

National Studies on Assessing the Economic Contribution of the Copyright-Based Industries



Creative Industries Series No. 4

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The Economic Contribution of Copyright-Based Industries in Australia



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Key findings

Copyright is a key piece of infrastructure that supports the industries that comprise a modern economy

The World Intellectual Property Organization (WIPO) has identified four classes of copyright industries:

- **Core** – industries that exist only because of copyright and are primarily involved in the creation, manufacture, production, broadcast and distribution of copyrighted works.
- **Partial** – a portion of the industries' activities are related to copyright through manufacture, performance, exhibition, broadcast, communication or distribution and sales.
- **Interdependent** – involved in the manufacture, performance, broadcast and communication in order to support and facilitate the creation of copyrighted works and other protected subject matter.
- **Non-dedicated support** – duties are included in this group where part of the activities are related to broadcast, communication, distribution and sales in protected subject matter and they are not included in the core copyright industries.

Copyright industries comprise a substantial proportion of the Australian economy

In the most recent year for which data is available (2006/07), Australia's copyright industries:

- employed 837,507 people, which constituted 8.0% of the Australian workforce
- generated economic value equal to 10.3% of gross domestic product (\$97.7 billion)
- generated \$6.873 billion in exports, equal to 4.1% of total exports.

Australia's copyright industries have grown considerably over the past 12 years

Over the period 1995/96 to 2006/07 the real (i.e. inflation adjusted) compound annual growth rate (CAGR) for the copyright industries averaged 4.7%, with the core copyright industries growing 5.1% per year. This compares to a CAGR for gross domestic product (GDP) of 3.6% over the same period.

Productivity growth in Australia's copyright industries has resulted in significant real wages growth

Spurred by digitisation, the value generated in Australia's copyright industries has increased in real terms over the period 1995/96 to 2006/07 from \$85,512 to \$116,742 per employee. As a result, the real average wage for people employed in the copyright industries increased from \$51,572 in 1995/96 to \$61,355 in 2006/07.

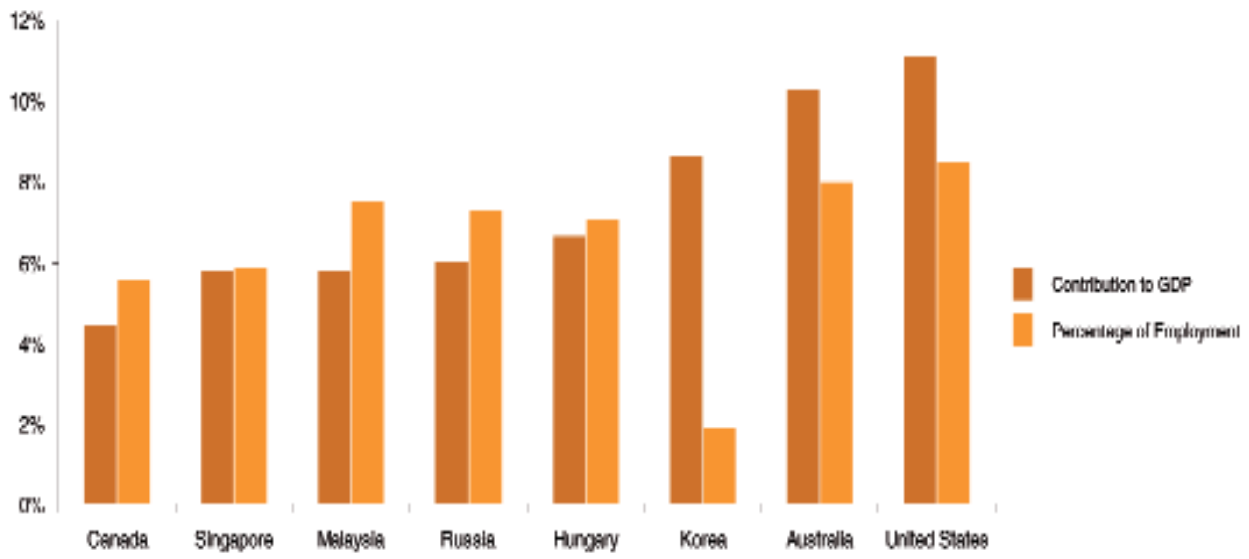
Australia remains a significant net importer of copyright goods and services

While exports of copyright products has grown in real terms by 0.6% per year over the period 1995/96 to 2006/07, imports have grown at 2.1%. In 2006/07 Australia had a trade deficit of just under \$20.8 billion in the copyright industries.

Australia's economy has a relatively high dependence on copyright industries

In comparison with other economies that have been analysed using the same WIPO framework as used in this report, the Australian economy appears to have a greater copyright intensity than average in terms of both value added by, and employment in, the copyright industries.

Country comparison (latest available years)



Source: WIPO

Note: Canadian and Singaporean estimates are understated

Introduction

Copyright was once viewed as a specialist branch of law focused primarily on the protection of artistic expression and hence focused on the protection of artistic creations such as music, literature, paintings, and so on.

Such a narrow conception overlooked the fact that copyright was born as a result of the advent of the first technology for the production of copies of works (i.e. printing with movable type). The subsequent development of copyright has been shaped by ongoing technological developments and their associated commercial exploitation.

In the past decade interest in the economic impact of copyright has been driven by a number of inter-related factors:

- The shift to a services economy — while Australia is commonly perceived as being an economy reliant upon agriculture and resources, in fact it has evolved to one reliant on services. For example, the Australian Services Roundtable (2008, p. 8) notes that, “In Australia, services account for 78 percent of GDP and 60 percent of domestic investment. Services employ 8.5 of every 10 Australians, with all net job growth over the past two decades taking place within the services sector.” Services industries are disproportionately users and/or producers of copyright material and so the growth in services has occurred in conjunction with the growth of copyright industries.
- The mainstream adoption of the Internet, digital production and distribution — Australians have embraced the use of the Internet, with usage increasing from 33.8% of the population in 2000 to 74.3% in December 2007 (Internet World Stats 2008). This is significant, as use of information and communications technologies has significantly increased the scope of the subject matter for copyright protection, with the ongoing growth of Internet usage and digital delivery of copyright materials drawing copyright into the lives of all members of society.
- There is an increasing understanding of the value attached to intangible assets, including copyright — much of the value of the leading companies in the world today resides in their portfolio of intangible assets. For example, PwC research in the United Kingdom shows that total intangible assets comprise, on average, some 80% of companies’ value (Hadjiloucas 2007). This has caused business to focus its attention on copyright and intellectual property more greatly.
- Copyright, and intellectual property protection more generally, has been embedded as a mandatory element in international trade negotiations — this has resulted in both a standardised set of expectations and an acknowledgement of the importance of trade in copyright products.

Consistent with this greater interest in better understanding the size and economic contribution of those industries which rely, to varying degrees, on protections afforded by copyright law, this study uses a recently published global framework (WIPO 2003) to better understand the economic contribution of Australia’s copyright industries.

Study methodology

A global framework

An important development since the last study of the economic contribution of Australia's copyright industries (ACG 2001) has been the development of a standardised global framework by the World Intellectual Property Organization (WIPO) (WIPO 2003).

WIPO sought to develop a common framework so that the myriad of country-specific studies that had been independently prepared could be made more transparent methodologically, and the results more directly comparable. As a result, WIPO endorsed:

- a new framework for classifying particular industries as being within the 'copyright industries'. It grouped industries into four groups — core, partial, non-dedicated support, and interdependent — which, combined, form the 'total' copyright industries. The following table provides a summary of the classifications.
- generic set of performance indicators. Consistent with most previous studies, the suggested focus is on 'value add', trade in copyright products and employment.

The following table provides a brief description of the four copyright industry groups. The table on the following page provides a greater level of detail of the specific sectors and products that comprise the copyright industries.

Copyright industries	Description
Core:	Primarily involved in the creation, manufacture, production, broadcast and distribution of copyrighted works and have a substantial level of copyright activities. These are industries that would not be in existence if not for the copyright subject or matter
Interdependent	Involved in the manufacture, performance, broadcast and communication of copyright material, in order to support and facilitate the creation of copyrighted works and other protected subject matter
Partial	A portion of activities which are related to copyright through manufacture, performance, exhibition, broadcast, communication or distribution and sales
Non-dedicated	Part of the activities are related to broadcast, communication, distribution and sales in protected subject matter and not included in the core copyright industries.

Industry components

Creative Industries	
Code	
Press and Literature	<ul style="list-style-type: none"> • Authors, writers, translators; • Newspapers; • News and feature agencies; • Magazines/periodicals; • Book publishing; • Cards and maps, directories and other published material; • Pre press, printing, and post press of books, magazines, newspapers, advertising materials; • Wholesale and retail of press and literature (book stores, newsstands, etc.); • Libraries
Music, Theatrical Productions, Operas	<ul style="list-style-type: none"> • Composers, lyricists, arrangers, choreographers, directors, performers and other personnel; • Printing and publishing of music; • Production/manufacturing of recorded music; • Wholesale and retail of recorded music (sale and rental); • Artistic and literary creation and interpretation; • Performances and allied agencies (bookings, ticket agencies, etc.)
Motion Picture and Video	<ul style="list-style-type: none"> • Writers, directors, actors etc.; • Motion picture and video production and distribution; • Motion picture exhibition; • Video rentals and sales, video on demand; • Allied services
Radio and Television	<ul style="list-style-type: none"> • National radio and television broadcasting companies; • Other radio and television broadcasters; • Independent producers; • Cable television (systems and channels); • Satellite television; • Allied services
Photography	<ul style="list-style-type: none"> • Studios and commercial photography • Photo agencies and libraries
Software and Databases	<ul style="list-style-type: none"> • Programming, development and design, manufacturing; • Wholesale and retail prepackaged software (business programs, video games, educational program etc.) • Database processing and publishing
Visual and Graphic Arts	<ul style="list-style-type: none"> • Artists, • Art galleries, other wholesale and retail; • Picture framing and other allied services; • Graphic design
Advertising Services Copyright Collecting Societies	<ul style="list-style-type: none"> • Agencies, buying services
Manufacturing	
TV sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Game Equipment, and other similar equipment	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail
Computers and Equipment	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail (sales and rental)
Musical Instruments	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail (sales and rental)
Photographic and Cinematographic Instruments	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail (sales and rental)
Photocopiers	<ul style="list-style-type: none"> • Manufacture; • Wholesale and retail (sales and rental)
Blank Recording Material	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail
Paper	<ul style="list-style-type: none"> • Manufacture • Wholesale and retail

Manufacturing	Services
Apparel, textiles and footwear Jewelry and coins Other crafts Furniture Household goods, china and glass Wall coverings and carpets Toys and games Architecture, engineering, surveying Interior design Museums	
Non-manufactured Support General wholesale and retailing General transportation Telephony and Internet	

While the WIPO framework is similar to that previously used in Australia, the key distinction is that it takes a slightly more expansive view of the industries that are classified as being copyright-related. This means that studies that have not used the WIPO framework (e.g. ACG 2001) are not directly comparable with this study.

This slightly expanded view of what constitutes the copyright industries is a challenge as some previous studies of copyright industries criticised definitions that may be said to inflate the perceived value of copyright (Revesz 1999; Ricketson 2000).

However, a more expansive definition of copyright industries more effectively captures the direct and flow-on impacts commonly identified using input-output (i.e., multiplier) analysis or 'general equilibrium' macro-economic models of the economy.

WIPO considers this risk is a worthwhile one as it allows more consistent cross-country comparisons, and so may be more useful for policy-makers in the longer term.

Similarly, while 'economic contribution studies are generous in their ascribing economic contribution solely to copyright' (Thorpe 2004, p 45), there are a number of countervailing assumptions that mean that the methodology does not capture some elements of the economic contribution of copyright industries:

- the value of copyright in intermediate goods and services is not included. Many organisations produce copyright materials as intermediate goods which are not explicitly accounted for in official data. Examples may include internal databases, manuals for equipment and processes, teaching materials, movies, pictures, and so on
- production of pirated copyright products is not included even though they are copyright industries, and
- copyright goods and services produced in non-commercial settings are not included. While there is significant personal activity that is copyright-related and demonstrates value-adding as a consumption good, their production is unpriced and hence unmeasured.

While value judgements are required in coding the data for the copyright industries, this report has focused on trends, as 'Trends will be less influenced by methodological and contextual differences, as long as these differences are stable over time.' (Madden 2004, p 10)

It should also be remembered that, even though the focus of this report is upon quantification of the copyright industries:

The true cultural value of copyright cannot be fully captured by measuring the value-added in the cultural industries however accurate those measures are because there are external benefits that are not priced through the marketplace; the national culture, a creative environment and freedom of expression are examples of non-appropriable benefits. (Towse 2000, p 115)

Application of the WIPO framework

The process undertaken in this study, consistent with the WIPO (2003) methodology, is shown in the following figure. It reflects the challenges of obtaining relevant data and then matching that data to the WIPO industry classifications and undertaking the subsequent analysis.



Note: Due to the disaggregation requirements for the analysis process, all value add, employment, wages, exports and imports disaggregated data is sourced from Custom IBIS world data. All inflation, GDP and all other aggregate data is source from the ABS.

Note: All years refer to financial years (e.g. 1996 refers to the 1995/1996 financial year)

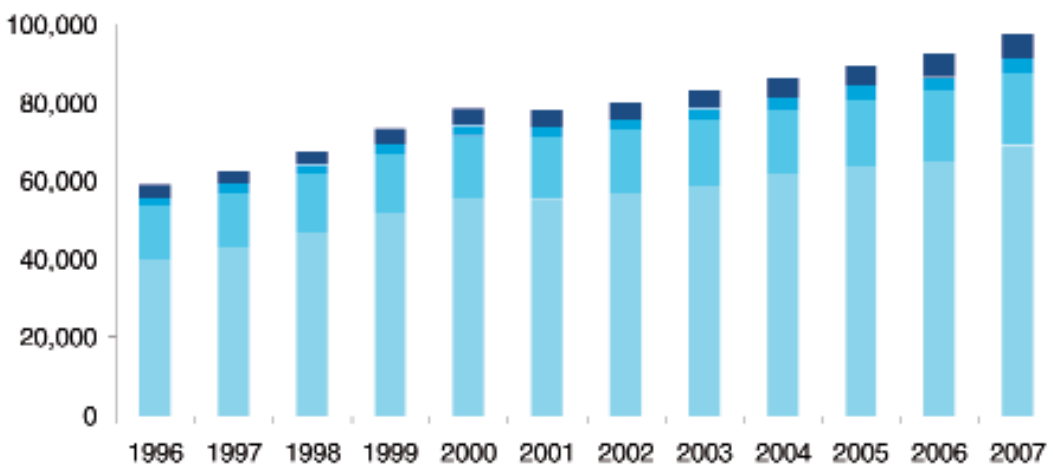


1. Value added by copyright industries

The key measure of an industry's economic contribution is its 'value add'. Value added is the value of gross outputs of a particular industry less the value of inputs from other industries. The sum of all industries' value add is the nation's gross domestic product (GDP). Thus, looking at the value add of Australia's copyright industries provides a measure of the relative importance of the copyright industries.

As shown in the figure below, there has been considerable growth in the value added by the copyright industries, increasing in real (i.e. inflation adjusted) terms from \$58.9 billion in 1995/96 to \$97.8 billion in 2006/07.

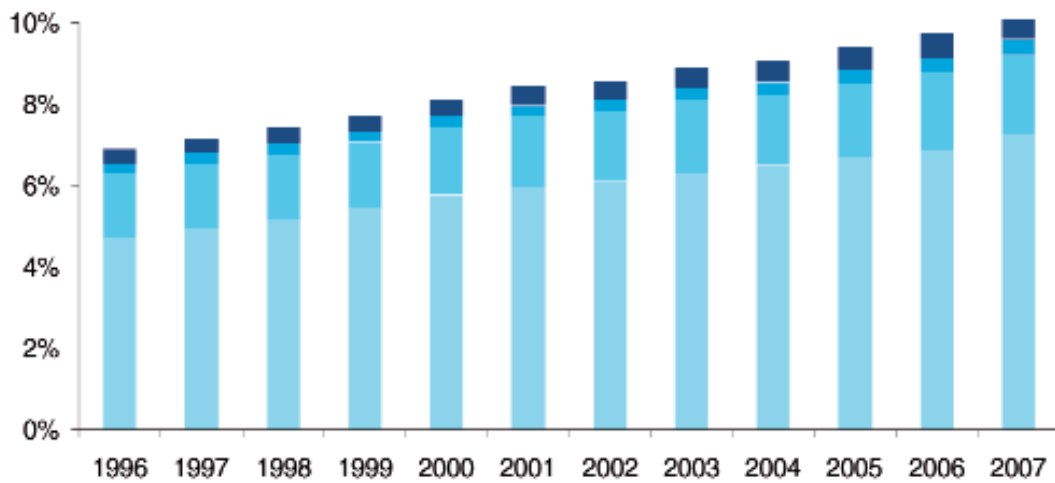
Value add of copyright industries (\$2007, \$million)



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Core	40,040	43,009	46,688	51,701	55,629	55,238	56,800	58,674	61,836	63,021	65,080	68,077
Interdependent	13,177	13,851	15,030	15,136	15,805	16,003	16,113	16,777	16,363	17,139	18,102	18,596
Partial	2,130	2,291	2,444	2,559	2,616	2,547	2,663	2,772	2,922	3,132	3,417	3,655
Non-Dedicated	3,299	3,427	3,744	3,994	4,235	4,388	4,444	4,655	5,070	5,574	6,037	6,444

While the dollar value of copyright industries' value add increased by about 66.0% over 12 years (see previous figure), the copyright industries' contribution to gross domestic product increased by only 48.4% (see figure below). This relatively lower view of copyright industry growth reflects the real growth over the same period in a number of major non-copyright industries (e.g., mining and resources).

Value add of copyright industries as a percentage of gross domestic product



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Core	4.7%	4.9%	5.1%	5.5%	5.8%	6.0%	6.1%	6.3%	6.5%	6.7%	6.9%	7.3%
Interdependent	1.6%	1.6%	1.6%	1.6%	1.7%	1.7%	1.7%	1.8%	1.7%	1.8%	1.9%	2.0%
Partial	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%
Non-Dedicated	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.6%	0.6%	0.7%

Over the period 1996 to 2007 the compound annual growth across the copyright industries has averaged 4.7%, with the core copyright industries growing 5.1%. This compares to a CAGR for GDP of 3.6% over the same period (i.e., 31% higher growth than GDP over the same period).

Copyright Industries	CAGR
Core	5.1%
Interdependent	3.0%
Partial Copyright	5.0%
Non-Dedicated Support	6.5%
Total	4.7%

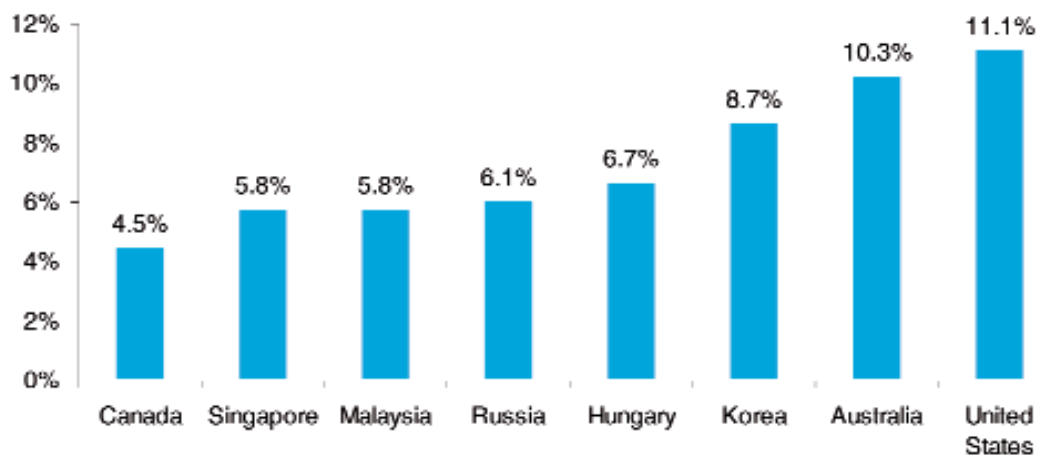
Books and E-books	1.9%
Music, Theatrical Productions, Operas	2.7%
Motion Picture and Video	3.2%
Television and Telecommunications	6.1%
Photography	5.2%
Software and Databases	10.4%
Visual and Creative Arts	5.0%
Advertising Services	3.2%
Copyright Collecting Societies	7.0%

Within the core copyright industries, not surprisingly, the greatest growth in value added has been in 'Software and database'.

Interestingly, the relative composition of the copyright industries has not changed significantly between the four major industry groups over the 12-year period with which this study is concerned.

In comparison with a number of other countries that have employed the WIPO framework, Australia's economy appears to be relatively more dependent upon copyright industries as a generator of value add and gross domestic product.

Value add by copyright industries as a percentage of gross domestic product (latest available years)

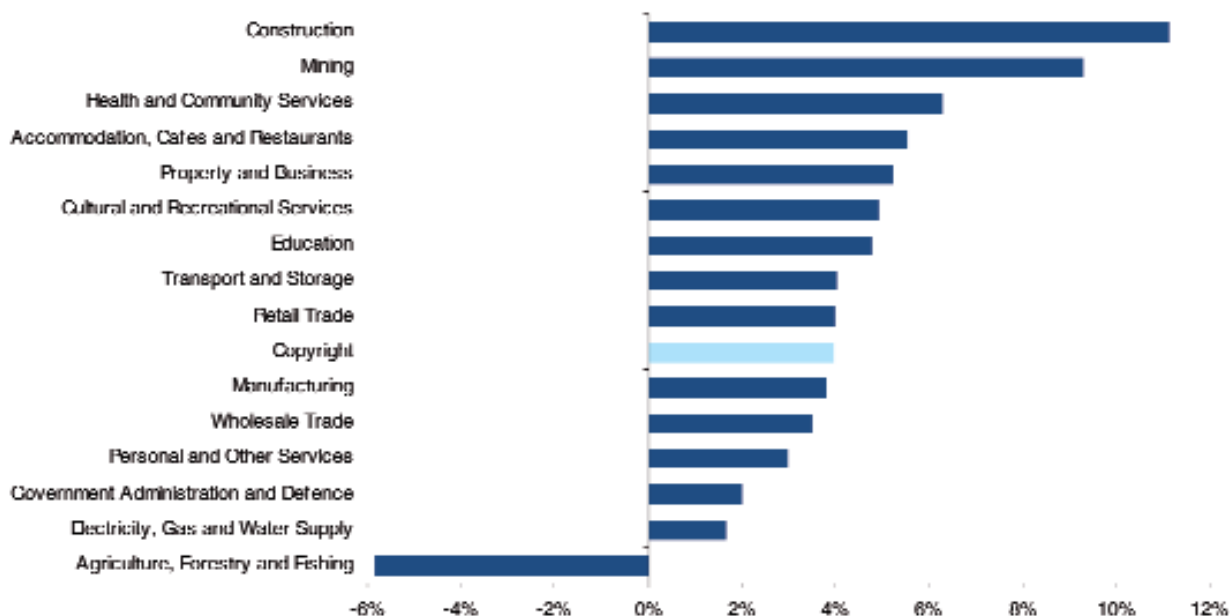


Source: WIPO

Note: Canadian and Singaporean estimates are understated

Real compounding annual growth rate (CAGR) of value add (2002 – 2007)

The Australian copyright industries have experienced moderate growth over the last 5 years compared to other primary Australian industries. The copyright industries experienced 4.0% real compounding annual growth over the period 2002 – 2007, in comparison to the CAGR of 4.7% over the period of 1996 – 2007.



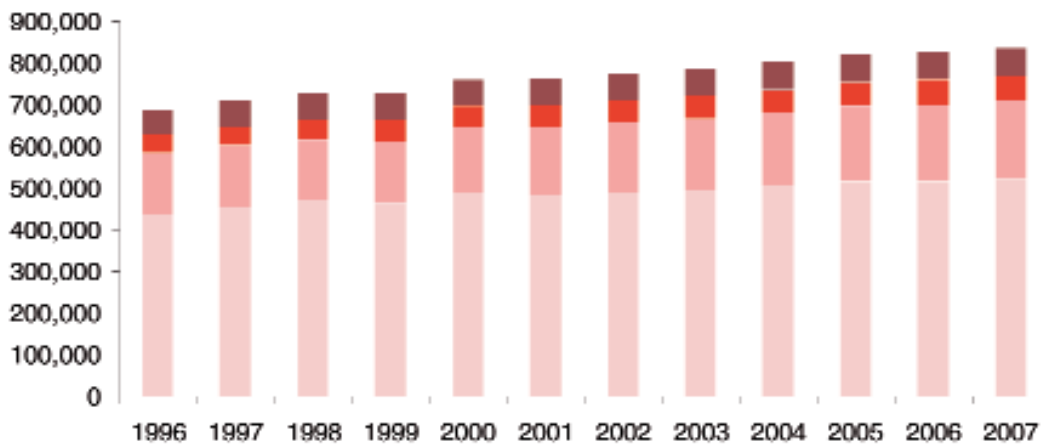
2. Employment in copyright industries

Copyright industries have traditionally been seen as employment intensive, reflecting the personal contribution required to generate the intellectual property. The available data suggests that this historical presumption may be breaking down.

Employment in Australian copyright industries has grown over the past 12 years, with an average of 769,320 people employed in the copyright industries during that period.

Employment in copyright industries

Employment in copyright industries



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Core	437,167	461,838	468,203	461,910	488,010	483,911	480,097	491,377	501,570	514,831	514,168	520,801
Interdependent	148,686	147,984	147,605	148,452	157,280	163,710	167,449	173,111	177,110	182,304	187,038	188,291
Partial	44,340	46,581	48,609	50,654	51,427	51,313	52,829	53,954	55,020	56,617	58,462	58,691
Non-Dedicated Support	58,242	61,639	63,594	63,412	65,154	63,491	64,766	65,813	66,721	67,180	67,765	67,624

Not surprisingly, in the core copyright industries employment has grown most significantly in the software and database industries.

Compound annual growth in employment

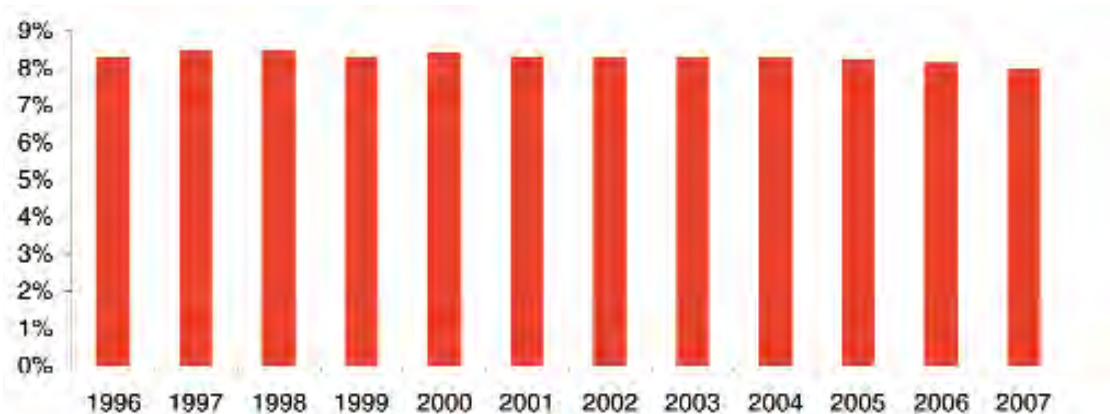
Copyright Industries	CAGR
Core	1.6%
Interdependent	2.2%
Partial	2.7%
Non-Dedicated Support	1.4%
Total	1.8%

Press and Literature	1.8%
Music, Theatrical Productions, Operas	1.0%
Motion Pictures and Video	3.8%
Radio and Television	0.5%
Heritage	1.9%
Software and Databases	7.3%
Visual and Graphic Arts	1.0%
Advertising Services	3.8%
Copyright Collecting Societies	8.0%

The relative distribution across the four copyright sectors has remained almost constant over the 12 years analysed.

While employment in the copyright industries has increased over time, as a percentage of the workforce the copyright industries now employ a slightly lower percentage of the workforce (8.0% versus 8.3% in 1996). This reflects a combination of efficiencies in the copyright industries (largely due to digitisation) and strong employment growth in non-copyright industries (such as mining and resources).

Employment in copyright industries as a percentage of employed persons



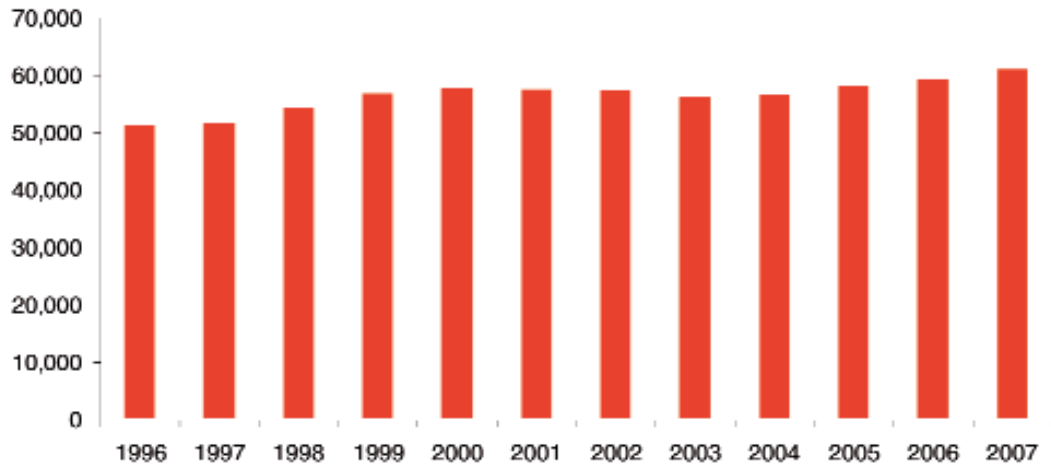
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total percentage of Employed Persons	8.3%	8.5%	8.5%	8.3%	8.4%	8.3%	8.3%	8.3%	8.3%	8.2%	8.1%	8.0%

As the following table shows, real wages growth in Australia's copyright industries has exceeded employment growth.

Copyright Industries	CAGR	
	Employment	Wages
Core	1.6%	4.0%
Interdependent	2.2%	3.2%
Partial	2.7%	5.3%
Non-Dedicated Support	1.4%	2.0%
Total	1.8%	3.4%

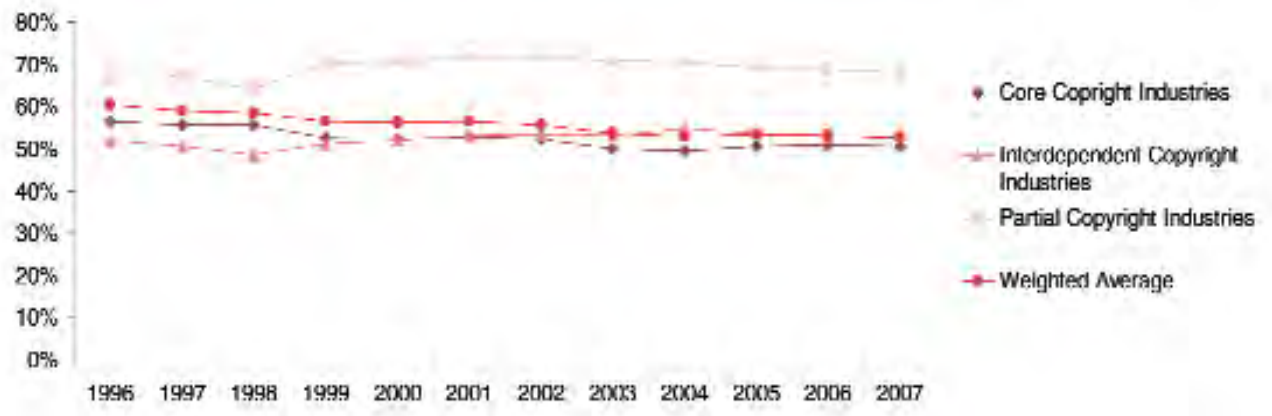
Indeed, the last 12 years have seen average wages in the copyright industries grow in real terms, from \$51,572 in 1995/96 to \$61,355 in 2006/07 per employee.

Average real wage per copyright employee (\$2007)



This wage growth has not resulted in a major shift to labour (i.e. employees) from other factors of production. Employees in copyright industries are achieving higher real wages, but owners of capital and land in the copyright industries are also receiving higher real returns. As the following diagram shows, real copyright industry wages as a percentage of value add generated in the copyright industries has decreased by about 13% over the past 12 years.

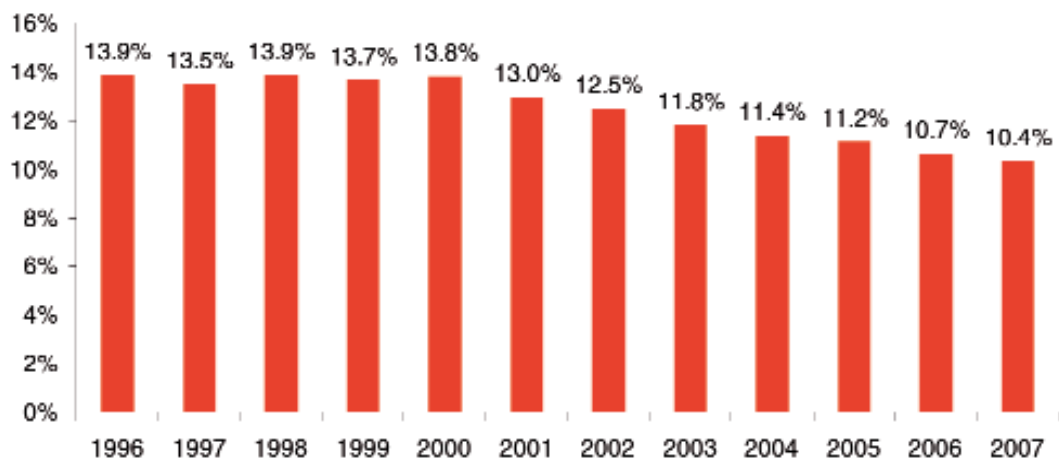
Real copyright industry wages as a percentage of value added in copyright industries



Furthermore, although copyright wages have fallen as a percentage of total wages (see figure below), copyright jobs are, on average, better remunerated than the economy as a whole.

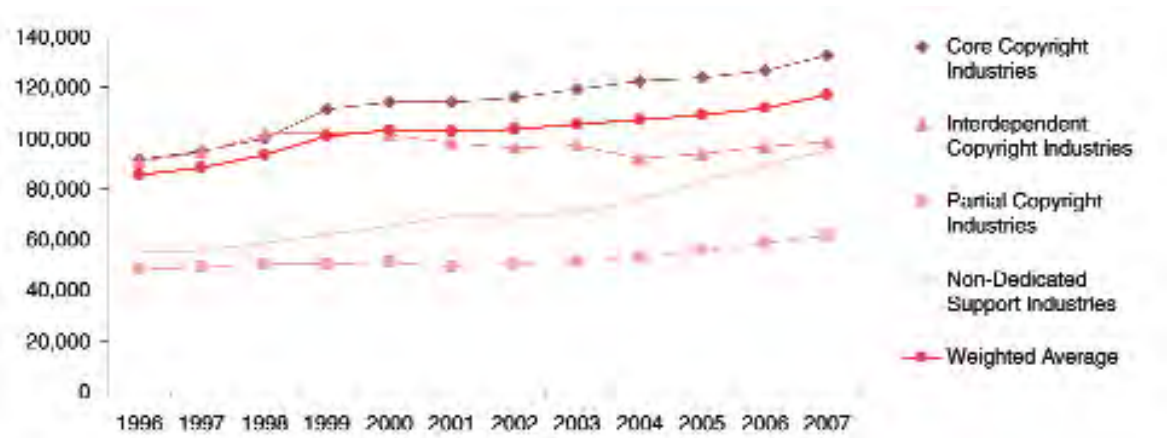


Copyright wages as a percentage of total wages



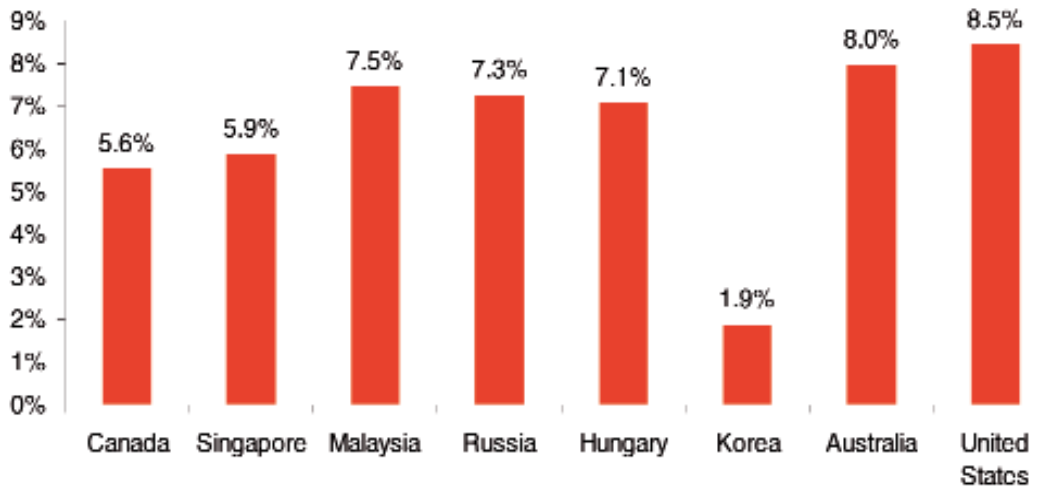
The real increase in copyright wages reflects the labour productivity growth that has been evident in the copyright industries over the period 1995/96 to 2006/07.

Real value add per employee (\$2007)



In comparison with a number of other country studies that have employed the WIPO framework (see figure immediately below), Australia's employment intensity appears stronger. That is, we have a higher percentage of the workforce employed in copyright industries.

Copyright employment as a percentage of total employment (latest available years)

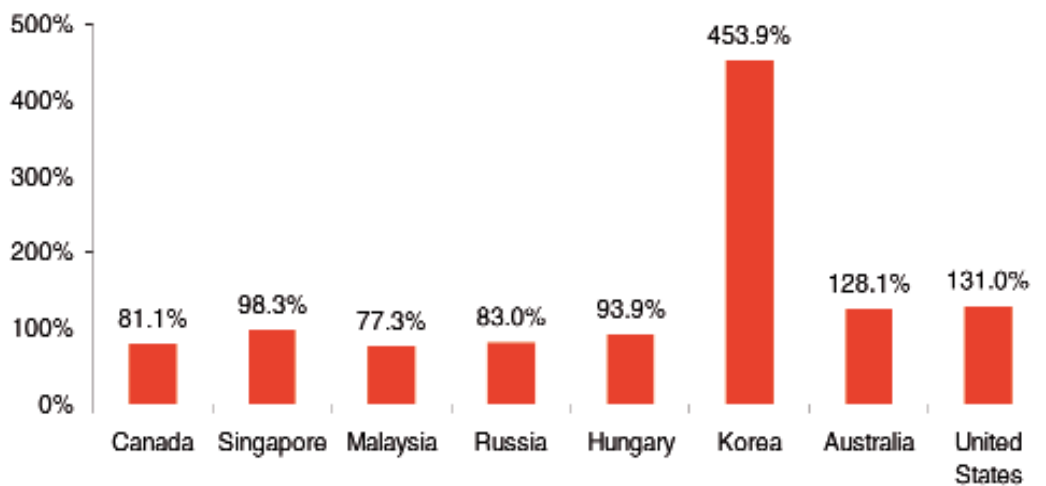


Source: WIPO

Note: Canadian and Singaporean estimates are understated

Even with the relatively higher employment intensity, Australia’s copyright industries show relatively high labour productivity. That is, value add divided by employment (both in percentage terms) is greater than 100%. Our level of productivity reflects our modern economy, and a relatively balanced mix of activity across the four copyright industry groups (Korea is an example of where its equipment production demonstrates significantly higher labour productivity).

Value added as a percentage of GDP divided by employment as a percentage of total employment (latest available years)



Source: WIPO

Note: Canadian and Singaporean estimates are understated



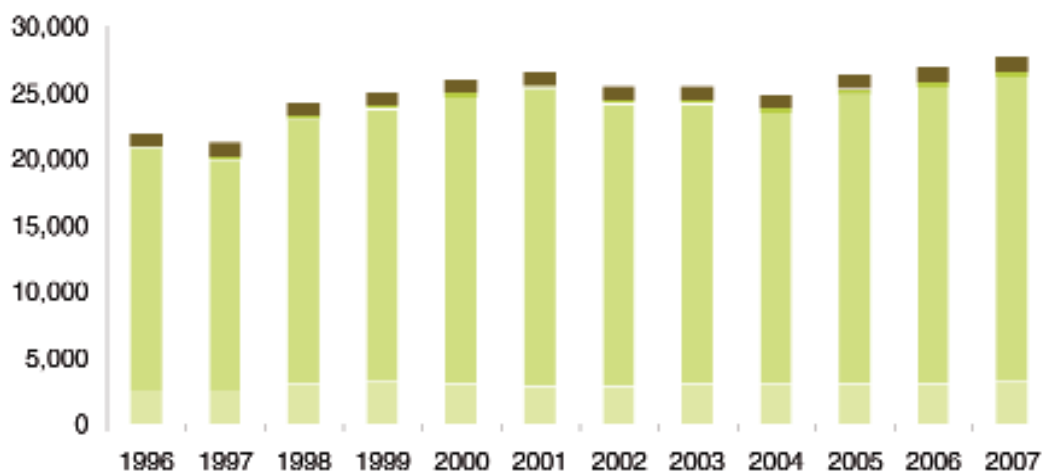
3. Trade in copyright products

It has always been understood that Australia is a net importer of copyright products. This reflects both our small size in the world economy and the fact we are an English speaking country, and hence draw significantly upon the cultural output of the United States and United Kingdom.

Imports

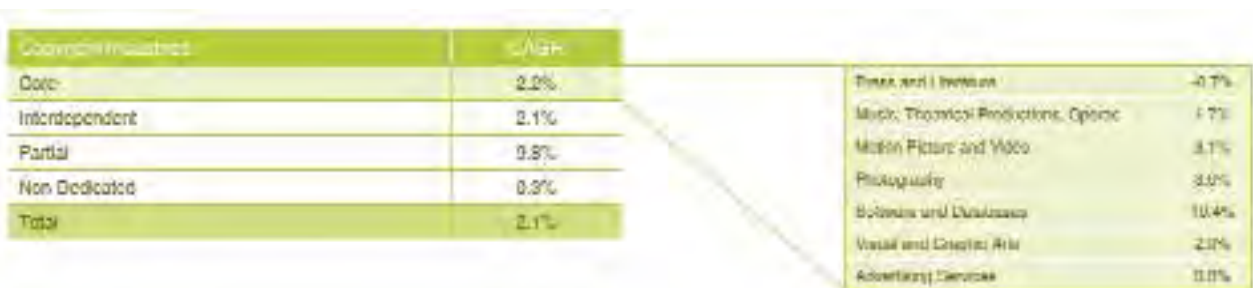
As the following figure shows, Australian consumption of overseas copyright-related products has grown over the past 12 years, but not in an even pattern of growth. Imports grew and peaked in 2000/01, then fell through to 2003/04, at which time import growth rose again.

