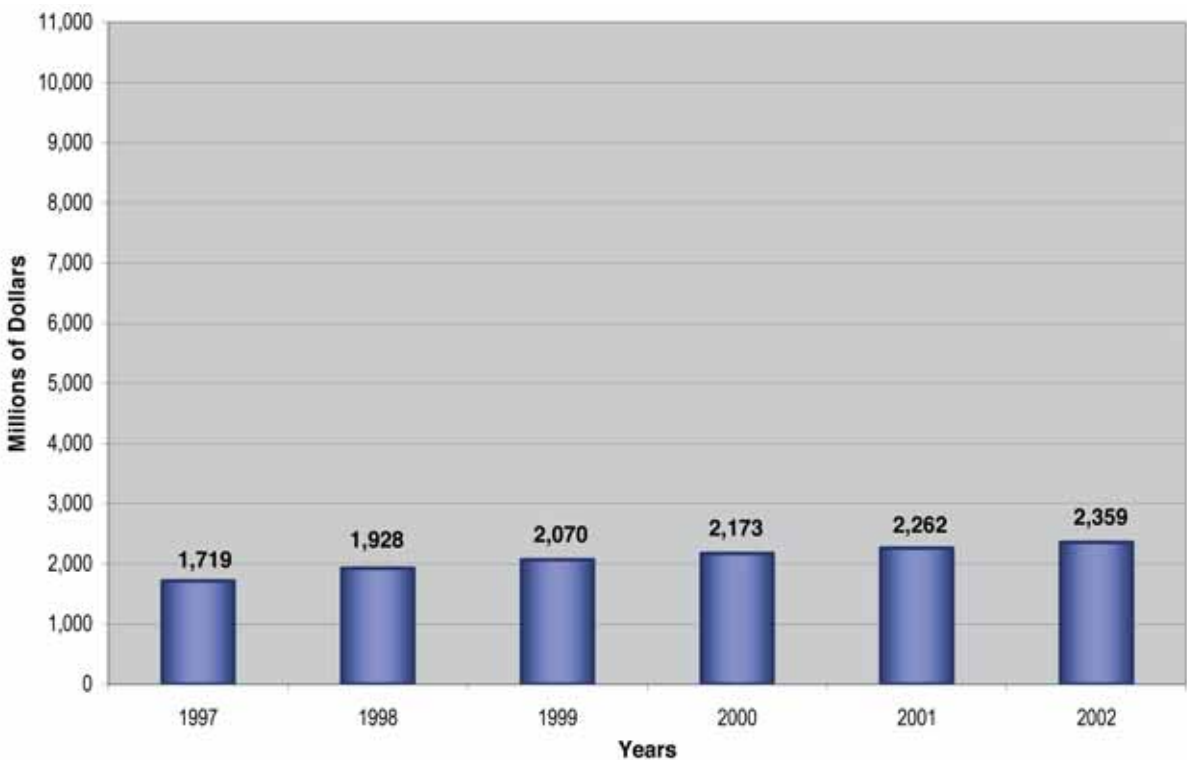
Source: Wall Communications Inc. 2004

7.3 Motion Picture and Video (including Sound Recording)

The movie and TV production, distribution and exhibition industries have undergone numerous changes over the last few decades. Greater vertical integration has characterized these industries, with many of the larger producers becoming very active in distribution. Revenues from distribution have led the way over production or exhibition mostly due to TV distribution which rose from \$317 million in 1997/98 to \$573 million in 2001/02. Consolidation has also been an ongoing feature of the industry.

This category is measured in NAICS 512 (Motion Picture and Sound Recording). Although it is still (in 2002) the smallest sub-sector as measured by GDP, it enjoyed a healthy rate of growth since 1991, although that has slowed somewhat since 1997. It has continued to grow since 1991 and has seen a gradual diminishment in its share of CORE copyright industries contribution since 1994 (see Chart 35).

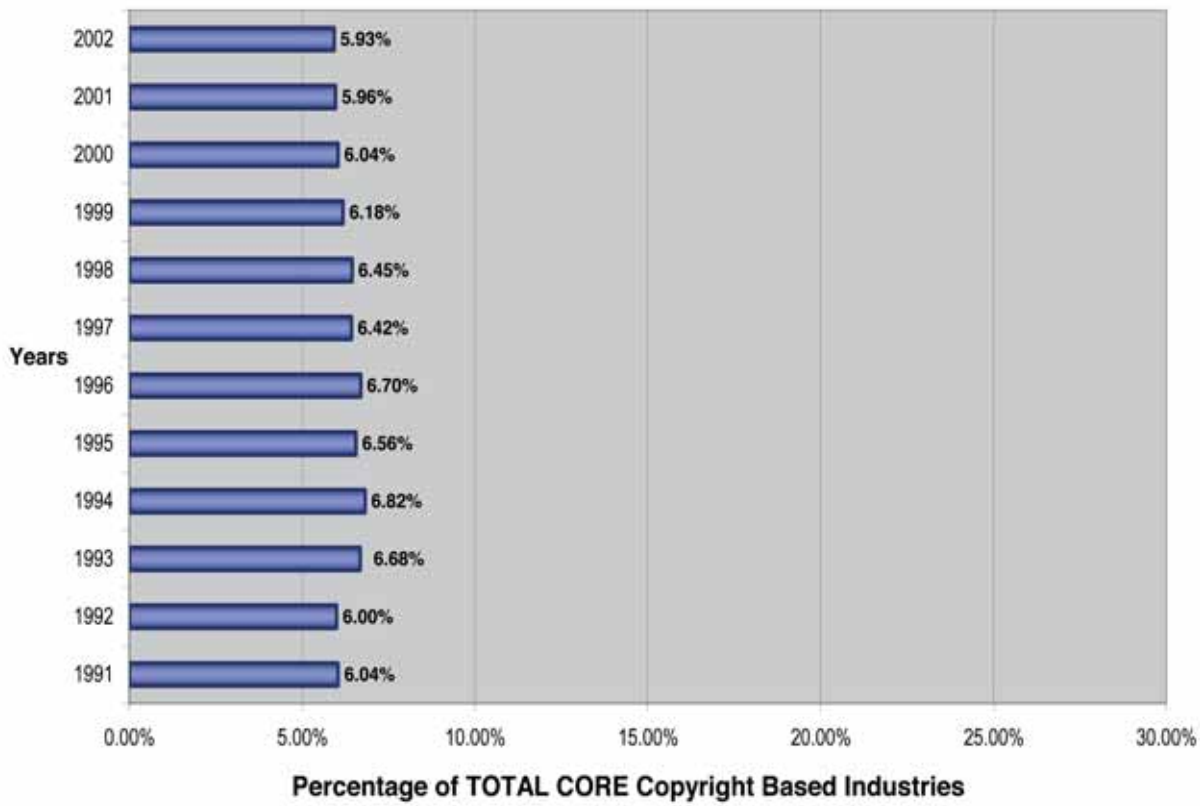
Chart 34
GDP: CORE Copyright-Based Industries Motion Pictures and Video
 Millions of Dollars



Source: Wall Communications Inc. 2004

Chart 35

GDP: CORE Copyright-Based Industries Motion Pictures and Video

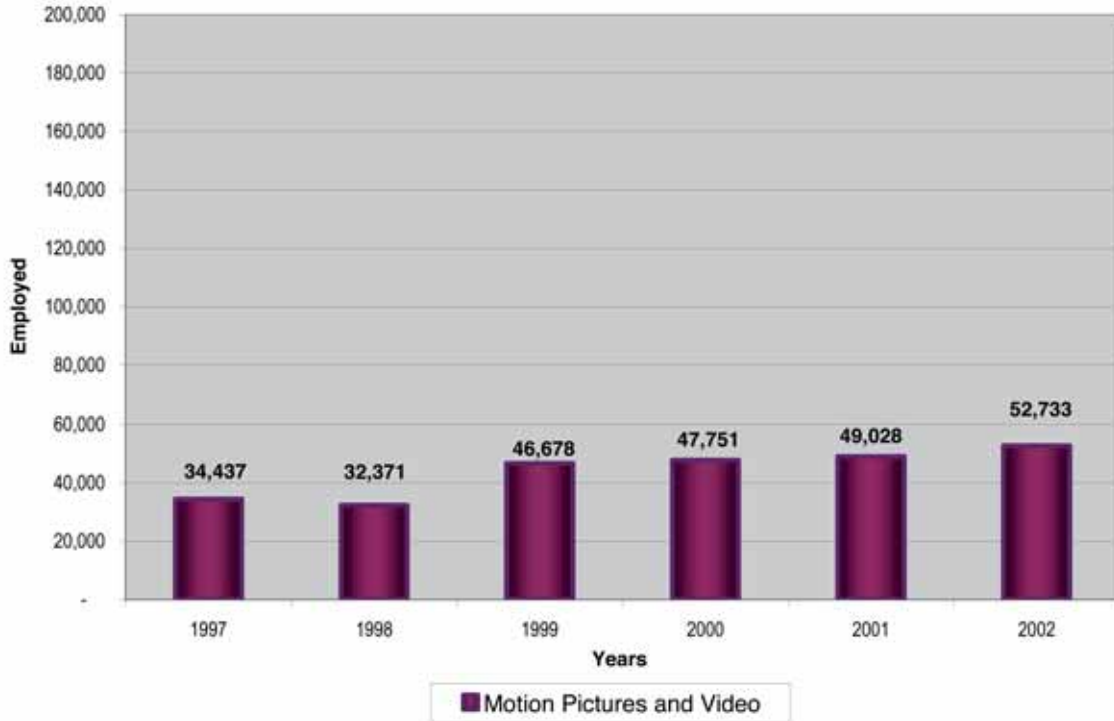


Source: Wall Communications Inc. 2004

Employment in the Motion Picture and Sound Recording industries has generally risen throughout the 1990's and has also gained a greater share of the core industries employment.

Chart 36

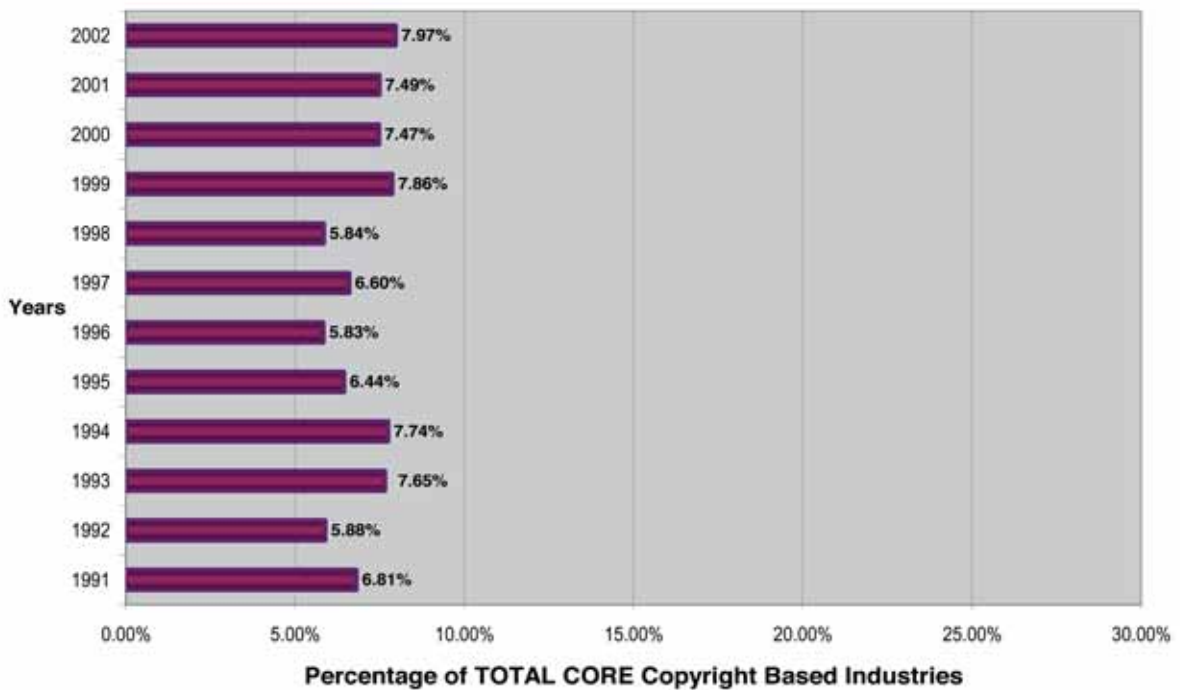
Employment: CORE Copyright-Based Industries: Motion Pictures and Video