Copyright related imports (\$2007, \$million)



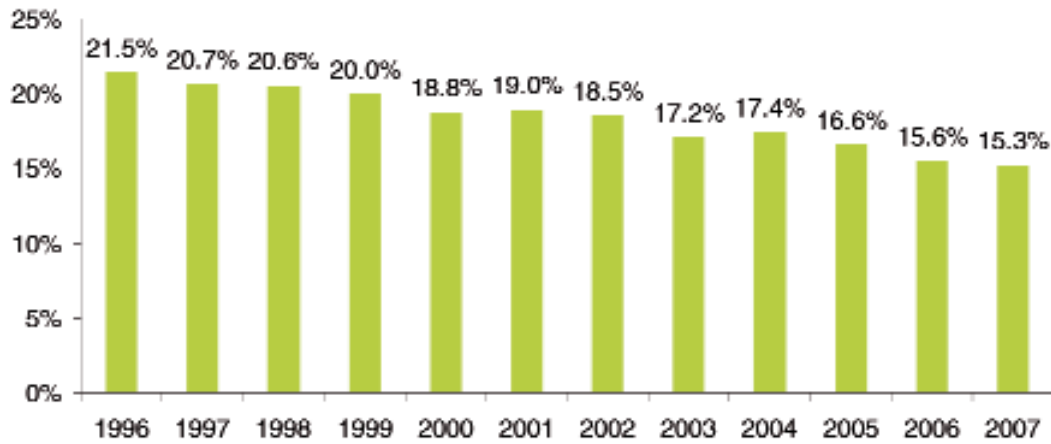
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Core	2,580	2,488	2,880	3,200	3,032	2,802	2,884	3,008	2,910	2,985	3,028	3,250
Interdependent	18,210	17,454	20,073	20,542	21,537	22,402	21,268	21,118	20,543	21,912	22,329	22,889
Partial	1,00	189	212	225	248	255	288	321	357	388	434	418
Non-Dedicated	1,022	1,014	1,081	1,088	1,011	1,054	1,018	888	1,051	1,088	1,083	1,050

Imports have grown across the three types of copyright industries. Within the core copyright industries most growth has come in the software and database industry.



Copyright related imports, as a percentage of total imports, have fallen relatively consistently over the last 12 years.

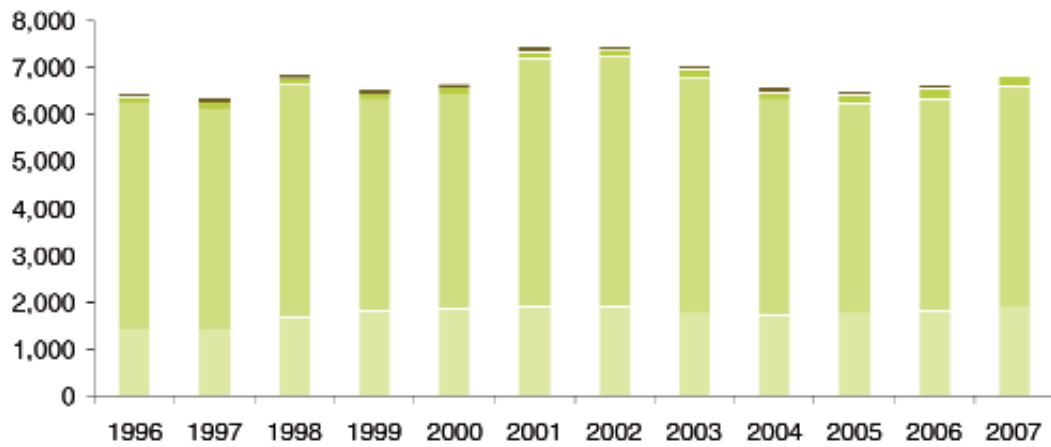
Copyright related imports as a percentage of total imports



Exports

Copyright exports ebbed and flowed in real terms over the past decade, with a peak in 2001/02. Exports have increased in the core and partial copyright industries, but declined in the interdependent and non-dedicated support industries.

Copyright related exports (\$2007, \$million)



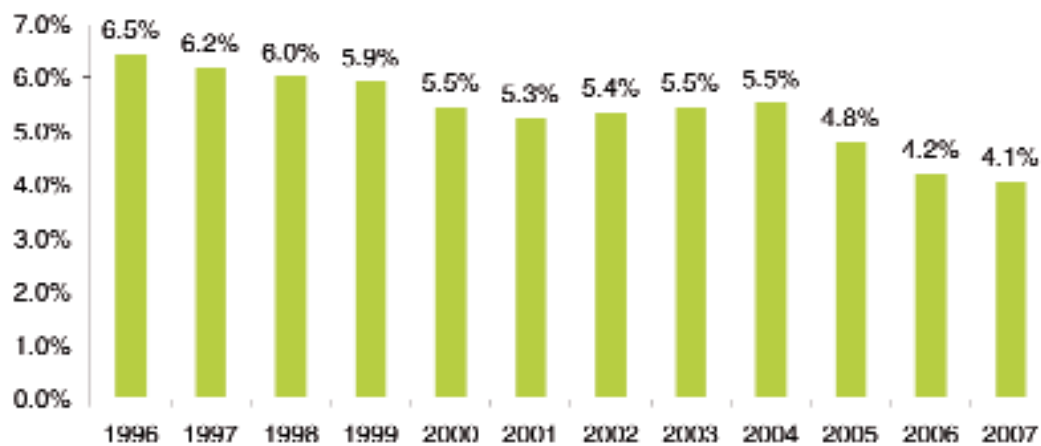
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Core	1,421	1,421	1,670	1,808	1,872	1,922	1,924	1,741	1,731	1,745	1,808	1,898
Interdependent	4,826	4,704	4,984	4,198	4,581	5,272	5,317	5,059	4,581	4,473	4,530	4,691
Partial	109	113	118	121	132	135	136	141	166	162	201	217
Non-Dedicated	107	107	100	107	99	97	97	97	99	98	74	69

Copyright Industries	CAGR
Core	2.7%
Interdependent	-0.3%
Partial	6.5%
Non-Dedicated	-3.8%
Total	0.8%

Dissolved Literature	-1.1%
Music, Theatrical Productions, Operas	3.3%
Motion Picture and Video	8.2%
Photography	0.4%
Software and Databases	2.8%
Visual and Graphic Arts	1.7%
Advertising Services	0.2%

Despite this growth in real exports in the last few years, copyright exports declined as a percentage of total exports. This relative performance is a reflection of the boom in the Australian resources sector.

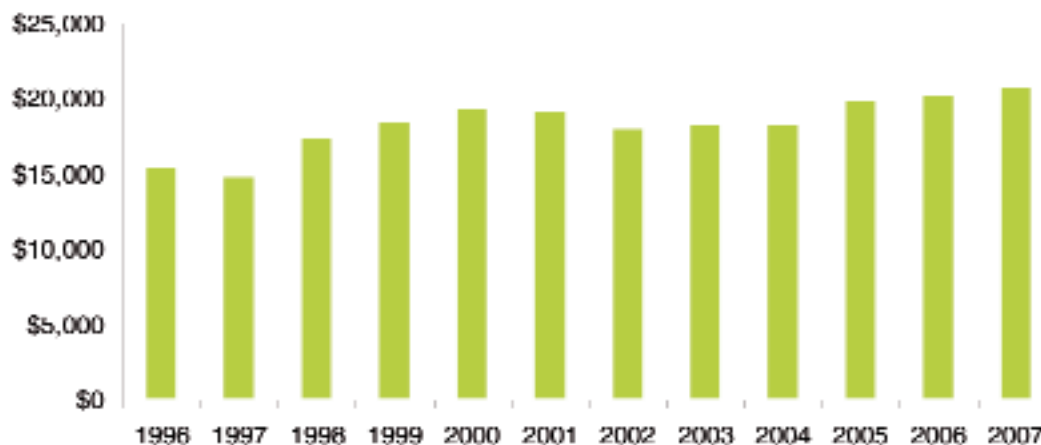
Copyright related exports as a percentage of total exports



The net position

Taking both exports and imports into account, the figure below shows Australia's net trade in copyright products.

Copyright related net imports (\$2007, \$million)



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Net Imports	15,500	14,020	17,407	18,548	19,284	18,087	17,990	18,381	18,877	19,877	20,234	20,799

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The Economic Contribution of Copyright-Based Industries in Kenya

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Dickson Nyariki

Summary

Copyright-based industries form part of creative industries, which are economic activities based on the creation, management, use and trade in original creations expressed in tangible form. Creative industries are referred to as copyright-based industries and products therefrom as copyright-based goods when they are protected under intellectual property rights. There is a growing interest in the copyright-based industries today due to the recognition that creativity is the very basis for social, economic and cultural development of nations. Based on the World Intellectual Property Organization (WIPO) Guide (2003), studies have been conducted to quantify the contributions of copyright-based industries in several European, Latin American and Asian countries. Currently, there are a number of similar studies going on in Africa.

The overall objective of the Kenyan study was to quantify the economic contribution of copyright and related rights-based industries in the country by estimating their value-added to GDP, share of national employment, and revenue generated from foreign trade. The findings of this study are expected to inform policy formulation processes towards an improved policy framework for the operation of the creative sector in the country. In accordance with the WIPO Guide, this study categorized the copyright and related rights-based industries into core, interdependent, partial, and non-dedicated support industries.

This study relied mainly on secondary data for 2007 obtained from various government departments and other relevant institutions. The main sources of data included the Kenya Revenue Authority (KRA); Kenya National Bureau of Statistics (KNBS); Attorney General Chambers; Kenya Institute for Public Policy Research and Analysis (KIPPRA); Institute of Policy Analysis and Research (IPAR); Kenya Association of Manufacturers (KAM); and the Music Copyright Society of Kenya (MCSK). Other secondary sources of data were past and current research and government reports. In addition, internet searches were employed to access available information on the contribution of creative industries to the national economy.

The results show that the total value-added of copyright-based industries in 2007 amounted to about KSHs 85.21 billion, which represented 5.32% of Kenya's GDP. The contribution to the country's total value-added by the core industries was KSHs 36.94 billion (2.3%), by the interdependent industries KSHs 34.78 billion (2.17%), the partial industries KSHs 6.56 billion (0.41%), and the non-dedicated support industries KSHs 6.92 billion (0.43%). The entire copyright-based industries contributed KSHs 114.23 billion out of the national gross output of KSHs 3,041.38 billion, which represented 3.76% of the gross output. Out of this total, the core copyright-based industries made a contribution of KSHs 57.2 billion, which formed 1.88%. With respect to the income for employees, the copyright-based industries made a total of KSHs 19.12 billion, making a proportion of about 1.97% compared to the total national economic value of KSHs 749.82 billion. The total employee income for core industries was KSHs 7.61 billion, which was 1.02% of the national employee income. Generally, those employed in the non-dedicated support industries were the highest paid workers in the copyright-based industries in Kenya.

Copyright-based industries employed 62,131 people. These comprised 3.26% of the total national workforce. Within this number, employee numbers in the core copyright industries were 22,799, constituting 1.2% of the total national workforce.

The core copyright-based industries outperformed the other three categories of copyright-based industries in all the main economic contributions considered in this study—GDP, gross output, employment and employee incomes. The interdependent copyright-based industries did better than the partial copyright-based and non-dedicated support industries in the contribution to GDP and gross output. The partial

copyright-based industries exceeded the interdependent copyright-based and non-dedicated support industries in the contribution to employment and employee incomes.

Within the copyright-based industries, the core copyright-based industries made the highest contribution of 43% to the total copyright-based GDP, followed by the interdependent copyright-based industries, which contributed 41%. With respect to gross output, the core copyright-based industries contributed an even higher share of 49% compared to the contribution of interdependent industries of 31% of the total copyright-based gross output. The partial copyright-based and non-dedicated support industries made contributions of 12% and 8% respectively.

Of the copyright-based industries, the most productive, in terms of the total added value per employee, was the interdependent industries with a contribution of KSHs 2,446,188, followed by the core copyright-based industries with a contribution of KSHs 1,620,426, all the copyright-based industries combined with a contribution of KSHs 1,371,436, and the total national economy with a contribution of KSHs 840,569 per employee. This shows that the productivity of all the copyright-based industries was more than one-and-a-half times that of the national productivity, while the productivity of the core copyright-based industries and the interdependent copyright-based industries was twice and three times that of the national productivity respectively. Also, compared to the other major sectors of the economy, copyright-based industries performed impressively in terms of productivity. The core copyright-based industries were second best with a productivity value of KSHs 1.62 million per employee, compared to the best-performing sector—finance, real estate and business services—with a productivity value of KSHs 1.94 million per employee.

The contribution of the copyright-based industries to the national economy on the basis of GDP was higher than that of the agricultural sector (2.3%), education (2.5%), and healthcare (3.9%), and compared favourably with the contributions of the other main sectors of the Kenyan economy, such as fisheries (5.4%) and manufacturing (6.2%). The contribution of copyright-based industries of 62,131 people to the national employment was also higher than that of the electrical-and-water sector (19,000 employees) and the mining-and-quarrying sector (6,300 employees). Furthermore, the contribution of copyright-based industries to the national employee income (KSHs 19.12 billion) was more than that from the mining-and-quarrying (KSHs 1.35 billion) and electrical-and-water (KSHs 8.37 billion) sectors, individually as well as combined.

The core and partial copyright-based industries contributed proportionally more value of exports than imports compared to the total national exports and imports, which were 1.30% and 0.22% for the core and 6.54% and 0.99% for the partial, respectively. Similarly, all copyright-based industries combined proportionally produced higher export value relative to the total national export value (9.35%) than import value relative to the total national import value (7.86%). The national economy exhibited a huge foreign trade deficit compared to the copyright-based industries, implying that the copyright-based industries are doing better than the overall national economy. However, the copyright-based industries have a relatively high import component, particularly within the interdependent category, that reduces its value-added and gross output.

Most of the statistics and computed economic contributions of copyright-based industries in Kenya compared reasonably well with those of other countries. In 2007, Kenya's core copyright-based industries made a contribution of over 2.3% to GDP. Compared with the results of similar studies conducted earlier in other countries, this figure was larger than those for Colombia (1.9%), Jamaica (1.7%), Bulgaria (1.6%), Mexico (1.6%) and Ukraine (1.5%). According to the studies so far carried out based on the WIPO Guide, Ukraine core copyright-based industries make the lowest contribution (1.5%) to GDP, while Australia make the highest (7.3%), followed by the USA (6.5%). These statistics, therefore, indicate that Kenya lies

somewhere in the middle of the lower half in terms of performance. With respect to employment contribution by the core copyright-based industries, Kenya did not do as well as with GDP contribution. Kenya's contribution of 1.2% of employees, compared to the national employment, was only better than Ukraine's (1.16%). However, the core and interdependent copyright-based industries combined accounted for 4.5% of Kenya's GDP, well above many countries in comparison. A comparison of the contribution of the total copyright-based industries to GDP and employment between Kenya and the USA, Singapore, Hungary, Jamaica, and Colombia reveals that Kenya performed favourably. It did better than Jamaica, compared closely with Colombia, and did not rank far behind Singapore and Hungary.

In summary, therefore, the contribution of copyright-based industries in Kenya in 2007 was as follows: On the basis of GDP, their contribution within the country was higher than that of the agricultural sector, education, and healthcare, and compared favourably with the fisheries and manufacturing sectors. With respect to employment, the industries engaged a higher number of people than the electrical-and-water and mining-and-quarrying sectors. As far as productivity is concerned, in terms of GDP per employee, the industries performed one-and-a-half times better than the national economy. Internationally, the industries performed averagely in terms of GDP, but did better than a number of countries in Europe, South America, Asia, and the Caribbean.

A few discrepancies were noted in the data used in this study, mainly as a result of databases in Kenya being piecemeal and scattered in different government agencies. This presented difficulties in estimating the full contribution of the copyright-based industries to GDP. The contribution of these industries to the total value-added, therefore, is likely higher than what was shown.

Despite some inadequacies in the policies governing the operations of copyright-based industries in Kenya, their economic contribution is reasonably significant. The economic contribution of copyright-based industries in Kenya is higher than a number of important sectors in the country and compares well with those of several countries in Europe, Asia and the Americas for which similar studies have been conducted. In order to promote the growth and development of already vibrant copyright-based sectors in Kenya, appropriate and operational policy frameworks are imperative.

1. Introduction

1.1 Background and Context

Copyright industries form part of creative industries, which are economic activities based on the creation, management, use and trade in original creations expressed in tangible form. When the produced expressions are protected under intellectual property (IP) rights, then such industries are referred to as copyright industries and the products therefrom as copyright goods. Copyright is a legal term describing rights given to creators for their literary and artistic works. It is a type of property that is founded on a person's creative skill and labour. It is designed to prevent the unauthorized use by others of a work, that is, the original form in which an idea or information has been expressed by the creator. According to the WIPO Guide (2003), copyright is not a tangible thing. It is made up of a bundle of exclusive economic rights to do certain acts with an original work or other copyright subject-matter. These rights include the right to copy, publish, communicate (e.g., broadcast, make available online) and publicly perform the copyright material. The copyright creators also have a number of non-economic rights.

The kinds of works covered by copyright include: literary works such as novels, poems and plays; reference works; newspapers; computer programs and databases; films, musical compositions and choreography; artistic works such as paintings, drawings, photographs and sculptures; advertisements; architecture; and maps and technical drawings. Creative industries—most of which are based on copyright and related rights—are said to have considerable impact on national economies. National studies in many countries have revealed that these industries are major contributors in terms of their relative aggregate value-added to a country's Gross Domestic Product (GDP) as well as their contribution to employment and foreign trade. For example, as shown in a report by Siwek (2004), one of the highest contributions of the core copyright-based industries to the national economy in terms of gross added value has been in the UK (7.1%). Another has been the USA with a contribution of about 6% in 2002. The contribution of total copyright-based industries in the USA in terms of GDP in the same year was an impressive 12%.²

Thus, copyright today is seen as more than a legal system providing a secure and stable environment for creative activity in different markets. The growing interest is largely due to a number of factors, namely a) the increased recognition of the role of IP in post-industrial society, where more attention is being paid to non-material production factors; b) the expansion of the scope of copyright protection as a result of digital technology, which has seen the economic gains from different technology-based products rise to very significant levels; c) the recognition of copyright-protected material as one of the main components in electronic commerce and digital transactions courtesy of the digital revolution; and d) the recognition of the fact that creativity is the very basis for the social, economic and cultural development of nations.

The nature of copyright and the scope of its protection, enforcement and infringement have been the subject of extensive research. Recently, however, the focus has shifted towards the economic characteristics of copyright. The first studies to quantify the economic contribution and significance of copyright-based industries were published in Canada and Sweden in the 1970s. These were followed by further works from the USA, New Zealand, the United Kingdom, Holland, Germany and Austria in the 1980s. More studies based on an integrated, standardized methodology have since been conducted in the 1990s in Finland, Japan, Argentina, Brazil, Paraguay, Uruguay, and Chile.³ The analysis of the contribution of copyright

²Information based on Siwek, S.E. (2004): Report on "The Economic Contribution of Copyright-Based Industries in the US." Prepared for the International Intellectual Property Alliance.

³Penyigey, K. and Munkácsi, P. (2005). "The Economic Contribution of Copyright-Based Industries in Hungary." In: National Studies on Assessing the Economic Contribution. WIPO, page 287.

industries to national economies in EU countries was published in 2003.⁴ In 2003, WIPO issued a methodological guide with a view to revealing the economic contribution of copyright-based industries under the title: "Guide on Surveying the Economic Contribution of Copyright-Based Industries".⁵ The Singapore, Canada, and USA reports, which were also based on the Guide, were published in 2004, followed by the Latvian report in early 2005.

The motivation behind research on the economic roles of copyright-based industries is to make economic policymakers aware of the economic importance of these industries. This is expected to encourage mainstreaming of copyright-based industries in the development policies of a given country. It is against this background that WIPO and the Government of Kenya commissioned the current study in light of the increasing importance of copyright-based goods and services to the economy, and as an element towards introducing an improved policy framework for the operation of the creative sector in the country. It is expected that the results of this study will serve as an important input in promoting the growth and development of the copyright-based sectors in the country. The Kenyan study is based on the WIPO Guide (2003).

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

1.2 Objectives and Structure of the Study

The key objectives of this study were to:

- a. Quantify the economic contribution of copyright and related rights-based industries in the country by estimating their value-added to GDP, share of national employment, and revenue generated from foreign trade.
- b. Analyze and elaborate on selected copyright and related rights-based industries of importance to Kenya, their national market structure, value chain, demand and supply patterns, labour market, policy framework, support from public and civil sectors including the role of collective management organizations and other copyright-related organizations, financing mechanisms, and implications of the digital environment, among others.
- c. Propose policy, strategy and institutional interventions to encourage the growth and development of copyright-based industries in the country.

The structure of the study is in seven parts:

- a. The first part consists of an introduction and a presentation of the objectives and structure of the study.
- b. The second part presents an overview of the copyright policy and law in Kenya.
- c. The third part describes the copyright and related rights-based industries in Kenya, presents the copyright factors used, and provides a comparison of Kenya's industry coding system and that of the WIPO Guide (2003).
- d. Part four provides details of data collection and methods of analysis.

⁴Picard, R.G., Toivonen, T.E. and Grönlund, M. (2003). "The Contribution of Copyright and Related Rights to the European Economy." European Commission, Directorate General (Internal Market).

⁵World Intellectual Property Organization (WIPO) (2003). "Guide on Surveying the Economic Contribution of the Copyright-Based Industries." WIPO, Geneva.

- e. The fifth part discusses the results of analysis on the economic contribution of copyright and related rights-based industries in Kenya, adapting the general guidelines presented in the Guide to the Kenyan situation, in terms of value-added generated by copyright and related rights-based industries, their contribution to employment generation, productivity of the various copyright-based sub-sectors, the foreign trade of copyright and related rights-based industries, and a brief comparison of the Kenyan and international studies carried out on the basis of the WIPO Guide.
- f. Part six provides a description of the development of some core copyright-based industries in Kenya.
- g. The final part presents the conclusions of the study and policy recommendations.

1.3 Scope of Study

The current study attempted to quantify as extensively as possible the economic contribution of copyright-protected goods and services in Kenya in 2007. The study included the following steps:

- a. The first step included the identification of the copyright and related rights-based industries to be studied using as reference Annex I of the WIPO Guide as well as the selected copyright and related rights-based industries which were given more detailed analysis. The categorization of the copyright and related rights-based industries followed the categories presented in the Guide—core, interdependent, partial and non-dedicated copyright industries.
- b. Based on the decision on item (a) above, data collection was undertaken. This involved compiling statistical data by industry classes and collecting additional statistics by preparation and use of appropriate questionnaires (see Appendix I for a sample questionnaire). The data were then disaggregated to the required level of detail. Interviews and questionnaires were used to address specific areas. Consultations with the relevant industry sectors, through industry associations, and the relevant public-sector institutions and/or ministries were part of the process.
- c. The third step was measurement and calculation of the contribution of the copyright and related rights-based industries studied to the national total added value, gross output, employment, employee income and foreign trade, using a selected approach under the WIPO Guide. The estimation of the relative size of copyright and related rights-based industries covered the size of the copyright and related rights-based industries against macro-economic variables such as GDP, gross output and employment.

2. Copyright Policy and Law in Kenya

2.1 Policies Related to Creative and Copyright Industries

Even though there have been concerted efforts recently by the Government of Kenya to develop policy focused on creative and copyright-based industries, there has been no national policy on these industries in the past. The absence of a National IP Policy has meant that Intellectual Property is not well mainstreamed into the National Development policies and programmes. Its value is thus not adequately recognized by policymakers as an important tool for national development that needs to be promoted and protected. Because of inadequacies in the existing policies, most of the creative industries may not be operating optimally and therefore a lot of the contribution of these industries is treated as informal and may not be captured by the government through taxes.

It has been shown through research that strengthening IP protection can stimulate direct foreign investments (DFI), technology transfer and increased funding for research and development. Thus, a number of recent efforts have been made by the Kenya Government that recognize the role creative and/or copyright-based industries play in the creation of wealth and therefore reduction of poverty. The government has proposed policies that favour the poor and has suggested that poverty alleviation can be achieved by strengthening the IP system. The government has therefore established three institutions that administer and promote intellectual property rights (IPRs). These are the Kenya Industrial Property Institute (KIPI), which administers and promotes industrial property rights that include trademarks and patents; the Kenya Copyright Board (KCB), which is responsible for the administration of copyrights and related rights; and the Kenya Plant Health Inspectorate Service (KEPHIS), which is responsible for the protection of new plant varieties.

The enactment of the Copyright Act 2001 by the Kenya Government is said to have contributed to a rapid growth in the local music industry, and has increased income and employment opportunities. The strengthening of registration of industrial designs is also deemed to have had a positive role in increasing confidence in ownership of products produced by local small and medium enterprises has both strengthened its IP system and provided opportunities for reducing poverty.⁶

2.2 Copyright Law

2.2.1 The Subject Matter and Beneficiaries of Copyright Law

The copyright law is based on certain fundamental ideas about creativity and possession. It arises from the notion that anything we create is an extension of "self" and should be protected from unauthorized use. Copyright law, however, protects only the form of expression of the ideas but not the ideas themselves. It protects the owners of the rights against those who "copy", or those who take and use the form in which the original work has been expressed by the author. It therefore deals with the intellectual creators in their creation.

Copyright protection includes every production in the literary, scientific and artistic domain whatever the mode of expression. For a work to enjoy copyright protection it must be an original creation. This means

⁶ Otieno-Odek, J. (2007). IPRs and Poverty Alleviation. Paper Presented at a Breakfast Meeting on IPRs and Poverty Alleviation, 24 April 2007, Norfolk Hotel, Nairobi.

that the work must originate from the author—it must have its origin in the labour of the author. The ideas in the work do not have to be new but the form of expression, be it literary or artistic, must be an original creation of the author.

2.2.2 Overview of the Kenyan Copyright Law

In Kenya, the law governing copyright is the Copyright Act 2001 (Act No. 12 of 2001) and the Copyright Regulations of 2004, published on 18th February 2005. Kenya's copyright law forms part of civil law, which is designed to settle property-related and personal matters. Copyright protection law is absolute in its structure, establishing a negative obligation which is very similar to an ownership title in character. The beneficiaries of copyright protection, as in most countries, are the authors—the creators of individual, original works in literature, science and art—who are entitled to moral and economic rights.

The Copyright Act of 2001 replaced the Copyright Act Cap. 130 of Kenya, which was in force between 1st April 1966 and 31st January 2003. As in countries like Hungary, the copyright law in Kenya has evolved over the decades in response to new challenges, some of them arising from changes in technology. The Copyright Act Cap. 130 underwent amendments in 1975, 1982, 1989 and 1995. The Act was amended in order to update it and enhance penalties for infringement of copyright and related rights, and also to expand the scope of protection. For instance, in 1995, the amendment extended copyright protection to computer programs. However, in 2001, it was repealed by Section 52 of the Copyright Act of 2001. The provisions of Section 51 of the Act state that "No copyright or right in the nature of copyright shall subsist otherwise than by virtue of this Act or some other enactment in that behalf". This section expressly provides for abrogation of common-law rights relating to copyright. The Copyright Act 2001 greatly enhanced penalties for infringement of copyright and is now in conformity with the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement, the WIPO Copyright Treaty (WCT) (1996) on the protection of the rights of authors in literary and artistic works, and the WIPO Performance and Phonograms Treaty (WPPT) (1996).

The Copyright Act 2001 introduced several provisions aimed at making it easier to enforce. Some of the provisions include:

- 1) The establishment of the Kenya Copyright Board (KCB). Having recognized the negative impacts of piracy in the copyright industry on the economy and on the creativity of the authors, the KCB was created as a corporate and autonomous body for administration and enforcement of copyright and related rights.
- 2) The appointment of copyright inspectors and prosecutors trained to enforce the Act under the KCB.
- 3) The establishment of a databank of authors and their works to provide a point of reference for the public and potential users of copyright works as a way of reducing piracy.
- 4) The enhancement of penalties with imprisonment of up to 10 years and fines up to KSh 800,000 in order to deter piracy.
- 5) The introduction of authentication devices to distinguish genuine from pirated works.
- 6) Registration and supervision of collective management societies to strengthen the rights holders by bringing them together.
- 7) The establishment of a competent authority headed by qualified personnel to adjudicate on arising issues.
- 8) Jurisdiction to hear copyright cases, where only experienced magistrates hear and determine court cases.

The Copyright Act 2001 received the Presidential assent on 31st December 2001 and was brought into force without the requisite implementing regulations on 1st February 2003. Therefore, as in most

developing countries, the Kenyan Copyright Act has experienced a number of difficulties related to its enforcement. Notable obstacles include:

- 1) Lack of public awareness, which has led to a thriving business in pirated works (thereby reducing legal employment opportunities), loss of revenue to the government, and death of talent in the copyright industry.
- 2) Lack of training and awareness on the part of most rights holders. Most of the agreements assigned either for licensing or assignment of copyright do not satisfy the legal requirements to be admissible in court.
- 3) Lack of training on the part of enforcement officers on copyright laws, implying lack of knowledge on how to gather relevant evidence and lack of awareness of seriousness of copyright infringement.
- 4) Evidentiary rules requiring detailed and complicated proof of copyright and copyright ownership for creative works cause unwarranted loss of time, effort and money by the rights holder.
- 5) Lack of intellectual property expertise is another difficulty faced in enforcing copyright infringements.
- 6) Lack of intellectual property policy has meant that intellectual property is not mainstreamed into national development.
- 7) Weak coordination among enforcement agencies.
- 8) It is often difficult to prove the amount of actual damage suffered by the rights holder.
- 9) High cost of litigation renders rights holders unable to instruct advocates to represent them in court in case of infringement of their rights.
- 8) Legal procedures to obtain information from or about infringers are missing. The ability to obtain information necessary to detect and detain all actors in the distribution chain and to identify the sources of supply of illegal goods is important if piracy is to be fought effectively.
- 9) There are emerging issues in enforcement with the advancement of technology. For example, piracy has taken a new dimension and has become more sophisticated and lucrative. This has led to the trade in pirated materials becoming a very attractive business.

2.2.3 Economic Considerations of the Kenyan Copyright Law

Copyright constitutes an essential element in the economic development process of Kenya. As is always the case with other countries, some people in Kenya possess the natural gift of intellectual creation more than others. Protection under the Kenyan copyright law encourages them to create further works, thus enriching Kenya's store of literature, music and art, as well as promoting economic development. Certainly, the overwhelming numbers of authors of creative works are interested in having some control over how their creations are used and in reaping some economic benefits from that use. This aspect of the Kenyan copyright law as a stimulus for intellectual creativity is of fundamental importance.

In addition, the considerable investments which are sometimes necessary for the creation and dissemination of works of the mind will be more easily obtainable if effective protection exists under the law. In some sectors, for instance book-printing, film-making and record manufacturing, such legal protection is in fact indispensable—it is simply not possible to engage in these expensive activities if no satisfactory legal protection exists which gives the possibility to take action against those who use the products without permission.

Furthermore, if the copyright protection exists in a work, the author is encouraged not only to create the work but also to make it public and disseminate it widely, because he knows that he will not lose control over it simply because it is made known to others. Such a wide dissemination of works is generally of great benefit for the society as a whole.

An author's work is generally the personal expression of his thoughts and of his personality and he should therefore be able to claim respect for it—that is, to decide whether, when and how his work may be

reproduced and performed in public and also to object to any distortion or mutilation of the work when it is used. Such protection is granted under the law on copyright (moral rights).

Finally, the works of the authors of a country enable the country's manners, customs and cultural heritage to become better known both inside and outside the country. Consequently, any country wishing to stimulate and inspire its own authors in their creativity must necessarily provide for copyright protection. (For more on Kenya's copyright law, see Appendix II.)

3. Copyright-based Industries in Kenya

3.1 Composition of Copyright-Based Industries

As alluded to earlier, copyright-based industries include all the activities and industries that produce works (creations) protected by the copyright law and the industries that consume or utilize such products. The copyright law ensures that the rights of those engaged in creations in copyright and related industries are protected and that the creator of such works benefits both morally and financially from the consumption of works they have created.

The creation of works under the protection of copyright law presents a starting point in terms of economic weight and effect of copyright. The creation of copyright-protected works is essentially associated with other activities that increase added value. The consumption of literary and artistic creations and works cannot be possible without interposing certain associated activities (e.g. wrapping, copying, distribution, etc.).

The law covers creative works such as the activities of writers, authors, software designers, etc. These activities are important factors in the economic development of nations worldwide, Kenya included. Apart from meeting social and cultural functions, the production of these works is key to enhancing economic value through generating added value.

3.2 Types of Copyright-Based Industries

The methodological guide published by WIPO (2003) distinguishes four main categories of copyright-based industries depending on the type of association to copyright. They are:

- I Core copyright-based industries.
- II Interdependent copyright-based industries.
- III Partial copyright-based industries.
- IV Non-dedicated support industries.

Creations and works protected by the copyright law do not carry equal weight in different sectors of the economy. There are those that are totally based on copyright-protected creative works. These include, according to the WIPO Guide, core copyright-based industries and interdependent copyright-based industries. In other sectors, copyrighted creations are only partly represented or have no role to play at all. These include partial and non-dedicated copyright-based industries.

3.2.1 Core Copyright-Based Industries

Core copyright-based industries are industries fully engaged in the creation, manufacturing and production, performance, broadcasting and communication, and exhibition or distribution and sale of works and other creations under the scope of copyright. They are areas in the economy whose activities are based on works protected by copyright and related rights. They form the core of copyright-based industries and activities in them are almost exclusively associated with creations protected by copyright, hence their full activities and performance are taken into consideration when establishing the economic contribution of copyright-based industries. The following industries fall into this category according to the WIPO Guide:

- i. Press and literature.
- ii. Music, theatrical productions and opera.

- iii. Motion pictures and video.
- iv. Radio and television.
- v. Photography.
- vi. Software and databases.
- vii. Visual and graphic arts.
- viii. Advertising.
- ix. Copyright collecting societies.

3.2.2 Interdependent Copyright-Based Industries

The interdependent copyright-based industries are defined by the WIPO Guide (2003) as “industries that are engaged in production, manufacture and sale of equipment whose function is wholly or primarily to facilitate the creation, production or use of works and other protected subject matter.” These industries wholly depend on core copyright industries for existence.

This category of industries includes:

- i. Manufacture, wholesale and retail of TV sets, radios, VCRs, CD players, DVD players, electronic game equipment and other similar equipment.
- ii. Manufacture, wholesale and retail (sales and rental) of computers and equipment.
- iii. Manufacture, wholesale and retail (sales and rental) of musical instruments.
- iv. Manufacture, wholesale and retail (sales and rental) of photographic and cinematographic instruments.
- v. Manufacture, wholesale and retail (sales and rental) of photocopiers.
- vi. Manufacture, wholesale and retail of blank recording materials.
- vii. Manufacture, wholesale and retail of paper.

3.2.3 Partial Copyright-Based Industries

Industries in which only a specific proportion of their production is associated with products protected by copyright and related rights are referred to as partial copyright-based industries. The ratio is indicated by a copyright factor which shows what percentage of the product is under protection of copyright. The following industries fall under this category, according to the WIPO Guide (2003):

- i. Apparel, textiles and footwear.
- ii. Jewellery and coins.
- iii. Other crafts.
- iv. Furniture.
- v. Household goods, china and glass.
- vi. Wall coverings and carpets.
- vii. Toys and games.
- viii. Architecture, engineering, surveying.
- ix. Interior design.
- x. Museums.

3.2.4 Non-Dedicated Support Industries

The non-dedicated support industries are those in which a portion of their activities is related to facilitating broadcast, communication, distribution and sale of products and works and other protected subject matter. The following industries fall under this category according to the WIPO Guide (2003):

- i. General wholesale and retailing.
- ii. General transportation.
- iii. Telephony and internet.

3.3 Comparison of Industry Classification for Kenya with the WIPO Guide

Table 1 summarizes all the copyright-based industries included in the Kenyan survey. The industries were determined according to the WIPO Guide but taking into account the specific characteristics of the Kenyan statistical system.

A comparison of the industries recommended by WIPO and those used in the Kenyan survey is given in Table 2. As can be seen from the table, these industries roughly correspond. There are a few differences, however. For example, the manufacture of musical instruments is in the interdependent category as per the WIPO classification but is missing in the Kenyan classification. Also, in the Kenyan survey results, interior designs have been included under the visual and graphic arts. Wholesale and retail in the Kenyan statistics are included in the core copyright industries.

Table 1: Copyright-based industries in Kenya

I. Core copyright-based industries	II. Interdependent copyright-based industries
Press and literature	TVs, radios, VCRs, CD and cassette players, electronic game equipment
Music, theatrical productions, opera	and other similar equipment
Motion pictures and video	Computers and equipment
Radio and television	Photographic and cinematographic instruments
Photography	Photocopiers
Software and databases	Blank recording materials
Visual and graphic arts	Paper
Advertising services	Manufacture, wholesale, retail and rental
Professional and labour organizations	
III. Partial copyright-based industries	IV. Non-dedicated support industries
Apparel, textiles and footwear	General wholesale and retail
Jewellery and coins	General transportation
Other crafts	General storage
Furniture	Telephony and internet
Household goods, china and glass	
Wall coverings and carpets	
Toys and computer games	
Architecture, engineering, surveying	
Museums	
Wholesale and retail	

Table 2: Classification of copyright-based industries in Kenya compared to the WIPO Guide classification

Category	WIPO	Kenya
I. Core	Press and literature	Press and literature
	Music, theatrical productions and opera	Music, theatrical productions, opera
	Motion pictures and video	Motion pictures and video
	Radio and television	Radio and television
	Photography	Photography
	Software and databases	Software and databases
	Visual and graphic arts	Visual and graphic arts, and interior designs
	Advertising services Copyright collecting societies	Advertising services Professional and labour organizations
II. Interdependent	TV sets, radios, VCRs, CD players, cassette players, electronic game equipment, and other similar equipment	TVs, radios, VCRs, CD and cassette players, electronic game equipment, and other similar equipment
	Computers and equipment	Computers and equipment
	Musical instruments	
	Photographic and cinematographic equipment	Photographic and cinematographic instruments
	Photocopiers	Photocopiers
	Blank recording materials	Blank recording materials
	Paper	Paper
	Manufacture, wholesale, retail and rental of interdependent industries	Manufacture, wholesale, retail and rental of interdependent industries
III. Partial	Apparel, textiles and footwear	Apparel, textiles and footwear
	Jewellery and coins	Jewellery and coins
	Other crafts	Other crafts
	Furniture	Furniture
	Household goods, china and glass	Household goods, china and glass
	Wall coverings and carpets	Wall coverings and carpets
	Toys and games	Toys and computer games
	Architecture/engineering/surveying	Architecture, engineering, surveying
	Interior design	
	Museums	Museums
	Wholesale and retail of partial industries	
IV. Non-dedicated	General wholesale and retailing	General wholesale and retail
	General transportation	General transportation
	Telephony and internet	Telephony and internet
		General storage

3.4 Copyright Factors

A copyright factor is a percentage indicating the proportion of copyright activities in a given industry. It is an expression of the extent of dependence of the product of the given industry on copyright.

According to WIPO recommendations, the copyright factor may take a value between 0 and 1 depending on the industry. Thus, industries that only produce products and works and other protected subject matter have a copyright factor of 1, while those having nothing to do with copyright have a factor of 0. This

means that all industries producing creative works protected by copyright have a copyright factor of 1. These include core copyright and interdependent copyright industries.

In partial and non-dedicated copyright-based industries, a large share of their goods and services has no relation to copyright at all. The copyright factors for partial industries used in this study were generated by computing means of partial copyright factors for Hungary, Singapore and Latvia. The copyright factors for these countries were chosen because they showed some degree of consistency in their ranges. Although the data from our survey did not capture all the partial industries and therefore was not adequate for generating the copyright factors, there were some indicative similarities between the observed and computed copyright factors from Hungary, Singapore and Latvia. The computed means of copyright factors from the three countries were therefore adopted to calculate the fractions of partial industries that are attributable to copyright-based industries (see Table 3). Several similar studies, carried out recently, have adopted the same approach to generate copyright factors (see, for example, Leenheer et al., 2008).⁷

Table 3: Copyright factors for partial copyright-based industries in Kenya

Partial copyright-based industries	Copyright factors (%)			
	Kenya	Hungary	Singapore	Latvia
Apparel	0.45	0.5	0.4	0.46
Footwear	0.44	0.5	0.4	0.42
Textiles	0.44	0.5	0.4	0.42
Jewellery and coins	14.14	25.0	8.3	9.13
Household goods, china and glass	0.55	0.5	0.6	NA
Wall coverings and carpets	1.78	2.0	1.7	1.85
Toys and computer games	45.83	50.0	42.0	45.80
Furniture, fittings and furnishings	29.33	5.0	42.0	41.00
Museums	50.00	50.0	NA	NA
Other crafts	41.00	40.0	42.0	NA
Architecture, engineering, surveying	9.15	10.0	8.3	NA
Wholesale and retail of partial copyright industries	5.00	5.0	NA	NA

The following formula suggested by Chow⁸ and adopted at the Experts Meeting in Singapore in October 2008 was used to compute the copyright factor for non-dedicated support industries (NDSI):

$$NDSI \text{ Copyright Factor} = \left(\frac{\text{Value Added for Core, Interdependent and Partial Industries}}{\text{Non - Distribution GDP}} \right) \quad (1)$$

The non-distribution GDP in Equation (1) is given by GDP *minus* (value-added of general transportation *plus* general wholesale and retail *plus* telephony and internet) *plus* value-added of distribution industries in the core, interdependent and partial sub-sectors. (Examples of distribution industries in the core group are wholesale and retail of press and literature—book stores, newsstands, etc.)

A full range of copyright factors used in the Kenyan study is provided in Table 4. The appropriate added value, output, employee income, and number of employees of copyright-based activities were computed by

⁷ Leenheer, J., Bremer, S. and Jules Theeuwes, J. (2008). "The Economic Contribution of the Copyright-Based Industries in the Netherlands: A Study Based on the WIPO Guide." The Netherlands.

⁸ Professor Chow Kit Boey is a co-author of the 2004 report on "The Economic Contribution of Copyright-Based Industries in Singapore," which was one of the first published reports to use the WIPO Guide (2003).

multiplying the total added value, output, employee income, and number of employees by the copyright factor of the industry studied. Thus, the actual significance of copyright-based industries in the national economy is determined to some degree of accuracy.

Table 4: Copyright factors adopted for the Kenyan study

Description	Copyright factor (%)
I. Core copyright industries	
Press and literature	100.00
Music, theatrical productions, opera	100.00
Motion picture and video	100.00
Radio and television	100.00
Photography	100.00
Software and databases	100.00
Visual and graphic arts	100.00
Advertising services	100.00
Professional and labour organizations	100.00
II. Interdependent copyright industries	
TVs, radios, VCRs, CD and cassette players, electronic game equipment and similar equipment	100.00
Computers and equipment	100.00
Photographic and cinematographic instruments	100.00
Photocopiers	100.00
Blank recording materials	100.00
Paper	100.00
Manufacture, wholesale, retail and rental of interdependent industries	100.00
III. Partial copyright industries	
Apparel	0.45
Footwear	0.44
Textiles	0.44
Jewellery and coins	14.14
Household goods, china and glass	0.55
Wall coverings and carpets	1.78
Toys and computer games	45.83
Furniture, fittings and furnishings	29.33
Museums	50.00
Other crafts	21.20
Architecture, engineering, surveying	9.15
Wholesale and retail of partial copyright industries	5.00
IV. Non-dedicated copyright industries	
General wholesale and retail	4.80
General transportation	4.80
General storage	4.80
Telephony and internet	4.80

3.5 Comparison of Kenya's Coding and the WIPO Guide (2003) ISIC System

The Kenyan classification, compared to the WIPO Guide (2003), is highly aggregated. A full range of these comparisons is given in Table 5. In a number of cases, this poses some difficulties in disaggregating the various sub-sectors and activities of copyright-based industries for the purposes of computing activity-specific contributions to the national economy. Thus, Kenya's adoption of the ISIC system lags behind and needs updating to be in line with the current UN system of classification.

Table 5: Kenya's industry coding compared to WIPO (2003) ISIC

Kenya's Coding	Code	ISIC	Rev. 3.1	Code
I. Core copyright industries				
Printing, publishing and allied services	3420	Publishing of newspapers		2212
		Publishing of books, brochures etc.		2211
		Other publishing		2219
		Printing		2221
		Services related to printing		2222
		Library and archive activities		9231
		News agency activities		9220
Retail of books, newspapers and stationery	5247	Wholesale of other household goods		5139
		Other retail sales in specialized stores		5239
Data processing and tabulating services	8023	Software publishing		7221
		Other software consultancy and supply		7229
		Database activities and online distribution		7240
		Data processing		7230
		Wholesale of computers		5151
Advertising services	8325	Advertising		7430
Business, professional and labour associations	9050	Activities of professional organizations		9112
Radio and TV broadcasting	9413	Radio and TV activities		9213
		Other business activities		7499
		Telecommunication		6420
Theatrical producers and entertainment services	9414	Dramatic arts and music etc.		9214
Authors, music composers and other artists	9415	Other entertainment activities		9219
Amusement and recreational services	9490	Other recreational services		9949
		Publishing of music		2213
		Reproduction of recorded media		2230
		Retail sale of household appliances		5233
		Renting of personal goods		7130
		Wholesale of household goods		5139
Motion picture production	9411	Motion picture and video prod.		9211
Motion picture distribution and projection	9412	Motion picture projection		9212
Photographic studios including commercial photography	9502	Photographic activities		7494
		Other business activities N.E.C.		7499
II. Interdependent copyright				
Manufacture of pulp, paper and paperboard	3411	Manufacture of pulp, paper and paperboard		2401
Manufacture of containers and boxes of paper	3412	Wholesale of other intermediate products		5149
Manufacture of pulp and paperboard articles N.E.C.	3419	Other retail sale		5239
Manufacture of radios and TVs	3832	Manufacture of TV and radio receivers		3230
Wholesale of radios and TVs	5143			
Manufacture of professional and scientific equipment	3851	Manufacture of office machinery		3800
		Wholesale of computers and equipment		5151
		Renting of office machinery		7123
		Wholesale of other machinery		5159
Manufacture of photographic and optical goods	3802	Manufacture of photographic and optical equipment		3320
		Other retail sale in specialized stores		5239
		Renting of other machinery		7129
Retail sale of professional apparatus and equipment TV goods	5246	Retail sale of household appliances, articles and equipment		5233

Kenya's Coding		ISIC	Rev. 3.1 Code
III. Partial copyright		III. Partial copyright	
Manufacture of furniture and fixtures	3320	Manufacture of furniture	3610
Sale of furniture and household goods	6115	Wholesale	5139
		Renting of personal goods N.E.C.	7130
Manufacture of glass products	3620	Manufacture of glass and glass products	2610
		Wholesale	5139
		Retail sale	5233
Manufacture of jewellery and related articles	3901	Manufacture of jewellery and related articles	3691
		Wholesale	5139
		Retail sale	5239
Sale of textiles, clothing, footwear and leather	6116	Manufacture of wearing apparel	1810
Wholesale of clothing and footwear	6142	Manufacture of made-up textiles	1721
Retail sale of footwear and leather goods	6243	Manufacture of footwear	1920
		Wholesale of textiles, clothing and footwear	5131
		Retail sale of textiles, clothing and footwear	5232
Libraries, museums etc	9420	Library and archive services	9231
		Museum activities and other preservation	9232
IV. Non-dedicated copyright		IV. Non-dedicated copyright	
Transport including construction	7110	Land transport via pipelines	60
Urban passenger transport	7112	Transport via railways	601
Other passenger transport (taxicabs, etc)	7113	Other land transport	602
Freight transport by road (long distance)	7114		
Pipeline transport	7115		
Support services to land transport (toll stations)	7116		
Ocean transport for passengers and freight	7121	Water transport	61
Inland water transport	7122		
Support services to water transport (piers, etc)	7123		
Air transport for passengers and freight	7131	Air transport	62
Aircraft rentals	7132	Travel agencies	6304
Travel agents	7191	Other transport agencies	6309
Storage and warehousing	7192	Supporting and auxiliary activities	630
		Cargo handling	6301
		Storage and warehousing	6302
		Other support activities	6303
Communication by radio, wire TV	7201	Post and courier activities	641
Communication by post or print	7202	National post services	6411
Other communication N.E.C.	7203	Courier activities not postal	6412
		Telecommunication	6420
		Database activities	7240
Wholesale of office machinery and equipment	6164	Wholesale of machinery, equipment and supplies	515
		Retail trade except of motor vehicles and motorcycles	520

4. Data Collection and Methods of Analysis

4.1 Sources of Information

The current study relied mainly on secondary data obtained from various government departments, institutions and NGOs. Sources of data and information included the Kenya Revenue Authority (KRA); Kenya National Bureau of Statistics (KNBS);⁹ Ministry of Gender, Sports, Culture and Social Services; Ministry of Trade and Industry; Ministry of Tourism and Wildlife; AG Chambers; relevant research institutions and institutes such as the Kenya Institute for Public Policy Research and Analysis (KIPPRA), Institute of Policy Analysis and Research (IPAR), Kenya Industrial Research and Development Institute (KIRDI), and Kenya Industrial Estate (KIE); Kenya Association of Manufacturers (KAM); Jua Kali Association; and the Music Copyright Society of Kenya (MCSK). Other secondary sources of data included past and current research and government reports, and study reports based on the WIPO Guide. In addition, internet searches were employed to access available information on the contribution of creative industries to the national economy.

4.2 Methodology

4.2.1 Data Collection

In this report, the economic contribution of copyright and neighbouring rights is measured according to the guidelines drawn up by WIPO. The study includes core copyright industries, interdependent copyright industries, partial copyright industries and non-dedicated support industries. A pilot survey at the initial stages of the study, using a questionnaire, was carried out to identify sources of secondary information and provide more insights into the nature and organizational structure of the copyright industries in Kenya. The primary data collected were later used to fill the gaps identified in the secondary data. With these data, there was an attempt to derive the factors used to adjust the contribution of partial copyright-based and non-dedicated support industries to the national economy. While some of the factors generated were found to be close to a few of the already published ones, most of them were inconsistent with those used in most studies—such as those for the Singaporean, Hungarian and Latvian studies. This may have been because the data collected were not sufficient to compute reliable factors.

4.2.2 Dealing with Missing Data

In a number of cases, data on one or several industries were missing. In a few cases, recorded data were contradictory, even from the same source. There were also situations where copyright-based industries' data were combined with those that did not fall under copyright-protected industries. Yet again, some data from different sources were conflicting. For example, data on VAT for particular activities/industries, which were used to calculate value-added at basic prices, contradicted the sales—in the sense that the value of sales (representing gross output) turned out to be less than the value-added—which should not be the case. In a few cases, data on sales were missing all together.

In cases where sales were missing or were shown to be less than added value, the calculated added value based on VAT was used. This meant that there was an undervaluation of the value of sales in that particular activity. Where data for an activity were available on (for example) employment but missing on VAT or sales (or vice versa), the proportional contribution in one economic indicator (for example, employment) of that specific industry was used to estimate another economic indicator (for example, value-added). Also, where a copyright-based industry was combined with that which was not copyright-based and a value for the

⁹ The KNBS provided two publications from which most data on employment, employee incomes and sector contributions were obtained: Economic Survey (2007), pages 49-262; and Statistical Abstract (2008) on "Annual Production Accounts", pages 32 and 33.

relevant industry with respect to one of the economic indicators was available, the proportional contribution based on that indicator was used to obtain its contribution in another indicator. In circumstances where data from different sources were contradictory, the researchers had the discretion to select data from the source deemed more reliable and representative of the activity in question.¹⁰

4.2.3 Calculation of Indicators of Economic Contribution

As in all the previous studies in this field, the indicators of the contribution of Kenyan copyright industries to the national economy are turnover (gross output), value-added, number of persons employed and employees' incomes. The value-added is obtained when labour costs (including social-security contributions and taxes) are added to the operating margin and the income from the sale of fixed assets is deducted from this sum. The GDP share of Gross Value-Added (GVA) is calculated to reveal the economic contribution of the copyright-based industries to the domestic economy.

GDP can be measured using three approaches—the output or production approach, the expenditure approach, and the income approach. The production approach views GDP as the sum of value-added (VA) of all industries, i.e., the difference between output and intermediate consumption. In the expenditure approach, GDP is viewed as the sum of all expenditure categories, including government and household consumption, fixed capital formation, changes in inventories, and exports minus imports. The income approach considers GDP to be the sum of the income due to households (compensation of employees, i.e., wages and salaries, bonuses and other benefits) and corporations (profits or gross operating surpluses) and taxes on production and imports (indirect taxes). All the three approaches would yield the same estimates of GDP. However, as different sources of data are used, differences between them inevitably arise. Singapore is one of the few countries that compile GDP estimates using all the three approaches.¹¹

The output or production approach was adopted in the Kenyan case. GDP at basic prices was derived by converting the Value-Added Tax (VAT) into value-added and then summing it up. Figures on VAT, which is uniformly charged at 16% across items, were obtained from the KRA. In addition to the value-added, the workforce of the copyright industries was calculated and compared with the total workforce in Kenya. Employee incomes were also treated the same way.

The overall methodological approach consisted of three principal components:

- a. Derivation of specific data for the various copyright and related rights-based industries, mainly from the Kenya National Bureau of Statistics (KNBS) and the Kenya Revenue Authority (KRA), and other relevant government sources. For selected copyright and related rights-based industries (partial and non-dedicated) for which only a part of the output is copyright-related, relevant copyright factors for partial industries were calculated using means of similar factors for three countries—Singapore, Hungary and Latvia—considered to be closely comparable. For the non-dedicated support industries, Equation (1) was applied.
- b. The total impact, which comprised the direct, indirect and induced impacts. These impacts were for output, added value, incomes, employment and foreign trade. The impacts were measured as follows:
 - i. The direct impact as represented by the operating revenue of copyright and related rights-based activities;

¹⁰ Thus, in a number of cases, gross output was not calculated in conformity with the WIPO Guide.

¹¹ Statistics Singapore Newsletter (July 2000). "National Accounts: Measuring Gross Domestic Product (GDP)." Singapore Department of Statistics, Singapore.

- ii. The indirect impact that arises from additional revenue generated from other sectors providing goods and services to copyright and related rights-based sectors; and
 - iii. The induced impact, limited to the group of non-dedicated support industries.
- c. Employment data were compiled for estimation of the employment impact while trade data were collected for the foreign trade measure.

It was not possible to perform an input-output analysis due to unavailability of adequate data from the standard data sources. We do recognize, however, the importance of this approach in analyzing the knock-on (multiplier) effects and therefore the comparative advantage in investing in copyright industries as opposed to other industries. We therefore suggest that follow-up studies seek information from professional and trade organizations, as this was not possible within the framework of the current study.

This study does not include copyright piracy or other illegal uses of copyright-protected works and other protected subject matter, because such activities were beyond the scope of the current study.

4.3 Survey Challenges

A number of challenges that deserve mention were faced during the Kenyan survey. Some of these may be unique to Kenya and similar developing countries, while some may be common to all countries.

In Kenya, the rate of growth of creative industries is quite fast, and there is increased awareness of their contribution to the national economy. However, the high growth rate is making it hard for the government to capture the activities and their contribution in its accounts. Also, the inadequacies of existing policies have made the creative industries operate in an uncoordinated manner, again leading to low focus on their activities for the purposes of making them contribute to the national revenue. In addition, the absence of an IP Policy, which has led to inadequate mainstreaming of intellectual property into the national development programmes, has meant that the value of intellectual property is not appropriately recognized by policymakers, and may not necessarily be fully captured in the national accounts.

Another problem, that may be common to all countries, is the unwillingness by those involved in the industry to disclose information for reasons of avoiding taxation. Particularly common is that most of the artists avoid taxes and even resist exposing themselves, mainly because they want to protect their products from piracy. Also, some retailers of creative works are either operating illegally or stock pirated materials, and would normally avoid disclosure. This would naturally result in poor or no documentation, therefore leading to no or inadequate database.

In the Kenyan databases, the contribution of creative industries is highly aggregated, e.g. partial and non-dedicated—transport and telecommunication. It is therefore difficult to establish the contribution of specific activities/industries to the GDP. This would lead to over- or under-estimation or double-accounting of the contribution of certain industries. Some of the creative industries are traditional and for prestige. Thus, only cultural value—and no monetary value—is attached to these industries, which include traditional healing, music, dancing and drama. Such industries are found away from cities, where there is little ability and willingness to pay.

The lack of a concrete databank on the contribution of creative industries in Kenya is a major challenge. For example, there is no database of authors and their works. This might be one of the major reasons for the rise in piracy, because members of the public or potential users of copyright works do not have a point of reference to find out who owns what in the copyright industry. Data on software are scanty; what is

recorded is the number of internet users and licensed Internet Service Providers (ISPs). Costs of inputs (expenditures) are also scanty, unavailable or highly aggregated, making it difficult to analyze the individual contributions. Input-output data are not compiled in government records—thus input-output analysis (using the Lontief matrix) to estimate multipliers is not possible with limited or inconsistent data.

Another challenge, albeit a minor one, is that Kenya's industry coding is not in harmony with the UN coding; for example, Kenya's code for printing is 3420, while the current ISIC coding is 2221. This can cause confusion. There is also a lack of related studies in similar environments (sub-Saharan Africa) from which to learn lessons for any new survey conducted in those environments.

Because of inadequate data, information and policies, there has been mushrooming of unscrupulous self-imposed industry regulators. These tend to block information flow to artists, so as to control them. Further to this, the quantification of exported artistic work is difficult due to a lack of data and also because some of the exportation is not done legally (not on record).

Yet another challenge is that related to piracy. Although not the subject of this survey, as mentioned in previous paragraphs, piracy has made it difficult to estimate the true contribution of copyright-based industries to GDP. For example, most of the music and video products in Kenya are said to be pirated. With the advancement of technology, piracy has taken a new dimension and has become sophisticated and lucrative, making trade in pirated material a very attractive business, with even organized gangs being involved; therefore, enforcement has become more challenging and risky.

5. Economic Contribution of Copyright-based Industries in Kenya in 2007

5.1 Overall Performance of Copyright-Based Industries

The economic contribution of the copyright-based industries in Kenya as shown by the values of value-added, employment, and employee incomes is significant. The total value-added (GDP at basic prices) of copyright-based industries in 2007 amounted to KSHs 85,208.7 million, which represented 5.32% of the total GDP of KSHs 1,603,176 million (at basic prices). Among the copyright-based industries, the contribution to the country's total value-added by the core industries was KSHs 36,944.1 million (2.30%), KSHs 34,784.8 million (2.17%) by the interdependent industries, KSHs 6,559.7 million (0.41%) by the partial industries, and KSHs 6,920.1 million (0.43%) by the non-dedicated industries (see Table 6).

When the core and interdependent copyright-based industries whose activities are 100% copyright-dependent are considered, the two contribute about 4.47%. Thus, even without including the contributions of partial and non-dedicated copyright-based industries whose combined contribution is low (0.84%), assuming the copyright factors used for apportionment reasonably represent their share contributions, this is a strong indication of the level of contribution of copyright-based industries in Kenya.

In terms of gross output (at basic prices), the entire copyright-based industries contributed KSHs 114,231.6 million out of the total national output of KSHs 3,041,382 million, which represented 3.76% of the national economic output. Out of this total, the core copyright-based industries made a contribution of KSHs 57,196.4 million, which formed 1.88% of the total national output. There is, however, a high likelihood that sales figures were under-reported.

With respect to the income for employees, the copyright-based industries made a total of KSHs 19,118.9 million in 2007, making a proportion of about 1.97% compared to the total national economic value of KSHs 749,818.5 million. Among the copyright-based industries, the total employee income for core industries was KSHs 7,609 million, which was about 1.02% of the national employee income.

In 2007, copyright-based industries employed 62,131 people. This made up about 3.26% of the total national workforce (government and private sector employees). Within this number, the core copyright industries employed 22,799 people, making up 1.2% of the total national workforce.

Overall, considering that the full contribution of the copyright-based industries may not be captured under the Kenyan circumstances, these industries may be contributing upwards of 7% to the national economy in terms of GDP, with the core copyright-based industries making a contribution of about 3–4%.

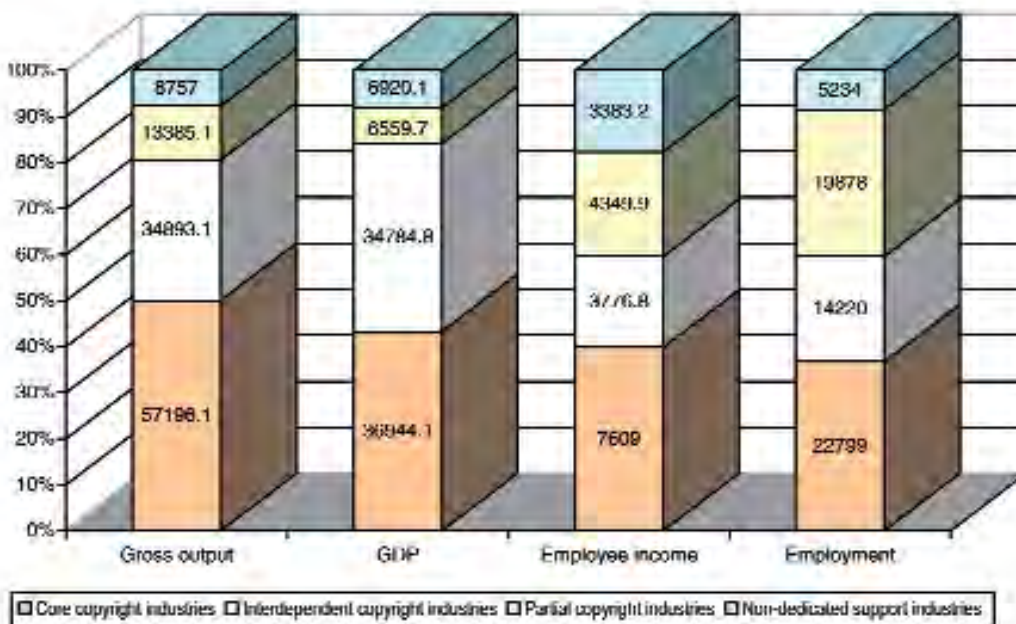


Table 6: Economic contribution of copyright-based industries in Kenya in 2007 (KSHs, numbers, %)

Copyright industries	Gross domestic product (GDP)		Gross output		Employee incomes		Employee numbers	
	Million KSHs	%	Million KSHs	%	Million KSHs	%	People	%
Core copyright industries	36,944.1	2.304	57,196.4	1.881	7,609.0	1.015	22,799	1.195
interdependent copyright industries	34,784.8	2.170	34,893.1	1.147	3,776.8	0.504	14,220	0.746
Partial copyright industries	6,559.7	0.409	13,385.1	0.440	4,349.9	0.5801	19,878	1.042
Non-dedicated support industries	6,920.1	0.432	6,757.0	0.228	3,363.2	0.451	5,234	0.274
TOTAL COPYRIGHT INDUSTRIES	85,208.7	5.320	114,231.6	3.760	19,118.9	1.940	62,131	3.267
Total national economy	1,603,176	100	3,041,382	100	749,818.5	100	1,907,250	100

Figure 1 illustrates clearly the contributions made by the various copyright-based industries in Kenya. In the performance indicators considered in this study, the core copyright-based industries outperformed the other three categories of copyright-based industries in the contribution to gross output and employee incomes, the interdependent copyright-based industries outperformed all the other groups in GDP contribution, while the partial copyright-based industries exceeded all the others in their contribution to employment.

Figure 1: Economic contribution of copyright-based industries in Kenya in 2007 (%)



Within the copyright-based industries, the core industries made the highest contribution to the national economy, followed by the interdependent industries—the former contributed 43% while the latter made a contribution of 41% of the total copyright-based GDP (at basic prices). The partial and non-dedicated copyright-based industries each made a contribution of 8%. This is illustrated in Figure 2. With respect to gross output, the core copyright-based industries again contributed the highest share of 49% of the total copyright-based gross output, compared to the contribution of interdependent industries of 31% (Figure 2). The partial and non-dedicated copyright-based industries in this respect also made reasonable contributions of 12% and 8% respectively.

Figure 2: Share contributions within copyright-based industries in Kenya based on total value-added (GDP) in 2007

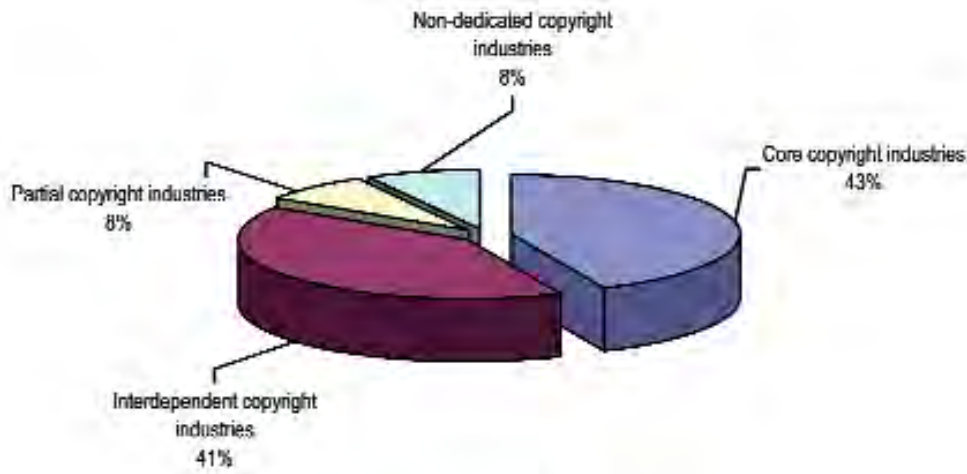


Figure 3: Share contributions within copyright-based industries in Kenya based on total gross output in 2007 (%)

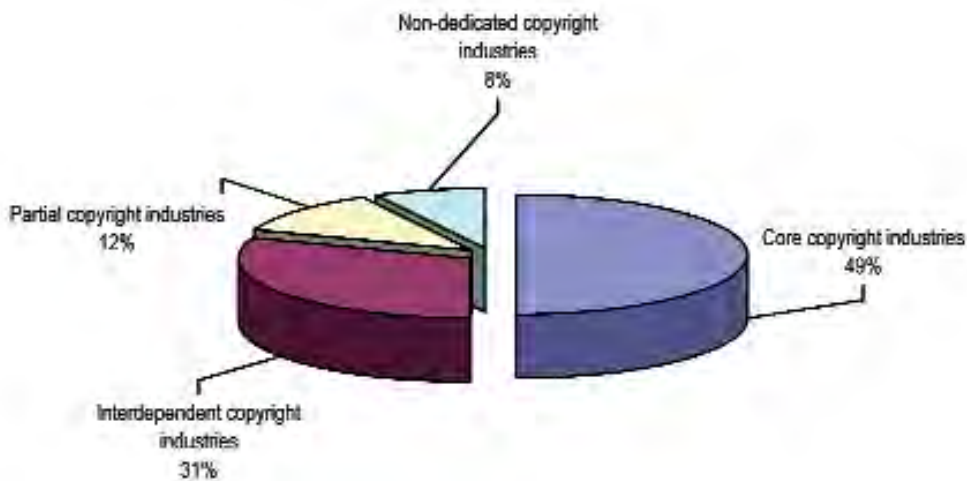
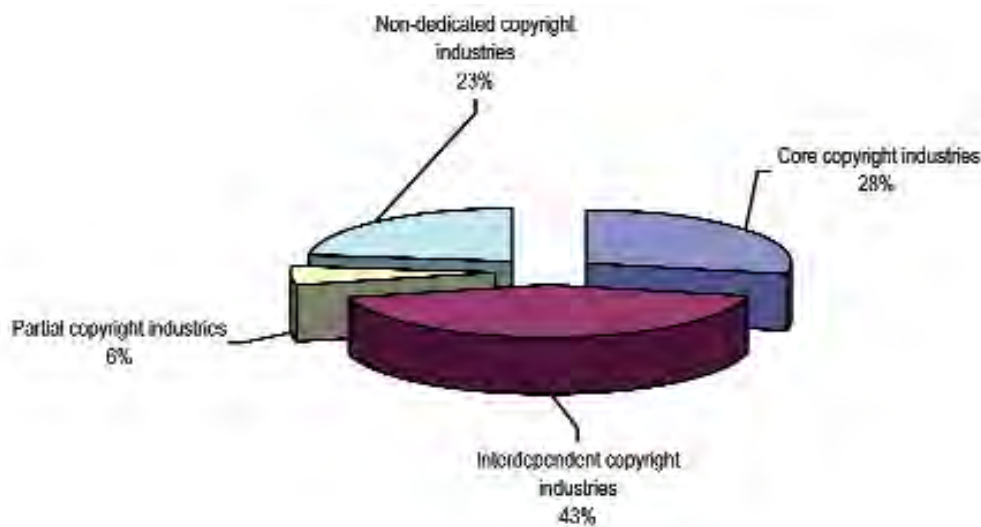


Figure 4 shows employee productivity shares within the copyright-based industries in Kenya with respect to total added-value. Productivity, which is usually distinguished from production, is, in general terms, the ratio of output to input, often physical but also monetary and even sometimes non-material. Output per unit capital or per unit labour/employee is a good indicator of the productivity and sustainability of a sector, as falling output might mean a deterioration of the resource base within that sector.

In terms of the total added value per employee in 2007, of the copyright-based industries, the most productive category was the interdependent industries with a contribution of 43%, followed by the core copyright industries with a contribution of 28%, the non-dedicated industries with 23%, and the partial industries with only 6% (Figure 4).

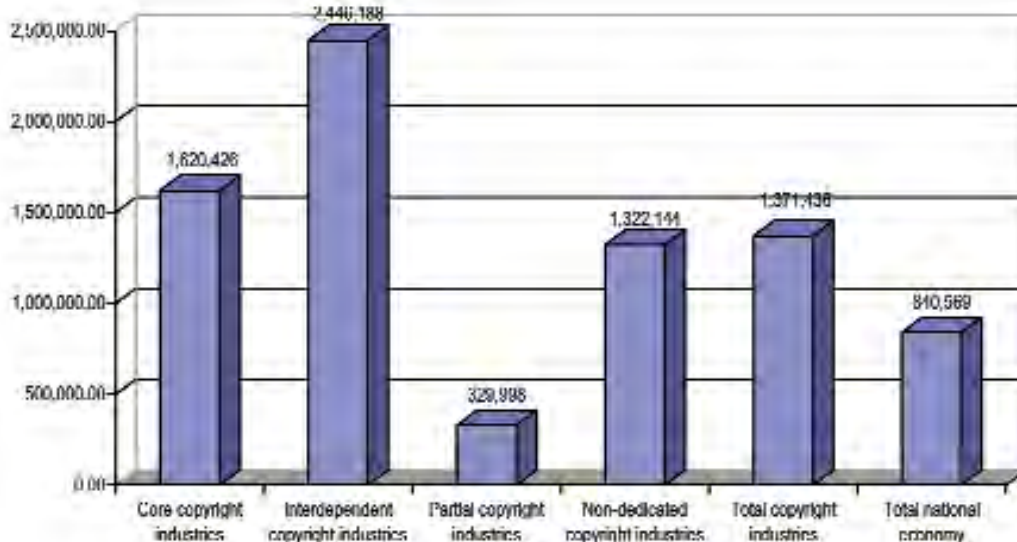


Figure 4: Productivity within copyright-based industries in Kenya in 2007 (total added value per employee)



For comparison, Figure 5 illustrates the productivity of the various copyright-based industries and that of the total national economy in Kenya in 2007. Again, the most productive were the interdependent copyright-based industries with a contribution of KSHs 2,446,188, followed by the core copyright-based industries with a contribution of KSHs 1,620,426, all the copyright-based industries combined with a contribution of KSHs 1,371,436, and the total national economy with a contribution of KSHs 840,569 per employee. This shows that the contribution of the copyright-based industries is significant.

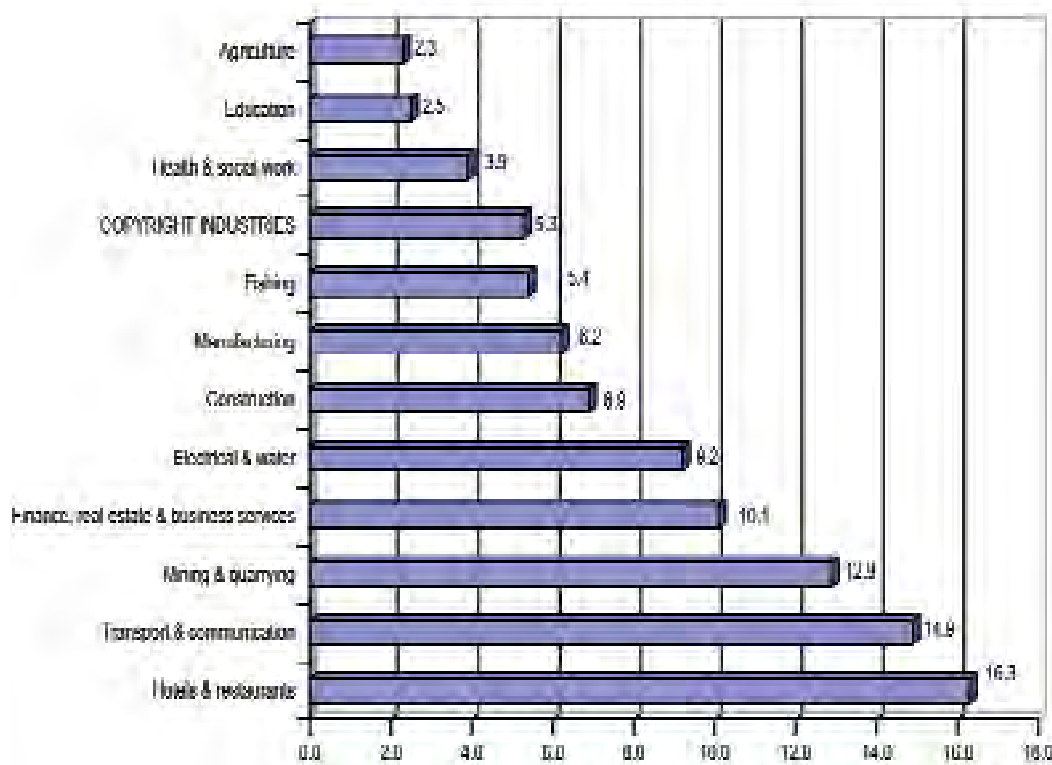
Figure 5: Productivity of copyright-based industries compared to the national productivity in Kenya in 2007 (total added value per employee)



5.2 Economic Contribution of Copyright-Based Industries Compared to Other Sectors

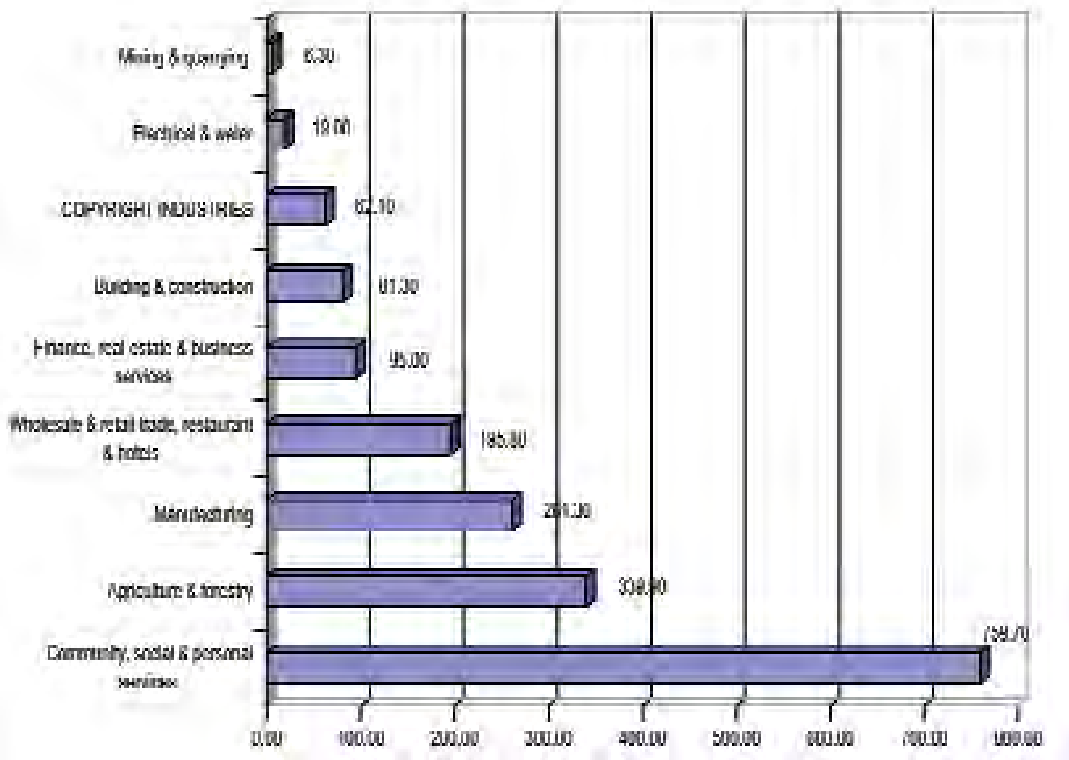
The contribution of the copyright-based industries to the national economy on the basis of GDP compared to a selected number of main sectors in Kenya is shown in Figure 6. This contribution shows that copyright-based industries in 2007 did better than the agriculture-and-forestry, education, and healthcare sectors and compared favourably with the contributions of fisheries and the other main sectors of the Kenyan economy, such as manufacturing and construction. In fact, the total added value generated by the core copyright-based industries alone was equal to that generated by the agriculture sector, and almost equal to that contributed by the education sector. The core and interdependent copyright-based industries collectively did almost as well as the agriculture and education sectors combined, and better than the health-and-social-work sector.

Figure 6: Contribution of copyright-based industries to Kenya's economy in 2007 compared to other sectors on the basis of GDP (%)



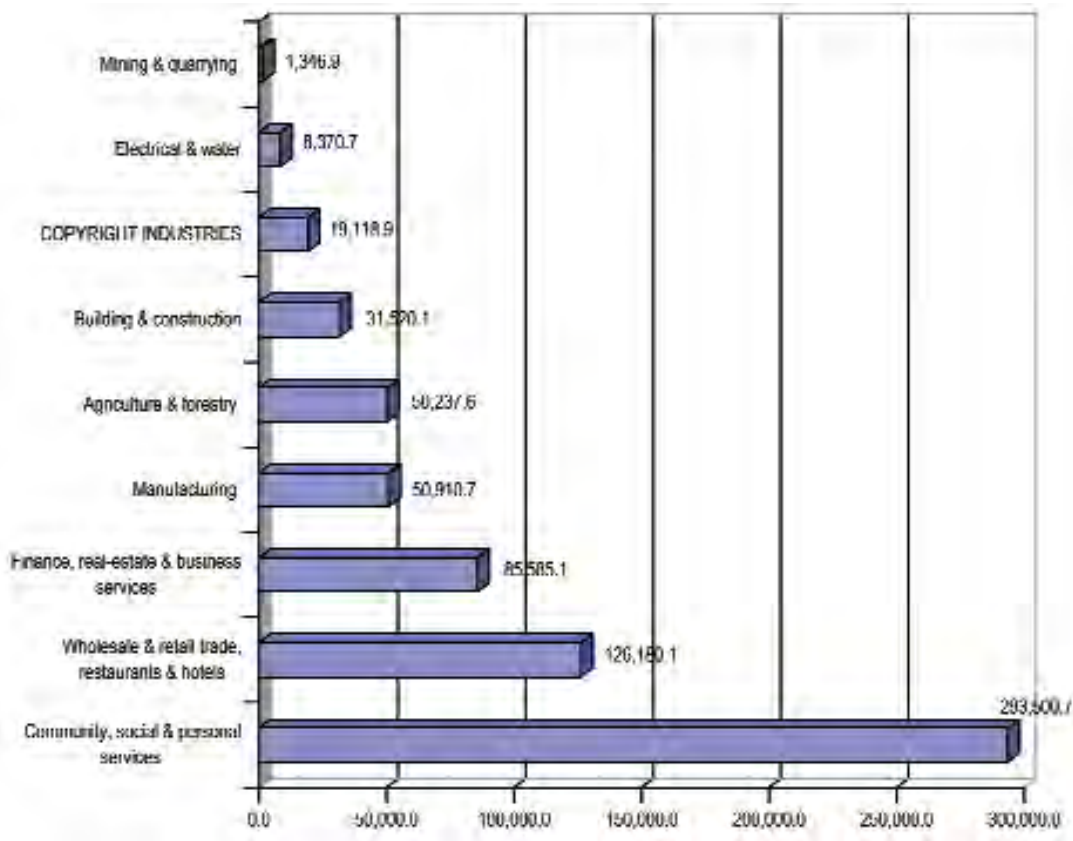
On the basis of employment, the copyright-based industries collectively employed 62,131 people in 2007 compared to the national workforce (government and private sector employment) of 1,907,250 (Figure 7, Table 6). This was about 3.3% of total employment. These employment figures were higher than those of the building-and-construction sector. They were also higher than those of the mining-and-quarrying and electrical-and-water sectors combined. The core copyright-based industries alone employed 22,799 people, comprising about 1.2% of the total national employment. This figure exceeded the contributions to employment of the mining-and-quarrying and electrical-and-water sectors respectively.

Figure 7: The contribution of copyright-based industries to Kenya's economy in 2007 compared to other sectors based on employment ('000)



Concerning the contribution to employee income, in 2007 the copyright-based industries combined generated KSHs 19,118.9 million compared to the national employee income (government and private sector) of KSHs 749,818.5 million (Figure 8, Table 6). This accounted for about 2% of the total national employee income. This amount was greater than that generated from either the mining-and-quarrying sector or the electrical-and-water sector. The core copyright-based industries alone generated about KSHs 7.61 billion, making an overall contribution of 1.02% to the national employee income. This proportion was also larger than that of the contribution to employee income of the mining-and-quarrying sector, and close to the contribution of the electrical-and-water sector.

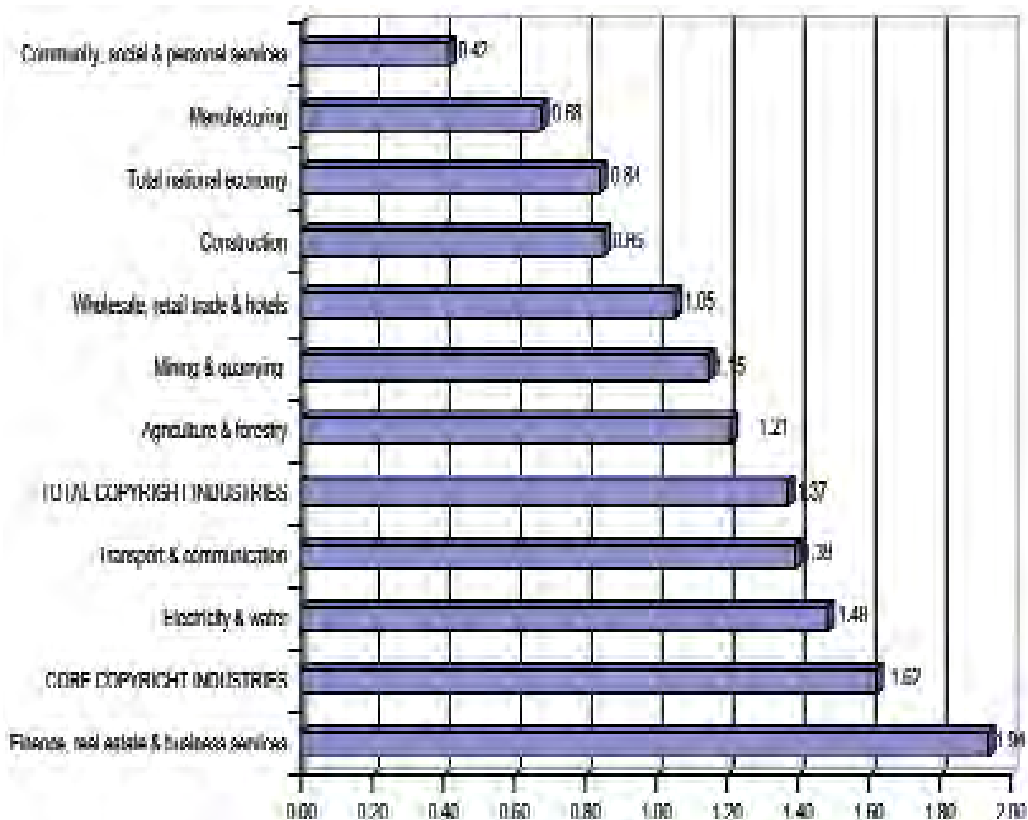
Figure 8: Contribution of copyright-based industries to Kenya's economy compared to other sectors on the basis of employee incomes (KSHs millions)



For comparison, Figure 9 illustrates the productivity of the core and total copyright-based industries alongside other sectors contributing to the national economy in Kenya in 2007. Both the overall and core copyright-based industries exhibited impressive productivity. The productivity index of the core copyright-based industries, calculated as a fraction of added value in million Kenya Shillings per employee, was better than those of 11 out of 13 major sectors contributing to the national economy. It was, however, suspected that the employee numbers in the creative industries in general were difficult to capture and were likely under-reported, leading to high productivity values.



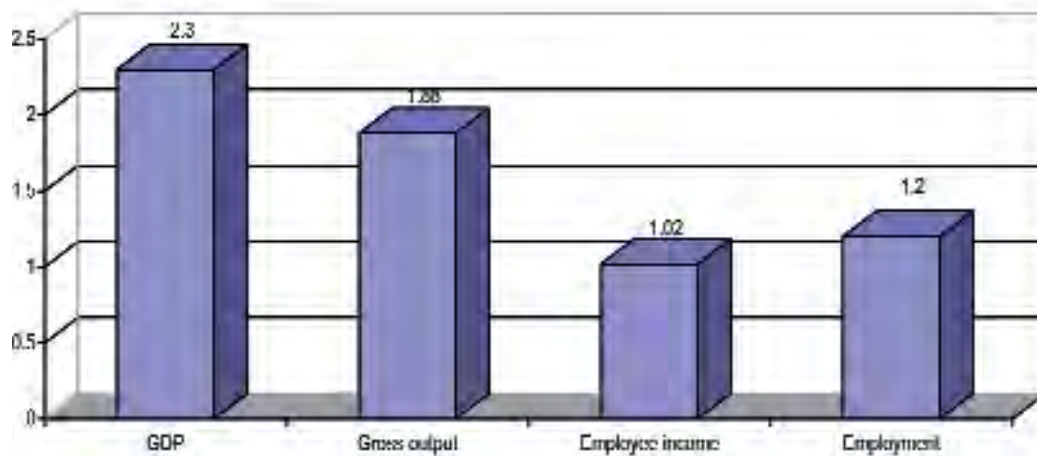
Figure 9: Productivity of copyright-based industries in Kenya (total added value in KSHs millions/employee) compared to other sectors in 2007



5.3 Economic Contribution of Decomposed Core Copyright-Based Industries

In the order of the magnitude of their value-added contributions, the main core copyright-based activities in Kenya include printing, publishing and allied services (KSHs 13.053 billion); retail sale of books, newspapers and stationery (KSHs 11.947 billion); data processing and tabulating services (KSHs 5.564 billion); amusement and other recreational services (KSHs 2.927 billion); and radio and television broadcasting (KSHs 1.676 billion). Others are motion picture distribution and projection (KSHs 0.390 billion); business, professional and labour associations (KSHs 0.221 billion); theatrical producers and entertainment services (KSHs 0.180 billion); authors, music composers and other artists (KSHs 0.177 billion); and motion picture production (KSHs 0.176 billion).

Collectively, the decomposed core copyright-based activities/industries contributed KSHs 36.944 billion of value-added in 2007, which translated to about 2.3% of the total national added value. The gross output of all the core copyright-based industries was KSHs 57.196 billion, accounting for about 1.88% of the gross economic output of the entire national economy (see Figure 10).

Figure 10: Economic contribution of core copyright-based industries in Kenya in 2007 (%)

Regarding employment, the core copyright-based industries in Kenya collectively employed 22,799 persons, who formed about 1.2% of total national employees (Figure 10, Table 6). In respect of the contribution to employee income in 2007, the core copyright-based industries generated KSHs 7.609 billion, making about 1.02% of the total national incomes generated for employees.

In comparison to the contribution to total value-added and gross output, the core copyright-based industries made a lower contribution to employment and employee incomes. This contrasted with the results of some of similar studies, such as that for Hungary in 2002, which showed a higher contribution to both employment numbers and incomes for employees.¹³ The results for Kenya also showed the contribution of employee numbers to be higher than the contribution to employee incomes. In this respect, the Kenyan scenario compared favourably with that of the more industrialized countries such as the USA. It is argued that the Hungarian situation is a reflection of the fact that the core copyright-based industries use a larger labour-force than the average industry. It is further argued that this apparent loss in productivity may be due to the lower level of mechanization and automation of the core copyright-based industries compared to industrialized countries, and the slow establishment of new, labour-saving technologies because of lack of finance. If the Kenyan outcome is not attributable to data problems, the differences observed may be due to the lower volumes involved in the Kenyan case and may also be an indication that the copyright-based industries are not very well established. Furthermore, the number of people employed in the copyright-based industries is likely larger than that reported in government statistics.