Source: Wall Communications Inc. 2004

Chart 37

Employment: CORE Copyright-Based Industries: Motion Pictures and Video

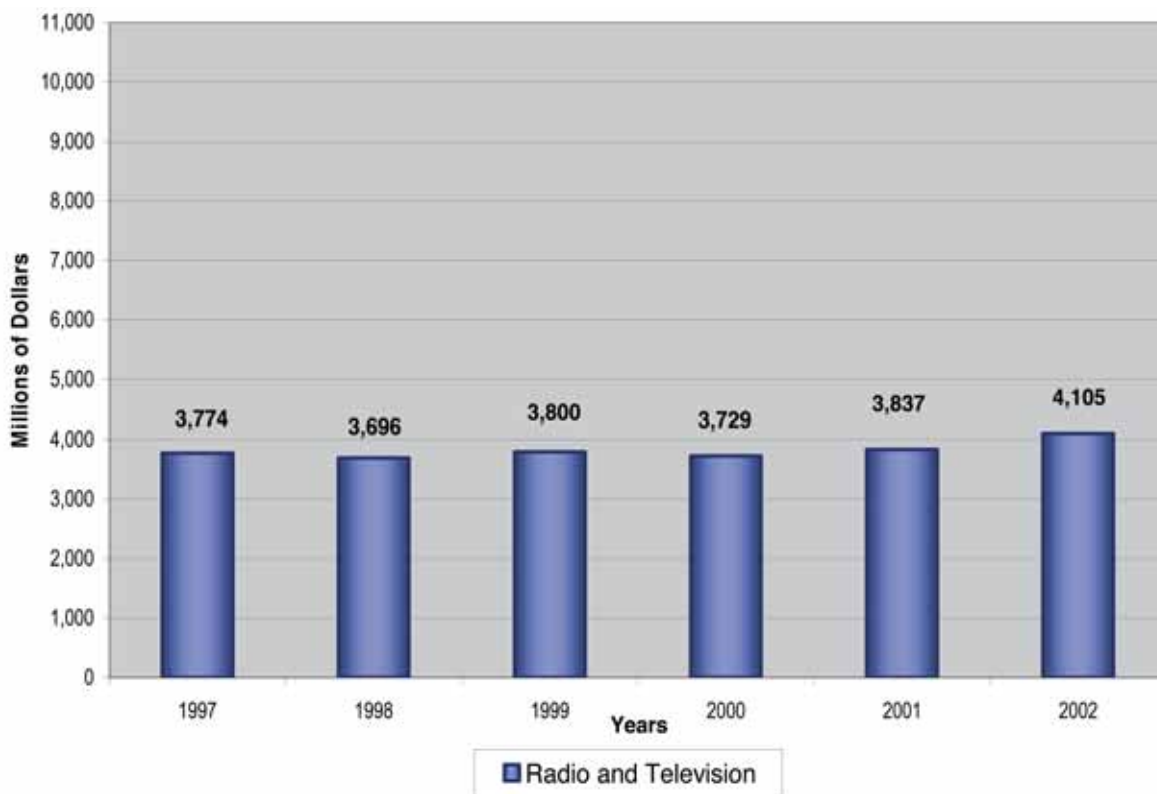


Source: Wall Communications Inc. 2004

7.4 Radio and Television (including cable pay and specialty, cable distribution and DTH)

The radio and television category has experienced one of the slowest rates of growth amongst the sub-sectors, even slower than the growth rate of the national economy. In GDP terms, the area was almost stagnant between the years of 1997 and 2001 (see Chart 38).

Chart 38
GDP: CORE Copyright-Based Industries Radio and Television
Millions of Dollars

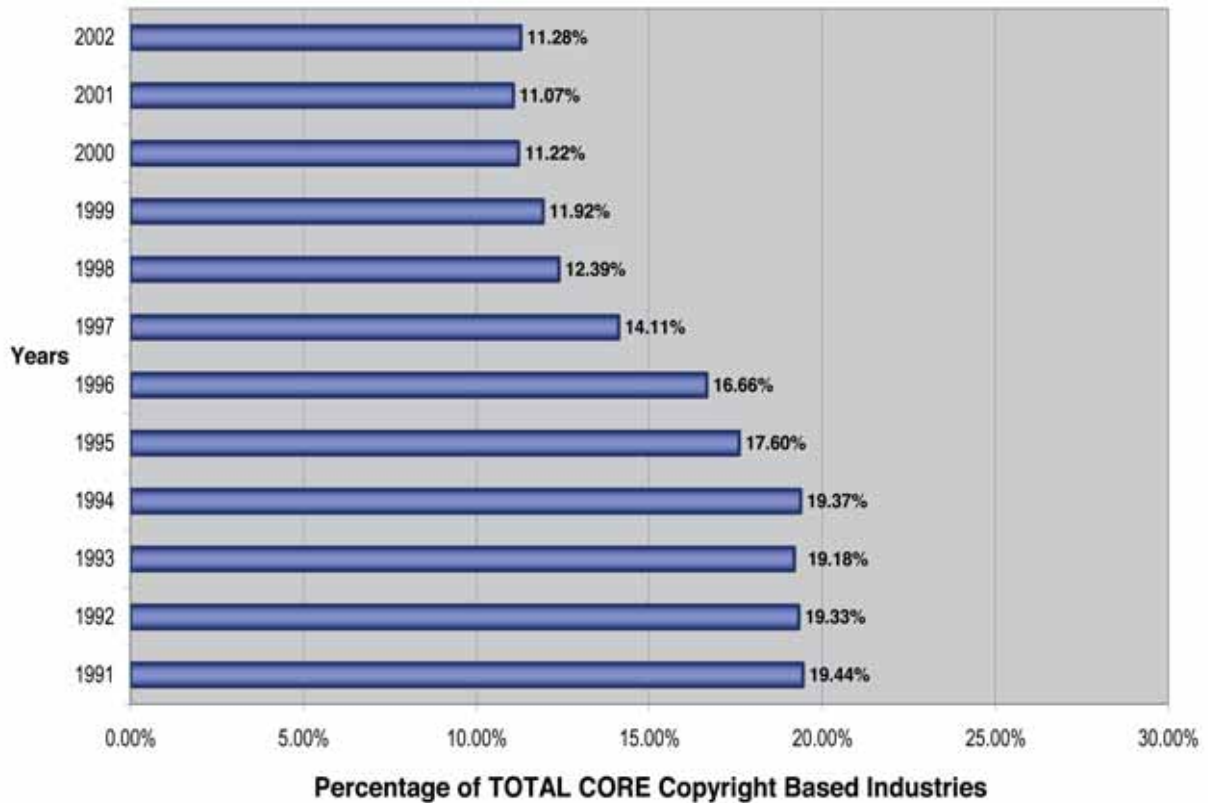


Source: Wall Communications Inc. 2004

Nonetheless, the GDP share of radio and television has fallen considerably over the period, dropping from over 19% in 1991 to just over 11% in 2002.

Chart 39

GDP: CORE Copyright-Based Industries Radio and Television

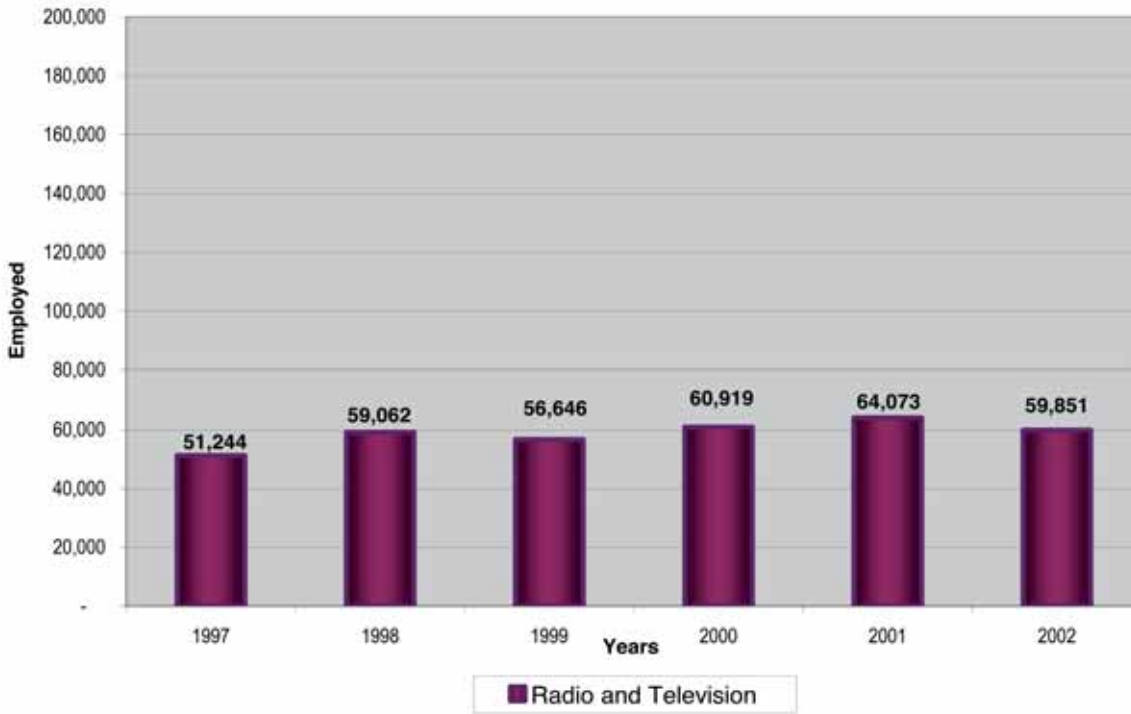


Source: Wall Communications Inc. 2004

Employment has been relatively stable over the period 1991 to 2002. Consequently the employment share of radio and television has fallen.

Chart 40

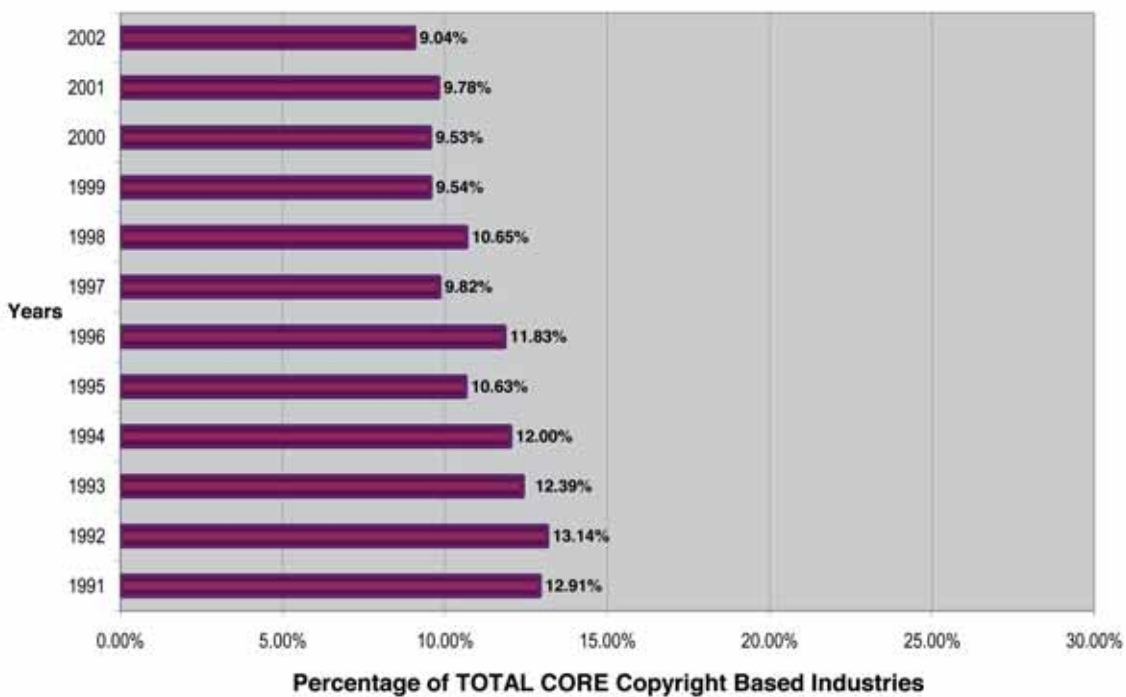
Employment: CORE Copyright-Based Industries Radio and Television