Table 7 shows the contribution of the decomposed core copyright-based industries/activities in 2007 in Kenya. Printing, publishing and allied services contributed KSHs 13,053 million to GDP in 2007, followed by the retail sale of books, newspapers and stationery (KSHs 11,947 million). Further illustration is given in Figure 11, which presents the structure of core copyright-based industries. As shown in the figure, within the category of core copyright-based industries, printing, publishing and allied services contributed 36% to GDP; the retail sale of books, newspapers and stationery contributed 32%; data processing and tabulating services 15%; amusement and other recreational services 8%; radio and television broadcasting 5%; and photographic studios and commercial photography 2%. The rest of the specific industries in the core category contributed 1% or less.

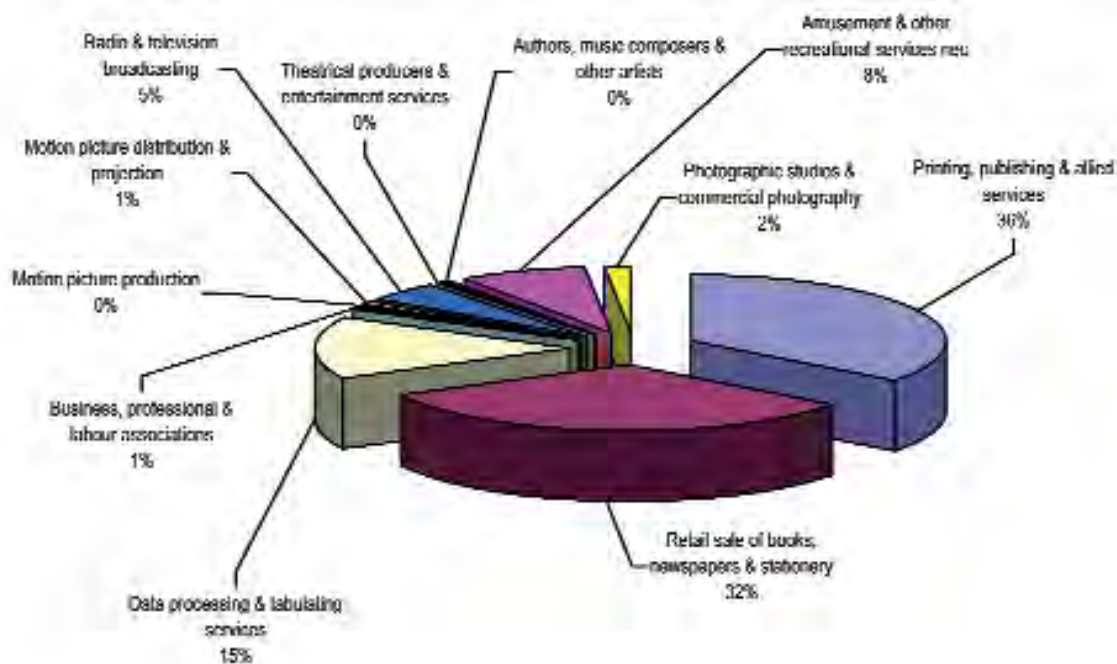
¹³Penyigey, K. and Munkácsi, P. (2005). "The Economic Contribution of Copyright-Based Industries in Hungary." In: National Studies on Assessing the Economic Contribution, WIPO.



Table 7: Economic contribution of decomposed core copyright-based industries in Kenya in 2007

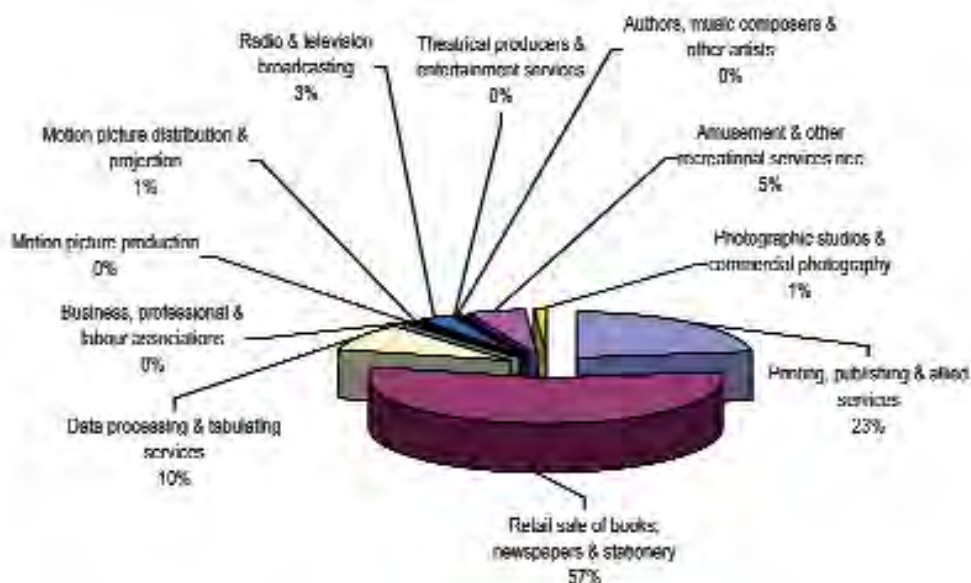
Description	Value-added (KSh)	% of GDP	Gross output (KSh)	% of total national gross output
Printing, publishing and allied services	13,053,050,975	0.811	12,972,811,506	0.427
Retail sale of books, newspapers and stationery	11,947,316,451	0.745	32,140,498,066	1.058
Data processing and tabulating services	5,563,777,568	0.347	5,568,186,133	0.182
Business, professional and labour associations	220,589,044	0.014	220,916,126	0.007
Motion picture production	76,371,991	0.011	178,857,731	0.006
Motion picture distribution and projection	380,499,881	0.024	392,742,630	0.013
Radio and television broadcasting	1,675,686,086	0.105	1,674,878,376	0.055
Theatrical producers and entertainment services	79,708,800	0.011	181,803,984	0.006
Authors, music composers and other artists	76,579,151	0.011	175,786,081	0.006
Amusement and other recreational services N.E.C.	2,927,468,700	0.183	2,989,131,334	0.098
Photographic studios and commercial photography	633,123,888	0.0395	670,185,895	0.022
TOTAL CORE COPYRIGHT INDUSTRIES	36,944,144,531	2.304	67,196,420,854	1.881
Total national economy	1,603,176,000,000	100	3,011,382,000,000	100

Figure 11: Structure of core copyright-based industries in Kenya in 2007 based on value-added (%)



According to the contribution to gross output within the core industries in 2007, the largest revenues were realized in the retail sale of books, newspapers and stationery (57%), followed by printing, publishing and allied services (23%), data processing and tabulating services (10%); amusement and other recreational services (5%), and radio and television broadcasting (3%), in that order (Figure 12). The rest of the activities/industries in the core category contributed 1% or less of the total gross output. As in other relatively developed countries such as Hungary, this illustrates the leading positions the press (particularly print media), literature and databases hold. The print media are long established, while the data processing and associated software services are a strongly emerging group of activities.

Figure 12: Structure of core copyright-based industries in Kenya in 2007 according to gross output (%)



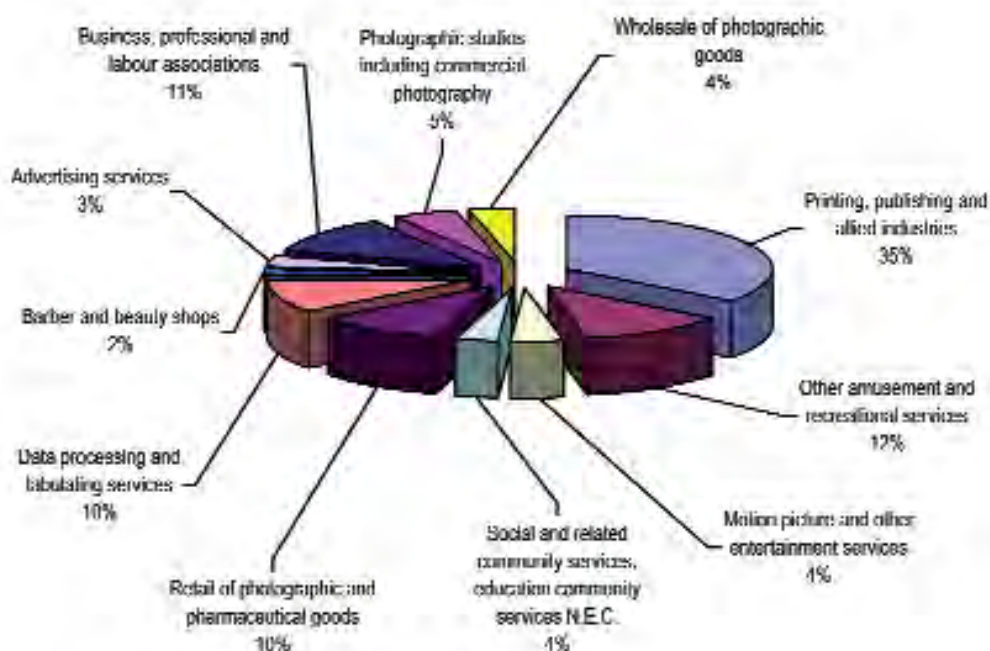
With respect to the contribution to employment within the core industries in 2007, printing, publishing and allied services had the largest number of employees (9,051 people), followed by amusement and recreational services (3,005); business, professional and labour associations (2,912); and data processing and tabulating services (2,684), in that order (Table 8). Figure 13 provides an illustration of the structure of these core copyright-based industries according to their contribution to employment.

Table 8: Contribution of decomposed core copyright-based industries to employment in Kenya in 2007

Core copyright industries	Number	%
Printing, publishing and allied industries	9,051	0.475
Other amusement and recreational services	3,006	0.158
Motion picture and other entertainment services	1,075	0.056
Social and related community services, education community services N.E.C.	918	0.048
Retail of photographic goods	763	0.041
Data processing and tabulating services	2,684	0.141
Barber and beauty shops	417	0.022
Advertising services	879	0.046
Business, professional and labour associations	2,912	0.153
Photographic studios including commercial photography	187	0.010
Wholesale of photographic goods	918	0.048
TOTAL CORE COPYRIGHT INDUSTRIES	22,798	1.196
TOTAL COPYRIGHT INDUSTRIES	92,150	4.832
Total national economy (government and private sector salaried employment)	1,907,250	100



Figure 13 : Structure of core copyright-based industries in Kenya in 2007 based on the number of employees (%)



The contribution of the decomposed core copyright-based industries to employee income in 2007 is shown in Table 9. Again, printing, publishing and allied industries had the largest contribution (KSHs 1,837.6 million), followed by business, professional and labour associations (KSHs 1,255.9 million); amusement and recreational services (KSHs 913.8 million); and data processing and tabulating services (KSHs 732.1 million), in that order.

Table 9: Contribution of decomposed core copyright-based industries to employee income in Kenya in 2007

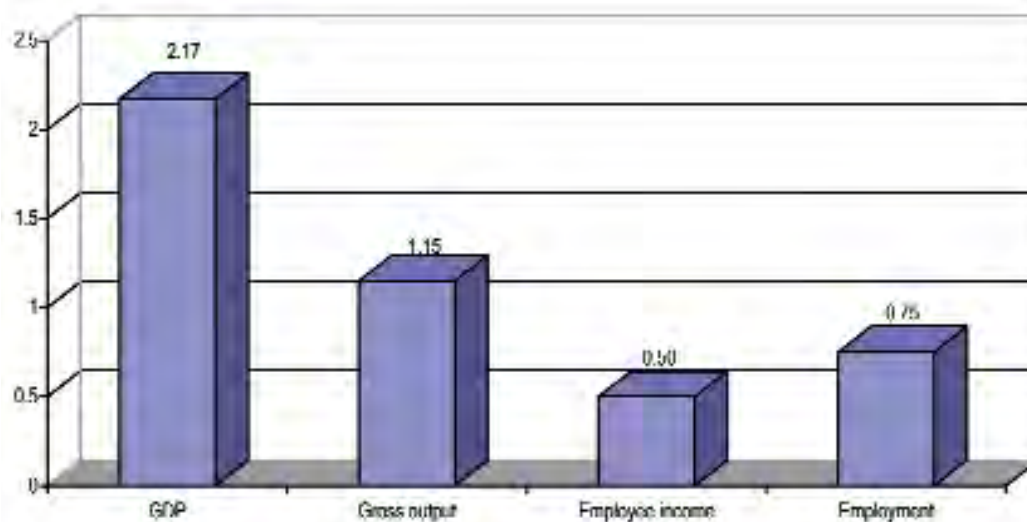
Core copyright industries	Million KSHs	%
Printing, publishing and allied industries	1,837.6	0.245
Other amusement and recreational services N.E.C.	913.8	0.122
Motion pictures and other entertainment	618	0.082
Social and related services N.E.C.	411.1	0.055
Retail of photographic goods	296.2	0.040
Wholesale of photographic goods	429.5	0.057
Data processing and tabulating services	732.1	0.096
Barber and beauty shops	125.2	0.017
Advertising services	307.3	0.041
Business, professional and labour associations	1,255.9	0.166
Photographic studios including commercial photography	652.3	0.091
TOTAL CORE COPYRIGHT INDUSTRIES	7,609.0	1.015
TOTAL NATIONAL ECONOMY	749,818.6	100

5.4 Economic Contribution of Interdependent Copyright-Based Industries

The analysis of the economic contribution of interdependent copyright industries includes activities involving the production, manufacture, and sale of instruments and equipment either wholly or principally designed to promote the creation, production, or use of copyrighted works and other protected subject matter.

In 2007, Kenya's output value of interdependent copyright-based industries amounted to over 34.89 billion Kenya Shillings, accounting for about 1.15% of the gross national economic output (Figure 14). With this gross output, the interdependent copyright industries made a contribution in terms of added value of slightly over 34.78 billion, which constituted about 2.17% of the national GDP. In terms of employees, the interdependent copyright industries engaged 14,220 people, making a contribution of about 0.75% of salaried employees in the country. With respect to income for employees, these industries gave KSHs 3.78 billion in the form of salaries, making about 0.5% of the total national income to employees.

Figure 14: Economic contribution of interdependent copyright-based industries in Kenya in 2007 (%)



Assuming that all the sales (output) and value-added were captured in the government statistics provided, a close look at Figure 14 reveals that the contribution of the interdependent copyright-based industries in terms of gross output to the national economy is just over 50% of their contribution to the GDP. It is more than twice its contribution (2.3 times) to employee income and more than its contribution to salaried employees by one-and-a-half times. One of the possible reasons for lower contribution of these industries in terms of gross output to the national economy compared to the GDP's contribution is that not all the sales from the interdependent copyright-based industries were captured. Alternatively, this scenario may be mainly a result of heavy involvement in the retail and wholesale activities, from where most of the value-added is obtained, as shown in Table 10 and Figure 15. Thus, due to the nature of the Kenyan economy, which is basically reliant on large proportions of foreign components for the production and/or manufacture of instruments and equipment that fall under the category of interdependent industries, this outcome can be explained by the fact that the activities in this sub-sector are mostly in the sale of final goods and/or the assembly of imported parts.

The assessment in the foregoing paragraph is supported by the data that show that among the highest contributors to both gross output and value-added in the interdependent copyright-based industries category in 2007 was the retail sale of household appliances and radio and TV goods (KSHs 14.7 billion to GDP), making more than 42% of the total contribution of the interdependent copyright-based industries in terms of added value. In contrast, the lowest contribution came from the manufacture of musical instruments

(KSHs 382,869); manufacture of photographic and optical goods (KSHs 65.8 million); manufacture of professional and scientific equipment (KSHs 78.2 million); and manufacture of radio, TV and communication equipment (KSHs 539.3 million) (Table 10). This is only about 2% of the total contribution of value-added by the interdependent copyright industries. The Kenyan economy is heavily dependent on durable manufacture goods in the copyright-based industries primarily sourced externally, and this is the main reason for high proportions of the retail activities and their value contribution in the interdependent copyright-based industries.

Table 10: Contribution of decomposed interdependent copyright-based industries to value-added in Kenya in 2007

Interdependent copyright industries	Value-added (KSHs)
Manufacture of pulp, paper and paperboard	4,026,938,150
Manufacture of containers and boxes of paper and paperboard	5,427,202,875
Manufacture of photographic and optical goods	65,816,403
Manufacture of professional and scientific equipment	78,190,375
Manufacture of radio, TV and communication equipment and apparatus	539,293,338
Wholesale of machinery for textile industry and of sewing and knitting	5,814,469,664
Manufacture of pulp, paper and paperboard articles N.E.C.	5,634,673,644
Retail sale of household appliances and radio and TV goods	14,700,201,413
Manufacture of musical instruments	382,869
Manufacture of office, computing and accounting machinery	997,315,613
TOTAL INTERDEPENDENT COPYRIGHT INDUSTRIES	54,784,544,802

Figure 15 illustrates activity contributions to total value-added. It clearly depicts that compared to the rest of the activities under the category of interdependent copyright-based industries, hardly any value-added came from the manufacture of musical instruments, manufacture of professional and scientific equipment, and manufacture of graphic and optical goods respectively. Also very little value-added contribution was made from the manufacture of radio, TV and communication equipment, and manufacture of office, computing and accounting machinery. The same trend is seen in the contribution of these activities to total gross output (Figure 16).

Figure 15: Contribution of decomposed interdependent copyright-based industries to value-added in Kenya in 2007 (%)

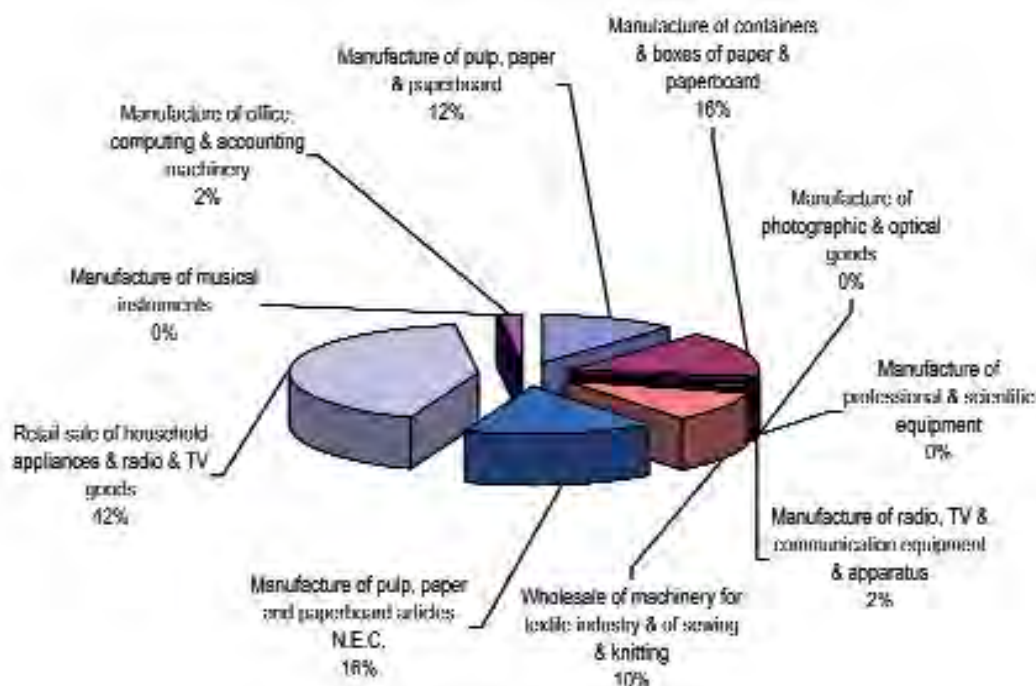
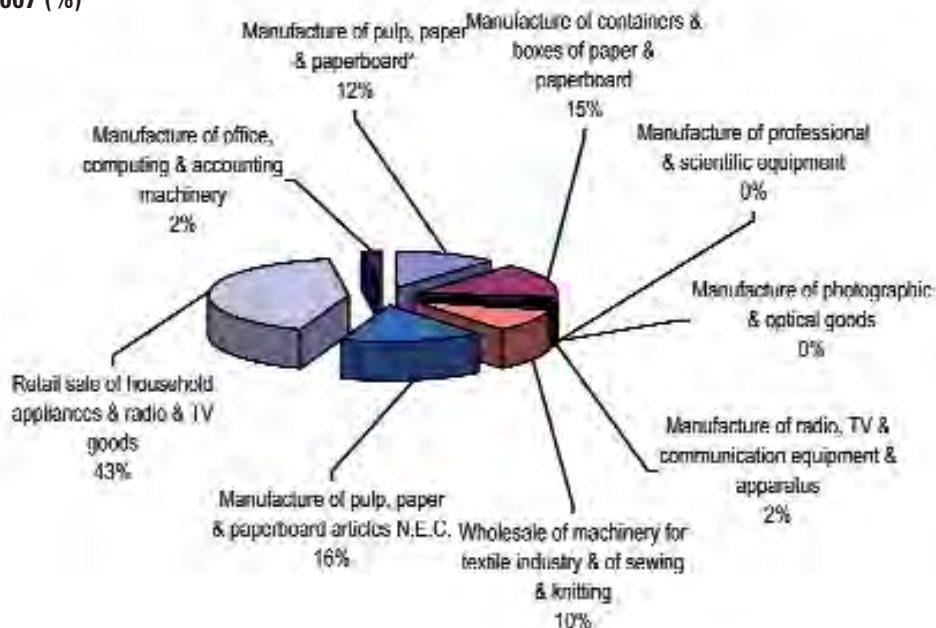


Figure 16: Contribution of decomposed interdependent copyright-based industries to gross output in Kenya in 2007 (%)



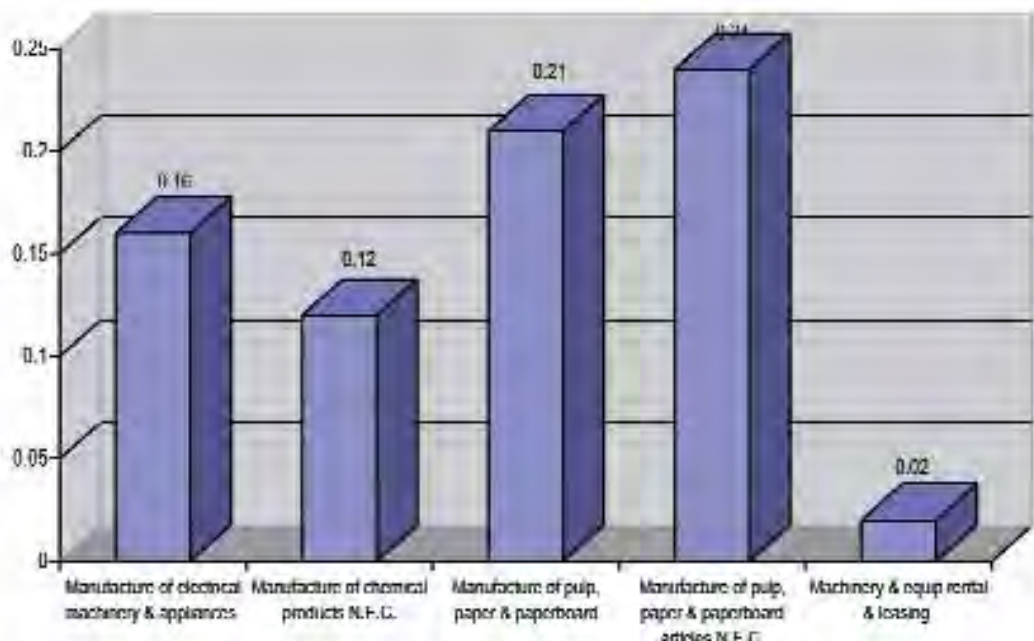
As shown in Table 11 and Figure 17, the sector with the highest number of employees in 2007 was the manufacture of pulp, paper and paperboard articles, making up about 0.24% of total salaried employment. This was followed by the manufacture of pulp, paper and paperboard (about 0.21%), and by wholesale and retail of electrical machinery and appliances (0.16%). These three combined made a total contribution of over 60% of employees in the group of interdependent copyright-based industries.

Table 11: Contribution of decomposed interdependent copyright-based industries to employment in Kenya in 2007

Interdependent copyright industries	Number	%
Manufacture of electrical machinery and appliances	3,016	0.158
Manufacture of electrical products N.E.C.	2,287	0.120
Manufacture of pulp, paper and paperboard	4,032	0.211
Manufacture of pulp, paper and paperboard articles N.E.C.	1,185	0.235
Machinery and equipment rental and leasing	399	0.021
TOTAL INTERDEPENDENT COPYRIGHT INDUSTRIES	14,220	0.748
TOTAL EMPLOYED (SALARIED)	1,907,250	100



Figure 17: Contribution of decomposed interdependent copyright-based industries to employment in Kenya in 2007 (%)

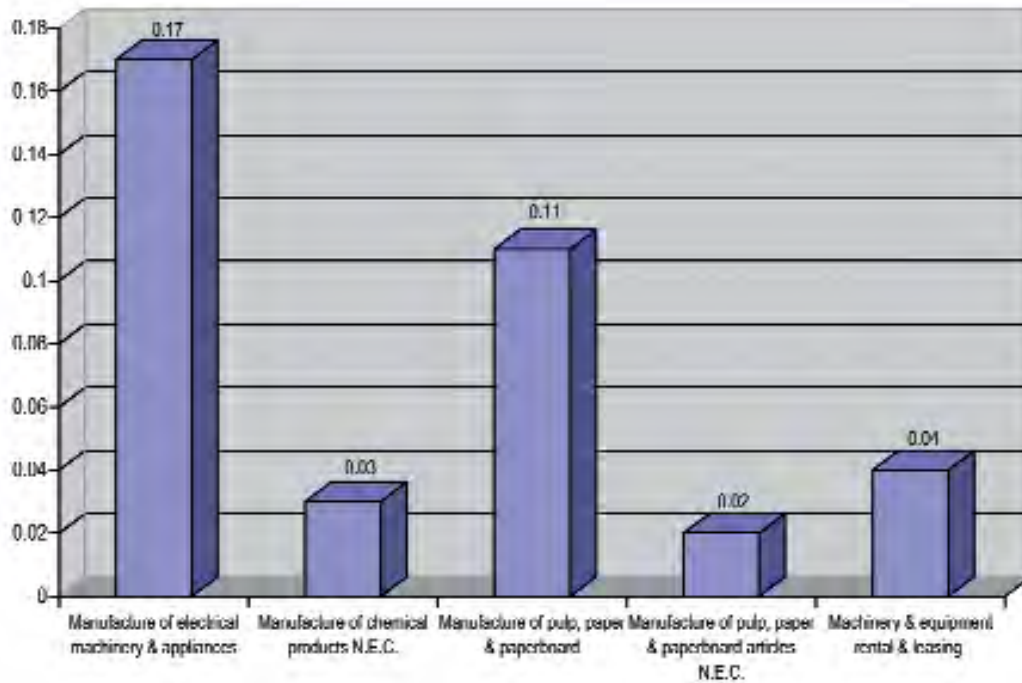


With respect to employee income, the manufacture of electrical machinery and appliances made the highest contribution in 2007 by registering employee income of KSHs 1,289.4 million (0.17%), which was close to 35% of the total employee income in the interdependent copyright-based industries category. It was followed by the manufacture of pulp, paper and paperboard (about 0.11%). The two sectors combined contributed over 50% of employee income in this category of industries (Table 12 and Figure 18).

Table 12: Contribution of decomposed interdependent copyright-based industries to employee incomes in Kenya in 2007

Interdependent industries	Million KSHs	%
Manufacture of electrical machinery and appliances	1,289.4	0.172
Manufacture of chemical products N.E.C.	227.2	0.030
Manufacture of pulp, paper and paperboard	786.2	0.105
Manufacture of pulp, paper and paperboard articles N.E.C.	115.7	0.015
Machinery and equipment rental and leasing	318.3	0.043
TOTAL INTERDEPENDENT COPYRIGHT INDUSTRIES	3,770.8	0.504
TOTAL NATIONAL ECONOMY	749,818.5	100

Figure 18: Contribution of decomposed interdependent copyright-based industries to employee incomes in Kenya in 2007 (%)



5.5 Economic Contribution of Partial Copyright-Based Industries

As described earlier, the category of partial copyright-based industries is composed of industries whose portion of its activities is related to copyright protected work. To obtain the partial contribution of these industries, a copyright factor is applied. In the Kenyan case, the factor applied is the average of the factors applied in the Singaporean, Hungarian and Latvian studies, for lack of a more appropriate one.

Generally, the partial copyright-based industries are expected to contribute much lower than the core and interdependent copyright industries because only a small fraction of their activities is meant for the production of copyrighted materials and services. This is illustrated in Figure 19, which shows that in 2007 these industries contributed KSHs 6,559.7 million value-added or just over 0.4% of GDP to the Kenyan economy. The value of gross output was about KSHs 13.4 billion, translating to 0.44% of gross national output. The contribution to employee income was slightly above KSHs 4.3 billion, representing 0.58% of the total national income. Applying the copyright factor, the partial copyright industries engaged 19,878 people, registering the highest number within the category of copyright-based industries. This number made up about 1.04% of the total salaried employees.

Figure 19: Economic contribution of partial copyright-based industries in Kenya in 2007 (%)

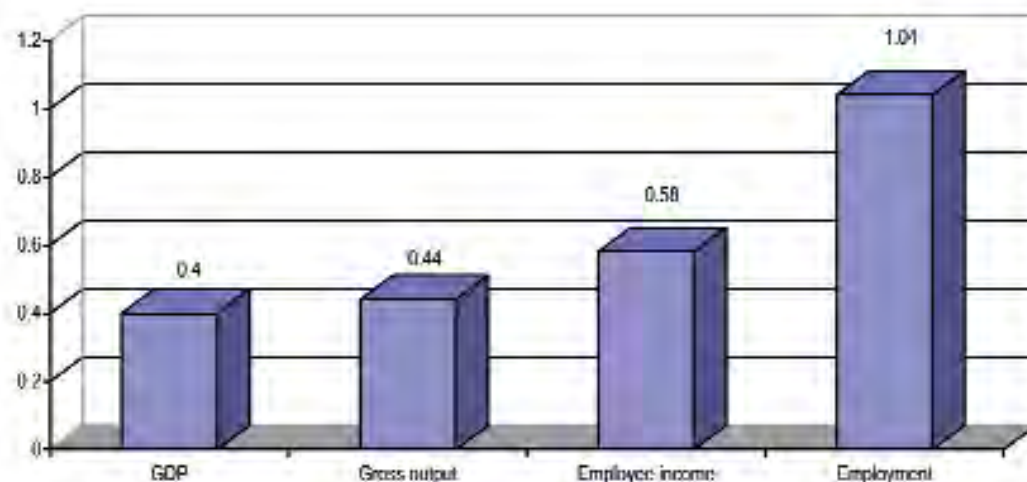


Table 13 shows the contribution of decomposed partial copyright-based industries, with copyright factors applied. Spinning, weaving and finishing articles made the highest contribution of 6,035 employees (0.32%), followed by sawmill planing and other wood mills with 2,027 employees (0.11%), manufacture of plastic with 1,880 employees (0.1%), and manufacture of fabricated metal products with 1,870 employees (0.1%). All these sectors combined formed about 60% of the total contribution to employment within the group of partial copyright-based industries.

Table 13: Contribution of decomposed partial copyright-based industries to employment in Kenya in 2007 (numbers, %)

Partial copyright industries	Number before applying copyright factor	Number after applying copyright factor	%
Manufacture of furniture and fixtures	1,591	467	0.024
Manufacture of glass and glass products	1,709	9	0.000
Manufacture of furniture and fixtures except primarily of metal or plastic	4,481	1,214	0.069
Cotton ginneries	578	103	0.006
Spinning, weaving and finishing articles	28,466	6,035	0.316
Manufactures of textile goods except wearing apparel	8,067	27	0.001
Knitting mills	7,704	1,633	0.086
Cordage rope and twine industries	2,189	161	0.004
Manufacture of textiles N.E.C.	859	4	0.000
Manufacture of wearing apparel except from footwear	16,026	72	0.004
Tanneries and leather finishing	50	6	0.000
Manufacture of products of leather except footwear and wearing apparel	0	0	0.000
Manufacture of footwear except plastic	1,740	8	0.000
Sawmill planing and other wood mills	9,560	2,027	0.106
Manufacture of wooden and cane containers	35	7	0.000
Manufacture of wood and cork products N.E.C.	109	23	0.001
Manufacture of pottery, china and earthenware	227	1	0.000
Manufacture of structural clay products	950	5	0.000
Manufacture of cutlery, hand tools and general hardware	1,132	6	0.000
Basic metal industries	5,069	1,159	0.061
Manufacture of fabricated metal products except machinery	8,820	1,870	0.100

Partial copyright industries	Number before applying copyright factor	Number after applying copyright factor	%
Wholesale of soft furnishings clothing and shoes	1,066	53	0.003
Retail of soft furnishings of clothing and shoes	4,637	227	0.012
Wholesale of domestic hardware	899	45	0.007
Wholesale of engineering products; scrap, industrial and agricultural	4,673	234	0.012
Libraries, museums, botanical and zoological gardens	1,604	752	0.039
Repair of footwear and other leather goods	48	0	0.000
Other repairs N.E.C.	596	126	0.001
Manufacture of rubber products	3,728	790	0.041
Manufacture of plastic	8,669	1,660	0.039
Painters, roof tiles and minor repairs	966	205	0.011
Manufacture of structural metal products	3,344	306	0.016
TOTAL PARTIAL COPYRIGHT INDUSTRIES	128,002	18,878	1.042
Total Employed (salaries)	1,907,350	1,907,350	100

As shown in Table 14, a trend almost similar to that of the number of employees is seen in employee income. Among the decomposed partial copyright-based industries, spinning, weaving and finishing articles made the highest contribution of KSHs 684.8 million (0.09%), followed by the manufacture of fabricated metal products with a contribution of KSHs 409 million (0.05%), knitting mills with KSHs 404.9 million (0.05%), and manufacture of furniture and fixtures with KSHs 404.8 million (0.05%).

Table 14: Contribution of decomposed partial copyright-based industries to employee incomes in Kenya in 2007 (million KSHs, %)

Partial copyright industry	Income before applying copyright factor	Income after applying copyright factor	%
Manufacturing of furniture and fixtures	1,214.2	358.1	0.0475
Manufacturing of glass and glass products	191.2	1.1	0.0001
Manufacture of furniture and fixtures except primarily metal or plastic	1,360.0	404.8	0.0540
Cotton ginners	151.2	32.1	0.0043
Spinning, weaving and finishing articles	3,250.4	684.8	0.0913
Manufacture of up (leather goods except wearing apparel)	361.8	158.1	0.0212
Knitting mills	1,910.1	404.9	0.0540
Cordage rope and twine industries	255.0	54.1	0.0072
Manufacture of textiles N.E.C.	292.2	1.3	0.0002
Manufacture of wearing apparel except footwear	3,202.1	14.4	0.0019
Tanneries and leather finishing	1.7	0.4	0.0000
Manufacture of products of leather except footwear and wearing apparel	0	0	0.0000
Manufacture of footwear except plastic footwear	531.3	2.3	0.0003
Sawmill planing and other wood mills	1,581.3	331.0	0.0441
Manufacture of wood and cane products	8.3	1.8	0.0002
Manufacture of wood and cork products N.E.C.	45.9	8.7	0.0012
Manufacture of pottery, china and earthenware	130.8	0.7	0.0001
Manufacture of structural clay products	163.7	0.9	0.0001
Manufacture of cutlery, hand tools and general hardware	256.3	0.4	0.0002
Basic metal industries	142.0	83.7	0.0124
Manufacture of fabricated metal products except machinery and equipment N.E.C.	1,829.2	409.0	0.0515
Wholesale of soft furnishings, clothing and shoes	813.4	40.7	0.0054
Retail of soft furnishings, clothing and shoes	965.7	48.3	0.0064
Wholesale of domestic hardware	569.4	28.4	0.0039
Wholesale of engineering products; scrap, industrial and agricultural	4,639.8	227.0	0.0303
Libraries, museums, botanical gardens and zoological gardens	775.5	387.6	0.0517
Repair of footwear and other leather goods	21.3	0.1	0.0000
Other reparations N.E.C.	107.4	22.8	0.0007

Partial copyright industry	Income before applying copyright factor	Income after applying copyright factor	%
Manufacture of rubber products	754.5	160.0	0.0215
Manufacture of plastic	1,077.6	226.5	0.0205
Painters, roof tiles and minor repairs	443.0	93.9	0.02125
Manufacture of structure metal products	1,002.9	91.8	0.0122
TOTAL PARTIAL COPYRIGHT INDUSTRIES	26,327.7	4,349.9	0.1651
Total national economy	149,818.5	149,818.5	100

5.6 Economic Contribution of Non-Dedicated Support Industries

Within the category of the non-dedicated support industries, the main activities are in transport and communications. The sum of GDP for core, interdependent and partial copyright-based industries is KSHs 78.3 billion, while the non-distribution GDP is KSHs 1,621.8 billion. Using the copyright factor formula as shown in Equation (1), the NDSI factor is given by:

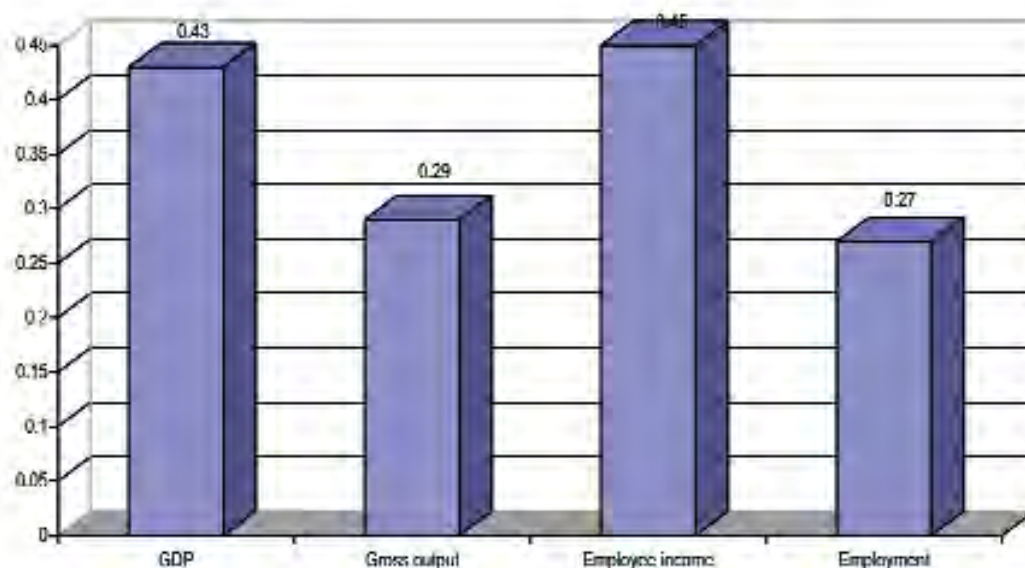
$$\begin{aligned}
 \text{NDSI Copyright Factor} &= \left(\frac{\text{Value Added for Core, Interdependent and Partial Industries}}{\text{Non-Distribution GDP}} \right) \quad (2) \\
 &= \frac{\text{KSHs 78.3 billion}}{\text{KSHs 1,621.8 billion}} = 0.048 = 4.8\%
 \end{aligned}$$

The derived factor (4.8%) in Equation (2) compares well with those for countries that have already carried out similar studies, such as Singapore (5 to 6.2%), Hungary (5.7%), Latvia (3.1 to 5.8%), and Lebanon (3.8 to 4.1%). The highest NDSI copyright factor so far recorded is that for Malaysia (8.8%) while the lowest are those for Bulgaria (2.1%) and Latvia (3.1%).¹⁴

According to this classification, the contribution in terms of transport is made to broadcasting and distribution of copyright materials and products. In 2007, all the NDSI made a contribution of about KSHs 6,920.1 million, which was 0.43% of the national GDP; and KSHs 8.8 billion in terms of gross output, which constituted 0.29% of the national gross output. It also made a contribution of KSHs 3.4 billion in terms of employee income, translating into 0.45% of the national employee income; and engaged 5,234 employees, which was about 0.27% of the overall number of salaried employees (Figure 20).

¹⁴WIPO Guide-based reports for Latvia (2000) and Bulgaria (2007) have been published in the Creative Industries Series 1 (2004) and Series 2 (undated) respectively.

Figure 20: Economic contribution of non-dedicated support industries in Kenya in 2007 (%)



The contribution of the decomposed industries in the NDSI category with respect to value-added is given in Table 15. The highest contributing sectors were communication (about KSHs 4.54 billion), freight transport by road (about KSHs 0.91 billion), and land transport (about KSHs 325.7 million).

Table 15: Contribution of decomposed non-dedicated support industries to value-added in Kenya in 2007 (KSHs)

Non-dedicated copyright industries	Value-added (KSHs)
Communication	4,544,357,346.0
Supporting services to land transport	15,851,994.2
Supporting services to water transport	217,955,514.2
Supporting services to air transport	67,808.2
Freight transport by road	910,920,598.8
Pipeline transport	219,731,083.5
Services incidental to transport	44,703,195.0
Urban, suburban and inter-urban passenger transport	4,114,611.3
Land transport	325,670,490.0
Other passenger land transport	2,841,429.8
Air transport carriers	30,320,956.5
Storage and warehousing	78,910,461.3
Ocean and coastal water transport	3,581,573.7
Inland water transport	35,958.4
Other provisions for lodging N.E.C.	158,953,579.8
Camping sites	31,193,694.1
Inland water transport	35,958.9
Wholesale of office machinery and equipment	331,622,406.3
TOTAL NON-DEDICATED SUPPORT INDUSTRIES	6,820,069,451

In terms of employee numbers and income in the NDSI category, again communication engaged the highest number of people (1,945) and paid the highest total income (about KSHs 1,463.3 million). This was followed by general retail, with 554 employees and an income of about KSHs 277 million (Table 16).

Table 16: Contribution of decomposed non-dedicated support industries to employment and employee income in Kenya in 2007 (numbers, million KSHs)

Non-dedicated copyright industries	Number of employees after applying copyright factor	Employee income after applying copyright factor
Kenya railway central administration	3	0.2
Railway transport	86	17.6
Urban, suburban and inter-urban highway passenger transport	289	86.4
Other passenger land transport	297	207.1
Freight transport by road	283	123.3
Pipeline transport	45	12.8
Support services to land transport	5	2.0
Ocean and coastal water transport	18	2.8
Inland water transport	8	2.3
Supporting services to water transport	249	235.3
Air transport carriers including aircraft rental	117	111.9
Support services to air transport	112	107.8
Booking and travel agencies	62	44.8
Services incidental to water transport N.E.C.	100	58.1
Storage and warehousing	159	84
Communications	1,945	1,463.3
Kenya pipeline administrative service	58	28.9
General retail	554	277
Retail N.E.C.	346	194.3
General wholesale	288	82.4
Wholesale N.E.C.	66	47.4
Hunting and tourist guide service	45	17.7
Wholesale and retail of electrical machinery and appliances	149	176.0
TOTAL NON-DEDICATED COPYRIGHT INDUSTRIES	5,234	3,383.2
Total salaried employees and income	1,907,250	749,818.5

5.7 Foreign Trade in Copyright-Based Goods and Services

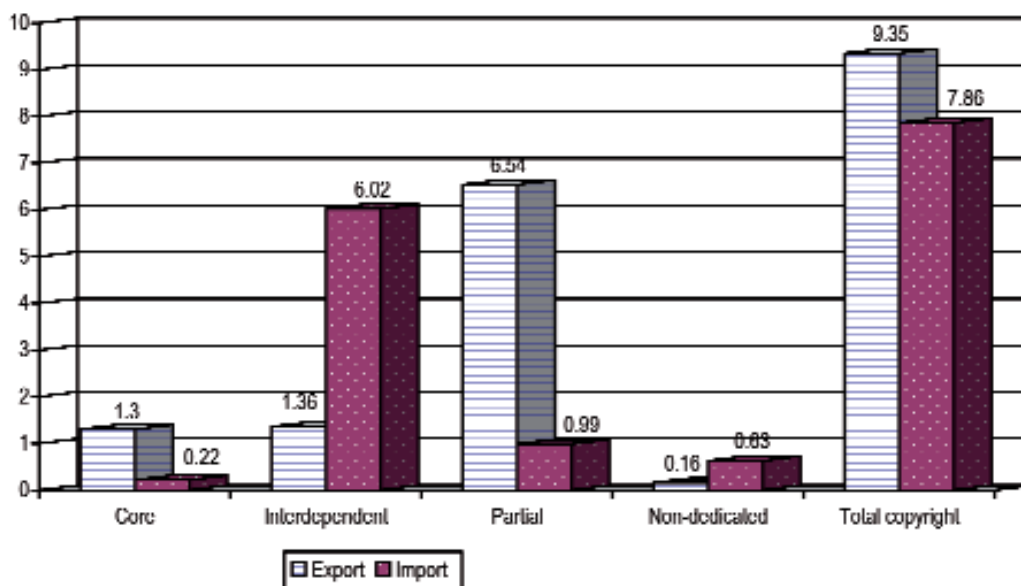
Table 17 provides an analysis of the copyright-based industries in terms of their exports, imports and trade balances. Among the copyright-based industries, only core and partial groups recorded a positive trade balance. The value of exports in the core copyright-based industry group in 2007 was about KSHs 3.4 billion, which accounted for 1.3% of the total national exports. On the other hand, the value of imports was about KSHs 1.34 billion, comprising 0.22% of all imports. The core copyright-based industries registered a favourable (positive) trade balance (value of exports minus value of imports) of about KSHs 2.06 billion. In the group of partial copyright-based industries, the value of exports was about KSHs 17.1 billion, which accounted for 6.54% of the total national exports, while the value of imports under this category was about KSHs 6 billion, making up 0.99% of all national imports. The relative contribution of partial copyright-based industries to exports was 5 times that of core copyright-based industries. This suggests that partial copyright-based industries had a higher local component whose market was external compared to the core group of industries.