Source: Wall Communications Inc. 2004

Chart 41

Employment: CORE Copyright-Based Industries Radio and Television



Source: Wall Communications Inc. 2004

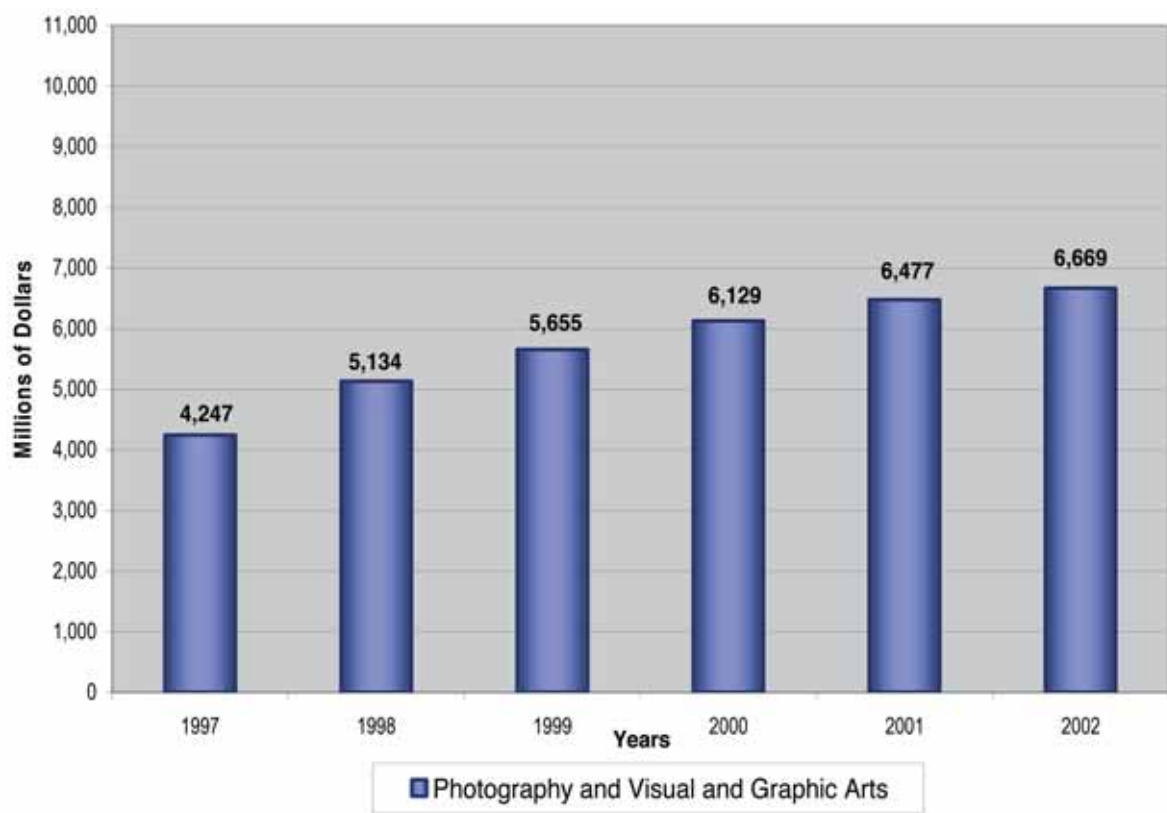
7.5 Photography and Visual and Graphic Arts (including Professional, Scientific and Technical Services)

This mixed category is a significant contributor with the CORE industries, particularly due to the growth in graphic and professional, scientific and technical services.²⁷

Chart 42

GDP: CORE Copyright-Based Industries Photography and Visual Graphic Arts

Millions of Dollars

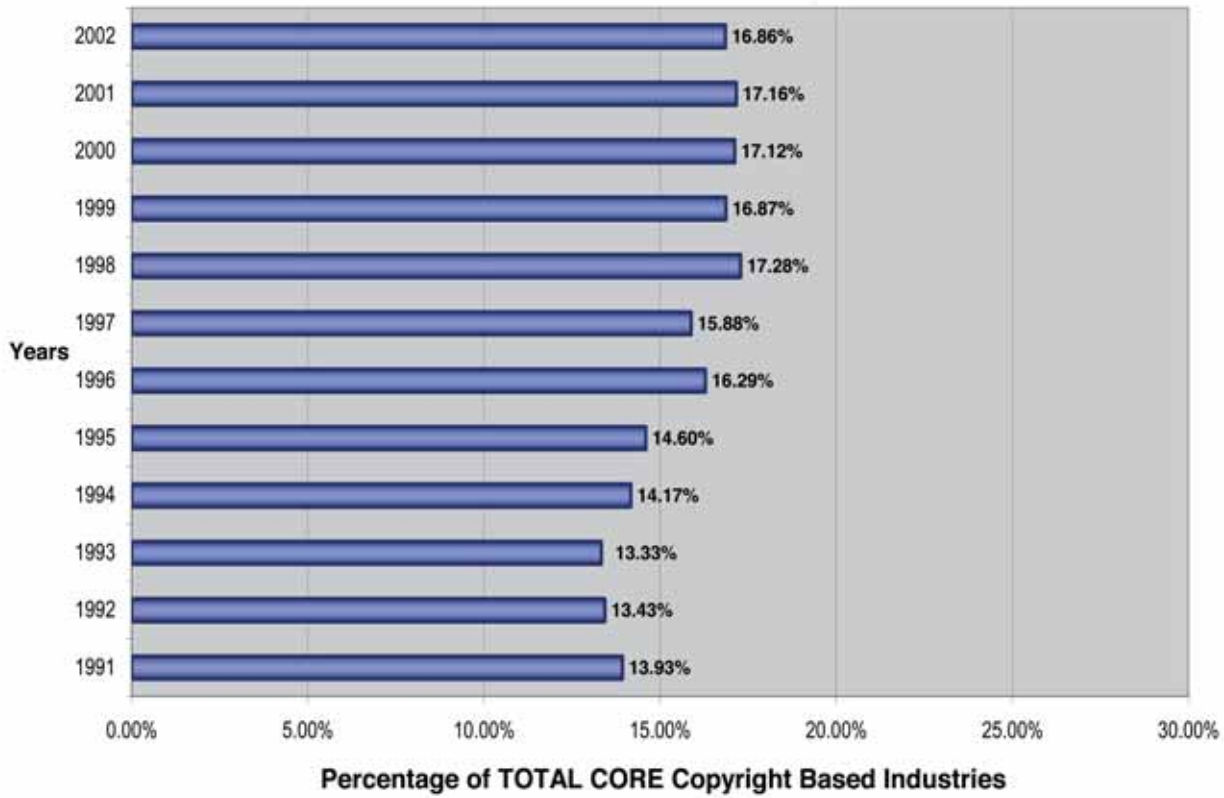


Source: Wall Communications Inc. 2004

²⁷ This includes NAICS 5414 (Specialized Design Services – including graphic), NAICS 5416 (Management, Scientific and Technical Consulting Services), NAICS 5417 (Scientific Research and Design Services) and NAICS 5419 (Other Professional, Scientific and Technical - including market research, photographic services and translation services). We have used 70% of these four NAICS categories.

Chart 43

GDP: CORE Copyright-Based Industries Photography and Visual Graphic Arts

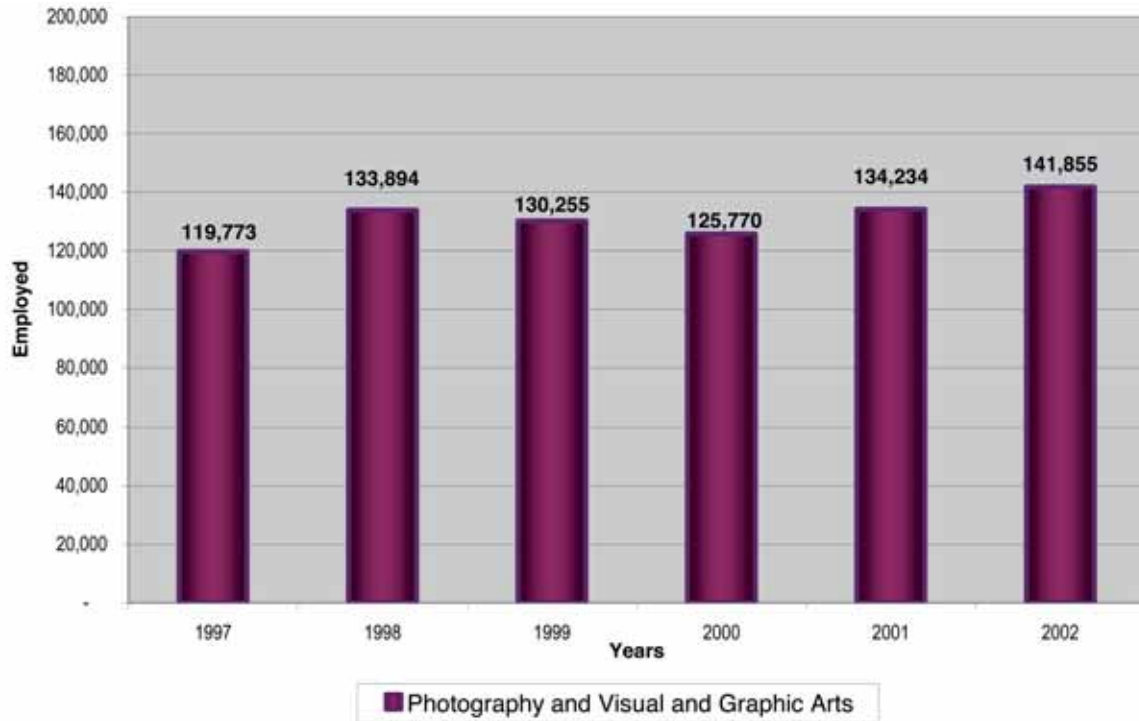


Source: Wall Communications Inc. 2004

Employment levels have been variable over the period, although this sub-sector has maintained a consistently high share of all core industries (e.g. typically 20% or more).

Chart 44

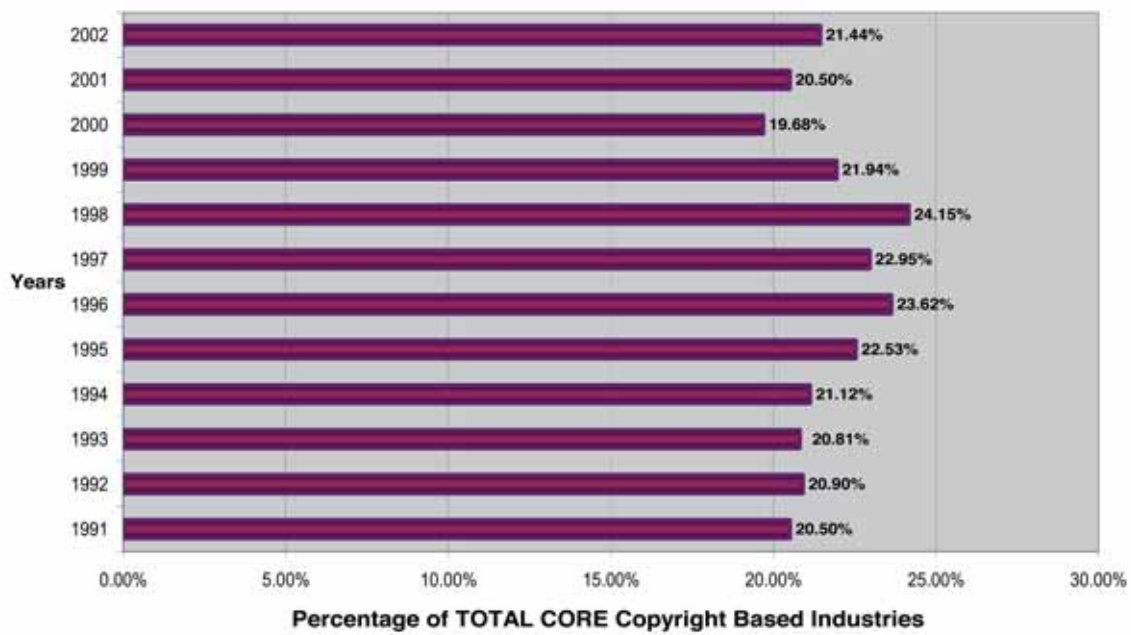
Employment: CORE Copyright-Based Industries Photography and Visual Graphic Arts



Source: Wall Communications Inc. 2004

Chart 45

Employment: CORE Copyright-Based Industries Photography and Visual Graphic Arts



Source: Wall Communications Inc. 2004

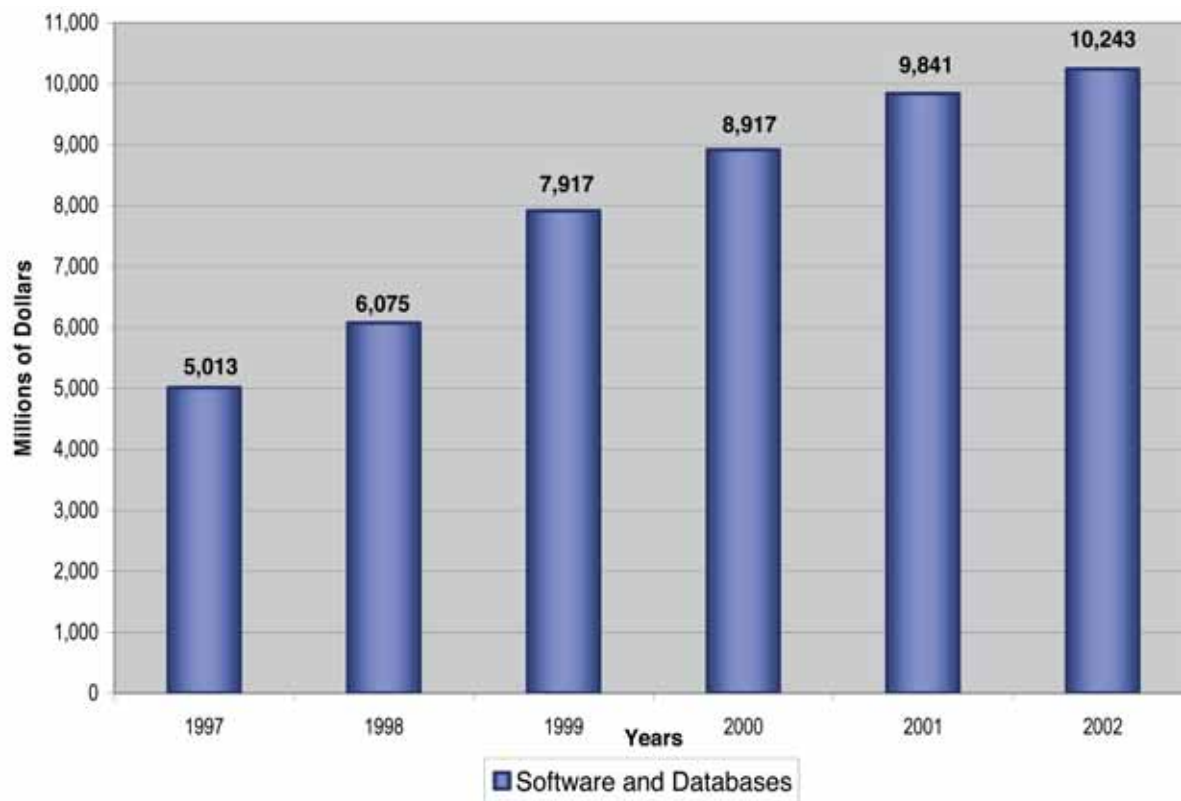
7.6 Software and Databases (and related information services)

The largest contributor to GDP (in 2002), the software and databases sub-sector surpassed Press and Literature (publishing) in 1999 to lead all others. Further, it has experienced the fastest growth rate since 1997.

Chart 46

GDP: CORE Copyright-Based Industries Software and Databases

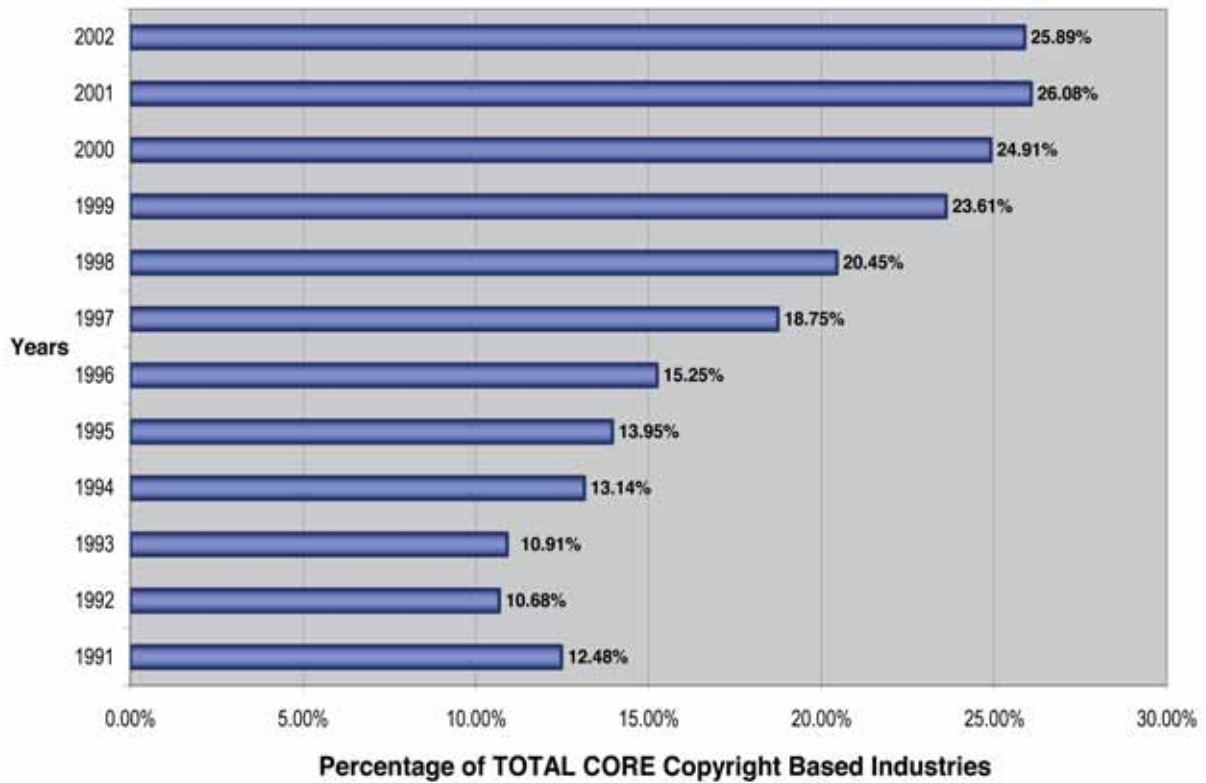
Millions of Dollars



Source: Wall Communications Inc. 2004

Chart 47

GDP: CORE Copyright-Based Industries Software and Databases



Source: Wall Communications Inc. 2004

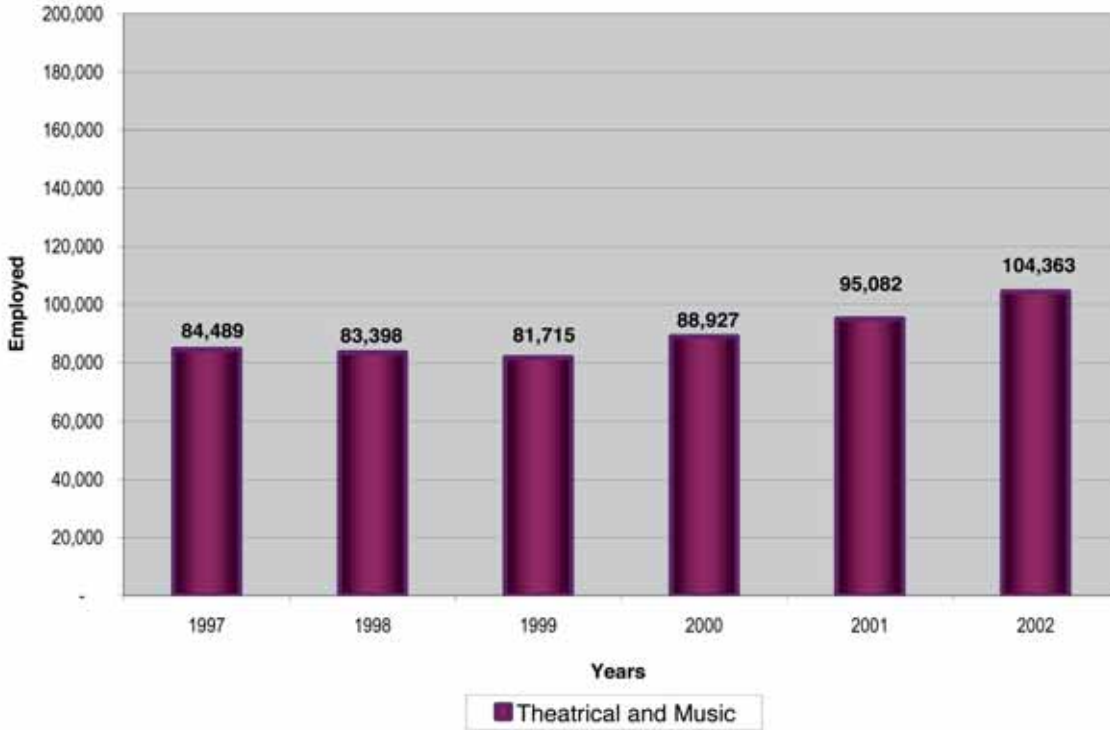
Employment has also climbed over the period, reaching a high of 194,000 in 1999, before falling back to 189,000 by 2002 (see Chart 48).

This sub-sector is comprised of NAICS categories 514 (Information Services and Data Processing Services) and 5415 (Computer Design Services). It should be noted that software and database publishing are contained in the Press and Literature (publishing) sub-sector so that this measure underestimates the contribution of software and databases (although they are all captured in total CORE industries).

²⁸ This includes services such as software analysis and design and writing, modifying, testing and supporting software to meet the needs of a particular customer, including the creation of Internet home pages.

Chart 48

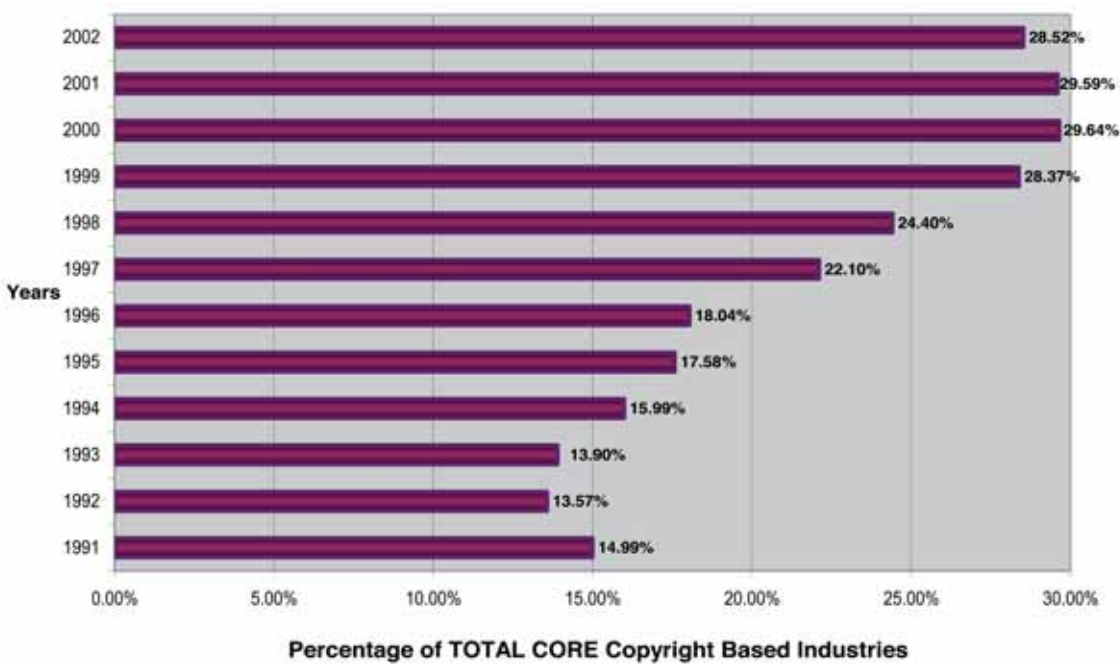
Employment: CORE Copyright-Based Industries Software and Databases



Source: Wall Communications Inc. 2004

Chart 49

Employment: CORE Copyright-Based Industries Software and Databases



Source: Wall Communications Inc. 2004

7.7 Advertising Services

In 2001, the advertising and related services industry earned revenues of \$5.1 billion, up 5.9% from 2000²⁹. The profit margin for the industry was 8.9% in 2001, compared with 9.5% in 2000.