Table 17: Kenya's exports, imports and trade balance of copyright-based goods and services in 2007 ('000 KSHs, %)

Copyright-based industry	Exports	% of total national economy	Imports	% of total national economy	Trade balance (exports minus imports)
Core	3,403,837	1.30	1,340,282	0.22	2,063,555
Interdependent	3,517,361	1.36	36,402,418	6.02	-32,885,057
Partial	17,100,667	6.54	5,997,643	0.99	11,103,024
Non-dedicated	471,737	0.16	3,315,540	0.67	-2,843,803
TOTAL COPYRIGHT INDUSTRIES	24,473,402	9.35	47,555,913	7.06	-23,082,511
Total national economy	261,876,153	100	685,117,797	100	-343,241,644

The contribution of the various copyright-based industries in terms of exports and imports relative to the total national economy is diagrammatically represented in Figure 21. The figure illustrates that, besides the core and partial copyright-based industries contributing proportionally more value of exports than imports compared to the national economy, all copyright-based industries combined produced relatively higher export value than import value compared to the whole economy. This is also shown by the huge national trade deficit compared to that in the copyright-based industries. Proportionally, the imports were more than double (2.3 times) the exports in the overall economy, while they were less than double (1.9 times) in the total copyright-based industries, implying that, comparatively, the copyright-based industries are doing better than the overall national economy.

Figure 21: Contribution of copyright-based industries to exports and imports in relation to the total national economy in Kenya in 2007 (%)



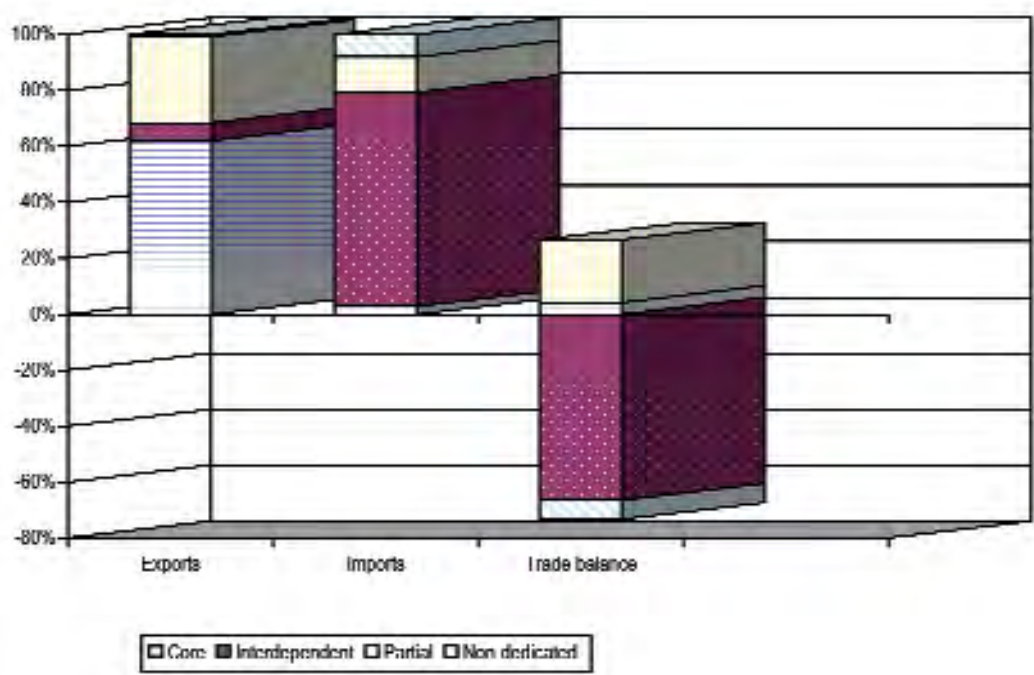
The highest foreign trade deficit (negative balance of trade) in 2007 was recorded in the category of interdependent copyright-based industries. The values of exports and imports were about KSHs 3.55 billion and KSHs 36.4 billion respectively, giving a foreign trade deficit of KSHs 32.86 billion. The non-dedicated support industries also registered a trade deficit amounting to approximately KSHs 3.39 billion.

As noted earlier, the copyright-based industries have a relatively high import component, particularly within the interdependent category (Table 17), and therefore this reduces their value-added and even gross output. This also confirms the fact that these industries principally rely on large proportions of foreign components

for the production and/or manufacture of instruments and equipment that fall under the category of interdependent copyright-based industries, and that they are mostly involved in the sale of final goods and/or assembly of imported parts.

Figure 22 provides a clear picture of the proportional contributions to foreign trade by copyright-based industries. For the various categories, the core copyright-based industries contributed the highest proportion of exports (about 60%); and the interdependent group contributed the highest proportion of imports (about 80%) and foreign trade deficit (over 70%).

Figure 22: Proportions contributed by copyright-based industries to exports, imports and foreign trade balance in Kenya in 2007 (%)



The main activity contributing to exports in the category of the core copyright-based industries is printed matter. In 2007 it contributed to the tune of KSHs 3.4 billion. Import costs in this category were from books and pamphlets, amounting to over KSHs 1.3 billion. In the category of interdependent copyright-based industries, the main sources of export value were paper and paper products, while the main import costs came from electric power machinery and switch gear (over KSHs 11 billion), and paper and paper products (over KSHs 23 billion) (see also Appendix V).

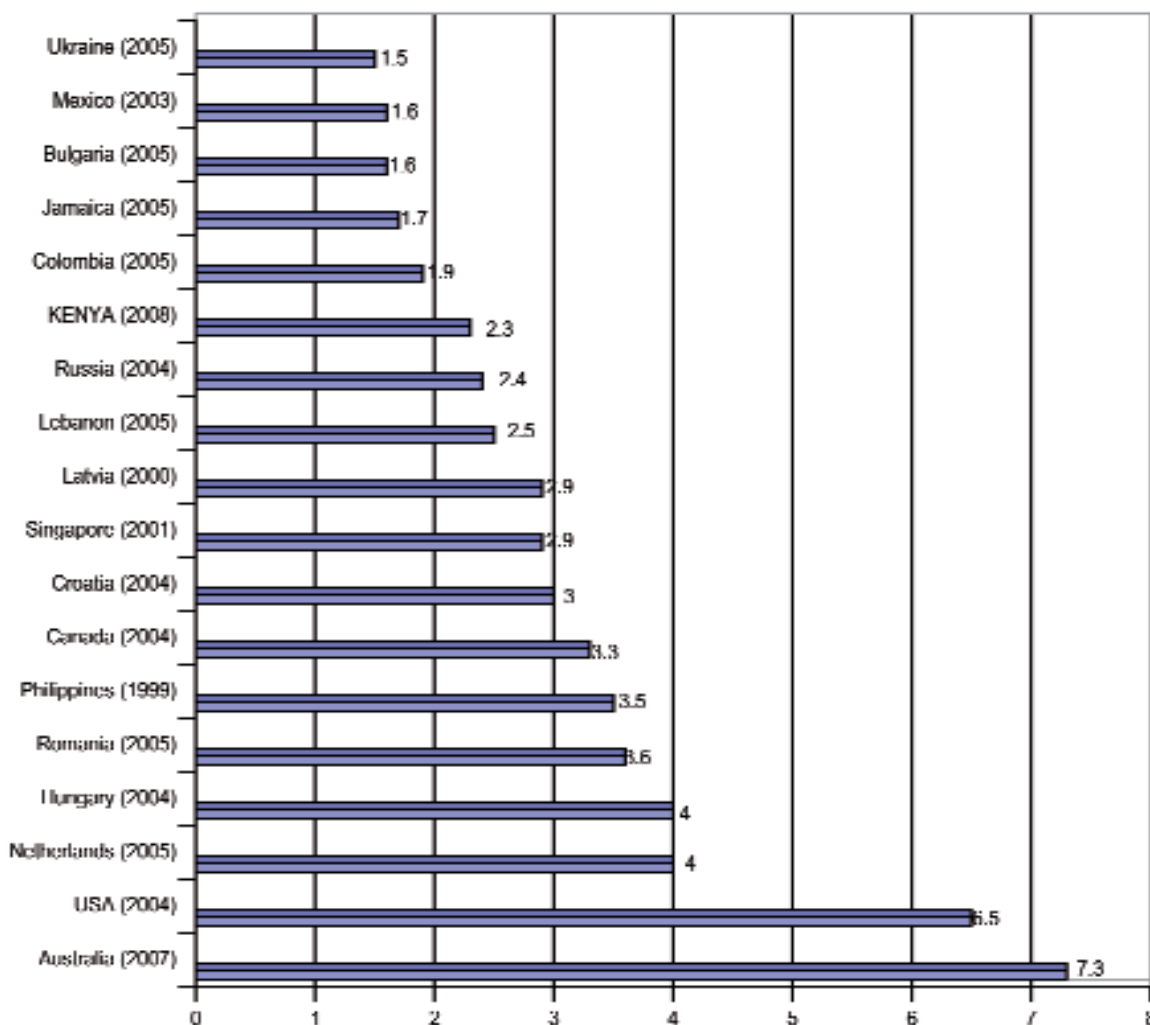
With respect to partial copyright-based industries, the main export value was derived from assorted manufacture goods (over KSHs 16 billion), aluminium ware (over KSHs 413 million), footwear (over KSHs 151 million), and wood carving (about KSHs 124 million). The main costs of imports in this category were incurred in the procurement of rubber and tyre tubes (about KSHs 2 billion), bar roads, angles, shapes and sections (KSHs 1.8 billion), tin-coated plates and sheets (about KSHs 0.5 billion), and wire products (over KSHs 471 million). The major contributors to exports among the activities in the non-dedicated support industries were machinery and transport equipment (about KSHs 422 million). The greatest contributors to imports in this category included passenger motor cars (more than KSHs 1.1 billion), roads and vehicles and parts (more than KSHs 1 billion), buses, trucks and lorries (over KSHs 642 million), and telecommunication equipment (about 630 million) (Appendix V).

5.8 International Comparisons

After analysing the national composition and contribution of the copyright-based industries in Kenya, this section looks at similar studies in a number of countries carried out at different points in time and compares their overall results with the results of the Kenyan study.¹⁵ These countries include Singapore, the first country to apply the WIPO Guide, the USA, Hungary, Jamaica, Colombia, the Netherlands and a number of other EU countries for which we obtained data from published reports. As Kenya is the first sub-Saharan African country to complete this kind of study, there are no relevant studies from the region with which to compare.

Most of the statistics and computed economic contributions of copyright-based industries in Kenya are reasonably consistent with those of most other countries. In 2007, Kenya's core copyright industries made a contribution of about 2.3%. This figure was higher than those of five countries—Colombia (1.9%), Jamaica (1.7%), Bulgaria (1.6%), Mexico (1.6%), and Ukraine (1.5%). The value is also close to those for Russia (2.4%) and Lebanon (2.5%). Amongst the available results from studies based on the WIPO Guide, Ukraine's core copyright-based industries make the lowest contribution to gross added value, while Australia's make the highest (7.3%). The available statistics, therefore, indicate that, out of 18 countries, Kenya lies somewhere in the middle of the lower half in terms of performance (Figure 23).

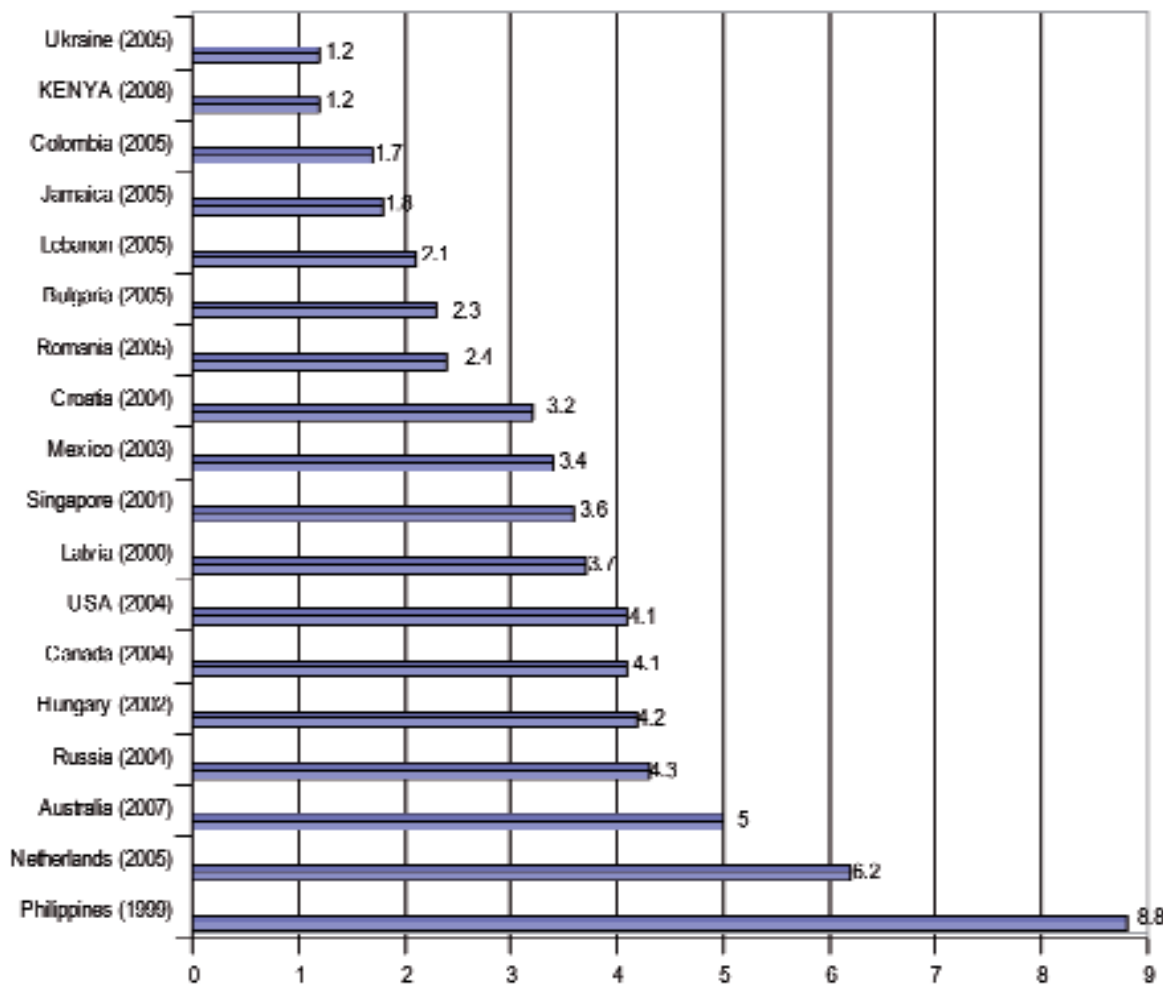
Figure 23: International comparison of the contribution of core copyright-based industries to GDP (%)



¹⁵ While the statistics generally provide a picture of the international situation, the fact that they represent different years of study (shown in brackets in the figures) is a disadvantage.

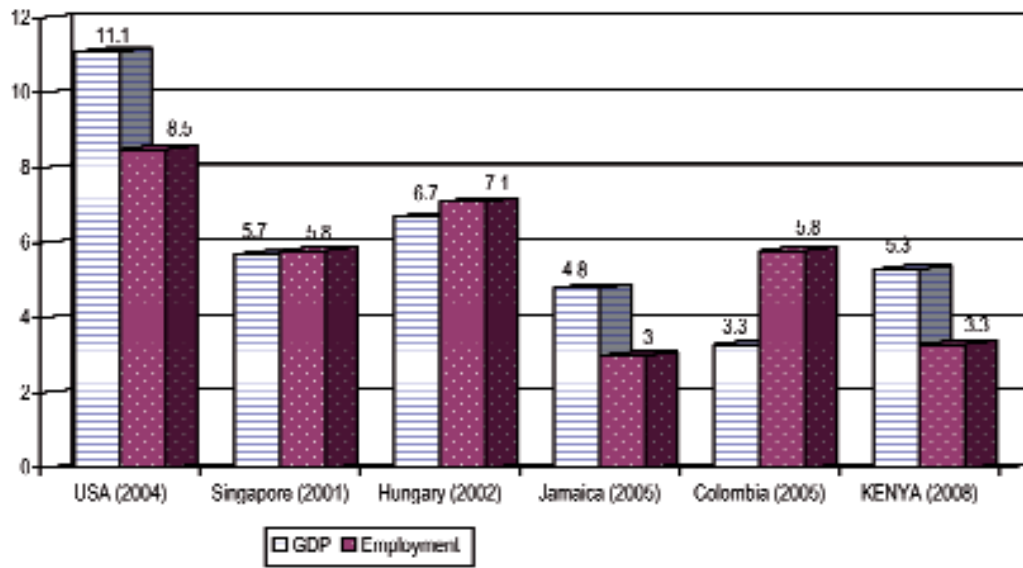
With respect to employment contribution by the core copyright-based industries, Kenya did not do as well as with GDP contribution. With a value of 1.195% (Table 6), it only did better than Ukraine, which recorded a contribution of 1.16% in 2005 (Figure 24).

Figure 24: International comparison of the contribution of core copyright-based industries to employment (%)



A comparison of the contributions of the total copyright-based industries to GDP and employment between Kenya and the USA, Hungary (EU country), Singapore (Asian), Jamaica (Caribbean), and Colombia (South American) reveals that Kenya performed favourably. It did better than Jamaica and did not rank far below Singapore (Figure 25). Structurally, the copyright-based industry sector in Kenya is similar to those of the USA and Jamaica, showing that proportionally the industries contribute more to GDP than they do to employment.

Figure 25: International comparison of the total copyright-based industries to GDP and employment (%)



6. The Development of some Core Copyright-based Industries in Kenya

This chapter presents a brief picture of the development of some of the main/core copyright-based industries in Kenya. The information presented relies mainly on literature and statistics taken from government reports and industry sources and the results of primary data from questionnaire interviews. Without seeking to be too detailed, this chapter, albeit in a brief form, compiles information on the most important issues regarding press and literature, music, theatrical production, opera, film production and videos, radio and television, and business and professional associations.

6.1 Press and Literature

According to the records from the Kenya Revenue Authority (KRA), the press and literature group of industries/activities consists of the following major categories:

- a. Printing, publishing and allied services.
- b. Retail sale of books, newspapers and stationery.
- c. Business, professional and labour associations.

In Kenya, newspaper printing, book publishing, card printing and all other forms of printing and publishing are lumped together under Printing, Publishing and Allied Services. Their sales are lumped together as Retail Sale of Books, Newspapers and Stationery. However, efforts are being made to disaggregate these further for the purposes of future industry analysis.

6.1.1 The Press Market

The history of the press in Kenya is rather recent. It started with the arrival of Pentecostal missionaries nearly a century-and-a-half ago, as the missionaries embarked on teaching new converts how to read and write, primarily so that the new converts could read biblical literature for themselves. The initial publications then contained religious materials. To date, the church still publishes some religious materials.

Since independence in 1963, the development of the Kenyan press market has been influenced by different opposing political views. During the single-party era, the ruling party ensured that the press sector was monitored and closely controlled so that the single-party ideologies were propagated. During the same time there were some opposing views from a group of people who were fighting for increased space for reporting. This took place amid strong opposition from the government. The country at this time was undergoing economic, political and social transformation, which brought about a fresh momentum to the Kenyan press market. During this period, the readers developed a specific liking for certain available press products that opposed, or looked like they were opposed to, the status quo. Thus, while a small proportion of the Kenyan population liked the state-sponsored press, a vast majority had started to develop a liking for an alternative press.

Kenya has four major daily national newspapers in English and one in Kiswahili, all published in Nairobi with a combined daily circulation of almost 400,000.¹⁶ The English dailies are the *Daily Nation*, *The Standard*, *Kenya Times*, and *People*, while *Taifa Leo* is the Swahili daily. The *Daily Nation* and *Taifa Leo* are published by the Nation Media Group (NMG), the largest private/independent media company in Kenya. *The*

¹⁶Most of the data in this section on the development of the press have been obtained from the Media Council of Kenya Report of 2005: "A Baseline Survey of Media in Kenya," August 2005.

Standard newspaper is published by The Standard Company, which is also an independent company. The *Kenya Times*, on the other hand, which was associated with the Kenya African National Union (KANU) government, is managed by the former ruling party, KANU. There are also a number of other smaller daily, weekly and monthly publications.

The Standard is the oldest mass-circulating newspaper in Kenya, founded in 1902 by a Parsee migrant, A.M. Jeevanjee. It catered mainly for civil servants and the business community in Mombasa. The need for a newspaper arose when the British settlers came to Kenya together with Indians to work on the construction of the railway line from the coast to open up the interior parts of the countryside for settlement. After the completion of the railway line, these Indian workers settled in Mombasa and formed the backbone of the civil service. Two years later, *The Standard* was sold to the partnership of Mayer and Anderson, who renamed it *The East African Standard*, marking the beginning of the European press, concerned with happenings in Britain and urging subservience to the settlers, a tune that for a long time became the tone of other settler-controlled media, including *Mombasa Mail* and *Nairobi News*. *The East African Standard* became the largest and most influential publication in colonial East Africa. In 1967, Lonrho (a company) acquired the newspaper and turned it into a tool to safeguard its interest in the region. In the mid-1990s, following the reorganization at the Lonrho headquarters in London, *The Standard* was sold again, this time to a group of Kenyan political businessmen who had then gained control of the Kenya Times Network (KTN) television channel. Today, *The Standard*, with a daily circulation of 54,000, has outlasted its competitors. Besides *The Standard* and KTN, this media house also operates the *Capital FM* radio station, currently licensed to broadcast in Nairobi. *Capital FM* launched its operations in September 1996.

The *Daily Nation* newspaper, published by the NMG, was first registered in 1959 by Michael Curtis and Charles Hayes. In 1960, it was purchased by the spiritual leader of the Ismaili community, Aga Khan. It was the first paper to adopt a policy of Africanization by publishing a Swahili version, *Taifa Leo*. Today, the *Daily Nation* has a daily circulation of 184,000 copies, while *Taifa Leo* has a daily circulation of 35,000 copies, making the *Nation* Kenya's most widely printed newspaper. The *Nation*, although targeting the Kenyan market, is also circulated throughout the East African region. The NMG also publishes the *East African*, a conservatively designed weekly focusing on the economic news of East Africa.

The NMG also owns the East African Magazine Ltd, publishers of True Love and Drum magazines. The circulation of these magazines increased by 24% and advertising revenue increased by 93% in the first half of 2007 compared to the same period in 2006. In the first half of 2007 the *Daily Nation* returned a 26% increase in advertising revenue compared to the same period in 2006. The circulation revenue also increased by 6%, with NMG's newly launched Business Daily newspaper showing a promising start.¹⁷ Further to this, the NMG owns Nation TV and Nation FM radio called Easy FM, which were licensed in 1998 and went on air a year later. His Highness the Aga Khan is the biggest shareholder in NMG.

The *People Daily*, owned by Kenneth Matiba, Kenya's major presidential candidate in 1992, started as a weekly before it turned into a daily newspaper with a Sunday edition in December 1998. It has a daily circulation of 60,000. Initially founded to serve as the voice of the opposition politics and to report materials that the *Nation* and *The Standard* feared to touch, the *People Daily* has since faced lean times. The biggest challenge facing the paper is its inability to attract sufficient revenue from advertising due to the perception that it is partisan.

¹⁷ Saturday Nation, July 28, 2007. Music Sector. "Act Tough on Music Piracy," page 26, by Maurine Ongwae.

The *Kenya Times* newspaper was first published as *Nairobi Daily*, which was intended to be a quality afternoon paper by Hilary Ng'weno—the first African editor of the Nation. It was, however, bought by the then ruling party, Kenya African National Union (KANU), in 1983. The paper has over the years suffered an identity crisis, as most people see it as the mouthpiece of the former ruling party. Currently, it has a daily circulation of about 50,000. Table 18 shows the average daily circulation of the leading dailies in 2007.

Table 18: Average circulation of leading dailies in Kenya in 2007 ('000 copies)

Newspaper	2007
<i>Daily Nation</i>	67,160
<i>The Standard</i>	19,710
<i>People Daily</i>	21,900
<i>Kenya Times</i>	18,250
<i>Taifa Leo</i>	12,775

According to Kenya's Economic Survey of 2008, the circulation of copies for morning newspapers published in English and Kiswahili grew by 10.2% and 13.7% respectively in 2007. Weekly newspapers (periodicals) grew by 40.8% in 2007 compared to a decline of 9.8% in 2006. The substantial increase in newspaper readership in 2007 was due to its being an election year. As expected, newspaper readership rises during this time. Table 19 shows details of the average daily and weekly circulation of newspapers in the country since 2003.

Table 19: Average circulation of daily and weekly newspapers in Kenya ('000 copies), 2003-2007

Morning newspapers	2003	2004	2005	2006	2007
English	86,508	78,309	80,938	89,402	98,479
Kiswahili	8,686	7,711	6,818	6,603	7,510
English weeklies	1,505	1,316	1,282	1,156	1,628

In the 1990s, with the advent of multiparty politics, the Kenyan press market grew, encouraged by more press freedom compared to the days when the press was gagged. The period also saw increased competition of different press products, leading to the expansion of the market.

In a recent survey carried out by the Media Council of Kenya (August, 2005), using a sample of 506 respondents, it was shown that the competition for the Kenyan press market is mainly between two leading dailies—the *Daily Nation* and *The Standard*. Other dailies like the *Kenya Times*, *People Daily*, and the *Nation's Taifa Leo* also have a considerable readership in the country (Table 20). During the same period, there has been an emergence of the gutter press, some of them operating illegally and erratically in their publication. This has made it difficult for the government to track them. The government has thus felt the need to moderate and/or regulate the sector by introducing stringent but controversial measures to be followed when printing newspapers. The statistics for the gutter press are currently unavailable.

Table 20: Readership of a number of newspapers in Kenya in 2005 (%)

Paper title	Per cent readership
<i>Daily Nation</i>	80.4
<i>The Standard</i>	40.3
<i>The People Daily</i>	7.3
<i>The Kenya Times</i>	3.4
<i>Taifa Leo</i>	28.5
<i>The East African</i>	3
<i>Citizen</i>	4.2
<i>The Independent</i>	1.2
<i>The Sunday Nation</i>	24.5
<i>Sunday Standard</i>	15.4
<i>Sunday Times</i>	1.0
<i>The People on Sunday</i>	1.0
<i>Dawida</i>	0.6
<i>Dholuo</i>	0.8
<i>Coast Week</i>	1.6
<i>Other Papers</i>	3.4

6.1.2 The Book Market

The Kenyan book-publishing market has undergone some sort of a revolution that has shaped the development of the industry. In the 1970s, most Kenyan writers developed their careers by engaging in publishing books of various categories. While some writers delved into fiction, others delved into political satires. This latter class of writers found themselves on the 'wrong side' of the law, as this was the period of high political intolerance of one-party rule. This led to many of these writers going into forced and self-imposed exile, dealing a blow to the local book-publishing sector. However, the few authors who remained continued to engage in writing, thus shaping the Kenyan book-publishing market. But over the years another category of publishers—the academic publishers—continued to publish.¹⁸

6.2 Music, Theatrical Productions and Opera

In Kenya, this sector has not been disaggregated. Based on the Kenyan ISIC, it combines the following activities:

- a. Theatrical Producers and Entertainment Services.
- b. Authors, Musicians and Other Artists.
- c. Other Amusements and Recreational Services N.E.C.

The values in the above three economic activities are aggregated to get the contribution of the Music, Theatrical Production and Opera sector.

6.2.1 The Music Industry

The Kenyan music industry has undergone a transformation over time. From the 1960s to the 1980s the industry was dominated by old musicians who mostly produced vernacular songs. The production was manual. This was the period when most people could consume music by attending live concerts organized by both local and foreign musicians. It was also a period when people frequented dance halls and discos to dance and enjoy themselves. However, there was not much variety of music, as very few local musicians ventured into the music industry.

¹⁸Daily Nation, April 25, 2008. Book Sector. "Authors Have Little," page 3, by Benjamin Muindi.

The trend of going to dance halls and discos changed drastically in the 1990s due to the liberalization of the music sector, changes in living standards, and penetration of good-quality sound carriers and quality music devices such as CDs which enabled many to consume music in their living rooms. This led to a sharp drop in the numbers of those who were attending live concerts and discos. It also led to a revolution in the music industry as a new crop of young musicians joined the market, with modern music, mostly a blend of local and foreign genres, pushing the older varieties out of the industry or to the vernacular music arena.

Technological advances also made it easier to record music and develop beats; hence there are many more musicians in the market today than there were in the past. The market of sound-recording media like CDs, VCDs and DVDs has increased drastically in the recent past. The number of families owning CD players has also increased, making music consumption easier and faster in these families' homes. Furthermore, the number of privately owned music-producing studios has increased in recent times. Ironically, technological advances have come with undesirable aspects. They have made piracy easier, with musicians losing millions of Kenya Shillings to this vice yearly. This, coupled with the lack of a clear guiding policy in the sector, has become the single most serious threat to the development of the sector. Currently, the government, through the Music Copyright Society of Kenya (MCSK) and the Kenya Association of Music Producers (KAMP), has initiated efforts to regulate the sector. The sector is characterized by chaos and poor planning.

The internet has become one of the avenues of pirating music in Kenya, with many people preferring to download music from the internet, which they consider cheaper than buying the same product from a musician. This has drastically reduced sales and revenues due to the musicians. This form of piracy, commonly referred to as cyber crime according to the Kenya Copyright Act 2001, is outlawed. According to this Act, the duration of the copyright lasts through the lifetime of the originator and is valid for up to 50 years after death. The copyright agency estimates the cost of piracy—or, rather, the loss due to piracy—to be approximately KSHs 30 billion annually.¹⁹ The MCSK estimates that pirates earn approximately 98% of the total music revenue, while the musicians get only 2%.²⁰ According to a study done by the World Bank, the economic value of the Kenyan music sector is placed at approximately KSHs 6 billion (US\$ 89.6 million) annually. It is noted that the current growth of the entertainment sector draws heavily on the music and home-grown movies sub-sectors, which have opened up the huge network of nightspots and other performance venues around the country. These have created a vibrant new sector that is purely youth-driven without any real government support.²¹

Most foreigners posing as tourists or researchers coming to study or to buy indigenous music and instruments end up studying the designs and probably improving on them and registering them as their own. Targeted areas in Kenya are Nyanza and Coast provinces. In Nyanza, *Nyatiti*, which forms the main basis of the *Luo* music, is highly sought after due to its versatility as a percussion and rhythm instrument, while in the coast the most targeted instrument is *Nzumari*, a wind instrument of the *Miji Kenda*. These traditional musical instruments are sought after by developed countries that are looking for new ingredients for their music and instruments, and could be vital in creating new tonal variation for their music.²² The Kenya Industrial Property Institute (KIPI) has thus acknowledged the urgent need to register the designs of indigenous instruments to preserve their uniqueness as part of the Kenyan heritage and is currently working with the National Museums of Kenya, which will hold the patents in trust for Kenya.

¹⁹ Sunday Nation April 27, 2008. Music Sector. "Internet Music Piracy," by John Koigi.

²⁰ Saturday Nation July 28, 2007. Music Sector. "Act Tough on Music Piracy," page 26, by Maurine Ongwae.

²¹ The East African, July 23-29, 2007. Music Sector. "Show Us the Money," page VI, by John Kariuki.

²² Saturday Nation, June 30, 2007. Music Sector. "Trafficking Local Music and Instruments," page 31 Review, by John Kariuki.

6.2.2 Theatres

Theatres have undergone a serious downturn in Kenya compared to the days when the theatre was known to produce serious theatrical works. In the 1970s, theatrical works gained much momentum. However, during those days of single-party rule, theatrical producers were seen by the political class to represent the opposition. This led to most of the critical theatrical producers being exiled, while those who remained quit the industry. Today, the Kenyan theatre sector is in disarray, with almost total state neglect. As an example of existing apathy towards theatrical works, the 2008 International Theatre Day was not commemorated in Kenya. Also, the Kenya National Theatre is the headquarters of the Kenyan thespians, but this facility receives negligible state support, with most of the funds going into paying staff.

At present there are numerous artists in Kenya, most of them not operating on profit. In addition to a lack of support from the government, this is because most Kenyans view the theatre as a social activity to which monetary value should not be attached. However, a team of young theatre artists has recently come up, with different groups emerging to engage in theatrical works. Additionally, this sector is now being supported by the tourism sector, as most of the consumers of theatrical works are foreigners who are always keen to sample Kenyan artistic works.

In summary, the drop in the attention given to theatre can be attributed to a number of factors. These include a crackdown on theatrical producers in the 1970s and 1980s, leading to producers being exiled or quitting art; changing lifestyles, with many Kenyans becoming interested in foreign theatrical works; and the availability of TV sets, making it easy for people to watch the artists in their living rooms. Besides this, the number of people who attend theatre has dropped drastically, for the same reasons. However, change has been witnessed in the recent past. Apart from tourists, many Kenyans are now starting to attend live concerts organized by local thespians and are buying CDs of local thespians. There is expectation that, coupled with the rise of many young talented thespians interested in art, the sector will grow again.

6.3 Film Production and Video

In Kenya, the film production and video sector is aggregated to include:

- a. Motion Picture Production.
- b. Motion Picture Distribution and Projection.

In the 1970s and 1980s, the Kenyan cinema market was dominated by the existence of cinema halls where families could go for outings to watch the latest arrivals in terms of the movie market. During this period, there were few or no local productions shown in these cinema halls. The availability of these cinema halls was skewed. The halls were only found in the cities; hence the rural folk had no access to the movies. This period also saw an upsurge of local comedians whose works could only be broadcast in the then government-sponsored Voice of Kenya (VOK) radio station, now known as the Kenya Broadcasting Corporation (KBC). Unfortunately, those who owned television sets were few; therefore the works of the Kenyan comedians had a very limited reach, resulting in low income accruing to them. With the advent of liberalization of the television sector, however, many Kenyan homesteads acquired television sets, which led to a decrease in traditional cinema screening and a fall in attendance by the general public to these cinema halls. This, nevertheless, gave rise to Kenyan comedians whose works could now be screened on the national television channels. But the full revolution in the Kenyan film industry took place in the late 1990s and early 2000s with the coming of video cameras, recordable tapes and even the sprouting of individual producers willing to produce works by local comedians, who by now were getting more fame due to the expansion of the television market.

Today, there are about 90 independent film and video producers in Kenya who have ensured that the Kenyan film industry thrives. Notable among these is Riverwood—the Kenyan version of Hollywood, Bollywood or Nollywood. Riverwood, which is a group of independent producers, has made it easier for Kenyan comedy in local languages to penetrate the market. However, the quality of their production is still low or in doubt due to a lack of professionalism and government support.

The unavailability of film-shooting equipment in Kenya has heralded the collapse of traditional cinema viewing. Most of these cinema halls have been made redundant and have now been transformed into prayer halls, due to the easy availability of video and films in the sitting rooms of most Kenyans. CD, VCD, DVD and other modern forms of recording and carrying film have made transactions cheaper and easier, although this has proven to be problematic for those in the film industry. The comedians and film producers have to cope with pirates who have taken advantage of the technological breakthroughs in the sector to download, record and sell comedians' works without the knowledge of the comedians and producers, resulting in huge losses of revenues.

According to the Kenya Film Commission (KFC), the local film industry regulator, if all facilitative aspects of the industry were in place, Kenya could be making over KSHs 40 billion annually. However, with little exploitation of the sector, Kenya raked in about KSHs 3.5 billion in the year 2007 alone from a few feature movies. The KFC indicates that if Kenya took advantage of her excellent climatic conditions throughout the year—the coastline with its sandy beaches, forests, fresh water, desert landscapes and snow-capped mountains, not forgetting her wildlife—the industry could potentially be a major contributor to the country's economic development, as this could promote film tourism.²³ Another form of exploiting the film/movie industry in Kenya is movie rentals. Many young people have ventured into this rental business, earning them a substantial living.²⁴

6.4 Radio and Television

The number of independent radio and television channels in Kenya increased in the 1990s. Prior to this time, the Kenyan radio and television sector was dominated by the government-owned station, Kenya Broadcasting Corporation (KBC). This period witnessed rising numbers of television channels, including KTN, Nation and Citizen. The same happened to the radio sector with many FM stations coming up; similar to the press sector, which flourished due to the advent of multiparty politics, accompanied by the opening up of democratic space.

In 2007, there was a high demand for broadcasting frequencies, demonstrated by a high number of applicants. Only 20 FM frequencies, including nine low FM and four television broadcasting frequencies, were assigned in 2007. This contrasted with 104 FM and 34 television frequencies assigned in 2006 (see also Table 21).

Table 21: Radio and television frequencies assigned in Kenya, 2003-2007

	Unit	2003	2004	2005	2006	2007
Radio frequencies	No.	80	77	88	123	127
TV frequencies	No.	137	148	244	348	368

²³The Financial Standard, March 11, 2008. Film Sector, page 7, by Joe Ombuor.

²⁴Daily Nation, May 1, 2008. Film Sector. "Money Matters", page 4, by Justus Ondari.

According to the Communication Commission of Kenya (CCK), the average viewer-ship in Kenya is as shown in Table 22.²⁵ The competition between two leading television broadcasters—Nation TV (NTV) and KTN—has drastically transformed the television broadcasting sector. From the days when only state-owned KBC enjoyed the airwaves to today, when even individual and private television stations have entered the market, there has been a major transformation of the Kenyan television market, making Kenya a leader in the number of television stations in operation in the region.

Table 22: Television viewer-ship in Kenya in 2007 (%)

TV Station	First quarter 2007	Second quarter 2007
NTV	30	30
KTN	28	25
KBC Channel 1	15	15
Citizen	8	10
Family	1	1
East Africa TV	3	3
Sayare TV	1	1
Metro TV (KBC Channel 2)	1	1
Others	4	5

Most of the revenue of public and privately owned television stations comes from advertisements. This is because of the change in style of Kenyan viewers who mostly want to get information about new products in their sitting rooms before going out to shop.

The radio sector has enjoyed considerable growth compared to television. FM stations have emerged, including some broadcasting in vernacular, enabling radio broadcasting to have a wider reach in Kenya than television. This can be attributed to the entry into the Kenyan market of small pocket FM receivers and mobile handsets with FM receivers, and generally the affordability of the FM receivers compared to televisions. This means that those listening to radio greatly outnumber those who view television (Table 23). Hence most companies spend much of their advertising budgets on radio due to the wider audience the radio stations attract compared to television audiences.²⁶

Table 23: Radio station listener-ship (% share of audience) in Kenya in 2007

Radio Station	First quarter 2007	Second quarter 2007
Kiss FM	16	17
Radio citizen	12	13
Easy FM	11	12
Metro FM	11	11
Classic	9	10
Capital FM	6	6
Karume FM	5	4
KBC Kiswahili	5	4
Inooro FM	3	3
Hope FM	3	3
Ramogi FM	3	2

²⁵ See [http://markets.nairobist.com/financial/rwx_gallery/Nation media](http://markets.nairobist.com/financial/rwx_gallery/Nation%20media).

²⁶ See [http://markets.nairobist.com/financial/rwx_gallery/Nation media](http://markets.nairobist.com/financial/rwx_gallery/Nation%20media).

According to the Frequency Spectrum Fee Schedule produced by the Communication Commission of Kenya (CCK), the fee payable for broadcasting stations is charged depending on the amount of Effective Radiated Power (ERP). The flat-rate fees for each category of ERP are specified for ERP up to 10 KW. For ERP greater than 10 KW, a formula is used to determine the fee payable. The formula for fee payable for broadcasting stations is commensurate with the power and the occupied bandwidth (Table 24).²⁷

Table 24: Fee payable according to different ERP conditions in Kenya in 2007

Service	Amount (KSHs)	ERP conditions
TV broadcasting	360,000	ERP less than or equal to 10 KW
Radio broadcasting	30,000	ERP less than or equal to 2 KW
	65,000	ERP greater than 2 KW and less than or equal to 5 KW
	130,000	ERP greater than 5 KW and less than or equal to 10 KW

6.5 Collective Management Societies

Kenya's Copyright Act, which came into being in December 2001, enabled the creation of the Kenya Copyright Board (KCB), a multi-sectoral state corporation charged with the broad responsibility of streamlining the copyright industry in Kenya. Specifically the board has been mandated to:

- License and supervise the activities of Collective Management Organizations (CMOs).
- Provide specialized training to various enforcement agencies on copyright matters.
- Facilitate legislation on copyright and related rights.
- Develop an anti-piracy security device for copyrighted audio/visual products.
- Sensitize and educate the public to respect copyright.
- Improve on laws and international treaties and conventions to which Kenya is a signatory.

The KCB has embraced this assignment and made progress in the overall process of protecting copyright and ultimately making it truly a national resource as well as a tool for attracting foreign direct investment into the national economy. Music has indeed been shown to promote businesses and stimulate economic activities in general; studies in England and Australia have underscored the importance of music in promoting various businesses. The same applies to Kenya, where it has been found that no business, big or small, can operate at its peak without music being played to those within its confines.

With regard to licensing and supervising the activities of collective management societies, the board has recognized the fact that various Kenyan artists have not fully benefited from their creative efforts in the past. The board has therefore embarked upon a programme that has led to the creation of various CMOs. The following are some of these organizations:

- Music Copyright Society of Kenya (MCSK).
- Kenya Association of Music Producers (KAMP).
- Society of Performing Artists of Kenya (SPAK).
- KOPIKEN.

²⁷Frequency Spectrum Fee Schedule by CCK. Press Sector.

- a. Kenya Publishers' Association (KPA).
- b. Third Force Association.
- c. Computer Society of Kenya (CSK).
- d. Kenya Film Commission (KFC).
- e. Kenya National Library Services (KNLS).

The Music Copyright Society of Kenya (MCSK) is the main body in Kenya representing music performing rights. MCSK's key function is to collect royalties on behalf of its members. It also administers the 'non-dramatic' performing, transmission and broadcasting rights for the musical works of its members and the members of affiliated societies. The MCSK does this by functioning as a collective administration society that negotiates 'blanket licences' with music users who then have access to MCSK's extensive repertoire of copyright musical works. Thus, the MCSK administers not only the music of its Kenyan members but also the great store of music in the repertoires of all those other societies—in other words, the music of over 1.6 million composers, lyricists and publishers in more than 150 countries. Therefore, no one may give a performance in public of music without the prior permission of the composer because this would constitute an infringement of the copyright. Apart from the word 'public,' meaning any open-air performance, it also includes music played in hotels, supermarkets, discos, factories, banks and inside passenger transport vehicles. In this way, the MCSK offers an essential service to the creators of music the world over and ensures that intellectual property rights owners are remunerated for their work.