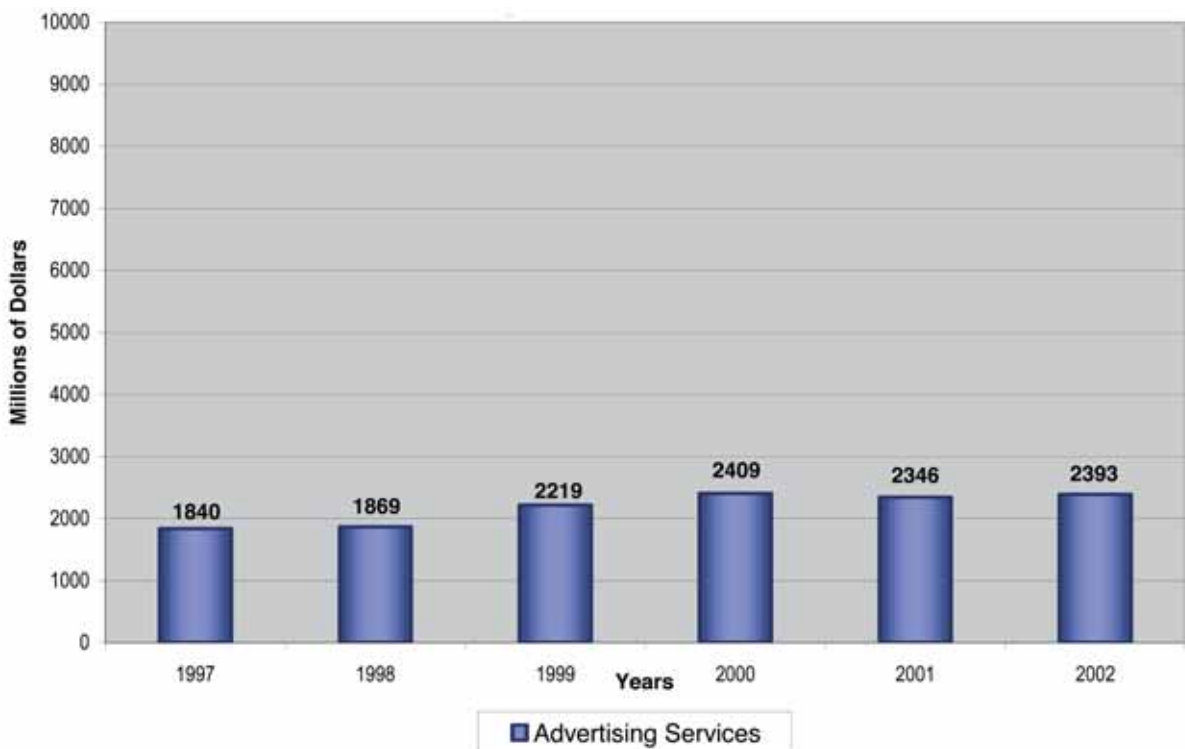
A downturn in traditional advertising spending in 2001 resulted in a 1.4% decrease in revenues for traditional advertising agencies. In contrast, the other more specialized advertising industries, such as public relations and billboard renters, enjoyed a 13.0% increase in revenues.

The majority of clients for the advertising and related services industry are private sector firms, with nearly one third (28% in 2001) in retail trade. Advertising agencies saw their foreign client base increase 4.9% in 2001, reaching 9%.

Chart 50

GDP: CORE Copyright-Based Industries Advertising Services

Millions of Dollars

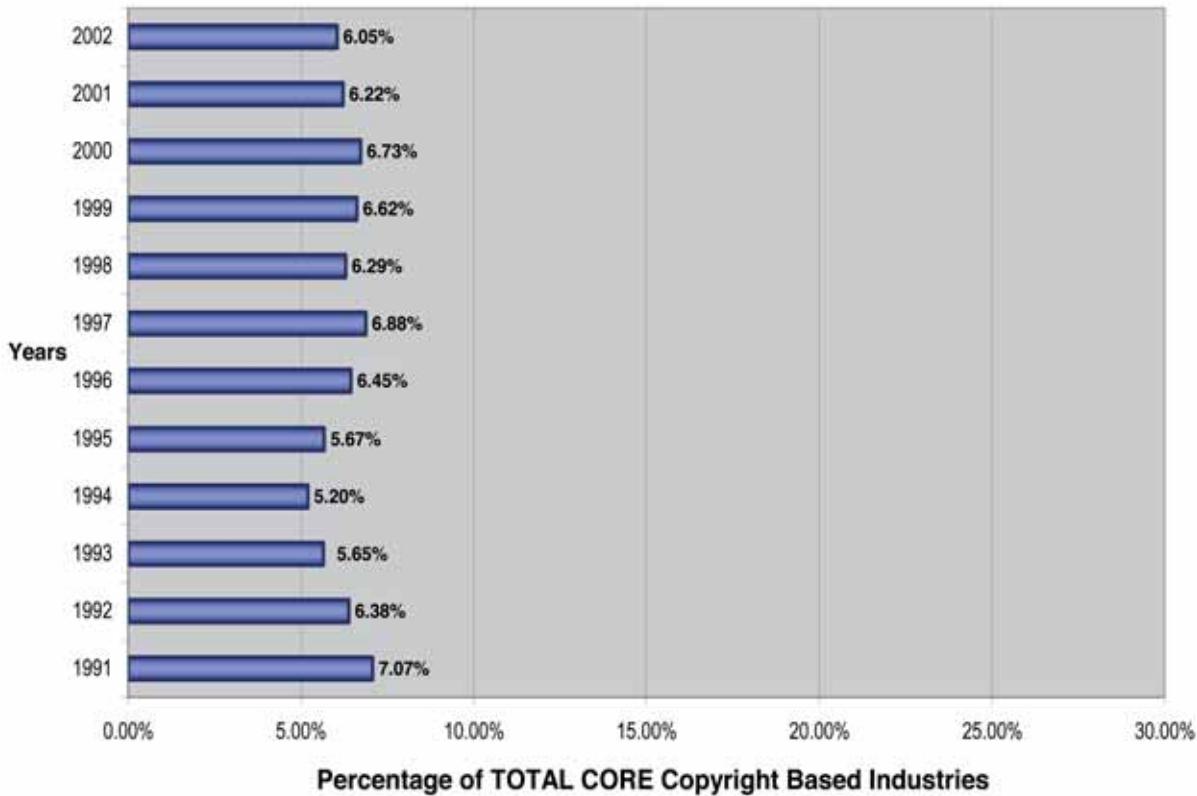


Source: Wall Communications Inc. 2004

²⁹ The Daily, April 23, 2003, Annual Survey of Advertising and Related Services, Statistics Canada.

Chart 51

GDP: CORE Copyright-Based Industries Advertising Services



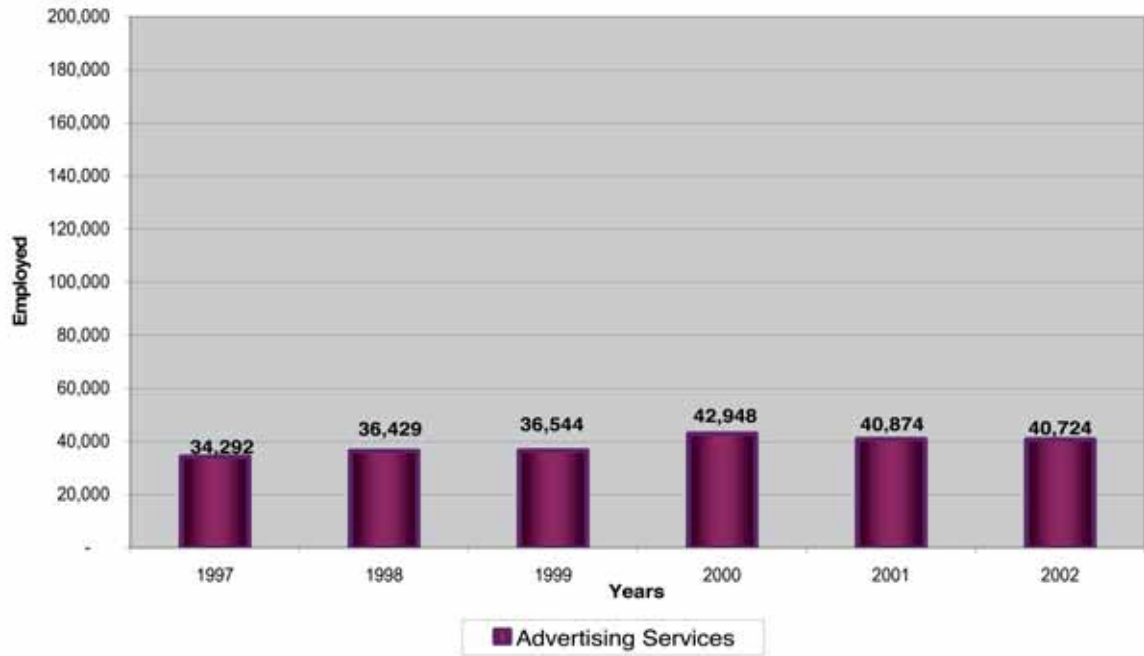
Source: Wall Communications Inc. 2004

Advertising services are one of the smallest contributors to core GDP, roughly equal to motion picture and sound recording. However, they have enjoyed a relatively strong rate of growth since 1997 and have roughly maintained their share of CORE contribution over the 1990's. They are found in NAICS 5418.

As can be seen from Chart 51, Advertising has cycled over the period, diminishing in the first part of the 1990's before peaking in 1997. Employment made some major gains from 1997 to 2000 (where it peaked at almost 43,000 – see Chart 52).

Chart 52

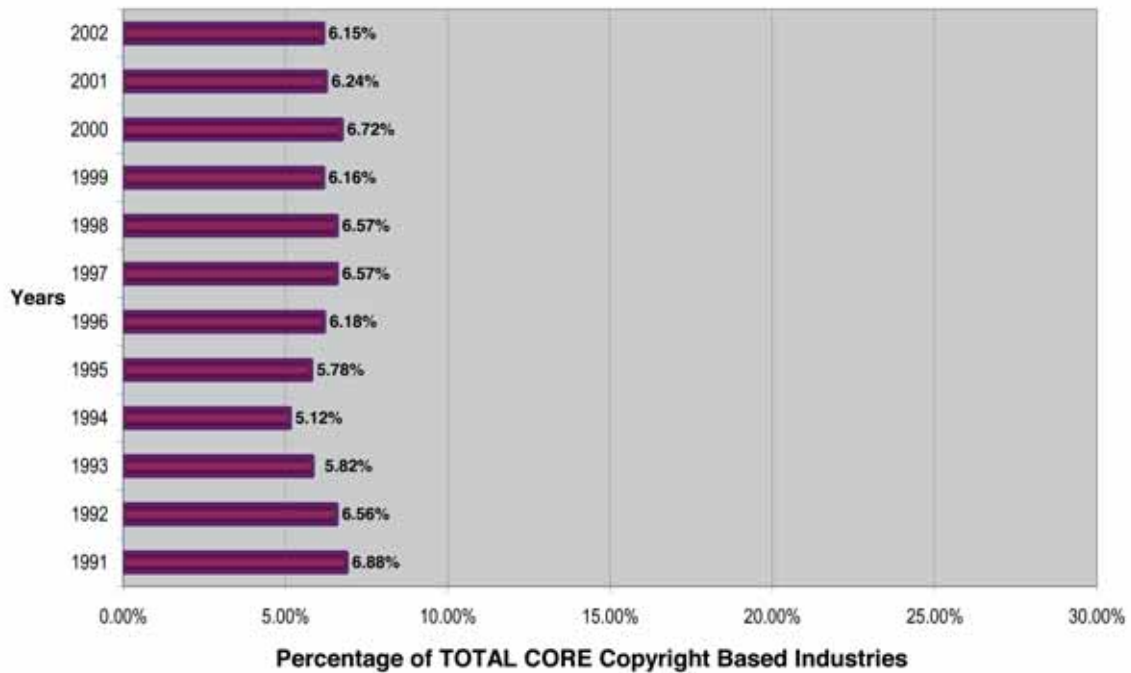
Employment: CORE Copyright-Based Industries Advertising Services



Source: Wall Communications Inc. 2004

Chart 53

Employment: CORE Copyright-Based Industries Advertising Services



Source: Wall Communications Inc. 2004

7.8 Copyright Collective Management Societies

There are close to 35 copyright collective societies in Canada today³⁰. These societies administer rights on behalf of their respective members (e.g., authors, composers, performers and producers). Their primary functions involve the collection of royalty fees from users of their members' works, as in the case of performance rights, reprography rights, mechanical reproduction rights and retransmission rights, together with the subsequent distribution of royalties to their members (both Canadian and, where applicable, affiliated foreign collective societies).