Charges by the MCSK vary widely. Public transport vehicles, popularly known as *Matatus*, are charged up to KSHs 2,000 per annum for playing music to their customers.²⁸ Hotels, cyber cafés, hair salons and other public places are charged according to their size, location and sitting capacity. The charges range from KSHs 1,500 to KSHs 2,000 per annum. Mobile discos are charged KSHs 10,000, while road-shows are charged KSHs 10,000 per day. Those playing music in branding companies pay KSHs 3,000 a day.²⁹ The music users regularly submit returns or lists of musical works performed in their establishment. This enables the MCSK to accurately distribute the royalties which it has collected (from licence fees) to the composers whose works have actually been performed. In 2008, members of the MCSK received a base amount of KSHs 6,000 each, with the highest receiving KSHs 300,000.³⁰

MCSK's membership is based on direct membership by composers, authors, translators, arrangers and music publishers, as well as members of affiliated societies.³¹ Currently, the MCSK has 1,300 members. The MCSK is affiliated to composer societies all over the world through a system of reciprocal agreements, either through bilateral agreements for the protection of intellectual property or through the Berne Convention for the Protection of Literary and Artistic Works. It authorizes those societies to administer the music of Kenyan composers, lyricists and publishers in their particular countries.

Formed and registered in 2007, the Kenya Association of Music Producers (KAMP) is charged with collecting gratitude (the equivalent of royalties) on behalf of music producers. The KAMP draws its membership from music producers. Just like the MCSK, it is charged with receiving royalties from radio stations, public service vehicles and all other 'public' use of music. The KAMP also charges a fee for the importation of blank CDs, tapes and musical recording media. Because the KAMP has not yet fully established its infrastructure, it is currently negotiating with the MCSK to collect royalties on its behalf while it pays the MCSK a commission for the services. Similarly, the Society of Performing Artists (SPAK) is a society that brings together various

²⁸ See http://www.bellybuttonwindow.com/2008/kenya/music_copyright_tax_kenya.html.

²⁹ See <http://www.propertykenya.com/news/517928-toothless-music-society-out-to-regain-former-glory.php>.

³⁰ See <http://timeinmoments.wordpress.com/2008/04/30-the-music-copyright-society-of-kenya-celebrating-first-year>.

³¹ See http://www.bellybuttonwindow.com/2008/kenya/music_copyright_tax_kenya.html.

performing artists in music. The SPAK is affiliated to the MCSK where it represents the interest of its members, ensuring that they receive royalties that are due to them.

KOPIKEN is a collective management organization that collects royalties for book writers and publishers. The royalties emanate mainly from photocopying of books within the country. It also covers external areas, for example the translation and photocopying of Kenyan books published abroad.³²

6.6 Institutions set up to safeguard the interests of their members

The Kenya Publishers' Association (KPA) represents the interests of book publishers. It ensures that publishers do not lose their money to book piracy and illegal sale of other copyright materials. According to the KPA, universities rank high in Kenya among those who photocopy books illegally.³³ The KPA works with a special police squad which was formed in 2007 to deal with book piracy and to crack down on illegal photocopying of original materials.

Members of the KPA include Catholic University, Dhillon Publishers, East African Education Publishers, Evangel Publishing House, Evans Brothers, Express Communication Ltd., Focus Publishers, Gem Counselling Services, Geoperi Publications, Kwani Trust, Karma Publishing Company, and Kenya Literature Bureau. Others are the Kenya National Library, Law Africa Publishers Ltd., Longhorn Kenya Ltd., Longman Kenya Ltd., Macmillan Kenya Publishers, Moi University Publishers, Mountain Top Publishers, Mvule Africa Publishers, Njigua Books, Oxford University Press, Phoenix Publishers, Promarc Media, Queenex Holding Ltd., and Story Moja Publishers.³⁴

The Third Force Association exists to collect royalties on behalf of film performers and producers. It ensures that any illegal use is prevented, and collects royalties from TV stations and cinema halls, among others. On the other hand, the Computer Society of Kenya (CSK) exists to protect the rights of software designers and engineers. Apart from ensuring no illegal use of members' inventions it also does lobbying and advocacy, and helps members to publish their inventions. It also organizes exhibitions, conferences and Training of Trainers (TOT) workshops, where members can share information.

The Kenya Film Corporation (KFC) was formed to facilitate the screening and filming of Kenyan film production. It exists to support local film producers by providing them with structures necessary for film production. It also organizes educational workshops on production, targeting local film producers to build their capacity in film production.³⁵

The Kenya National Library Services (KNLS) was established by an Act of Parliament, Cap 225 of the Laws of Kenya of April 1965. It commenced activities in 1967. Its main mandate is to promote, establish, equip, manage, maintain and develop a chain of libraries in Kenya. The main aim of the KNLS is to make available for use by present and future generations national collections at the library and the information centre. It seeks to provide quality, equitable and accessible library and information services countrywide. Currently, the KNLS has approximately 800,000 volumes of books in stock and about 500,000 registered members countrywide. Over 2,000,000 people use the facilities countrywide annually.³⁶

³² See <http://www.kopiken.org/about/organization.html>.

³³ See <http://www.kenyapublishers.org/about.html>.

³⁴ See <http://www.kenyapublishers.org/members.html>.

³⁵ See http://en.wikipedia.org/wiki/kenya_film_commission.

³⁶ See <http://www.knls.or.ke/index.php?id=2>.

7. Conclusions and Recommendations

The results of this study show that the copyright-based industries in Kenya contribute significantly to the national economy. The contribution of 5.3% to the total value-added, about 3.8% to the national gross output, and 3.3% to the total national workforce by copyright-based industries is an indication of their significance to Kenya's economy. In terms of employee productivity, copyright-based industries combined made a higher contribution per employee than that of the total national economy. Again, this is strong evidence of the contribution of these industries to the national economy. The contribution of the copyright-based industries to the national economy on the basis of GDP was higher than that of the agricultural sector, healthcare and education, and fisheries, and compared favourably with the contributions of the other main sectors of the Kenyan economy, such as manufacturing, mining-and-quarrying, and construction.

The overall copyright-based industries exhibited impressive productivity. The productivity index of the core copyright-based industries, calculated as a fraction of added value per employee, was even better, coming second best among 13 major sectors contributing to the national economy. The national economy exhibited a huge foreign trade deficit compared to the copyright industries, implying that, comparatively, the copyright industries are doing better than the overall national economy. However, the copyright industries have a relatively high import component, particularly within the interdependent category, which reduces their value-added and gross output. This foreign trade imbalance can be corrected through appropriate and operational policy frameworks.

Although the copyright-based industries in Kenya contribute significantly to the national economy, the industry faces a number of challenges that require attention. Some of these may be unique to Kenya and similar developing countries, while some may be common to all countries. The copyright-based industry sector is among the fastest growing sectors in Kenya's economy. However, the value of this sector requires more recognition than it is currently receiving from policymakers, since it is an important tool for national development that needs to be promoted and protected. The fast growth rate of the industry also makes it difficult for the government to capture its activities. Most of the creative industries therefore operate haphazardly and much of their contribution to the national revenue is not captured by the government through taxes. This implies that the industry's contribution to the GDP is likely underestimated.

In Kenya, databases on the contribution of creative industries are highly aggregated. This is a potential source of inaccuracy in estimation of the contribution of copyright-based industries in the country. In order to circumvent this problem, the Kenyan classification system of the copyright-based industries must be harmonized with the International System of Industry Classification (ISIC). The ISIC system is more disaggregated and enables the estimation of the contribution of decomposed sub-sectors to the national economy. In addition, it is necessary to coordinate and standardize data collection and presentation on copyright-based industries among major government departments such as the KNBS and KRA.

Given the fast growth rate of the copyright-based industries in Kenya, there is a need to conduct regular studies to monitor the performance of the industries as a way of keeping track of their activities and contribution to the national economy. Although not investigated in this study, piracy is a problem in Kenya and forms part of the unreported contribution of copyright-based industries to the national economy. It is particularly common in developing countries for the artists to avoid taxes and even resist exposing themselves, mainly because they want to protect their products from piracy. Similarly, some retailers of creative works are either operating illegally or stock pirated materials and would normally avoid disclosure. This would naturally result in poor or no documentation, therefore leading to no, or an inadequate,

database on the contribution of copyright-based industries to the national economy.

This calls for a study to estimate the revenue lost as a result of piracy, as part of the contribution of copyright-based industries to Kenya's economy.

Concerning foreign trade, this study shows that the copyright industries have a relatively high import component, particularly within the interdependent category. This reduces their value-added and even gross output. The foreign trade deficits can, however, be addressed through appropriate and favourable policies.

In spite of the apparent inadequacies of policies governing the operations of copyright-based industries in Kenya, the economic contribution of these industries, as shown by the values of value-added, employment, and employee incomes, is significant. Their economic contribution in Kenya compares reasonably well with, and in a few cases is higher than, that in a number of countries in Europe, Asia and America for which similar studies have been conducted. However, a few discrepancies were noted in this study, partly as a result of databases in Kenya being piecemeal and scattered in different government agencies. This presented difficulties in estimating the full contribution of the copyright-based industries to the total GDP.

Existing policies should be strengthened to streamline the operations of copyright-based industries in order to promote the growth and development of these industries. Adequate policies will enable the government to capture the contribution of these industries and ultimately lead to deepened recognition of their importance in the national economy. In addition, a proactive approach is necessary to promote the copyright-based industries given their significant contribution to the national economy, especially in terms of employment.

This study is a snapshot of what is taking place in the creative sector in Kenya; it has only focused on the year 2007, and has therefore not captured the copyright-based industry dynamics. The study is also the first of its kind to be completed in Africa. There is, however, a need for monitoring and evaluating the copyright-based industries. This can only be achieved if similar assessments can be carried out systematically and consistently. The current study can thus serve as a source of reference material for future studies that could cover several years to include dynamic effects within the creative sector.

Appendix

Appendix I: Sample Questionnaire for the Contribution of Copyright-Based and Related Industries to Kenya's National Economy in 2007—Music

Producers

1. Date of interview:/...../2008. Questionnaire No:
2. Name of enumerator:
3. Name of respondent: Designation in business/company/organization:
4. Name of organization/business/activity/individual:
5. Location of the business:
6. Sex of the respondent: (1) Male (0) Female
7. Age of the respondent: (1) 18–30 years (2) 31–50 years (3) 51 years and above
8. Education level of the respondent: (1) None (2) Primary (3) Secondary (4) Tertiary
9. What are the activities of the organization/business/activity/individual? Main activities:

Other activities:

10. When was your business/company/organization established?
11. Are you a member of any association/society? If yes, list them:
12. What type of music do you produce? (1) Secular (2) Gospel (3) Both
13. How many albums did you produce last year? Secular Gospel
14. What were the categories and number of employees and their wages in your business/company/organization last year?
Categories of employees (list):
- Number of employees:/total salaries/wages (KSHs.):
15. Did you sell your products in (1) Bulk (wholesale) or (2) Retail last year? If you sold in bulk, how many wholesalers did you sell to last year?
16. How much did you sell of the following products:

Type	Wholesale (Unit price)	Retail (Unit price)	
Tape			
CD			
Video			

17. What percentage of your sales did the artists receive?

18. Costs and Sales in the production of Music:

Category	Costs (KSHs)				Sales (KSHs)			Income	
	Production	Marketing	Other costs	Total cost	Local	Export	Production fee per album	Gross benefit (KSHs.)	Net Benefit (KSHs.)
Secular									
Gospel									

19. How much money did you pay us charges/fees last year? Specify:

20. Investments necessary for music production (Use separate sheet if list is long)

Investment (capital)	Costs (KSHs)

21. Did you have access to any credit facility last year? (1) Yes (0) No. If yes, did you ever receive any credit? Where did you receive it from?
- Where did you invest it within the business/company?
22. Is piracy a serious problem to you? If yes, how?
23. Did you lose any earnings to piracy last year? If yes, how much could you have earned if there was no piracy last year?
24. What are other problems/challenges that your business faced last year? Rank

25. How did you try to solve the problems?

26. In your opinion, how best do you think these problems can be solved?

27. Who do you think should help solve these problems?

28. Are there any opportunities you know of that are yet to be exploited in this industry? If yes, give examples

29. Do you know of any producer who is involved in a similar activity? If yes, fill the table below (Use separate sheet if list is long):

Producer	Location

Artists

1. Date of interview: (Q/W) Questionnaire No:

2. Name of enumerator:

3. Name of respondent: Designation in business/company/organization

4. Name of organization/business/activity/individual

5. Location of the business:

6. Sex of the respondent: (1) Male (2) Female

7. Age of the respondent: (1) 18-30 years (2) 31-40 years (3) 51 years and above

8. Education level of the respondent: (1) None (2) Primary (3) Secondary (4) Tertiary

9. What are the activities of the organization/business/activity/individual? Main activities:

Other activities:

10. When was your business/company/organization established?

11. Are you a member of any association/society? If yes, list them:

12. What type of music do you produce? (1) Secular (2) Gospel (3) Both

13. What were the categories and number of employees and their wages in your business/company/organization last year?
Categories of employees (list):

Number of employees: Total salaries/wages (KSHs):

14. Did you sell your products in (1) Bulk (wholesale) or (2) Retail last year? If you sold in bulk, how many wholesalers did you sell to last year?

15. How much did you sell of the following products:

	Wholesale (Unit price)	Retail (Unit price)	
Tape			
CD			
Video			

16. How many performances did you stage last year? (Give examples (fill the table below) (Use separate sheet if list is long).)

Performance (type)	Location
1.	
2.	
3.	
4.	

17. Costs and Sales in the production of Music:

	Production	Costs (KSHs)		Sales (KSHs)			Benefit before tax
		Marketing	Other costs	Local	Export	Live performance	
Secular							
Gospel							

18. How much money did you pay as charges/fees last year? Specify

19. Investments necessary for music production (Use separate sheet if list is long):

Investment (capital)	Costs (KSHs)

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20. Did you have access to any credit facility last year? (1) Yes (0) No. If yes, did you ever receive any credit?
21. Where did you receive it from?
22. Where did you invest it within the business/company?
23. Is piracy a serious problem to you? If yes, how?
24. Did you lose any earnings to piracy last year? If yes, how much could you have earned if there was no piracy last year?
25. How did you try to solve the problem of piracy?
26. In your opinion, how best do you think the problem of piracy can be solved?
27. Who do you think should help solve the problem of piracy?
28. What are other problems/challenges that your business faced last year? Rank
29. How did you try to solve the problems?
30. In your opinion, how best do you think these problems can be solved?
31. Who do you think should help solve these problems?
32. Are there any opportunities you know of that are yet to be exploited in this industry? If yes, give examples
33. Do you know of any artist who is involved in a similar activity? If yes, fill the table below (Use separate sheet if list is long)

Artist	Location

Consumer

1. Date of interview:/...../2008. Questionnaire No:
2. Name of enumerator:
3. Name of respondent: Occupation:
4. Sex of the respondent: (1) Male (0) Female
5. Age of the respondent: (1) 18-30 years (2) 31-50 years (3) 51 years and above
6. Education level of the respondent: (1) None (2) Primary (3) Secondary (4) Tertiary
7. How many of the following music products did you buy last year?

	Quantity	Source	Unit price (KSh Is.)	Total cost
Tape				
Video				
CD				

Appendix II: Further Information on Kenya's Copyright Law

A. Subject Matter of Copyright Protection

Section 22(1) of the Kenya Copyright Act provides that the following works are eligible for copyright-protection:

- 1) Literary works, which include:
 - g. Novels, stories and poetic works.
 - n. Plays, stage directions, film scenarios and broadcasting scripts.
 - o. Textbooks, treatises, histories, biographies, essays and articles.
 - j. Encyclopaedia and dictionaries.
 - k. Letters, reports and memoranda.
 - l. Lectures, addresses and sermons.
 - m. Charts and tables.
 - n. Computer programs.
 - o. Tables and compilation of data including tables and compilation of data embodied in a computer or a medium used in conjunction with a computer.
- 2) Musical works.
- 3) Artistic works, which include:
 - a. Paintings, drawings, etchings, lithographs, woodcuts, engravings and prints.
 - b. Maps, plans and diagrams.
 - c. Works of sculpture.
 - d. Photographs not comprised in audio-visual works.
 - e. Works of architecture in the form of buildings or models.
 - f. Works of artistic craftsmanship, pictorial woven tissues and articles of applied handicrafts and industrial art.
- 4) Audio visual works.
- 5) Sound recording.
- 6) Broadcasts.

Section 22 (2) and (3) of the Act provides that:

- 1) A broadcast is not eligible for copyright protection until it has been broadcast.
- 2) A literary, musical or artistic work is not eligible for copyright protection unless sufficient effort has been expended on making the work to give it an original character and the work has been written down, recorded or otherwise reduced to material form.

Section 23 (1) of the Act provides that copyright is eligible for protection when the author of the work is a citizen of Kenya, is domiciled or ordinarily resident in Kenya, or when a legal entity is incorporated in Kenya. Subsection (2) of Section 23 sets out the terms of protection of copyright, for example 50 years after the end of the year in which the author of the work dies.

B. Ownership of Copyright

Copyright protection is available to all Kenyans including body corporate incorporated in Kenya and not who are domiciled in Kenya. This protection is also extended to citizens of, or body corporate incorporated in, countries which are signatories to international treaties to which Kenya is a party and which provide reciprocal recognition of copyright owned by Kenyan citizens. Ownership vests in the author of the specific work but also vests in:

- 1) The author's employer, if the work is made in the course of the author's employment.
- 2) The person who commissioned the work and who is not the author's employer under a contract of service.

In many countries copyright (with the exception of moral rights) may be assigned. This means that the owner of the copyright may transfer it to another person or entity, who becomes the owner of the copyright. In some other countries an assignment of copyright is not legally possible. However, nearly the same practical effect as the effect of assignment can be achieved by licensing. Licensing means that the owner of the copyright remains the owner but authorizes someone else to exercise all or some of his rights subject to possible limitations. When such authorization or license extends to the full period

of copyright and when such authorization or license extends to all the rights (except the moral rights) protected by copyright, the license is vis-à-vis third parties and, for all practical purposes, in the same position as an owner of copyright.

C. Rights Conferred by Copyright

Copyright confers both economic and moral rights to the owner of copyright and these rights are exclusive to him, i.e., others cannot exercise them without his permission. These include:

- 1) Moral rights, the rights to claim authorship and the right to object to any distortion, mutilation and other actions that may harm the author's honour and reputation. These rights remain with the author and cannot be transferred.
- 2) Economic rights.

Under Section 26 of the Copyright Act 2001, the owner of a publication has the exclusive right to control the doing in Kenya of the following acts:

- 1) The reproduction of the work in any material form such as:
 - a. Printing.
 - b. Photocopying.
 - c. Scanning.
 - d. Digital copying (e.g. CDs and DVDs).
 - e. Electronic storage in databases.
- 2) The distribution of the work to the public for rental, lease, hire, etc.
- 3) The communication of the work to the public.
- 4) Adaptation and translation of the work.

D. Exceptions to the Exclusive Rights (Fair Use)

Although the rights conferred by copyright are exclusive in nature, the law imposes certain limitations in the exercise of those rights under the fair use provisions confined in the Act. Under these provisions an act which would otherwise amount to infringement of copyright is allowed by the law principally for the promotion of the public good. The exclusive rights conferred on a copyright owner are subject to a number of exceptions. These are:

- 1) Use of the works for educational and scientific purposes.
- 2) Private use.
- 3) Criticism or review.
- 4) Reporting of current events subject to acknowledgement of the source.
- 5) The inclusion of not more than two passages from the direction and control of the government or public libraries and scientific institutions where the reproduction is in the public interest and no revenue is derived.

E. Related Rights

Related rights or rights neighbouring on copyright include:

- 1) The rights of performing artists in their performances.
- 2) The rights of producers of phonograms in their phonograms.
- 3) The rights of broadcasting organizations in their radio and television programmes.

Protection of these rights assists their owners to communicate their message and to disseminate their works to the public at large.

Appendix III: Year 2007 Data: Copyright Industries Value-Added and Sales by Codes and Description (KSHs)

1. Core copyright Industries breakdown

ISIC	Description	Value-added (KSHs)	% of GDP	Gross output (KSHs)	% of total national gross output
3490	Printing, publishing and allied services	13,053,050,975	0.814	12,972,844,506	0.427
6247	Retail sale of books, newspapers and stationery	11,947,315,450	0.745	32,170,496,055	1.059
8323	Data processing and tabulating services	5,563,777,553	0.347	5,569,486,133	0.183
0350	Business, professional and labour associations	220,580,044	0.014	220,915,126	0.007
9411	Motion picture production	176,374,994	0.011	178,857,734	0.006
9412	Motion picture distribution and projection	390,499,881	0.024	302,742,530	0.913
9413	Radio and television broadcasting	1,675,666,066	0.105	1,674,878,376	0.055
9414	Theatrical producers and entertainment services	179,708,800	0.011	181,803,984	0.006
9415	Authors, music composers and other artists	176,579,150	0.011	175,796,081	0.006
9490	Amusement and other recreational services N.E.C.	2,027,456,700	0.123	2,969,131,334	0.098
	Photographic studios and commercial photography	633,123,888	0.0395	670,485,995	0.022
	TOTAL CORE COPYRIGHT INDUSTRIES	38,944,144,531	2.304	57,198,429,654	1.881
	Total national economy	1,693,175,000,000	100	3,041,362,000,000	100

2. Interdependent copyright industries

ISIC	Description	Value-added	Sales
3411	Manufacture of Pulp, Paper and Paperboard	4,028,936,150	4,082,367,605
3412	Manufacture of Containers and Boxes of Paper and Paperboard	5,427,202,875	5,351,791,781
3852	Manufacture of Photographic and Optical Goods	85,816,463	88,539,539
3851	Manufacture of Professional and Scientific Equipment	78,150,375	78,200,620
3032	Manufacture of Radio, TV and Communication Equipment and Apparatus	539,293,339	527,339,517
6143	Wholesale of Machinery for Textile Industry and of Sewing and Knitting	3,614,469,869	3,607,762,818
3419	Manufacture of Pulp, Paper and Paperboard Articles N.E.C.	5,034,623,844	5,635,829,124
	Retail sales of household appliances and radio and TV goods	14,700,281,413	14,748,518,834
3902	Manufacture of Musical Instruments	382,969	389,674
3825	Manufacture of Office, Computing and Accounting Machinery	697,849,613	769,387,294
	TOTAL INTERDEPENDENT	34,784,844,802	34,803,127,005

3. Partial copyright industries

ISIC	Description	Value-added	Sales
6246	Retail Sale of Glass and Hardware	2,742,600,846	2,761,512,263
6243	Retail Sale of Footwear and Leather	63,488,102	216,395,371
6116	Sales agents of Textiles, Clothing, Footwear etc.	55,200,707	55,218,584
3320	Manufacture of Furniture and Fixtures	324,475,801	319,886,091
3620	Manufacture of Glass Products	12,694,189	14,274,671
6142	Wholesale of Clothing and Footwear	100,810,739	151,182,496
3901	Manufacture of Jewellery and Related Articles	8,276,830	8,370,281
6144	Wholesale of China and Glassware etc.	26,380,845	26,600,060
6420	Libraries, Museums etc.	8,564,780	6,375,526
3213	Knitting Mills	4,549,497	4,671,999
3610	Manufacturing of Pottery, China and Earthenware	79,388	79,388
3217	Manufacture of Made-in Textile Goods	6,778,572	6,796,434
3232	Fur Dressing and Dyeing Industry	82,796	84,758
3215	Carriage, Rope and Twine Industries	2,717,296	2,812,551
3691	Manufacture of Structural Clay Products	1,352,600,591	1,352,847,984
3214	Manufacture of Carpets and Rugs	3,108,953	3,108,953
3319	Manufacture of Wood and Cork Products	73,958,311	71,115,033
8324	Engineering, Architectural and Technical Services	741,789,799	7407,620,395
3216	Manufacture of Textiles, N.E.C.	7,597,283	7,600,110
3240	Manufacture of Footwear except moulded by rubber	16,848,914	16,778,194
3220	Manufacturing of Wearing Apparel except footwear	23,811,195	25,274,162
6241	Retail Sale of Textiles	201,634,912	201,653,689
6242	Retail Sale of Clothing	517,758,634	517,378,159
3311	Sawmills, Planing and other Wood Mills	52,511,233	52,522,130
3312	Manufacture of Wooden and Cane Containers	881,181	881,181
3211	Spinning, Weaving and Finishing Textiles	14,744,482	14,744,482
6141	Wholesale of Textiles	117,781,430	111,812,206
	TOTAL PARTIAL	6,559,733,187	13,305,090,722

4 Non-dedicated copyright industries

ISIC	Description	Value-added	Sales
7200	Communication	4,544,367,348	4,583,024,720
7116	Supporting Services to Land Transport	16,653,984.2	1,607,862,619
7123	Supporting Services to Water Transport	217,355,514.2	217,307,820
7132	Supporting Services to Air Transport	67,608.2	1,147,011.5
7114	Freight Transport By Road	910,020,896.9	911,200,971.5
7115	Pipeline Transport	219,731,683.5	96,666,368
7191	Services incidental to Transport	44,703,195	45,040,285.7
7117	Urban, Suburban and Inter-Urban Passenger Transport	4,314,611.1	4,117,966.4
7110	Land Transport	325,870,400	313,232,039
7113	Other Passenger Land Transport	2,841,429.6	71,395,758
7131	Air Transport Carriers	30,320,956.5	303,356,586.2
7192	Storage and Warehousing	78,910,461.3	74,013,383.1
7121	Ocean and Coastal Water Transport	3,581,573.7	3,680,141.1
7197	Inland Water Transport	35,959.4	35,810.5
8523	Other Provisions for Lodging N.E.C.	158,953,679.9	157,007,967.1
6597	Gaming Rites	37,193,894.1	31,547,493.9
7122	Inland Water Transport	35,958.3	35,810.5
6164	Wholesale Office Machinery and Equipment	331,629,406.3	330,143,384.7
	TOTAL NON-DEDICATED	6,920,009,151	8,756,960,664

Appendix IV: Productivity Values

1. GDP, gross output and employee income divided by employee numbers

Industry	GDP/employee	Gross output/employee	Employee income/employee
Core Industry	1,620,426	2,508,724	333,743
Interdependent	2,440,168	2,453,806	265,508
Partial	329,998	673,863	218,830
Non-dedicated	1,322,144	1,673,099	646,389
Total Copyright	1,371,436	1,838,560	307,719
Total National Economy	840,569	1,604,643	303,141

2. Productivity by sector

Productivity with respect to value-added			
Sector	Value added (mil)	Employment	Productivity
Agriculture and forestry	410,967	339,582	1,210,244
Mining and quarrying	7,162	6,247	1,146,630
Manufacturing	176,610	261,345	675,773
Electricity and water	28,105	18,961	1,482,253
Construction	69,279	81,303	652,109
Wholesale, retail, hotel	206,160	195,827	1,052,868
Transport and communication	207,300	149,049	1,390,818
Finance, real estate and business services	163,873	94,968	1,936,157
Community, social and personal services	315,129	759,698	414,806
Total national economy	1,603,176	1,907,250	840,569
Total copyright industries	95,208.7	62,131	1,371,436
Total core copyright	36,844.1	22,789	1,620,426
Employee Income			
Sector	Income (mil)	Employment	Productivity
Agriculture and forestry	40,227.7	339,582	147,940
Mining and quarrying	1,346.9	6,247	215,607
Manufacturing	50,910.7	261,345	194,803
Electricity and water	8,370.7	18,961	441,480
Construction	31,520.1	81,303	387,687

Wholesale, retail, hotel	126,100.1	135,827	644,345
Transport and communication	102,167.5	140,049	685,462
Finance, real estate and business services	85,585.1	94,968	901,199
Community, social and personal services	293,500.6	759,698	386,339
Total national economy	749,816.5	1,907,250	393,142
Total copyright industries	18,113.9	62,131	307,719
Total core copyright	7,600.0	22,799	313,743
Gross output			
Sector	Gross output (mil)	Employment	Productivity
Agriculture and forestry	532,499	330,582	1,568,101
Mining and quarrying	20,233	6,217	3,238,835
Manufacturing	603,695	261,345	2,309,954
Electricity and water	53,495	18,981	2,821,317
Construction	191,236	81,303	2,352,978
Wholesale, retail, hotel	476,157	135,827	2,431,517
Transport and communication	441,636	140,049	2,964,367
Finance, real estate and business services	257,010	94,968	2,700,280
Community, social and personal services	320,129	759,698	4,213,888
Total national economy	3,041,382	1,907,250	1,594,643
Total copyright industries	114,231.6	62,131	1,838,560
Total core copyright	57,196.4	22,799	2,506,724

3. Productivity comparisons, all sectors

Sector	Value-added	Income	Gross output
Agriculture and forestry	1,210,214.3	117,940	1,568,101
Mining and quarrying	1,146,630.3	215,607	3,238,835
Manufacturing	675,773.4	194,803	2,309,954
Electricity and water	1,482,253	441,469	2,821,317
Construction	852,109	387,687	2,352,878
Wholesale, retail, hotel	1,052,888	644,346	2,431,517
Transport and communication	1,390,818	685,462	2,964,367
Finance, real estate and business services	1,936,157	901,199	2,706,280
Community, social and personal services	414,808	366,339	4,213,898
Total national economy	840,569.4	393,142	1,594,643
Total copyright industries	1,371,436	307,719	1,838,500
Total core copyright	1,620,426	333,743	2,508,724

1. Contribution of core copyright industries to exports in Kenya

Industry	2007 (KSHs, 000)	%
Printed matter	3,403,637	1.301
Total core	3,403,637	1.301
Total national economy	261,626,153	100

2. Contribution of interdependent copyright industries to exports in Kenya

Industry	2007 (KSHs, 000)	%
Paper and paper products	3,547,361	1.356
Total interdependent	3,547,361	1.356
Total national economy	261,626,153	100

3. Contribution of partial copyright industries to exports in Kenya

Industry	2007 (KSHs, 000)	%
Timber (rough or simply worked)	108	0.000
Textiles: fabrics and made up textiles	16,000	0.006
Leather	15,181	0.006
Wood carvings	123,982	0.047
Other woods	38,183	0.015
Glassware	7,174	0.003
Steel doors and windows	12,774	0.005
Aluminium ware	413,395	0.158
Footwear	151,472	0.058
Other manufactured goods	16,183,419	6.186
Total partial	17,100,667	6.536
Total national economy	261,626,153	100

4. Contribution of non-dedicated copyright industries to exports in Kenya

Industry	2007 (KSHs, 000)	%
Machinery and transport equipment	733,970	0.281
Total non-dedicated	733,970	0.281
Total national economy	261,626,153	100

5. Contribution of copyright industries in Kenya to exports

Industry	2007 (KSHs, 000)	%
Core copyright	3,403,637	1.301
Interdependent copyright	3,547,361	1.356
Partial copyright	17,100,667	6.536
Non-dedicated	733,970	0.281
Total copyright industries	24,785,635	9.474
Total national economy	261,626,153	100

6. Contribution of core copyright industries to imports in Kenya

Industry	2007 (KSHs, 000)	%
Newspapers and periodicals	0	0.000
Books and pamphlets	1,340,202	0.222
Total core copyright	1,340,202	0.222
Total national economy	605,117,797	100

7. Contribution of interdependent copyright industries to imports in Kenya

Industry	2007 (KSHs) ,000	%
Paper and paperboard manufacturers	9,557,926	1.580
News print paper	1,866,537	0.325
Printing paper	2,931,154	0.484
Packing paper	1,335,328	0.221
Other manufacturers' paper	3,324,908	0.550
Paper pulp and paperboard articles	3,551,446	0.587
Electric power machinery and switch gear	11,793,871	1.949
Domestic wireless sets	43,5879	0.072
TV sets	1,505,595	0.240
Total interdependent copyright	36,402,446	6.016
Total national economy	605,117,797	100

8. Contribution of partial copyright industries to imports in Kenya

Industry	2007 (KSHs, 000)	%
Materials of rubber	220,240	0.036
Rubber and tyre tubes	2,063,483	0.341
Wood and cork products	217,138	0.036
Cotton yarn and thread	1,266	0.000
Yarn and thread of synthetic fibres	5,725	0.001
Cotton piece goods	29,338	0.005
Jute bags and sacks	70,560	0.012
Blankets, cotton	241	0.000
Other types of blankets and rugs	605	0.000
Bed, table and kitchen linen	1,887	0.000
Glass and glassware	0	0.000
Bar rods, angles, straps and sections	1,763,005	0.291
Corrugated coated plates and sheets	42,521	0.007
Tin-coated plates and sheets	496,432	0.082
Mechanic (hand tools)	298,164	0.049
Agricultural hand tools	129,777	0.021
Domestic utensils of base metals	27,210	0.005
Metal containers	0	0.000
Wine products	171,301	0.028
Furniture and fixtures	100,410	0.017
Clothing	21,603	0.004
Footwear	5,966	0.001
Fittings	21,771	0.004
Total partial copyright	5,997,643	0.991
Total national economy	605,117,797	100

9. Contribution of non-dedicated copyright industries to imports in Kenya

Industry	2007 (KShs, 000)	%
Insulated wire and cable	64,504	0.001
Telecommunication equipment N.E.C.	1,096,275	0.181
Aircraft engines complete	242,076	0.004
Combustion engines complete	8,616	0.001
Railway locomotives	2	0.000
Passenger motor cars complete	1,865,544	0.328
Buses, trucks and lorries complete	1,117,944	0.185
Chassis with engines mounted for buses	9,178	0.001
Bicycles	47,704	0.008
All roads and vehicles and parts	1,858,436	0.304
Aircraft complete	235,086	0.039
Other transport equipment N.L.C.	0	0.000
Total non-dedicated copyright	6,644,375	1.058
Total national economy	625,117,797	100

10. Contribution of copyright industries in Kenya to imports

Industry	2007 (KShs, 000)	%
Core copyright	1,340,282	0.222
Interdependent copyright	36,402,448	0.016
Partial copyright	5,897,643	0.991
Non-dedicated	3,815,540	0.631
Total copyright industries	47,555,913	7.859
Total national economy	605,117,797	100

The Economic Contribution of Copyright-Based Industries in Malaysia



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1. Executive Summary

Introduction

This study estimates the size of the creative and the information sectors in the Malaysian economy that are protected by copyright, collectively known as copyright-based industries. There is now a growing body of evidence on the increasing importance of copyright-based activities in national growth and development. A number of countries have carried out studies to estimate the size of copyright-based industries in their economies.

This study is a pilot project to comprehensively and systematically define, identify and estimate the economic contribution of copyright-based industries to the Malaysian economy. It uses the framework and guidelines recommended by WIPO to quantify the contribution of copyright-based activities in terms of value added, employment and foreign trade.

WIPO defines copyright-based industries as industries that are engaged in the creation, production, performance, broadcast, communication or distribution and sales of protected materials. This represents the “core” copyright industries. However, in measuring the economic impact, WIPO recognizes the importance of including the “non-core” activities that support or are related to the “core” activities such as distribution and consumption.

Using WIPO’s framework, Malaysia’s copyright industries are classified into four groups:

- The *core* copyright industries, which create copyright materials as their primary product;
- The *inter-dependent* copyright industries, which support and facilitate the creation of copyright works;
- The *partial* copyright industries, where only a portion of the industry activities are associated with the creation of copyright works;
- The copyright *distribution* industries, which facilitate the distribution of copyright materials to businesses and consumers.

Economic Contribution of Copyright-Based Industries

In 2005, the estimated total contribution of copyright-based industries to the Malaysian economy was:

- RM30.2 billion of value added (5.8 per cent of GDP)
- 817 thousand jobs (7.5 per cent of nationwide employment)
- RM3.1 billion worth of exports (1.0 of total exports)

Malaysia’s copyright-based industries have recorded remarkable growth in recent years. Value added in real terms grew at an annual average of 11.1 per cent from 2000 to 2005, surpassing the national growth rate of 6.6 per cent. As a result, their contribution to GDP rose from 4.7 per cent to 5.8 per cent during this period. Likewise, employment grew at 10.7 per cent or three times that at the national level. The strong performance of these industries has increased their share of the nationwide workforce from 5.3 per cent in 2000 to 7.5 per cent in 2005.

Trade data does not capture the full contribution of copyright industries to the economy, as it generally tends to underestimate its true value. However, broad trends in the trade of copyrighted products do provide some indication on their performance. Interestingly, the trade balance turned positive in 2005 from a net loss of RM0.5 billion in 2000, due in large part to double-digit growth in the export of copyrighted products.

Copyright-based industries have performed extremely well in comparison to other services and resource-based industries in the economy. They make a larger contribution to GDP and employment compared to construction, transport and storage, and business services. Their relative growth is much more significant. The total copyright-based industries registered the second highest growth of 11.1 per cent per annum from 2000 to 2005, after mining and quarrying (13.1 per cent).

The productivity of the copyright-based industries in 2005 was RM34,848, which was higher than that for agriculture, construction and government services but lower than manufacturing, mining and quarrying, and transport and storage, and communications. The industries exhibited a productivity growth of 0.4 per cent per annum from 2000 to 2005. The characteristic nature of the creative group of industries in generating employment explains the slow productivity growth.

Data and information on the copyright-based industries are far from adequate. One of the main reasons is the higher incidence of microenterprises and individual operators in the creative and information sectors – a characteristic phenomenon of these industries worldwide. There is also an apparent lack of awareness of the importance of copyright among consumers as well as producers of copyright works.

Knowledge and content that underpin copyright-based activities have emerged as the main factors of economic growth, and as the nation shifts towards a service-oriented economy, copyright will become more significant. Therefore, it is essential that the copyright-based industries be closely monitored, evaluated and prioritized. It is within this context that the following recommendations are made.

- Establish an institutional framework to facilitate systematic and regular data collection and reporting on copyright-based industries. This should be part and parcel of ongoing efforts by the Department of Statistics to improve the database on the services sector. A Working Committee led by MyIPO and with representation from the Department of Statistics and all agencies related to copyright-based industries such as the Ministry of Unity, Culture, Arts and Heritage, Ministry of Communications, Energy and Water, Ministry of Information, the Central Bank, Copyright Collecting Societies and all relevant industry organizations should be set up to explore the most cost-effective means to generate key economic data on copyright-based industries. Ongoing establishment and household surveys must be reviewed to evaluate how they can be expanded and improved to generate data on creative industries protected by copyright. All secondary sources of data on copyright industries must be identified, and the agencies collating such data must be made responsible for producing them on a regular basis.
- The Department of Statistics should team up with the relevant industry organizations and provide professional assistance to facilitate the generation of key industry statistics at a more disaggregated level on a regular basis.
- It would also be timely and useful to generate more detailed trade data on the services sector with the shift towards a service-based economy and the growing importance of trade in services at the bilateral and multilateral negotiations. This would allow more accurate estimates of trade in copyrighted products. Inter-agency collaboration between the relevant agencies in the public and private sectors has to be beefed up to initiate data collection and reporting on trade in services.
- More in-depth sector-specific studies of the creative and informative sectors that are protected by copyright must be carried out. To begin with, a vertical analysis of the nine sub-sectors of the core copyright industries should be carried out. Such studies can assist in improving the assessment of the contribution of copyright-based industries to the economy as well as identify the issues and challenges faced by the industry to prioritize policies.

- MyIPO should launch programs such as workshops, seminars and advocacy campaigns in collaboration with the copyright-based industry organizations to enhance awareness of the importance of copyright among both consumers and creators of copyrighted works.
- The study provides strong empirical evidence of the dynamism of the copyright-based industries in Malaysia, demonstrating their key role in the nation's drive towards a knowledge and information-based economy. The study is at best an exploratory study that contributes to more evidence-based policy-making with respect to the development of copyright-based industries within the context of the overall development of the economy.

1. Introduction

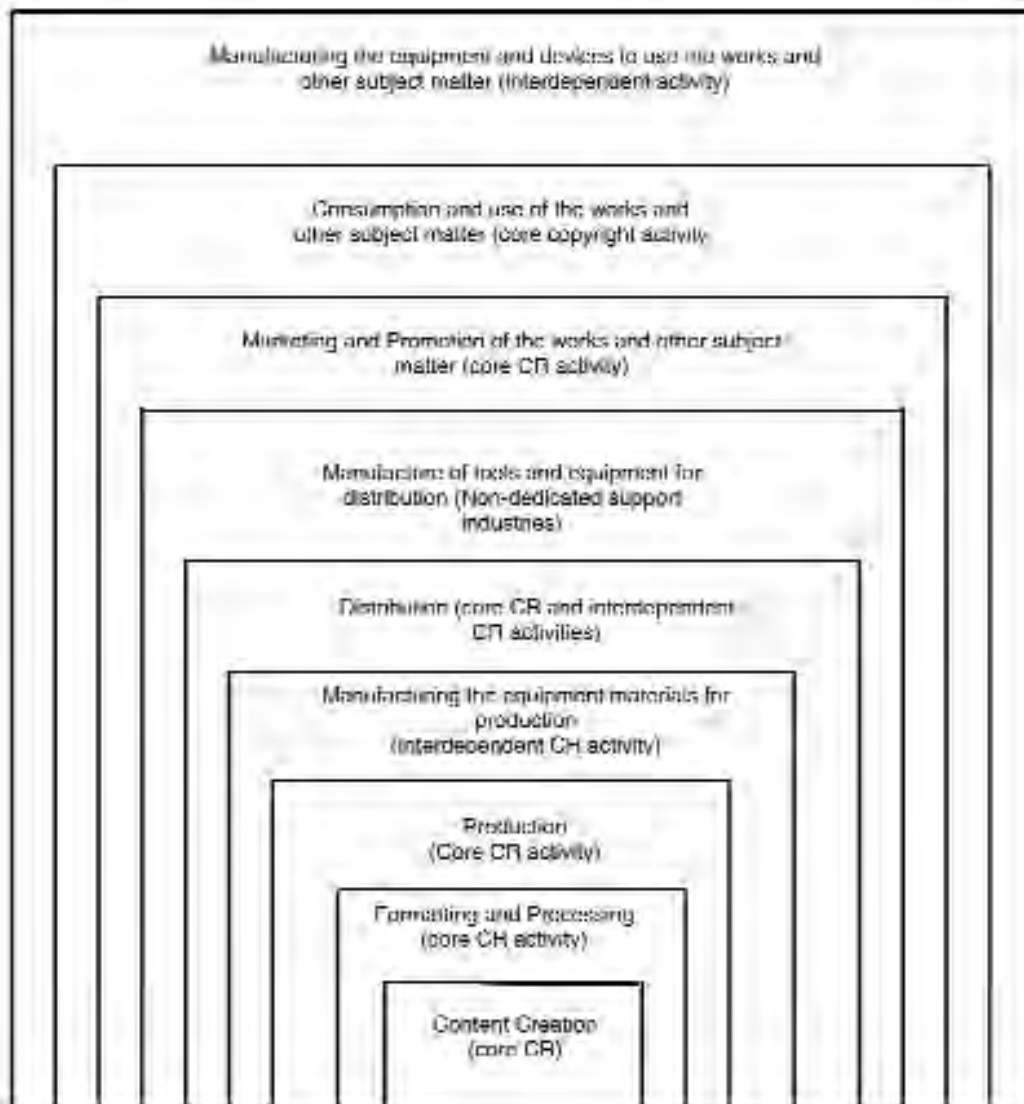
1.1 Background and Context

There has been a worldwide increase in the contribution of copyright and related rights-based industries (hereafter termed copyright-based industries) to the economy, driven largely by developments in information and communications technology (ICT). With the advent of ICT, the scope of copyright protection has expanded beyond the narrower confines of the cultural and social dimensions to include the information economy. As a result, copyright has emerged as an enabling tool for the growth and development of an increasing number of industries, especially in the service sector. Without copyright protection, incentives to engage in creative activities are weakened.

WIPO defines copyright-based industries as “industries engaged in creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter” (WIPO, 2003, p.29). This represents the “core” copyright industries. However, in measuring the true economic contribution of copyright-based industries to the economy, WIPO acknowledges the importance of incorporating the multiple effects of copyright on the economy, i.e. the contribution of the “non-core” activities that support or are interrelated to the core copyright industries with regard to such distribution and equipment manufacturing (see Figure 1.1).

The growing importance of copyright in changing the economic landscape has been acknowledged by an increasing number of international studies on the economic contribution of copyright-based industries. This study is the first of its kind to comprehensively define, identify and estimate the relative economic contribution and performance of copyright industries in Malaysia.

Figure 1.1 Economic Activities Relating to Production, Packaging, and Distribution of Materials Protected by Copyright and Related Rights



Note: CR – Copyright
Source: WIPO, 2003, p.299

1.2 Objective of the Study

The principal objective of the study is to define copyright-based industries in Malaysia and to estimate their relative economic contribution to the economy. The scope of the study is as follows:

- Define and identify the copyright-based industries in Malaysia using the 2000 Malaysian Standard Industrial Classification (MSIC);
- Provide an overview of copyright laws and institutions in Malaysia;
- Undertake an assessment of the economic contribution of copyright-based industries to the Malaysian economy in terms of value added, employment and trade from 2000 to 2005;
- Carry out an international comparative analysis of copyright-based industries; and
- Analyze the performance and economic impact of copyright industries.

1.3 Defining Malaysia's Copyright-Based Industries

One of the core tasks of the study is to clearly define what constitutes Malaysia's copyright-based industries. Different country studies have adopted different definitions, but with the publication of the WIPO guidelines in 2003, there has been some convergence in the definitions and indicators used to estimate the economic contribution of copyright-based industries to the economy. To ensure consistency and comparability of data over time and across countries, Malaysian copyright-based industries are also classified using WIPO's guidelines and recommendations.

WIPO classifies copyright-based industries comprehensively into four main industry groups based on their degree of dependence on copyright activities. The list of industry subsectors under each broad group of copyright activities is detailed in Table 1.1.

Table 1.1 List of Copyright-Based Industries in Malaysia Based on WIPO Classification

Major Industry Group	Industry Subsectors
i. Core Copyright Industries	<ol style="list-style-type: none"> 1. Press and Literature 2. Music, Theatrical Production and Opera 3. Motion Picture and Video 4. Radio and Television 5. Photography 6. Software and Databases 7. Visual and Graphic Arts 8. Advertising Services 9. Copyright Collecting Societies
ii. Interdependent Copyright Industries	<ol style="list-style-type: none"> 1. TV Sets, Radios, VCRs & DVD Players 2. Computers and Equipment 3. Musical Instruments 4. Photographic and Cinematographic Instruments 5. Photocopiers 6. Blank Recording Material 7. Paper
iii. Partial Copyright Industries	<ol style="list-style-type: none"> 1. Apparel, Textiles and Footwear 2. Jewelry and Coins 3. Other Crafts 4. Furniture 5. Household Goods, China and Glass 6. Wall Coverings and Carpets 7. Toys and Games 8. Architecture, Engineering, Surveying 9. Interior Design 10. Museum
iv. Non-Dedicated Support Industries	<ol style="list-style-type: none"> 1. General Wholesale and Retailing 2. General Transportation 3. Telephony and Internet

Note: The list of industries for each of the major industry groups and the respective MSIC Codes is detailed in Appendix Tables 1 to 4.

Source: Adapted from WIPO, Guide on Surveying the Economic Contribution of the Copyright-Based Industries, WIPO Publication, No. 893(E), 2003.

i. Core Copyright Industries

The core copyright industries are industries wholly engaged in the creation, production and manufacturing, performance, broadcast, communication and exhibition or distribution and sales of works and other protected subject matter (WIPO, 2003, p.29). There are nine industries that are entirely dependent upon copyright protection for their activities.

ii. Interdependent Copyright Industries

The interdependent copyright industries are industries that are engaged in production, manufacture and sale of equipment whose function is wholly or primarily to support and facilitate the creation, production or use of copyright protected subject matter (WIPO, 2003, p.33).

These are industries that produce products jointly consumed with the core industries. For example, the transmission of entertainment programs requires a television.

iii. Partial Copyright Industries

The partial copyright industries are industries in which only a part of the production is linked to copyright protected material, such as design, architecture, apparel, jewelry and other crafts. Products by these industries may have a registered design as well as copyright protection. Only the element that is protected by copyright legislation is included.

iv. Non-Dedicated Support Industries

The non-dedicated support industries only remotely rely on copyright material and where copyright generates only a very small fraction of their business. That portion of activities "related to facilitating broadcast, communication, distribution or sales of works and other protected subjected matter and whose activities are not included in the core copyright industries" are incorporated into this group (WIPO, 2003).

1.4 Approach and Methodology

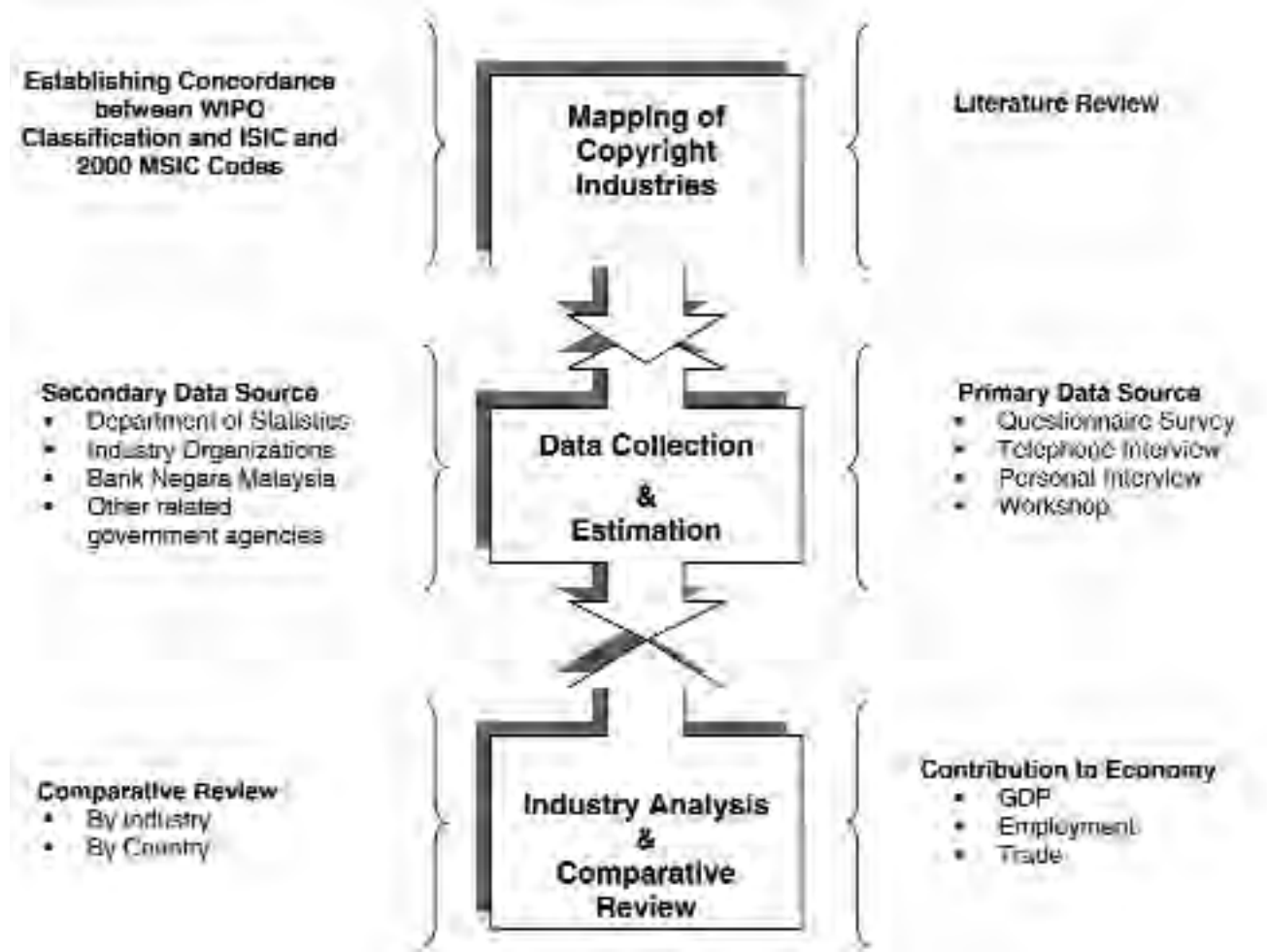
The approach and methodology used in the study are based on the guidelines and recommendations by WIPO. The study has also benefited from the experiences reported in a number of country reports on the estimation of the size of the copyright-based industries in their economies (see reference). The major steps are detailed in Figure 1.2 and discussed in detail below.

i Mapping of Copyright-Based Industries

A thorough literature review was carried out to determine the scope and definition of copyright-based industries in Malaysia, and the methodology and techniques to estimate the economic contribution of copyright-based industries to the Malaysian economy. Great caution was exercised to avoid double counting.

WIPO defines copyright-based industries using the International Standard Industrial Classification (ISIC) Codes. This enabled the mapping of the copyright-based industries in Malaysia into the WIPO framework by determining the concordance between the ISIC Codes and the 2000 Malaysian Standard Industrial Classification (MSIC) Codes. The detailed mapping of Malaysia's copyright-based industries using WIPO definitions and MSIC Codes is given in Appendix 1.

Figure 1.2 Study Approach and Methodology



ii. Data Collection and Estimation

a. Secondary Data Collection

The primary source of data for estimating the contribution of copyright-based industries to the economy was the Department of Statistics (DOS). Data on value added and employment at the five-digit MSIC code was readily available from a number of annual establishment surveys. The use of DOS data also ensures consistency in data measurement methodology over time and across industries.

Data on value added and employment for the majority of copyright-based industries at the five-digit MSIC code were collected from the following establishment surveys:

- Annual Survey of Manufacturing Industries;
- Census of Distributive Trades;
- Quarterly Report on Distributive Trades;
- Transport and Communications Services Statistics;
- Annual Survey of Communications Industries; and
- Information and Communications Technology Services Statistics.

However, not all of the copyright-based industries were covered by the establishment surveys. For the smaller industries, data on value added was gathered by DOS on a less regular basis for national accounts tabulation. Data for the missing years was extrapolated from the figures available for 2000 and 2003, and verified with estimates on industry growth through personal interviews and secondary data. Similarly, data on employment was sourced from the 1991 and 2000 Population Census to estimate employment data at the five-digit MSIC code. Trade data on copyrighted products were identified at the eight-digit SITC code and sourced from the DOS.

Data on copyright-based industries were collected for the years 2000 to 2005, as 2005 is the latest year for which data are available. The year 2000 was chosen as a base year as it was a census year for most industries. It also marked the launching of a number of new establishment surveys to capture the contribution of non-traditional industries, especially in the services sector, that had altered the Malaysian industrial landscape.

The overall impact of core copyright industries on the economy was estimated using a computable general equilibrium model of Malaysia (MGEM). The CGE model was built using the 2000 Input-Output (I-O) table. Hence, Malaysia's copyright-based industries were redefined using the I-O industry classification and the MSIC/WIPO industry classifications (See Appendix 3).

Nominal data was converted to real terms using the GDP deflator.

b. Primary Data Collection

Primary data and information were gathered through a nationwide sample survey and personal interviews. A nationwide survey of 1,200 companies located throughout the country was carried out from November 2007 to March 2008. The main purpose was to estimate the degree of copyright content in the interdependent, partial and non-dedicated support industries. For the first batch, a detailed questionnaire as shown in Appendix 4 was mailed out. Since most of the data required could be sourced from the Department of Statistics, a shorter version of the questionnaire focusing on the copyright content was used for subsequent surveys.

Out of the 800 questionnaires mailed to firms in the "non-core" copyright industries, a total of 30 responses (3.8 per cent) were received. To increase the response rate and to ensure that all subsectors are included in the responses, telephone interviews and online survey were also carried out focusing on the copyright-related questions. A total of 63 companies in the "non-core" copyright industries were interviewed, raising the response rate to 11.6 per cent. Telephone interviews were more useful since additional questions could be posed to assess the copyright content of their activities. Of the 400 questionnaires mailed to companies in the "core" copyright industries, 16 responded. Their responses provided a better understanding of the copyright activities in the country.

c. Data Estimation

As explained earlier, WIPO has identified copyright-based industries into two broad categories, i.e. the "core" and "non-core" copyright industries. The contribution of core copyright industries was simple and direct as all of the value added and employment of the industries was attributed to copyright activities. There were a total of nine industries in the core copyright group.

As for the non-core copyright industries, not all of their activities can be attributed to copyright protection. For each of these non-core industry groups, the data collected had to be adjusted by using copyright factors to estimate the value added and employment of the industries attributable to copyright activities. The

copyright factors determine the proportion of value added or employment that is derived from creative and copyright activities. The copyright factor was primarily determined through the nationwide survey of industries in the respective industry group and personal and telephone interviews of key personnel in the companies.

It is apparent that the estimation of copyright activity attributable to the “non-core” group of industries is less precise. Therefore, a great deal of caution was exercised in determining the copyright factors. Adequate feedback from industries and literature review was carried out to ensure the contribution of the “non-core” industries was neither overestimated nor severely underestimated. A detailed explanation of the determination of copyright factors used is given in Appendix 2.



2. An Overview of Copyright Laws and Institutions

2.1 Introduction

Copyright protection in Malaysia has a very long history dating back to 1902. However, the first locally enacted statute uniformly applicable to all of the country's states was the 1969 Copyright Act. The 1969 Copyright Act was later repealed and replaced by the 1987 Copyright Act to provide for stronger deterrence against copyright infringements.

Today, the 1987 Copyright Act governs copyright protection in Malaysia. The 1987 Copyright Act has, however, undergone several amendments to keep abreast of the latest industry developments and international standards. The major amendments and their motivations are highlighted in Table 2.1.

Copyright is the exclusive right given to the owner of the copyright for a specific period. The Act provides comprehensive protection for copyrightable works by outlining the nature of works eligible for copyright, the scope of protection, and the manner in which the protection is accorded.

2.2 Protection of Copyrights

Works eligible for copyright protection under the 1987 Copyright Act include the following:

- Literary, artistic and musical works (computer programs are treated as literary works);
- Published editions of such works;
- Sound recordings;
- Films;
- Broadcasts; and
- Derivative works, i.e. works derived from works eligible for copyright.

Table 2.1 Milestones in the Development of Malaysia's Copyright Act 1987

Year	Rationale for Amendments
1990	<ul style="list-style-type: none"> • To enable Malaysia to become a signatory to the Berne Convention for the Protection of Literary and Artistic Works.
1996	<ul style="list-style-type: none"> • To provide for compounding of minor offences. • To redefine works protected under the Industrial Design Act. • To widen the powers of the Copyright Tribunal.
1997	<ul style="list-style-type: none"> • To incorporate provisions of the Internet Treaties to address copyright issues in the digital environment, especially to provide protection for contents that pass through the Internet.
2000	<ul style="list-style-type: none"> • To provide protection for rights of performers in accordance with the Agreement on TRIPS, of which Malaysia became a signatory in 1994.
2002	<ul style="list-style-type: none"> • To provide for the creation of the Intellectual Property Corporation of Malaysia (MyIPO).
2003	<ul style="list-style-type: none"> • To widen powers of enforcement officers and to increase the penalty for offences committed under the Copyright Act.

The scope and duration of copyright for the above are summarized in Table 2.2. There is no registration of copyright material in Malaysia. A work is automatically protected under the following conditions:

- Sufficient effort has been made to make the work original in character;
- The work has been written down, recorded or reduced to material form; and
- The author is a qualified person, the work is made in Malaysia, or the work is first published in Malaysia.

The copyright holder is initially the author (writer, composer or maker) of the work. However, if an employee does the work in the course of his employment, the person who had commissioned the work holds the copyright, unless otherwise agreed. The author's right is also transferable.

These rights apply whether the works are copied partially or wholly. Infringement occurs when a work belonging to the right owner is reproduced, distributed, rented, sold or communicated to the public without prior consent from the right owner. In the event of an infringement, the burden of proof lies with the person claiming that his or her work has been unlawfully copied.

Malaysia is not a member of the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (the Rome Convention) of 1961. However, in 1994 Malaysia became a signatory of the Agreement on the Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) that covered substantive portions of the Rome Convention, including protection for performers.

As a developing country, Malaysia was given until the year 2000 to comply fully with the provisions of the TRIPS Agreement. One of the important areas of compliance, that had its roots in the Rome Convention, was the granting of rights to performers. Thus, in 2000 the Copyright Act was amended to provide compliance with the TRIPS obligation and provide protection for performers. Following the amendments, the Copyright Act provides protection for the performer's rights in a live performance, which subsists for 50 years from the beginning of the calendar year following the year in which the live performance was given.

Table 2.2 Ownership Rights and Duration in Literary and Artistic Works

Category	Exclusive Ownership Rights	Duration of Protection
Literary works Musical works Artistic works Films	<ul style="list-style-type: none"> ▪ Reproduction of the work in any material form ▪ Performing, showing, or playing the work to public ▪ Communication of the work to public ▪ Distribution of copies to public by sale or other transfer of ownership ▪ Commercial rental to public 	<ul style="list-style-type: none"> ▪ Life of the author plus 50 years ▪ If published after death, copyright lasts for 50 years from date of publication. ▪ If joint authorship, life of author who dies last applies
Sound recordings	<ul style="list-style-type: none"> ▪ Same as above 	<ul style="list-style-type: none"> ▪ 50 years since first publishing ▪ If unpublished, year of recording applies.
Broadcasts	<ul style="list-style-type: none"> ▪ Recording ▪ Reproduction ▪ Rebroadcasting ▪ Performance, showing or playing to public in a place where admission fee is charged ▪ Right to take still photographs from a TV broadcast 	<ul style="list-style-type: none"> ▪ 50 years from year of making broadcast

2.3. Infringement of Copyrights and Remedies

A copyright work is infringed when a person, without the consent of the copyright owner, does or authorizes any act that the copyright owner has the exclusive right to perform. The Copyright Act details the types of action, including selling and importing of copyrighted works without the consent of the owner, and the respective penalties and remedies are summarized in Table 2.3.

Remedial recourse for infringement of copyright can be taken up either in civil or criminal proceedings. In both instances, the complaints must originate from the owners of the copyright or their agents.

As there is no registration system for copyright works in Malaysia, Malaysian law provides for the creation of an affidavit by the owner himself or an authorized person. In the affidavit, he has to state that at the time specified, the copyright subsisted in his work and that he is the owner of the copyright or an agent. A copy of the work must be attached with the affidavit, and with this, remedial measures are initiated.

In addition, the Copyright Act also provides for border measures. If the owner of the copyright has prior knowledge that his infringed works are about to be imported into the country, he can notify the Controller of Copyright¹ of the importation of infringed goods, who will then issue an order for the prohibition or seizure of the infringed goods. The infringing copies can be forfeited as if they were prohibited goods under the Customs Act 1967.

¹The Director General of MyIPO is the Controller of Copyright.

Table 2.3 Remedies for Criminal and Civil Copyright Infringement

Types of Criminal Infringement	Penalty
<ul style="list-style-type: none"> ▪ Makes for sale or hire any infringing copy ▪ Sells, lets for hire or by way of trade, exposes or offers for sale or hire any infringing copy ▪ Distributes infringing copies ▪ Possesses, other than for private and domestic use, any infringing copy ▪ By way of trade, exhibits in public any infringing copy ▪ Imports into Malaysia, other than for his private and domestic use, an infringing copy 	<ul style="list-style-type: none"> ▪ A fine of not less than RM2,000 and not more than RM20,000 for each infringing copy and/or to imprisonment of a term not exceeding five years or to both ▪ For any subsequent offence, a fine of not less than RM40,000 for each infringing copy or to imprisonment for a term not exceeding 10 years or to both
<ul style="list-style-type: none"> ▪ Makes or has in possession any contrivance used or intended to be used for the purposes of making infringing copies 	<ul style="list-style-type: none"> ▪ A fine of not less than RM4,000 and not more than RM40,000 for each contrivance in respect of which the offence was committed, or to imprisonment for a term not exceeding 10 years or to both ▪ For any subsequent offence, a fine of not less than RM8,000 and not more than RM80,000 for each contrivance in respect of which the offence was committed or imprisonment for a term not exceeding 20 years or to both ▪ Fine exceeding RM20,000 or imprisonment of maximum three years
<ul style="list-style-type: none"> ▪ Circumvents or causes the circumvention of any effective technological measures ▪ Removes or alters any electronic rights management information without authority; or ▪ Distributes, imports for distribution or communicates to the public, without authority, works or copies of works in respect of which electronic rights management information has been removed or altered without authority 	<ul style="list-style-type: none"> ▪ A fine not exceeding RM250,000 or to imprisonment for a term not exceeding three years or to both ▪ For subsequent offence, a fine not exceeding RM500,000 or to imprisonment for a term not exceeding five years or to both
<p style="text-align: center;">Types of Criminal Offences</p> <ul style="list-style-type: none"> ▪ Imports an article into Malaysia for the purpose of: <ol style="list-style-type: none"> (a) selling, letting for hire, or by way of trade, offering or exposing for sale or hire, the article; (b) distributing the article: (i) for the purpose of trade; or (ii) for any other purpose to an extent that it will affect prejudicially the owner of the copyright; or (c) by way of trade, exhibiting the article in public. 	<p style="text-align: center;">Civil Remedies</p> <ul style="list-style-type: none"> ▪ Damages-seeking compensation for the losses incurred ▪ Injunction-stopping further continuance of business activity ▪ Anton Pillar Order – order taken from court to conduct search for documents and other effects related to the business operation ▪ Show of account or profits by infringer ▪ Mareva Injunction – forbid the infringer from keeping or destroying his assets ▪ Pay up costs relating to the civil remedy initiatives ▪ General civil remedy as applied in the Malaysian courts

Source: The Copyright Act, 1987 (Sections 36 and 37).

2.4. Institutional Framework for Copyright Protection

There is a fairly well-established institutional framework to ensure adequate protection for copyright works as shown in Figure 2.1. These include:

- (i) Public agencies that are custodians of the policy and regulatory framework covering copyright;
- (ii) Enforcement agencies that provide surveillance and remedies for copyright infringement; and
- (iii) Private bodies that serve copyright owners by ensuring their members' copyright works are protected and provide feedback to policy-makers to improve the policy and regulatory environment for copyright-based industries to thrive.

i. Policy and Regulatory Institutions

The Intellectual Property Corporation of Malaysia (MyIPO), a corporate body under the Ministry of Domestic Trade and Consumer Affairs (MDTCA), acts as the custodian of laws on intellectual property. Accordingly, MyIPO is the lead agency for the regulatory framework for intellectual property (IP) rights. However, there are other government bodies that independently provide protection to components of copyright works that fall within their own areas of jurisdiction. These include:

- The Ministry of Home Affairs, which is the custodian of the Film Censorship Act 2002 and the Printing Press and Publications Act 1984;
- The Ministry of Unity, Culture, Arts and Heritage, which is the custodian of the Film Development Act 1984; and
- The Ministry of Communications, Energy and Water, which is the custodian of broadcasting matters.

ii. Enforcement Agencies

The Copyright law is enforced by the Royal Malaysian Police Department and the Enforcement Division of the Ministry of Domestic Trade and Consumer Affairs (MDTCA). At present, the Enforcement Division of the MDTCA has a strong force of some 2,100 officers placed in 72 branches throughout the country to enforce the law. Copyright owners may lodge an official complaint supported by necessary documents to the Enforcement Division of the Ministry if they suspect infringement. The Division will conduct the necessary investigations with the assistance of the prosecution officers from the Attorney General's Office. If there is sufficient evidence, the case goes to the Court. Civil proceedings, on the other hand, are carried out with the assistance of lawyers.

The enforcement agencies also carry out anti-piracy measures as provided for in the Copyright Act. Such measures include the establishment of:

- The Anti-Piracy Task Force under the Chairmanship of the Minister of Domestic Trade and Consumer Affairs. The Task Force is made up of representatives from the government and private sectors engaged in IP affairs.
- The Special Task Force to Combat Counterfeit Products made up of the Royal Malaysian Police Force, Royal Customs Department, the Ministry of Health, the pharmaceutical industries, the Energy Commission, Standards and Industrial Research Institute of Malaysia (SIRIM) Berhad and the cigarette manufacturing companies. Other related associations and guilds also actively participate in discussions and in coordination of joint raids and enforcement activities.
- Special Export Unit from the Ministry of Domestic Trade and Consumer Affairs, whose officers are stationed at exit points to foil attempts by pirates trying to export pirated goods.

iii. Special Intellectual Property (IP) Courts

The Government has approved the establishment of 15 Intellectual Property Sessions Courts to hear cases of a criminal nature, while six Intellectual Property Specialized High Courts have been set up throughout the country to hear both civil and criminal cases. These courts have appellate jurisdictions. Currently, there is one specialized IP Sessions Court, i.e. Court 4 in the Federal Capital to hear only first instance criminal cases.

iv. Private Bodies

a. Collective Management Organizations

The Copyright Act also provides for the setting-up of licensing bodies commonly termed Collective Management Organizations (CMOs) or Copyright Collecting Societies (CCS) to collect royalties on behalf of copyright owners for public performance of copyright works.

Sound recordings and musical works are respectively the copyrighted properties of the recording companies and the songwriters. Any public performance of music must obtain the consent of the sound recording companies and the songwriters via the CMOs that represent them. The CMO issues the public performance license for which royalties are imposed. The royalties are then distributed to the sound recording companies and the songwriters. At present, there are five CMOs licensed in Malaysia, of which three are more established. Details of the CMOs are discussed in Section 5.

b. Industry Organizations

Apart from the CMOs, there are Industry Organizations that represent the interests of their members and their industry. These carry out a variety of activities to develop, promote and protect their respective industry. They hold seminars, dialogues and exhibitions and conduct training programs for their members. They also represent their members in matters affecting policies, laws and regulation, and prepare and forward memoranda to the Government on issues affecting their industry. A list of some of the key copyright-based industry organizations is given in Appendix 5.

c. Copyright Tribunal

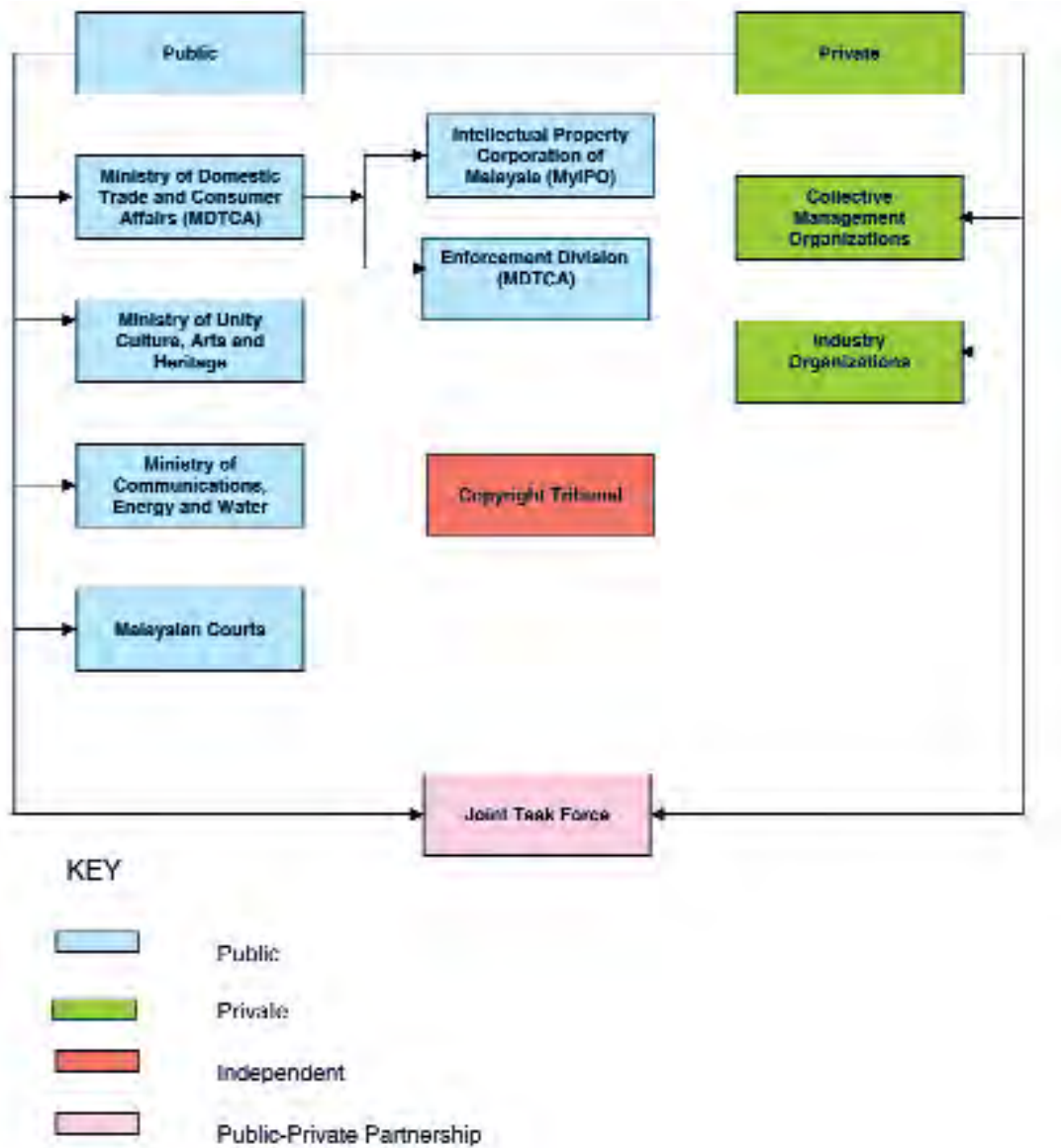
The Copyright Act also provides for the establishment of the Copyright Tribunal, an independent body set up by the Minister of Domestic Trade and Consumer Affairs in accordance with Sections 28 to 35 of the Copyright Act 1987.

The Tribunal was originally responsible for approving applications for translation of foreign works into the national language. Since 1996, however, its mandate has been expanded to include settlement of disputes between the CMOs and users of copyright works. Its key functions include:

- Determining types of licensing schemes between the licensing bodies and users of copyrighted works;
- Mentioning the instances and the party/parties who may refer or apply with respect to entitlement of a license;
- Providing that the proposed scheme shall be in force and an existing scheme should remain in operation so long as the order of the Tribunal remains in force;
- Providing for the types of licenses that may be granted by licensing bodies;
- Specifying instances where terms of the proposed license due to expire may be referred to the Tribunal by the licensor and licensee respectively;
- Providing for the Tribunal to review its orders;

- Providing for the appointment of a Deputy Chairman and a Secretary to enable more than one proceeding to be conducted, and facilitating the smooth running of the proceedings; and
- Specifying that only questions of law arising from the proceedings before the Tribunal may be referred to the High Court.

Figure 2.1 Institutional Framework for Copyright Protection



3. Contribution Of Copyright-based Industries to the Malaysian Economy

3.1 Introduction

The economic contribution of copyright-based industries is estimated using two key summary indicators, i.e. the value added and the employment share of the copyright-based industries in the economy. The value-added share is also the percentage contribution to Gross Domestic Product (GDP), and hence allows a comprehensive comparative analysis of the performance of the copyright-based industries in the economy.

The total copyright-based industries include the following four industry groups:

- Core copyright industries
- Interdependent copyright industries
- Partial copyright industries
- Non-dedicated support industries

The estimated contribution of the total copyright-based industries to the economy in 2005 was:

- RM30.2 billion of value added or 5.8 per cent of GDP.
- 817 thousand jobs or 7.5 per cent of nationwide employment.
- RM3.1 billion worth of exports or 1.0 per cent of national exports.

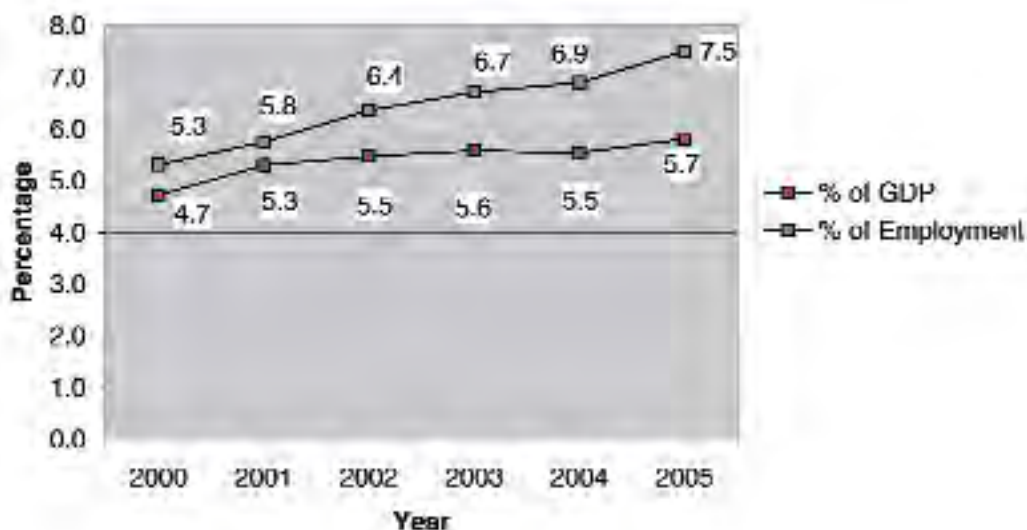
The performance of the total copyright-based industries is analyzed below, while Section 4 examines the relative structure and performance of the four copyright-based industry groups in greater detail.

3.2 Economic Contribution of Total Copyright-Based Industries

i. Contribution to GDP

Much like in other countries, Malaysia's copyright-based industries have undergone remarkable growth in recent years. The industry grew at an annual average of 11.1 per cent from 2000 to 2005, surpassing the national growth rate of 6.6 per cent (Table 3.2). As a result, its contribution to GDP rose from 4.7 per cent to 5.8 per cent during this period (Chart 3.1).

Chart 3.1 Contribution of Copyright Industries to GDP and Employment

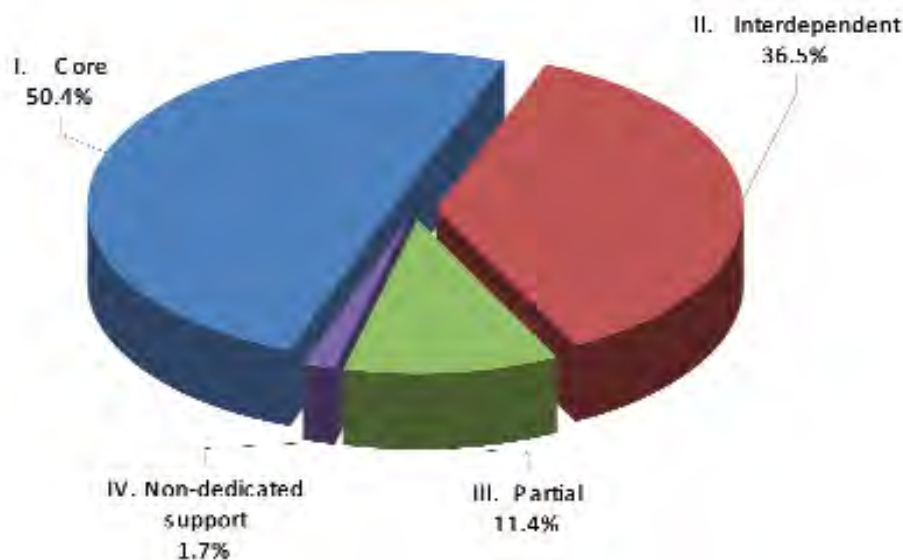


As all of the activities of the core copyright industries were treated as copyrighted works, this industry was the largest copyright industry group, accounting for about half of the total copyright value added (Chart 3.2). In 2005, its value added was RM15.2 billion or 2.9 per cent of GDP (Table 3.1). The second largest industry group was the interdependent copyright industries, which accounted for about 37.0 per cent of the value added of total copyright industries. The economic contribution of both the partial and non-dedicated support industries was relatively small, as their combined contribution GDP was less than one per cent.

Table 3.1 Contribution of Copyright-Based Industries to GDP and Employment, 2005

Copyright-based Industries	Value Added (RM million)	% of GDP	Employment ('000)	% of Employment
I. Core	15,189.7	2.9	518.2	4.7
II. Interdependent	11,024.7	2.1	176.8	1.6
III. Partial	3,452.0	0.6	99.6	0.9
IV. Non-dedicated support	500.8	0.1	22.6	0.2
Total copyright-based industries	30,167.2	5.7	817.2	7.5
Malaysian economy	519,451.0	100.0	10,892.9	100.0

Chart 3.2 Relative Size of the Copyright Industries by Value Added, 2005



ii. Contribution to Employment

A similar positive trend was observed with regard to employment. The industry employed 817,200 workers in 2005, amounting to 7.5 per cent of the total workforce in 2005. Employment expansion in these industries also surpassed the national employment growth, growing at a rate three times faster (10.7 per cent) than at the national level (3.3 per cent) from 2000–2005 (Table 3.2).

A similar trend could be seen in the growth of professionals in the creative industries. Based on data collated from the 1991 and 2000 Population and Housing Census, the number of professionals in the creative occupations surged from 40,643 to 149,415, that is, it grew at an annual rate of about 16.0 per cent in the inter-census period (Table 3.3). There was a remarkable increase in the number of computing professionals, and architects, engineers and related professionals, with these professional categories posting average annual growth of above 20 per cent between 1991 and 2000.

The core copyright industries are relatively labor-intensive. In 2005, they accounted for some 50 per cent of the value added of the total copyright-based industries but created about 63 per cent of employment. In contrast, the interdependent copyright industries accounted for about 37 per cent of the value added but only 22 per cent of employment. Clearly, the interdependent industries are less labor absorbing.

Chart 3.3 Relative Size of the Copyright Industries by Employment, 2005

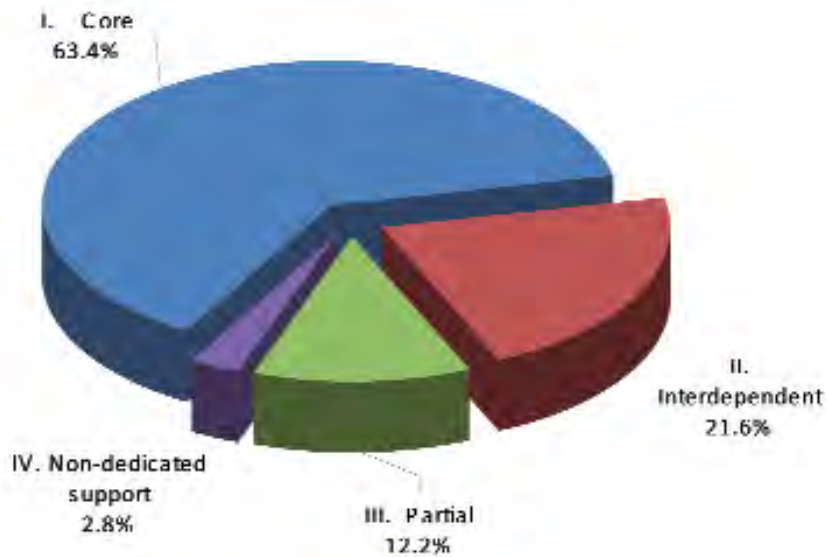


Table 3.2 Performance of Copyright-Based Industries, 2000–2005

Copyright-Based Industries	2000	2001	2002	2003	2004	2005	Growth Rate* (%) 2000-2005
Value Added (Percentage)							
I. Core:	55.3	53.4	53.8	53.5	51.8	50.4	9.0
II. Interdependent	25.7	29.3	29.7	30.1	31.2	36.5	19.2
III. Partial	17.4	15.6	14.9	14.8	12.5	11.4	2.2
IV. Non-dedicated support	1.6	1.8	1.8	1.6	1.7	1.7	11.6
Total copyright-based industries (RM million)	100.0 (16,834.4)	100.0 (18,673)	100.0 (20,062.0)	100.0 (23,371.2)	100.0 (26,257.6)	100.0 (30,107.2)	- 11.1
Malaysian Economy (RM million)	356,401	352,579	383,213	418,760	474,048	510,451	6.6
Employment (Percentage)							
I. Core:	83.2	81.4	82.8	82.9	84.5	83.5	10.8
II. Interdependent	20.5	23.6	22.3	21.6	20.3	21.6	11.9
III. Partial	13.2	11.8	11.8	12.9	12.3	12.2	9.0
IV. Non-dedicated support	3.2	5.3	3.0	2.6	2.8	2.8	7.7
Total copyright-based industries (thousand)	100.0 (492.1)	100.0 (547.7)	100.0 (616.9)	100.0 (673.9)	100.0 (726.7)	100.0 (817.2)	- 16.7
Malaysian Economy (thousand)	9,271.2	9,539.5	9,709.0	10,047.0	10,463.7	10,892	3.2

Note: * Refers to the annual compounded growth rate in constant 2000 values.

Table 3.3 Number of Professionals in the Copyright-Based Industries, 1991 & 2000

Employment Category	1991	2000	Growth rate ⁺ (%)
Computing professionals	3,135	19,155	22.8
Architects, engineers & related professionals	12,979	94,055	24.6
Archivists, curators & librarians	1,225	1,621	3.2
Writers, creative or performing artists	13,610	22,131	5.6
Printing & related trades workers	9,604	12,453	2.8
Total	40,643	149,415	15.6

Note: * Based on three-digit employment codes.

+ Refers to the compounded annual growth rate.

Source: Unpublished data from the 1991 and 2000 Population and Housing Census by the Department of Statistics

iii. Inter-Industry Comparisons

Copyright-based industries have performed extremely well in comparison to other services and resource-based industries in the economy. Table 3.4 shows that the contribution of copyright-based industries was much higher than that of construction, transport and storage or business services. The relative expansion of the copyright-based industries was much more significant, as they registered the second-highest growth of 11.1 per cent per annum from 2000 to 2005, after mining and quarrying.

iv. Value Added Per Worker

Productivity of the copyright-based industries, defined as value added per worker in real terms, was RM34,848 in 2005. Here, workers' productivity was higher than that for agriculture, construction and government services but lower than that for manufacturing, mining and quarrying, and transport and storage and communications (Table 3.5). Much as in other countries, the core copyright industries in Malaysia are relatively labor intensive, and hence the productivity of the total copyright-based industries was lower than the national average of RM45,017. The level of productivity growth was 0.4 per cent per annum from 2000 to 2005 in contrast to the national average of 3.2 per cent.

Table 3.4 Relative Size of the Copyright-Based Industries, 2005

Industries	Value Added RM million	% of GDP	Growth rate* (%) 2000-2005
1. Copyright-based Industries	30,167	5.8	11.1
2. Agriculture	43,361	8.4	6.0
3. Mining and quarrying	73,817	14.2	13.1
4. Construction	15,474	3.0	0.9
5. Manufacturing	154,740	30.0	5.8
6. Wholesale and retail	55,288	10.7	5.5
7. Transport and storage	18,772	3.8	5.0
8. Finance	34,728	6.7	3.4
9. Business services	12,676	2.4	5.5

Note: * Refers to the annual compounded growth rate in constant 2000 values

Table 3.5 Value Added Per Worker, 2000 & 2005 (Malaysian Ringgit)

Industry	2000	2005	Growth Rate* (%)
Agriculture	21,774	29,211	6.1
Mining and quarrying	913,034	1,631,926	12.9
Manufacturing	42,997	46,622	1.6
Construction	18,505	19,231	0.8
Transport, storage & communications	53,939	62,780	8.9
Government services	23,013	16,832	-6.1
Copyright-Based Industries	34,209	34,848	0.4
Malaysian Economy	38,442	45,017	3.2

Note: * Refers to the annual compounded growth rate in constant 2000 values

4. Structure And Performance Of Copyright-based Industry Groups

4.1 Core Copyright Industries

The core copyright industries create copyright protected materials as their primary product, and they are classified into nine industry subsectors:

- Press and literature
- Music, theatrical production and opera
- Motion picture and video
- Radio and television
- Photography
- Software and databases
- Visual and graphic arts
- Advertising services
- Copyright Collecting Societies

As the copyright content of these industries is relatively high, all of their value added and employment are included in the estimation of the economic contribution of copyright-based industries to the Malaysian economy. As data for visual arts and graphics have been subsumed under other subsectors², the relative contribution of core copyright industries is estimated under eight industry subsectors as shown in Charts 4.1 and 4.2.

The core copyright industries accounted for more than half of the contribution of copyright-based industries. However, their relative share has been on the decline, largely due to the rapid growth of the interdependent industry group. The employment share of the core copyright group is higher at about 63.0 per cent and has remained more or less constant over the years (Table 4.1). The industry grew faster than the economy, registering a growth rate of nine per cent from 2000 to 2005, led by the software and databases and press and literature subsectors.

Press and literature, software and databases, and motion picture and video have dominated the activities of core copyright industries, accounting for an overwhelming 88 per cent of the total value added and 90.8 per cent of total employment of the core copyright industries. Press and literature is the largest sub-sector within this group, accounting for some 44 per cent of the total value added and around 55 per cent of total employment contribution. However, the software and databases subsector, the next largest sector, was the most dynamic industry and grew at about 12 per cent per annum from 2000 to 2005 (Table 4.2). This is hardly surprising given policy priority and substantial fiscal, financial and infrastructure support from the Government for the development of ICT-based industries.