A number of amendments were made to the Canadian Copyright Act in 1997, including the introduction of remuneration rights for performers and producers (neighbouring rights) and a compensation system for private copying, among other changes. This led to the establishment of several new copyright collectives over the last several years.³¹

Since the copyright collective societies are private, non-profit organizations, annual financial information for the societies is generally not publicly available, other than in a few instances. Moreover, Statistics Canada does not collect or report data for these organizations. Nevertheless, based on the limited information that is available, we estimate that the total revenues of Canadian copyright collectives in 2002 were at least in the order of \$365 million.³² Collective society revenues have generally been growing rapidly over the last ten years. Based on the limited historical revenue data available for the certain collective societies, the annual average growth rate in revenues over the period 1991 to 2002 has varied from 8% to 15% per year, well above the corresponding average annual rate of inflation.

Collective society administration expenses often range between 10% and 20% of total revenues. Value added generated by these societies, given they are non-profit organizations, consists of payments to employees. In approximate terms, salaries and other employee-related expenses account for between 50% and 70% of total administrative expenses. Based on the broad estimates, value added attributable to copyright collective societies was likely no more than \$50 million in 2002 and, consequently, represents only a very small component of core copyright industry GDP.

³⁰ A list and description of Canadian collective societies is available on the Copyright Board of Canada's website: <http://www.cb-cda.gc.ca/societies/index-e.html>.

³¹ For instance, the Neighbouring Rights Collective of Canada and Canadian Private Copying Collective were established in 1997 and 1999 respectively.

³² This approximation is based on available revenues and revenue estimates for some of the largest copyright collective societies in Canada. Therefore, while estimate is understated, we expect that it accounts for the majority of the revenues of all Canadian societies combined.

7.9 Sub-sector Environmental Analysis

Background and General Commentary

In order to provide further depth regarding the economic situations of the sub-sectors, we undertook a series of personal interviews with industry representatives as well as surveying several regional and national associations³³. The selective information gathered from these processes provides context for recent economic performance, current challenges and what the future might hold.

In terms of what factor has been most important in shaping the financial health of each industry over the last decade, government regulation and policy ranked first among respondents followed by technological change (2), access to financing (3), global competition (4) and access to skilled labour (5).

The factor that has caused the most significant change in the way business is conducted (over the last decade) was overwhelmingly identified as new (often digital) technology. The most significant change facing CB industries today brought a mixed response with respondents noting difficulty in getting financing, becoming more client-oriented, ability to influence government policy, variations in Canada's versus other countries copyright protection (and related competitive implications), falling demand, and dealing with fundamental technological change. Many of the sub-sectors noted the exceptional creative abilities of Canadians as a source of on-going strength.

Views on the future were varied, as some sub-sectors such as visual and graphic arts, photography and broadcast distribution felt growth of 3% per annum was likely while others were less optimistic. The sound recording industry in particular did not see growth in their immediate future. Consolidation (both domestic and international) is expected to continue for the most part, except in CB areas where individual creators are involved (e.g. independent authors, performers and artists). The greatest challenges in the next 3 to 5 years centre around the harnessing of new technology and gaining more favourable government policy/regulation.

Further individual sub-sector commentary is provided below³⁴.

Press and Literature (Publishing)

The newspaper business, more so than other publishing areas, seems to be tied to the overall state of the economy. When the national economy is strong, the newspaper business is strong and vice versa. It is no surprise that the newspaper industry is perceived as better off today than ten years ago (when the recession of the early 1990's was just ending). But there is also a perception that the industry is structurally better off today, having adopted and adapted to new technologies (such as the Internet) and leveraged their brand (into areas such as web pages).

³³ The information gathered from these processes is not necessarily statistically significant. In fact the sample sizes are too small to draw statistically valid conclusions. However, respondents typically represent creators in a CB industry and their views are very relevant in understanding the issues and challenges that are being faced.

³⁴ Based on personal interviews, questionnaire responses and literature review.

Industry revenue streams are split between circulation and advertising (roughly 20%/80%). Advertising revenue, as implied above, reflects the state of the economy. While there have been some changes in the relative shares of categories of advertising (e.g. career advertising has been shifting to the Internet), overall the revenue has reflected national economic growth. In addition, circulation revenues appear to be gradually diminishing but have been more than offset by increases in ad revenues.

On the cost side, newsprint is a key basic input that can significantly impact profitability. This “cost-input/profitability” relationship is not expected to change materially in the near-term.

The Canadian book publishing industry is facing many of the factors common to all CB industries: dealing with new technologies, asserting protection over copyright works and competing with larger, better-financed firms from outside of Canada (particularly the U.S.).

Unique issues facing book publishing include structural change in the supply chain (with Chapters now controlling the majority of the retail market) and shifts in consumer preferences (i.e. the types of books consumers want). In addition, there is a view that average price levels are set by non-Canadian “best-seller” titles and are therefore somewhat out of the control of Canadian publishers. Combined with lower economies of scale, this may imply lower average profit margins for Canadian versus U.S. publishers.

The industry is now looking at how to introduce new technologies to better track sales (potentially improving inventory control and purchasing planning). In any event, book publishing remains a relatively “low entry cost” business.

Exports are a very important part of the Canadian book publishing industry with strong recent growth. There is a view that the prominence of Canadian authors on the world literary prize stage has brought welcome attention to Canadian authors. However it may have also led to the “best” Canadian authors being picked up by large non-Canadian firms. This is similar to the “farm-team league” analogy cited in sound recording.

Periodical publishing is similar to newspaper publishing in that they both earn two main revenue sources: advertising and copy sales. The revenue split is roughly 60% advertising, 30% copy sales and 10% other.

The primary expense for periodical publishing is production and printing (about 35% of total expenses). Freelance writers are relatively small component of overall expenses (only about 20% of total labour costs or 5% of total costs) and appear to be decreasing over time. There is a view that increasing consolidation in the industry has depressed compensation for freelance writers and that growth will be hard to attain over the next few years. More than half of Canadian periodicals were in a loss position in the late 1990's and prospects have not significantly improved.

Theatrical Productions and Music

Music performances in Canada in most venues and areas (such as large venues and local clubs) have not fared especially well in the recent past. Causes that have been mentioned include public attitudes towards drinking and driving and smoking bylaws in many municipalities.

The musical performance side is intimately tied into sound recording and many performers also attempt to supplement performance income with recording income. The system of rights accounting and collection has offered a number of income opportunities in the last decade.

Technology has affected the performance arts, but not necessarily in terms of significantly lowering costs. For theatrical productions, more complex special effects (particularly in the lighting area) have been made possible, but have not lowered costs significantly. In live music performances, technology has improved the array of sounds and amplification quality, but again has not lowered costs (except where sampled sounds replace live musicians).

Motion Picture and Sound Recording

After a period of sustained growth, the film and TV industry appears to have stalled. Much of the growth in Canadian production activity during the 1990's was fueled by non-Canadian service productions. With the advent of a higher Canadian dollar and pressure by U.S. film-makers to keep shooting in the U.S. and by other countries' policies to attract service work, Canadian production has suffered recently. Regionally, British Columbia appears to have been hardest hit.

In addition, international demand (including financing and co-productions) appears to be diminishing. Observers noted in particular the loss of Movies of the Week (MOW's) once a staple of U.S. networks but now often produced in-house.

Changes to funding programs and broadcasting regulations are also identified as negative factors influencing production.

At the box office, the share of Canadian films has been growing, but it has not yet reached the objective of 5% share. The share of French-language films in Quebec remains much higher than in English-language Canada. Overall, feature film exhibition appears to have reached a plateau even though the number of theatres has increased since the year 2000.

Distribution appears to be an area of some growth, primarily driven by distribution of non-Canadian films. There also appears to be a structural shift occurring with resource moving out of production and into distribution.

Many of the key personnel in TV and film production (e.g. writers, actors, directors, and technical staff) are quite mobile. Some costs of production have been falling in part due to the introduction of digital technology. However, the financing climate has grown tighter in recent years.

Nonetheless, it appears that opportunities in production and distribution are better today than ten years ago.

Sound recording is facing perhaps the most significant challenges of any CB sub-sector. The advent of on-line music file sharing has made serious erosions into industry revenues, although the exact extent of causality is not clear. File-sharing has created havoc with industry business models, leaving many recording labels scrambling to find a practical means of putting an end to the practice. On a more positive note, various label-led efforts to introduce on-line music distribution may lead at some point to revenue repatriation and growth.

While lack of government action and leadership is frequently voiced by industry representatives, others in the industry point out that the roots of this problem have been apparent for some time and the industry has been slow to assess and address it.

At the independent musician, producer and performer levels, there is some belief that there are many new business and artistic opportunities available as a result of technological change. These include more ways to exploit rights both domestically and internationally.

There is widespread agreement that CRTC Cancon rules and the FACTOR program have been significant forces in boosting Canadian music at all levels.

In terms of industry structure, many Canadian independent labels (of all sizes) operate to a degree as a “farm team league” finding and providing initial marketing and promotional support to new artists, who may eventually get picked up by a major label. At that point they may receive major promotional effort and possibly international exposure. Some industry participants view this as a lost opportunity for the Canadian music industry while others see it as a “fact of life” that works synergistically and benefits all parties.

Radio and Television (Broadcasting)

Broadcasting encompasses a variety of activities including conventional television and radio, cable TV, DTH and specialty/pay programming services. Each area has its own unique challenges and relevant environmental factors.

In conventional broadcasting, fragmentation in advertising revenues caused by new broadcasting services has tended to lead to diminished revenues on average. At the same time, costs of doing business (e.g. program acquisition) have continued to increase.

Conventional broadcasters rely almost exclusively on advertising revenue, unlike distribution undertakings which receive subscription revenue and specialty and pay programming services which obtain both advertising and subscription revenue. Competition continues to grow for their key revenue stream as a result of the licensing of new programming services and due to web-based alternatives.

As a regulated industry, many of the most pressing concerns voiced by the industry relate to regulation and policy matters. These include concerns with conditions of licence (relative to other licensees) and funding programs for production.

Broadcast distribution undertakings (BDU's) are facing revenue loss due to signal piracy. Having achieved relatively high market penetration in terms of homes passed, growth in the industry will be largely dependent on providing new services. For Cable, high-speed Internet has been the fastest growing business segment in its portfolio for the past few years and is seen as the likely leader for the foreseeable future.

BDU's also faces greater competition from outside the traditional industry from new entrants such as telephone companies. Alternative entertainment services (such as Internet-based services) are also developing.

Digitization has been a major factor shaping the industry and offering new opportunities. Although initial capital costs are significant for network upgrades, they can lead to ongoing cost savings.

Specialty program providers are also facing increasing competitive pressure from new entrants in the form of newly licensed channels.

Photography, Visual and Graphic Arts and Professional Services

Digitization in photography, as elsewhere, has had a major impact on the industry, changing the cost structure as well as widening business opportunities. Protection of copyright works domestically and internationally is an ongoing concern. Demand for photographic, graphic and related services is expected to continue to grow in years to come.

Software and Databases

Software and databases (including new media) has surged while some other CB sub-sectors have not. Growing reliance on computers and the Internet are seen as key reasons behind the continued growth in these areas.

The sub-sector is not without its challenges however. Software piracy is seen as a massive and omnipresent problem. The problem exists not only in business and personal applications, but is reportedly a major problem in educational facilities as well. Effective solutions are not readily apparent.

Access to funding remains a priority issue for new media companies. Both private and public funding sources are viewed as inadequate to bring new media to a critical and self-sustaining level. While there has been some firming up of workable business models, the industry remains in search of identifiable and accepted models for financing, creating and selling its services. In short, it still remains an industry of enormous potential, but minimal actualization in the broader marketplace.

The growth of IT professionals as a mainstay in the corporate world is a testament to the growing corporate reliance on software and related services. Many corporations routinely hire Chief Technology and/or Information Officers. Management of databases and related functions require skilled labour and there is some concern that not enough skilled workers are being produced in Canada.

The software industry is seen as a global industry where needs can be sourced from many different countries. Accordingly, the degree of international competition is perceived as fierce.

Challenges include the need to better manage growing volumes of internally and externally generated information and managing increased processing capability. This also relates to the need for skilled labour and may be a possible roadblock to future expansion.

8. Conclusions and Suggestions for Further Research

This study has found that copyright related industries are adding an ever-increasing contribution to the Canadian economy. The current estimated contribution (as of 2002) is 5.4% of Canadian GDP – a contribution that is as great as or larger than many other industries including 'Agriculture, Forestry, Fishing and Hunting', 'Mining and Oil and Gas Extraction', Utilities and Accommodation and Food Services. It is almost as large as all of Retail Trade.

But it is the pace of growth in copyright based industries that is particularly noteworthy. While the Canadian economy grew by about 3.3% per annum over the 1991–2002 period, copyright based industries grew by 6.5% - almost twice the economy-wide growth rate.

The importance of copyright based industries is also reflected in its employment characteristics. An estimated 780,000 people were employed in copyright based industries as of 2002.

While the CB industries do not contribute on net to the trade balance, there has been a gradual improvement in the size of the trade deficit. The annual growth of exports (which peaked at 23% in 1998) has been gradually diminishing over the last five years. However, it is still growing, reaching almost 4% in 2002.

Compared to other countries, Canada's CB industries have grown faster in terms of GDP than Australia but not as quickly as in the U.S. Further contribution to national GDP is also higher in Canada than Australia but not as high as in the U.S. However, Canada has the highest rate of growth in employment in CB industries.

Looking at the core sub-sectors, software and databases (and information services) has grown to become the largest contributor to GDP. Press and Literature (publishing) held the lead until 1999. This is consistent with comments that were received from the industry as to where growth has been occurring and where it will likely continue to come from.

The main issues and challenges facing sub-sectors have a degree of commonality but also individuality. Technological change and regulation/policy matters seem to be key issues for virtually all sub-sectors. On the other hand, no two sub-sectors have exactly the same priorities or concerns. A growing attention to copyright protection (both domestically and internationally) and future implications appears to characterize all sub-sectors.

8.1 Is the Contribution of Copyright-Based Industries Underestimated?

We believe that the estimates in this study are conservative. While there are undoubtedly some sub-sector core industry data that include activities that are not particularly related to copyright, they are not likely to be too significant since the NAICS categories which have been used are quite well-defined. On the other hand, we can point to several instances where the data used in this study exclude relevant activities.

Perhaps the most important of these exclusions is in wholesale and retail trade. Because more narrow activities (e.g. CD sales) are not identified separately, there is no practical means of estimating the contribution from these activities to core value-added. The impact on core CP industry value-added could be significant, possibly in the range of a further 5% to 10% of estimated core GDP³⁵. However, without more granular data, an accurate estimate cannot be provided at this time.

In addition, the WIPO guidelines identify several types of core activity that only appear within larger NAICS aggregates and could therefore not be reasonably estimated for this study. Potential activities that might fit fully or partly within core CB industries include:

- Computer and peripheral equipment manufacturing (3341);
- Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing (33422);
- Audio and Video Equipment Manufacturing (3343);
- Manufacturing and Reproducing Magnetic and Optical Media (3346);
- Packaging and Labeling Services (56191);
- Drinking Places (Alcoholic Beverages)(7224);
- Electronic and Precision Equipment Repair and Maintenance (81121);
- Photo Finishing Services (81292);
- Consumer Electronics and Appliance Rental (53221);
- Video Tape and Disc Rental (53223);
- Culture and arts support programs, federal (911910); and
- Office Machinery and Equipment Rental and Leasing (53242).

It should also be noted that the “establishment” approach to collecting NAICS data (i.e. does a particular establishment have an activity as its primary business?) means that there will be core CB activity that is not recorded because it is secondary to an establishment’s primary activities. Although this is true of both CB and non-CB activities that are secondary, a case could be made that the measurement of CB industries suffers disproportionately. This would be the case, for example, if faster growing industries (such as ICT) use and/or produce CB works more than other slower growing industries. While further research is required, it is arguable that copyright works or activities supporting them are more integral to the “Information” economy.

It is also possible that the above-noted phenomena and other factors lead to an underestimation of the contribution of non-core CB activities. As noted earlier, much of the relevant data on non-core activities is subsumed within various NAICS categories. To our knowledge, there has been no comprehensive or detailed examination of the extent to which non-core industries rely on or utilize CB works. In WIPO guideline terms, the partial copyright and non-dedicated support industries (e.g. telecommunications) might be particularly susceptible to an underestimation.

³⁵ As an example, we ask the question: is it possible that the wholesale and retail GDP activities of books, magazines and newspapers could be in the neighbourhood of 5% to 10% of overall publishing activities? The range seems plausible and is somewhat validated by (albeit) limited interview responses.

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APPENDIX 1: Mapping of WIPO Categories to NAICS

WIPO Categories with NAICS counterparts

1. Press and Literature

- Authors, writers and translators
- Newspapers
- News and feature agencies
- Magazines/periodicals
- Book publishing
- Cards and maps
- Directories and other publishing materials
- Pre-press, printing and post-press of books, magazines, newspapers, advertising materials
- Wholesale and retail of press and literature (book stores and newsstands)
- Libraries

NAICS

These WIPO-identified services are most closely associated with the 511 NAICS category (publishing Industries). This sub-sector (511) comprises establishments primarily engaged in publishing newspapers, periodicals, books, databases, software and other works. These works are characterized by the intellectual creativity required in their development and are usually protected by copyright. Publishers distribute, or arrange for the distribution of copies of these works.

Publishing establishments may create the works in-house, or contract for, purchase, or compile works that were originally created by others. These works may be published in one or more formats including traditional print form, electronic and on-line. Publishers of "multimedia" products, such as interactive children's books, multimedia CD-ROM and digital video disk (DVD) reference books, and musical greeting cards are also included. Establishments in this sub-sector may print, reproduce or offer direct on-line access to the works themselves or they may arrange with others to carry out such functions.

2. Music, Theatrical Productions, Operas

- 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 (booking, tickets)

NAICS

The primary NAICS category used for this WIPO grouping is 71 "Arts, Entertainment and Recreation". This sector (71) comprises establishments primarily engaged in operating facilities or providing services to meet the cultural, entertainment and recreational interests of their patrons. These establishments produce, promote or participate in live performances, events or exhibits intended for public viewing; provide the

artistic, creative and technical skills necessary for the production of artistic products and live performances; preserve and exhibit objects and sites of historical, cultural or educational interest; and operate facilities or provide services that enable patrons to participate in sports or recreational activities or pursue amusement, hobbies and leisure-time interests.

Sub-sectors in NAICS 71 that have been included and measured for this study are:

711 (Performing Arts, Spectator Sports and Related Industries) - This sub-sector comprises establishments primarily engaged in producing, or organizing and promoting, live presentations that involve the performances of actors and actresses, singers, dancers, musical groups and artists, athletes and other entertainers. This sub-sector also includes independent (free lance) entertainers and artists and the establishments that manage their careers. The classification recognizes four basic processes: producing events; organizing and promoting events; managing and representing entertainers; and providing the artistic, creative and technical skills necessary for the production of artistic products and live performances.

This sub-sector makes a clear distinction between performing arts companies and performing artists (independents). Although not unique to arts and entertainment, free-lancing is a particularly important phenomenon in this sub-sector; however, it is difficult to implement in the case of musical groups (companies) and artists, especially pop groups. These establishments tend to be more loosely organized and it can be difficult to distinguish companies from free lances. Therefore, this sub-sector includes one industry that covers both musical groups and musical artists.

Sub-aggregates at the four digit NAICS level include 7111 (Performing Arts Companies), 7113 (Promoters (Presenters) of Performing Arts, Sports and Similar Events), 7114 (Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures), and 7115 (Independent Artists, Writers and Performers).

712 (Heritage Institutions) - This sub-sector comprises establishments primarily engaged in preserving and exhibiting objects, sites and natural wonders of historical, cultural and educational value.

3. Motion Picture and Video

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

NAICS

The primary NAICS used for this WIPO grouping is 512 Motion Picture and Sound Recording Industries. The most important difference between WIPO and our approach is the inclusion of sound recording that is necessary due to the manner in which data is reported.

This sub-sector (512) comprises establishments primarily engaged in producing and distributing video and audio recordings or providing related services, such as post-production services, exhibition services, and motion picture processing and developing services. Sound recording studios are also included and it should be noted that music publishers are measured within this sub-sector (and not within 511).

4. Radio and Television

- National radio and television broadcasting companies
- Other radio and television broadcasters
- Independent producers
- Cable television
- Satellite television
- Allied services

NAICS

The primary NAICS classification used for this WIPO category is 513 (Broadcasting and Telecommunications) from which the telecommunications portion has been excluded. It should be noted that NAICS 2002 has updated and this category provides a more detailed breakout, including 3-digit classifications for 513 Broadcasting (not including broadcast distributors), 516 Internet Publishers and broadcasters, 514 ISPs, Web Search Portals and Data Processing Services, and 519 Other Information Services (including news syndicates and libraries). These new groupings will be useful in future analysis.

5. Photography, Visual and Graphic Arts and Professional and Technical Services (which combines 2 WIPO categories)

- Studios and commercial photography
- Photo agencies and libraries (photo-finishing labs not included)
- Artists
- Art galleries and other wholesale and retail
- Picture framing and other allied services
- Graphic design

NAICS

The primary NAICS categories used for this WIPO grouping are drawn from 54 Professional, Scientific and Technical services. NAICS 5419 (Other Professional, Scientific and Technical Services) contains 54192 (Photographic services) as well as other copyright-related activities. 5415 contains graphic design services. Do to data aggregation, NAICS 7115 (Independent artists, writers and performers) is included in Theatrical and Music.

6. Software and Databases

- Programming, development and design
- Manufacturing, wholesale and retail prepackaged software (business programs, video games, educational programs)
- Data base processing and publishing

NAICS

NAICS 514 is information services and data processing (5141 data processing services) and NAICS 5415 is computer systems design and related. Video games and related is found in NAICS 5112 (software publishers) and can not be separated out from other services covered in the WIPO Press and Literature category.

7. Advertising Services

- Agencies, buying services

NAICS

Advertising is part of 5418 and is estimated as a portion of the Professional, Scientific and Technical Services (54).

8. Copyright Collective Management Societies

- Only includes salaries of those administering the collection of fees

NAICS

There does appear to be a separate NAICS category related to collective societies. However, NAICS 813910 contains business associations (although collectives are not listed as examples). For this study, Statistics Canada data was not available.

APPENDIX 2: Listing of NAICS Categories Used in Study

COPYRIGHT INDUSTRIES LIST BY NAICS 1997 CODE

51 Information and Cultural Industries

- 511 Publishing
 - 5111 Newspaper, Periodical and Book Publishing
 - 5112 Software Publishers
- 512 Motion Picture and Sound Recoding Industries
 - 5121 Motion Picture and Video
 - 5122 Sound Recording Industries
- 513 Broadcasting and Telecommunications
 - 5131 Radio and Television Broadcasting
 - 5132 Pay, Specialty Television and Program Distribution
- 514 Information Services and Data Processing
 - 5141 Information Services
 - 5142 Data Processing Services

54 Professional, Scientific and Technical Services

- 5413 Architectural, Engineering and Related Services
- 5414 Specialized Design Services
- 54143 Graphic Design Services
- 5415 Computer Systems Design and Related Services
- 5416 Management, Scientific and Technical Consulting Services
- 5418 Advertising and Related Services
- 5419 Other Professional, Scientific and Technical Services (including Photography and translation)

71 Arts, Entertainment and Recreation

- 711 Performing Arts, Spectator Sports and Related Industries
- 7111 Performing Arts Companies
- 7113 Promoters
- 7114 Agents and Managers
- 7115 Independent artists, Writers and Performers
- 712 Heritage Institutions

APPENDIX 3: Data Definitions

Gross Domestic Product (GDP)

Canadian GDP: At basic prices (1997), by North American Industry Classification System (NAICS), all industries. Data from 1991 to 2002 in millions of Constant 1997 dollars and from 1997 to 2002 in millions of Chained 1997 dollars.

Copyright-Based Industries GDP: At basic prices (1997), by North American Industry Classification System (NAICS). Data from 1991 to 2002 in millions of Constant 1997 dollars and data from 1997 to 2002 in millions of Chained 1997 dollars.

Employment

Canadian Employment: Seasonally adjusted, for all employees for selected industries classified using the North American Industry Classification System (NAICS). Industrial aggregate excluding unclassified. Data from 1991 to 2002 in thousands of persons.

Copyright-Based Industries Employment: Labour Force Survey, sum of frequency count of employed at work and employed absent from work. Data from 1991 to 2002 in thousands of persons.

Exports

Canadian Exports: Canadian Trade Balance, total for all industries. Data from 1996 to 2002 in millions of dollars.

Domestic Exports (Copyright-Based Industries Exports): Value of international trade in culture goods. Domestic exports are exports of goods that are mass-produced or original works that originate in Canada. They are equal to total exports less re-exports. Data from 1996 to 2002 in thousands of Canadian dollars.

Imports

Canadian Imports: Canadian Trade Balance, total for all industries. Data from 1996 to 2002 in millions of dollars.

Retained Imports (Copyright-Based Industries Imports): Value of international trade in culture goods. Retained imports are imports of goods that are mass-produced or original works that originate outside of Canada. They are equal to total imports less re-exports. Data from 1996 to 2002 in thousands of Canadian dollars.

APPENDIX 4: List of Surveyed Agencies

Access Copyright

Alliance de la vidéo et du cinéma indépendants

Alliance Numerique

Alliance of Canadian Cinema, Television & Radio Artists

Association des producteurs de films et de télévision du Québec

Association for Media and Technology in Education in Canada

Association for the Export of Canadian Books

Association littéraire et artistique internationale, section Canada

Association of Canadian Advertisers

Association of Canadian Publishers

Association pour l'avancement des sciences et des techniques de la documentation

Association québécoise de l'industrie du disque, du spectacle et de la vidéo

Book Promoters Association of Canada

Book Publishers' Professional Association

Bureau of Canadian Archivists

Canadian Artists' Representation

Canadian Arts Presenting Association

Canadian Association of Broadcasters

Canadian Association of Music Libraries, Archives & Documentation Centres Inc.

Canadian Association of Research Libraries

Canadian Associations of Photographers and Illustrators in Communications

Canadian Bookbinders & Book Artists Guild

Canadian Booksellers Association

Canadian Broadcasting Corporation

Canadian Cable Television Association

Canadian Copyright Institute

Canadian Film & Television Production Association

Canadian Independent Record Production Association

Canadian Interactive Digital Software Association

Canadian Library Association

Canadian Magazine Publishers Association

Canadian Motion Picture Distributors Association

Canadian Museums Association

Canadian Music Publishers Association

Canadian Musical Reproduction Rights Agency

Canadian Newspaper Association

Canadian Photographers Coalition

Canadian Private Copying Collective

Canadian Publishers' Council

Canadian Recording Industry Association

Canadian Retransmission Collective

Canadian Society of Cinematographers

Copyright Board of Canada

Creators' Right Alliance

Directors Guild of Canada and Directors Rights Collective of Canada

Droit d'auteur multimédia Internet copyright

Federation of Canadian Artists

Gulliver's Quality Books

Intellectual Property Institute of Canada

Interactive Multimedia Arts & Technologies Association

Music Industries Association of Canada

National Broadcast Reading Service Inc.

Ontario Association of Architects

Ontario Library Association

Periodical Writers Association of Canada

Professional Photographers of Canada

Promotional Products Association of Canada Inc.

Radio-Television News Directors Association

Regroupement des artistes en arts visuels

Société du droit de reproduction des auteurs, compositeurs et éditeurs au Canada

Société professionnelle des auteurs et des compositeurs du Québec

Société québécoise de gestion collective des droits de reproduction

Society of Composers, Authors & Music Publishers of Canada

Writers Guild of Canada

APPENDIX 5: Electronic Questionnaire

Introductory Notes

The purpose of this questionnaire is to gather contextual information from copyright-dependent industries. The target group is various federal (or provincial) Associations. By using a standard questionnaire, the responses can be compared and summarized more readily. The responses should be brief enough to only require 15-20 minutes of the respondent's time. It should be addressed to the Association's President or a Senior Official.

The content will concern key impact factors in the recent past (i.e. previous decade), in the current environment and looking 3 to 5 years out.

OUTLINE

1. Last Decade

1.1 Please rank the following factors in order of importance in shaping the financial health of your industry over the last decade (where "1" is most important):

Technological change	
Global competition	
Access to Financing	
Government regulation and policy	
Access to skilled labour	
Other(s) (please identify)	

1.2 What has been the most significant change in the way your industry conducts its business over the last decade?

2. Current Environment

2.1 What is the most significant change(s) facing your industry today?

2.2 What is your industry's greatest strength (compared to similar products or services provided in other countries)?

3. Looking Ahead

3.1 Do you believe your industry will grow by at least 3% per annum over the next 3 to 5 years (in real terms)?

3.2 Over the next 3 to 5 years, what is the greatest challenge facing your industry?

3.3 Is significant consolidation likely to occur in the next 5 years? If so, will it be domestic or international in nature?

APPENDIX 6: List of Interview Subjects

List of persons interviewed or consulted for the study

Ron Bourgeois (Recording and Performing Musician, Halifax)

Brookes Diamond (Brookes Diamond Productions, Halifax)

Ann McKenzie (Nova Scotia Film Development Corporation, Halifax)

Gilles Bertrand (Alliance NumériQC, Montréal)

Melanie Alder (APFTQ, Montreal)

John Pelletier (Association of Canadian Publishers, Toronto)

Ross Reynolds (Canadian Association of Recording Artists, Toronto)

Anne Kothawala (Canadian Newspaper Association, Toronto)

Brian Chater (Canadian Independent Record and Producers Association, Toronto)

Brian Robertson (Canadian Recording Industry Association, Toronto)

Jim Everson (Canadian Magazine Publishers Association, Toronto)

Sam Punnett (FAD Research, Toronto)

Wayne Charman (Canadian Association of Broadcasters, Ottawa)

Gilles McDougall (Copyright Board of Canada)

Rob Eglan (BC Film, Vancouver)

Scott McIntyre (Douglas & McIntyre, Vancouver)

Ted Roberts (Arts Club Theater, Vancouver)

Marc Lafrance (FACTOR, Vancouver)

Neil Haggquist (BCCFTPA, Vancouver)

Tom Rowe (Tide Pool Pictures, Vancouver)

APPENDIX 7: Trade in Film and Broadcasting

As noted by Statistics Canada, the trade figures do not include services. This appears to significantly underestimate trade activity for the film and television sub-sector.

The CFTPA puts out an annual profile of the Canadian film and television production industry. The most recent profile estimates that in 2002/03 the industry produced \$2.37 billion in export value³⁶. The largest portion of film and television production export value is derived from Canadian location shooting by foreign producers (i.e. \$1.9 billion in 2002/03).

The following Table provides film and television production export value for the period 94/95 to 02/03:

Export Value of Canadian Film and Television Production (Nominal \$ billions)

	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03
Value	.68	.82	1.4	1.4	2.0	2.4	2.6	2.4	2.4
Annual Growth		21%	71%	0%	43%	20%	8%	- 8%	0%

Source: Profile 2004, CFTPA, APTFTQ, NGL

A second area of interest is in the broadcast area. Trade figures for the cultural industries do not include any estimates of program expenditures for foreign programs. The CRTC reports that in 2002 Canadian conventional television broadcasters spent \$499 million on non-Canadian programs. Pay and Specialty providers spent an estimated additional \$275 million.

Non-Canadian Program Expenditures by Conventional, Pay and Specialty (Nominal \$, millions)

	Conventional TV	Pay and Specialty
2002	\$499	\$275
2001	\$466	\$229
2000	\$434	\$161

Source: CRTC Statistical and Financial Summaries, various years

³⁶The term "Export Value" has been developed by NGL as opposed to "export" to better reflects the nature of film and television production in Canada. It acknowledges that film and television productions are intangible products and portions of the copyright can be exported to foreign countries (e.g. broadcast rights for other countries). Second, this indicator accounts for the budgets of productions shot in Canada, even when the copyright is held by a foreign entity (e.g. when a U.S. studio shoots a feature film in Canada).

APPENDIX 8: The Valuation of Rights and Royalties

(Sourced from Arts, culture and recreation – Research papers "Culture goods trade estimates: Methodology, technical notes and user guide 2003" prepared by Jamie Carson, Statistics Canada)

Culture services (as opposed to products), which are intangible products such as performances and broadcasts, are not included in these estimates.

There are frequently difficulties surrounding the valuation of software in measuring trade -- such as the delineation between the "goods" and the "services/rights" portion of a software diskette.ⁱ Similar issues exist for culture goods.

The Customs Act defines "information-based" products as information in one form or another (including sound and image recordings) together with the physical medium on which that information is carried.ⁱⁱ For trades of these products, the assessed value of the product consists of:

- (a) An amount for the physical medium and the cost of transcribing the information onto the physical medium (i.e. the medium processed or containing information); and
- (b) An amount for the information contained on the physical medium or rights for use thereof (usually referred to as a royalty, copyright, licence fee, etc.).

For example, a television commercial is made in a foreign country for broadcasting in Canada. The foreign supplier sells it to a party in Canada who acquires ownership of and exclusive rights to the commercial. The value for duty of the commercial is equal to the price paid or payable by the party for the physical product and the rights associated with that product.

This principle of valuation is also applicable where a party in Canada makes a television commercial in a foreign country for broadcast in Canada. Value for duty must take into account the total production costs incurred by the agency to produce the commercial in the foreign country. Production costs would include elements such as talent fees, travel, production facilities, etc.

Information-based products may be acquired free of charge or by a consideration being paid for the right to use the information on the physical medium. In these circumstances, value for duty is determined under the residual basis of appraisal method (section 53 of the Customs Act) on the basis of the value of the processed physical medium (containing the information).

As an example of this method of valuation, if a pre-recorded tape is acquired free of charge for reference or broadcasting purposes, then value for duty is the value of the medium plus the cost of transcribing the information onto the medium. Similarly, where a radio commercial is imported and payment is made only for the right to broadcast the commercial, value for duty is equal to the value of the processed physical medium (containing the information).

Similarly, royalties or licence fees paid for the right to reproduce a master in Canada are not included in Customs valuations. The right to reproduce refers not only to the physical reproduction of imported goods but also to the right to reproduce a creation, thought, or idea incorporated in, or reflected by, the imported goods. An example would be the importation of a master recording, containing various musical selections, for the purpose of producing compact discs in Canada. The royalties or licence fees payable in respect of the compact discs subsequently produced and sold in Canada would not be added to the price paid or payable for the master recording.

For mass-produced goods, such as compact discs or books, where a royalty is payable to the copyright holder when a final sale is made (typically as a percentage of the selling price as a contractual condition of sale), the value of the royalty is to be added to the valuation of the good if it is not already included.ⁱⁱⁱ In cases where the royalty or licence fee is not tied to the sale of the specific shipment of goods, as in the payment of a franchise or similar fee for the right to distribute or resell goods within a geographical boundary, then the payment is not added to the value of the goods themselves.^{iv}

ⁱFor a discussion, see page 46 of "Canada's Balance of International Payments and International Investment Position: Concepts, Sources, Methods and Products".

ⁱⁱCustoms memorandum D13-11-2 - Value for duty of certain information-based products (Customs Act, Sections 48 to 53), Ottawa, April 12, 2001.

ⁱⁱⁱCCRA allows for these royalty amounts to be estimated and reported separately from the shipping documents for some importers. This reporting procedure could negatively affect data quality of these estimates.

^{iv}Customs memorandum D13-4-9 - Royalties and licence fees (Customs Act, Section 48), Ottawa, March 28, 2001.