²See Appendix Table 1.7 for details.

Table 4.1 Contribution of Core Copyright Industries, 2000–2005

Year	Value Added			Employment		
	RM million	Contribution to GDP (%)	Share of Total Copyright Industries (%)	Thousand	Contribution to National Employment (%)	Share of Total Copyright Industries
2000	9,316.5	2.6	55.3	310.9	3.4	63.2
2001	9,951.6	2.8	53.1	335.0	3.5	61.3
2002	11,231.7	2.9	53.6	387.8	4.0	62.9
2003	12,504.4	3.0	53.5	423.7	4.2	62.9
2004	13,550.2	2.9	51.6	468.1	4.5	64.1
2005	15,190.0	2.9	50.4	518.2	4.8	63.4

Chart 4.1 Value Added of Core Copyright Industries by Sector, 2005

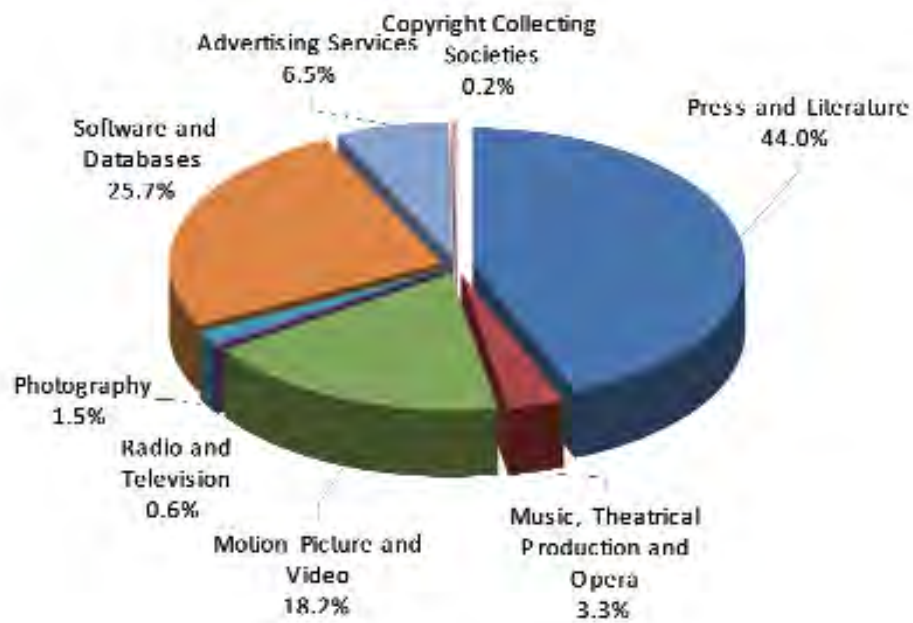




Chart 4.2 Employment in Core Copyright Industries by Sector, 2005

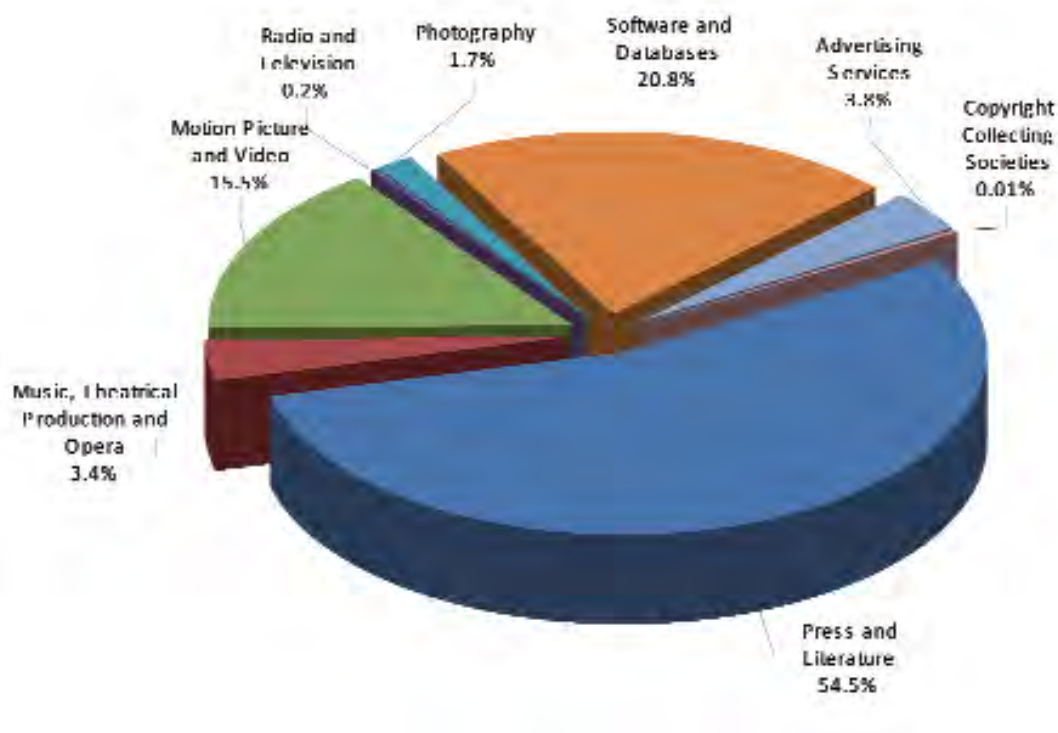


Table 4.2 Performance of Core Copyright-Based Industries

Copyright Based Industries	2000	2001	2002	2003	2004	2005	Growth Rate* (%) 2000-2005
Value Added (RM million)							
1. Theatrical/Opera	41.7	42.5	42.5	42.5	43.6	44.0	0.1
2. Music, theatrical production, opera	3.8	3.5	3.4	3.3	3.4	3.5	0.2
3. Motion picture and video	70.1	70.5	70.8	71.1	71.4	71.7	0.6
4. Radio and television	0.5	0.6	0.6	0.6	0.6	0.6	0.0
5. Photography	1.0	1.0	1.0	1.0	1.0	1.0	0.0
6. Software and databases	27.7	27.7	27.7	27.7	27.7	27.7	0.0
7. Advertising services	6.8	7.0	7.0	7.0	7.0	7.0	0.0
8. Copyright Collecting Societies	0.0	0.0	0.0	0.0	0.0	0.0	-0.0
Core copyright-based industries (RM million)	150.8 (6,310.0)	150.8 (6,351.0)	150.8 (1,320.7)	150.8 (12,001.9)	150.8 (10,000.2)	150.8 (10,190.0)	0
Employment (Number)							
1. Press and literature	46.8	43.0	41.7	42.0	43.2	44.0	11.1
2. Music, theatrical production, opera	3.3	3.6	3.6	3.7	3.6	3.6	7.9
3. Motion picture and video	18.7	18.0	15.7	16.4	15.0	15.0	7.4
4. Radio and television	0.2	0.2	0.2	0.2	0.2	0.2	0.0
5. Photography	2.4	2.3	2.0	1.9	1.8	1.7	3.3
6. Software and databases	24.8	18.0	22.5	22.0	21.4	20.8	7.2
7. Advertising services	4.1	4.2	3.9	3.9	3.9	3.8	0.0
8. Copyright Collecting Societies	0.02	0.02	0.01	0.01	0.01	0.01	3.8
Core copyright-based industries (Number)	100.0 (370,000)	100.0 (400,300)	100.0 (327,847)	100.0 (432,551)	100.0 (484,711)	100.0 (518,479)	10.8

Note: * Refers to the annual compounded growth rate in constant 2000 values.

4.2 Interdependent Copyright Industries

The interdependent copyright industry group produces products that are jointly consumed with core copyright industry products. There are seven industry subsectors within this group.

- TV sets, radios, VCRs & DVD players
- Computers and equipment
- Musical instruments
- Photographic and cinematographic instruments
- Photocopiers
- Blank recording material
- Paper

The economic contribution of the interdependent copyright industries has been on the rise. They were the fastest-growing copyright-based industry group, recording double-digit growth of some 19 per cent from 2000 to 2005 (Table 4.4). As a result, their contribution to GDP almost doubled from 1.2 per cent in 2000 to 2.1 per cent in 2005 (Table 4.3). There was a significant jump of about 10 percentage points in term of their value-added share of the total copyright-based industries. However, their employment share increased only marginally, reflecting the higher capital intensity of their key subsector, i.e. TV sets, radios, VCRs and DVD players.

The two largest subsectors within this industry group are the manufacture of products used for transmitting copyrighted works such as TV sets, radios, VCRs and DVD players, and computers and equipment. Together, they contributed close to 90 per cent of the value added and employment of the interdependent copyright industries (Charts 4.3 and 4.4). These are long-established industries in the country and have a relatively high level of R&D and innovation.

Table 4.3 Contribution of Interdependent Copyright Industries, 2000-2005

Year	Value Added			Employment		
	RM million	Contribution to GDP (%)	Share of Total Copyright Industries (%)	Thousand	Contribution to National Employment (%)	Share of Total Copyright Industries
2000	4,320.7	1.2	25.6	100.8	1.1	20.5
2001	5,180.5	1.6	29.3	129.2	1.5	23.6
2002	6,232.8	1.8	29.7	157.8	1.4	22.3
2003	7,034.1	1.7	30.1	145.5	1.5	21.6
2004	8,982.0	1.9	34.2	178.9	1.7	20.6
2005	11,024.7	2.1	36.5	176.3	1.6	21.6

Two of the smaller industries, i.e. photographic and cinematographic instruments and blank recording equipment, recorded relatively high double-digit growth from 2000 to 2005 (Table 4.4). On the other hand, both photocopiers and musical instrument registered negative growth.



Chart 4.3 Value Added of Independent Copyright Industries by Sector, 2005

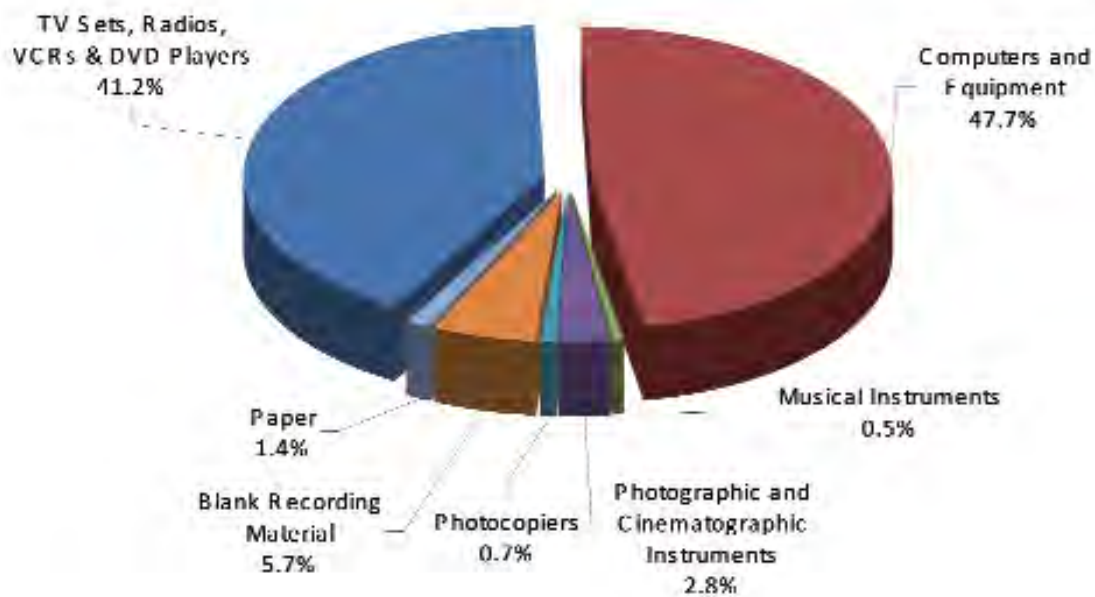


Chart 4.4 Employment in Interdependent Copyright Industries by Sector, 2005

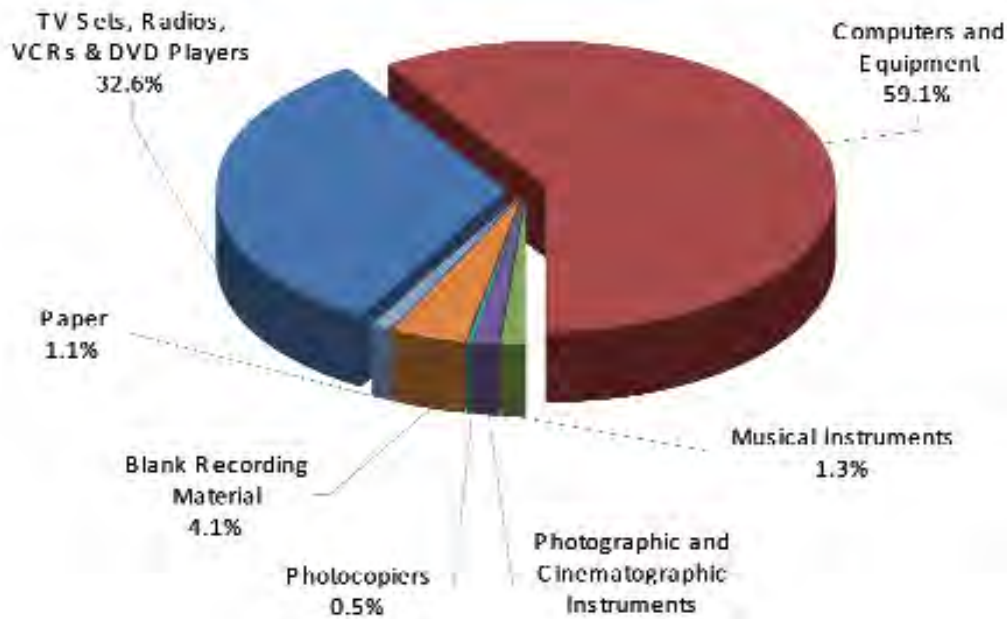


Table 4.4 Performance of Interdependent Copyright Industries

Industries	2000	2001	2002	2003	2004	2005	Growth Rate* (%) 2000-2005
Value Added (Percentage)							
1. TV sets, radios, VCRs, and DVD players	30.8	30.7	28.1	28.1	28.0	21.2	00.0
2. Computers and equipment	58.4	47.8	46.0	50.0	50.0	47.7	14.0
3. Musical instruments	1.7	1.4	1.2	0.6	0.7	0.0	-0.6
4. Photographic and cinematographic instruments	1.0	1.0	2.2	1.0	2.6	2.8	83.8
5. Photocopiers	3.2	1.4	1.4	0.0	0.8	0.7	13.0
6. Blank recording equipment	9.2	4.7	5.8	5.8	5.0	5.7	17.3
7. Paper	8.0	2.3	1.0	1.5	1.8	1.4	-2.1
Interdependent copyright-based industries (Number)	100.0 (4,320.7)	100.0 (5,480.5)	100.0 (6,232.8)	100.0 (7,094.7)	100.0 (8,052.0)	100.0 (11,024.7)	19.2
Employment (Percentage)							
1. TV sets, radios, VCRs, and DVD players	1.8	25.8	20.7	20.2	25.7	23.8	10.8
2. Computers and equipment	61.1	64.4	61.5	61.5	65.4	62.7	-5.1
3. Musical instruments	2.5	1.8	1.8	1.8	1.5	1.1	-1.4
4. Photographic and cinematographic instruments	2.3	1.9	1.7	1.8	1.8	1.4	-1.4
5. Photocopiers	1.7	0.8	0.1	0.1	0.8	0.8	-7.0
6. Blank recording equipment	8.7	5.4	5.4	4.5	4.0	4.1	0.4
7. Paper	1.1	1.0	0.8	1.2	1.1	1.1	1.0
Interdependent copyright-based industries (RM million)	100.0 (165.8)	100.0 (138.8)	100.0 (137.7)	100.0 (145.5)	100.0 (168.4)	100.0 (177.0)	-

Note: * Refers to the annual compounded growth rate in constant 2000 values.

4.3. Partial Copyright Industries

The partial copyright industries are industries in which only a part of the production is linked to copyright protected material, and there are nine industry sub-sectors within the partial copyright industry group:

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

The partial copyright industries grew at a similar pace as the economy, contributing some 0.8 per cent to GDP and about 0.7 per cent to national employment in 2005 (Table 4.5). Their share of the total copyright-based industries was about 11 per cent in terms of value added and about 12 per cent in terms of employment in 2005. The relative size of this industry group has been on the decline since 2000, with the rapid expansion of the interdependent copyright industry group.

Textiles, apparel and footwear, and furniture are relatively large export industries in the country, and hence their share in the partial copyright industry groups was relatively high. The textiles subsector accounted for about 40 per cent of the value added, while the furniture industry share was around 37 per cent (Chart 4.6). These two subsectors further accounted for about 84 per cent of total employment in the partial copyright industries. The rest of the industries are relatively insignificant, though architecture, engineering and surveying, and interior design grew twice as fast as the partial copyright industry group as a whole (Table 4.6).



Table 4.5 Contribution of Partial Copyright Industries, 2000-2005

Year	Value Added			Employment		
	RM million	Contribution to GDP (%)	Share of Total Copyright Industries (%)	Thousand	Contribution to National Employment (%)	Share of Total Copyright Industries
2000	2,924.4	0.8	17.4	61.8	0.7	13.2
2001	2,893.1	0.8	15.5	64.6	0.7	11.8
2002	3,119.6	0.8	14.9	73.0	0.8	11.8
2003	3,450.7	0.8	14.8	86.9	0.9	12.9
2004	3,269.2	0.7	12.5	89.2	0.9	12.9
2005	3,452.0	0.7	11.4	90.6	0.9	12.2

The handicrafts industry in the country falls under the partial copyright industry group. Although the industry is relatively small, it plays a vital role in promoting the cultural heritage of the economy and is closely linked to the flourishing tourism industry. In 2007, there were a total of 6,167 firms, with about 94 per cent classified as microenterprises, meaning that they employ less than five full-time staff. About 80 per cent were wood and textile-based craft producers. The total market size was RM489 million, of which half was for the export market. This industry currently employs an estimated 12,073 workers (Zuraida, 2008).

The Malaysian Handicraft Development Corporation provides assistance with research and development. It informs craftsmen about new products and assists with the marketing and promotion of products in both local and global markets. It has also set up innovation centers to help craftsmen design new products. The Corporation has embarked on entrepreneur development through the "One District, One Industry" Program and the incubator scheme, and provides financial, technical and other support services to the entrepreneurs. It is further involved in crafts preservation and restoration. It has a National Craft Institute offering training programs in batik making, weaving, woodcraft, rattan craft, ceramic and metalwork. Copyright in the Malaysian handicraft industry is handled by the World Handicraft Council.

Chart 4.5 Value Added of Partial Copyright Industries by Sector, 2005

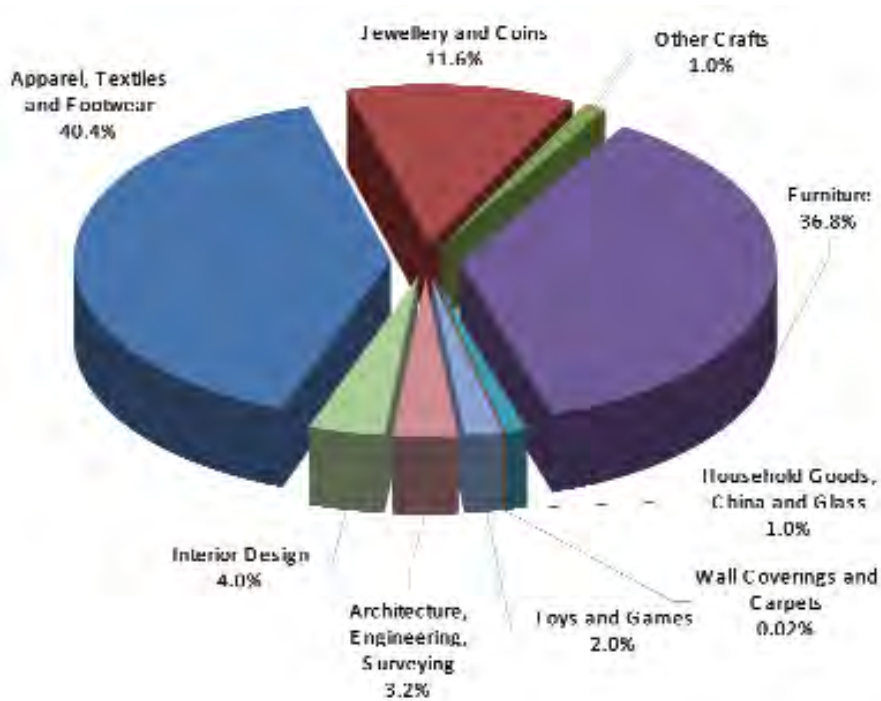


Chart 4.6 Employment in Partial Copyright Industries by Sector, 2005

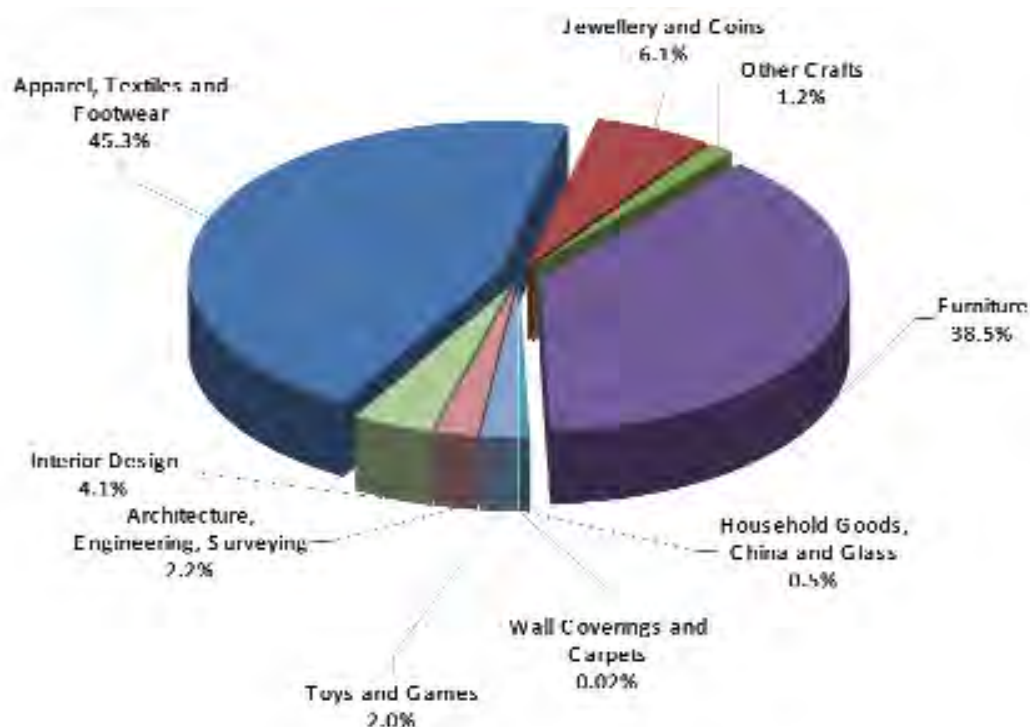


Table 4.6 Performance of Partial Copyright Industries

Industry	2000	2001	2002	2003	2004	2005	Growth Rate* (%) 2000-2005
Value Added (Percentage)							
1. Apparel, textiles and footwear	65.0	66.0	65.5	64.7	65.2	66.8	6.8
2. Jewellery	10.2	10.7	10.4	9.8	11.6	11.8	6.1
3. Other crafts	0.9	1.0	1.0	0.9	1.0	1.0	4.1
4. Furniture	33.8	31.9	33.7	35.5	35.4	36.8	5.1
5. Household goods, china and glass	0.9	0.8	0.8	0.8	1.0	1.0	4.3
6. Wall coverings and carpets	0.03	0.03	0.02	0.02	0.02	0.02	0.1
7. Toys and games	2.2	2.0	2.1	1.9	2.1	2.3	1.2
8. Architecture, engineering & surveying	2.2	2.4	2.4	2.6	3.2	3.2	7.9
9. Interior design	4.1	4.6	4.6	4.5	4.8	4.8	7.8
Total Partial Copyright Industries (RM Million)	100.0 (12,824.4)	100.0 (12,892.1)	100.0 (12,798.8)	100.0 (12,495.7)	100.0 (12,654.2)	100.0 (12,452.4)	- 3.4
Employment (Percentage)							
1. Apparel, textiles and footwear	25.8	32.0	33.7	33.7	41.1	46.4	17.9
2. Jewellery	8.3	8.0	8.0	7.0	7.9	6.1	1.4
3. Other crafts	1.8	1.4	1.8	1.2	1.2	1.2	0.9
4. Furniture	49.3	46.0	46.0	49.5	41.1	39.0	2.8
5. Household goods, china and glass	0.7	0.6	0.6	0.6	0.6	0.6	1.8
6. Wall coverings and carpets	0.03	0.03	0.02	0.02	0.02	0.02	0.2
7. Toys and games	3.5	3.1	3.4	3.2	2.1	2.0	-3.0
8. Architecture, engineering & surveying	2.0	2.0	2.0	2.2	2.2	2.2	0.0
9. Interior design	4.0	4.9	4.9	4.1	4.4	4.1	5.8
Total Partial Copyright Industries (Number)	100.0 (67,831)	100.0 (67,690)	100.0 (70,007)	100.0 (66,848)	100.0 (68,297)	100.0 (68,076)	- 7.7

Note: * Refers to the annual compounded growth rate in constant 2000 values.

4.4. Non-Dedicated Support Industries

The non-dedicated support industries consist of the following distributive and the telecommunications industry subsectors:

- General wholesale and retail
- General transportation
- Telephony and Internet

Table 4.7 Contribution of Non-Dedicated Support Industries, 2000-2005

Year	Value Added			Employment		
	RM million	Contribution to GDP (%)	Share of Total Copyright Industries (%)	Thousand	Contribution to National Employment (%)	Share of Total Copyright Industries
2000	272.9	0.1	1.6	15.8	0.2	3.2
2001	335.8	0.1	1.8	18.0	0.2	3.3
2002	378.0	0.1	1.6	18.3	0.2	3.0
2003	482.0	0.1	1.6	17.8	0.2	2.6
2004	456.1	0.1	1.7	20.4	0.2	2.8
2005	500.8	0.1	1.7	22.6	0.2	2.8

The contribution of this industry is minimal both in terms of value added and employment. Its contribution to GDP was 0.1 per cent, while its share of national employment was 0.2 per cent. These estimates have remained constant from 2000 to 2005 (Table 4.7).

The industry accounted for some two per cent of the total value added of the total copyright-based industries and about three per cent of employment. Nonetheless, this industry group outperformed the economy both in terms of value added and employment, driven primarily by the rapid expansion of the wholesale and retail industries, reflecting a shift to a service-led economy. The value added and employment of the wholesale and retail subsector grew at about 12 per cent per annum between 2000 and 2005 (Table 4.8). It was also the largest subsector, accounting for an overwhelming 99.6 per cent of the total value added of the non-dedicated support industry group. However, it accounted for only a quarter of the total employment in this industry group.

Chart 4.7 Value Added of Non-Dedicated Support Industries by Sector, 2005

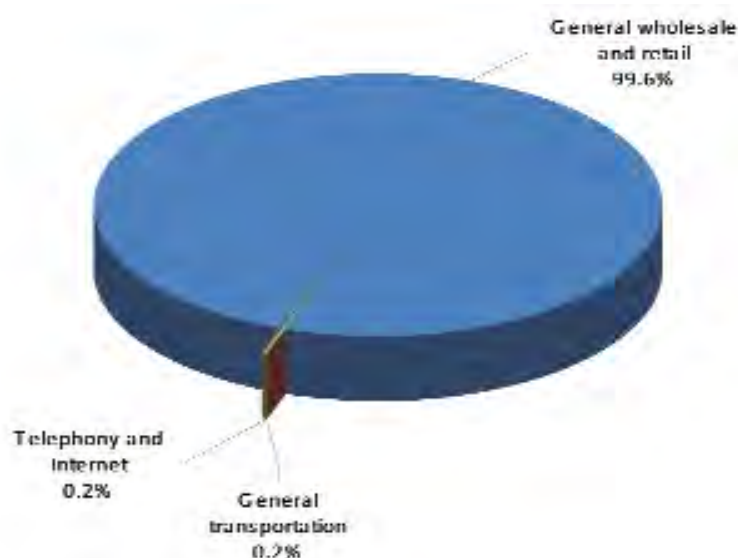


Chart 4.8 Employment in Non-Dedicated Support Industries by Sector, 2005

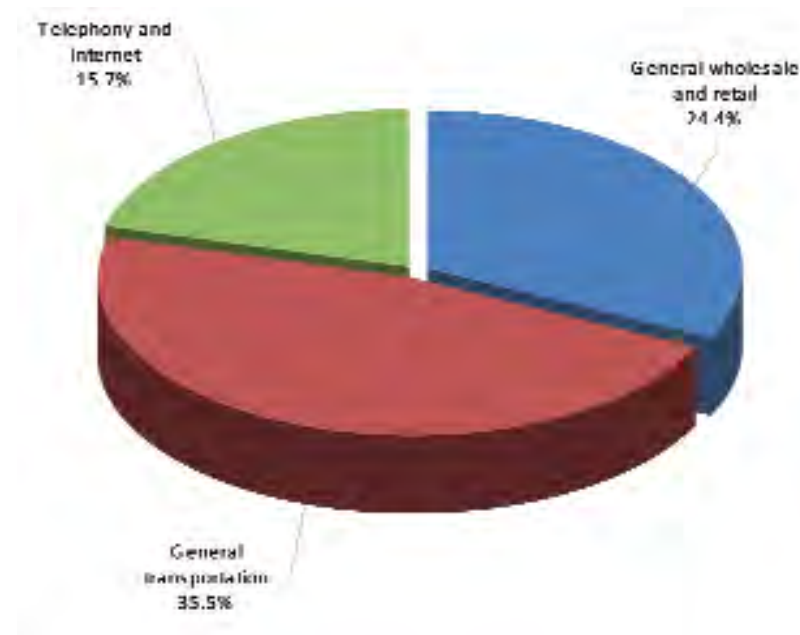


Table 4.8 Performance of Non-Dedicated Support Industries

Industry	2000	2001	2002	2003	2004	2005	Growth Rate* (%) (2000-2005)
(Value Added) (Percentage)							
1. General wholesale and retail	89.0	89.0	89.0	89.0	89.0	89.0	10.0
2. General transportation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Telephony and Internet	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Non-Dedicated Support Industries (RM Million)	100.0 (272.0)	100.0 (385.8)	100.0 (878.0)	100.0 (582.0)	100.0 (456.1)	100.0 (290.5)	11.0
(Employment) (Percentage)							
1. General wholesale and retail	20.1	21.1	22.0	22.6	24.0	24.0	12.0
2. General transportation	41.4	38.0	37.1	38.1	30.0	35.4	4.8
3. Telephony and Internet	18.4	19.0	17.0	21.8	15.2	15.7	4.8
Total Non-Dedicated Support Industries (Number)	100.0 (10,420)	100.0 (22,780)	100.0 (23,101)	100.0 (22,029)	100.0 (27,045)	100.0 (20,291)	1.0

Note: * Refers to the annual compounded growth rate in constant 2000 values.

5. Profile of Selected Core Copyright Industries

5.1 Press and Literature

The publishing industry is largely driven by the private sector, and caters for a relatively small³ but rapidly expanding domestic market. Vastly improved literacy and education levels, higher standards of living and increased purchasing power have boosted the performance and prospects of the publishing industry.

There has also been renewed public policy support to revitalize the industry to keep abreast of developments in the other sectors of the economy. The Government recognizes the integral role of the publishing industry in fostering knowledge-based industries and in its drive to attain developed nation status by 2020.

The National Book Policy formulated in 1985 is being reviewed to transform the industry into a more vibrant and integrated publishing sector. Some key initiatives include strengthening the National Book Council to oversee the implementation of the National Book Policy, reviewing existing laws impinging upon the performance of the publishing industry, and addressing outstanding issues and problems facing the industry.

The Government has carried out numerous reading campaigns to inculcate the reading habit amongst Malaysians. A Division for the Promotion of Reading was established in 1991 at the National Library. In 2003, the Division was restructured into a section called the Information Literacy Movement Division to incorporate new literacy skills into information and communications technology. Since 1995, the month of August, recently changed to July, has been National Reading Month.

Value added in the publishing industry is currently estimated at RM1.8 billion; together with the printing industry, this subsector accounted for about 44 per cent of core copyright industries. There are around 500 publishers, though only an estimated one-third is very active. The majority of publishing companies are small privately owned companies with less than 50 employees (Ng, 2005). There are also some fully-owned or quasi government bodies⁴, including the university press or publishing departments that carry out in-house publishing.

The activities of the publishing industry include the publication of: (1) serials, i.e. almanacs, annuals and yearbooks, bulletins and newsletters, directories and gazettes, indexes and abstracts, journals and periodicals, laws and statutes, monograph series, newspapers, patents and standards, proceedings and transactions published in all the four main languages spoken in the country, i.e. Bahasa Melayu (Malay), English, Chinese and Tamil (Norma Bahri, 1999); (2) books, i.e. school textbooks, including workbooks and reference books, novels, biographies and memoirs, travel books, cookbooks, inspirational and religious books; (3) commercial printing, i.e. cards, envelopes, forms, brochures, posters/ advertising material and calendars; (4) security printing, i.e. stamps, legal tender, bank forms and passbooks; (5) office supply printing, i.e. receipt books, business forms and invoices; (6) packaging materials; and (7) software-related printing services such as typesetting, graphic illustration, imaging and Web design.

Publication of books for children and for the total educational market is currently the most lucrative. Parents are now more conscious of the need for an early start to education and are sending their children to preschools, thus creating increased demand for pre-school literature. There is also support from the

³The current rate of publication is less than 10,000 titles per year compared to Taiwan (whose population is comparable to Malaysia) which publishes about 30,000 titles annually.

⁴The Government Printers, Percetakan Nasional, was corporatized in 1987 and is the main publisher for all government documents such as annual reports, laws and statutes and brochures.

Government to expand preschool education, especially to the rural areas. According to industry sources, the number of titles of children's books published has increased from 188 in 1980 to an annual average of about 2,000 titles in the 1990s to around 5,000 in 2007.

The majority (about 70 per cent) of the publishers are engaged in the production of school textbooks and related materials such as workbooks and reference books. The publishing of schoolbooks is a captive market, and publishers compete to secure annual government contracts estimated at RM100 million to provide books for schools under the Textbook Loan Scheme. However, with the recent introduction of the 100 per cent textbook-on-loan scheme policy for all schoolchildren, these publishers are experiencing a decline in the school textbook market as the books are being recycled. In addition, the approved textbooks used in all schools have been revised, leading to a significant drop in the use of supplementary books and workbooks (Law, 2008b).

However, the industry is undergoing greater diversification with increasing demand for the production of trade books, juvenile paperback, illustration books, travel guidebooks, biographies and memoirs, cookbooks, inspirational and religious books as well as other local titles. Print runs of some local titles have hit 150,000 copies, which was unheard of in the past. There has also been an increase in the demand for and supply of academic and scholarly books with the increase in local tertiary education since the mid-1990s following the liberalization of the tertiary education market. Consumer magazine publishing is also a rapidly growing market segment. At present, there are 15 magazine publishers who are members of the Magazine Publishers Association Malaysia producing around 131 major magazines in the country.

Based on new books received and registered by the National Library in accordance with the Library Depository Act, 1986, the total books registered in 2007 was 11,623, which represents a twofold increase since 1997⁵ (Table 5.1). Of this, 43 per cent were children's books, followed by adult books at about 32 per cent, while the remaining one-fifth consisted of school textbooks.

Table 5.1 New Books Registered with the National Library, 1997–2007

Type of Books	1997	2003	2004	2005	2006	2007
Textbooks	1,553	1,941	1,189	3,863	5,493	2,325
Children	2,383	3,420	1,003	2,470	3,929	5,040
Adult	1,621	2,268	2,539	3,977	5,141	3,658
Total	5,557	7,629	4,725	10,310	14,563	11,623

Note: The figures are based on books registered with the National Library under the Deposit of the Library Materials Act, 1986.

Source: Adapted from Law (2008b).

The traditional publishing industry has also embraced new electronic formats, venturing into online publishing, marketing and sales. A number of academic publishers have published digital books as well as online academic journals. Several online bookstores have emerged to promote and sell books online. Dewan Bahasa and Pustaka⁶ launched an e-publishing portal called KaryaNet in 2002, a virtual production house aimed at writers wishing to produce and disseminate books in the Malay language in all fields.

⁵ Books registered with the National Library under the Library Deposit Act, 1987 are underestimates of the total books published since not all the books published are registered with the National Library. The figures however do reflect broad trends in the book publishing industry.

⁶ The Dewan Bahasa and Pustaka is a quasi government body set up with the main objective of developing the national language (Bahasa Melayu) and literature.



The print media includes seven major daily newspapers and tabloids in English, four in Bahasa Melayu, three in Mandarin and two in Tamil. In addition, there are four main dailies in the states of Sabah and Sarawak. A survey conducted by AGB Nielson Media Research on Malaysian newspaper readership for the year 2007 shows that the dailies in the national language have the highest readership, with *Harian Metro* leading with 1.98 million readers, followed by *Berita Harian* at 1.27 million readers (Table 5.2). Of the two main English dailies, *The Star* has 1.12 million readers, while the *New Straits Times* is far behind with 330,000 readers.

In the late 1990s, many newspaper dailies ventured into the world of multimedia and launched limited online news through their websites. In 1997, *Utusan Malaysia On-Line* became the first paid-subscriber online newspaper to provide an exact replica of the Group's newspapers, including *Utusan Malaysia*⁷. This effort was followed by *Malaysiakini*, a purely online newspaper with paid-subscribers. In addition, there is a free newspaper, *The Sun*.

Table 5.2 Newspaper Readership in Malaysia, 2007

Daily Newspaper	Readership
Bahasa Melayu Daily	
Berita Metro	1.98 million
Berita Harian	1.27 million
Utusan Malaysia	1.10 million
English Dailies	
The Star	1.12 million
New Straits Times	330,000
Chinese Dailies	
Sin Chew Daily	1.17 million
China Press	659,000
Guang Ming	400,000

Source: AGB Nielson Media Research

The development of the publishing industry is well supported by a number of industry organizations such as the National Book Council, the Malaysian Book Industry Council, the Malaysian Book Publishers Association (MABOPA) and the Magazine Publishers Association of Malaysia, as well as associations representing writers such the National Writers Association or GAPENA. The main body representing writers, GAPENA is an umbrella organization of 23 writers' associations.

The National Book Council of Malaysia was established under the Ministry of Education in 1968 as a professional and advisory body for the development of the book industry. It is a non-profit body with members from the public and private sectors supported by a full-time secretariat under the Ministry of Education. The main objective of the Council is to promote professionalism in the book industry, coordinate book development activities, encourage reading habits and facilitate negotiations among the producers and consumers involved in the book business.

The Malaysian Book Industry Council (MBIC) (formerly known as the Malaysian Book Trade Council) is an informal non-profit organization with representatives from the various book trade associations, namely MABOPA, the Malaysian Book Sellers Association (MBA), the Malay Publishers Association (IKATAN), the

⁷In July 2001, the newspaper group launched the "Utusan Education Portal" that is free of charge.

Malaysian Book Importers Association (MBIA) and the Malaysian Book Contractors Association (MBCA). In 1993, MBIC set up a company called the Malaysian Book Promotion Sdn. Bhd. with equal paid-up capital by all members except MBCA. One of the main functions of the MBIC is to help manage and organize the Kuala Lumpur International Book Fair. The Malaysian Book Publishers Association (MABOPA) established in 1969 represents about 150 publishers. It is the main organization that liaises with the Government on behalf of the publishing companies to represent and advance the interests of the industry.

The publishing industry faces stiff competition from imported books which are superior in content and quality and offer wider variety for general reading. More than 60 per cent of the academic and university books are currently imported (Ng, 2005). The majority of the local authors view writing as a hobby or a secondary profession and hence pay scant attention to their copyright. The level of copyright awareness among authors is low and some authors prefer to sell their publishing rights to the publisher in return for a lump sum payment. There is a need for industry organizations to play a greater role in promoting copyright awareness among writers and authors.

Many of the publishing companies are small and encounter difficulties in accessing funds to modernize their operations. Industry players attribute this to low market demand, short shelf life for Malaysian books in major chain stores, high distribution costs and overheads. Retailers are also known to demand high discounts, and many publishers sell on a consignment basis and hence shoulder the risks in the event of poor sales.

The reading culture in the country has improved significantly with the increasing level of education and purchasing power, but in contrast to many countries in a similar stage of development, Malaysia's tradition of book authorship, readership and ownership remains relatively weak. Malaysian books have yet to make a strong presence in the global market.

Book piracy and infringement through illegal photocopying, especially by university students, is a perennial problem. At present, there is no copyright collecting society for the publishing industry. Also known as rights reproduction organizations (RROs), they play an important role in protecting the copyright of authors and publishers of educational materials by licensing the copying of such publications (Law, 2008a).

The advent of information technology has altered the landscape of the publishing industry, posing tremendous challenges and opportunities. The growth of the Internet and portable technology such as e-books or personal digital assistants (PDAs) has spurred the growth of electronic publishing or e-publishing. Publishers are now compelled to rise to new challenges of delivering content to consumers in new formats. Authors too can take advantage of these new developments by turning into publishers by publishing their own books online at minimal or zero cost.

Though the industry faces enormous challenges, there are a number of positive factors that augur well for the growth and development of the publishing industry. These include the relatively high level of literacy, strong State support for education at all levels, rapid expansion of private tertiary education, strong emphasis on and commitment to the development of information technology, and an overall positive investment climate.

5.2 Music, Theatrical Production and Opera

The Music Industry

Music, theatrical production and opera as a whole is a relatively small subsector of the core copyright industry group, accounting for some three per cent of value added and employment in 2005. The music industry is a highly competitive industry and faces tremendous challenges and opportunities following rapid advancements in ICTs.

The industry has undergone significant transformation worldwide and the Malaysian music industry is no exception. The local industry has evolved from music entertainment via the Radio Malaya stations in the 1940s to gramophone records in the 1950s, vinyl records and open-reel tape recorders in the 1960s, and hi-fi systems in the 1970s. Since the 1970s, technological advancements have made music cheaper and more accessible to a wider audience through the mass production of radios, cassette players and cartridges. The increasing affluence of Malaysians and the international demonstration effects on the local music scene have contributed to the expansion and diversification of the local music industry. The 1970s witnessed the growth of new musical outlets such as dance clubs and discos, while in the latter part of the 1980s karaoke outlets were set up. By the mid-1990s, compact discs (CDs) were popular and became the main medium for musical videos. The advent of CDs has revolutionized the entire music industry and has heightened challenges in addressing piracy.

Currently, there are about 65 active recording companies in Malaysia and the main players include Universal Music Malaysia⁸, Warner Music, EMI and Sony BMG. Together they control some 80 per cent of the music market in Malaysia. These are large global companies with a local presence, and they control the manufacture, marketing, sales and distribution of recorded music through a network of subsidiaries, joint ventures and licensees. There are also a handful of successful home-based independent recording companies such as Life Records (Manisekaran, 2005).

The value chain in the music industry consists of five key areas: artistes and repertoire, recording, production, marketing and sales. Each of these operates as a unique component of the music industry but with multiple close ties between the various individuals such as artistes, songwriters, composers, musicians and producers, who in turn deal with the record companies, production houses, recording studios and publishers.

One of the foremost challenges facing the industry is piracy. Technology has drastically altered access to music products. Previously, customers had to purchase music products from retail outlets, but now they can resort to pirated sources, own devices or the Internet. The incidence of piracy has increased with the advent of optical discs that ensure high-quality reproduction of music. Those peddling pirated music are able to sell at unimaginably low prices and such pirated music is readily available in major stores, let alone open night markets. Producers of genuine music find it exceedingly difficult to compete with these pirated versions as their average costs are greater due to sales tax, advertisements, royalties and higher overheads. Technological advancements and competitively priced technological gadgets have also enabled customers to create their own optical discs. The availability of CD burners along with personal computers allows users to burn CDs for personal consumption as well as for sale using one master CD.

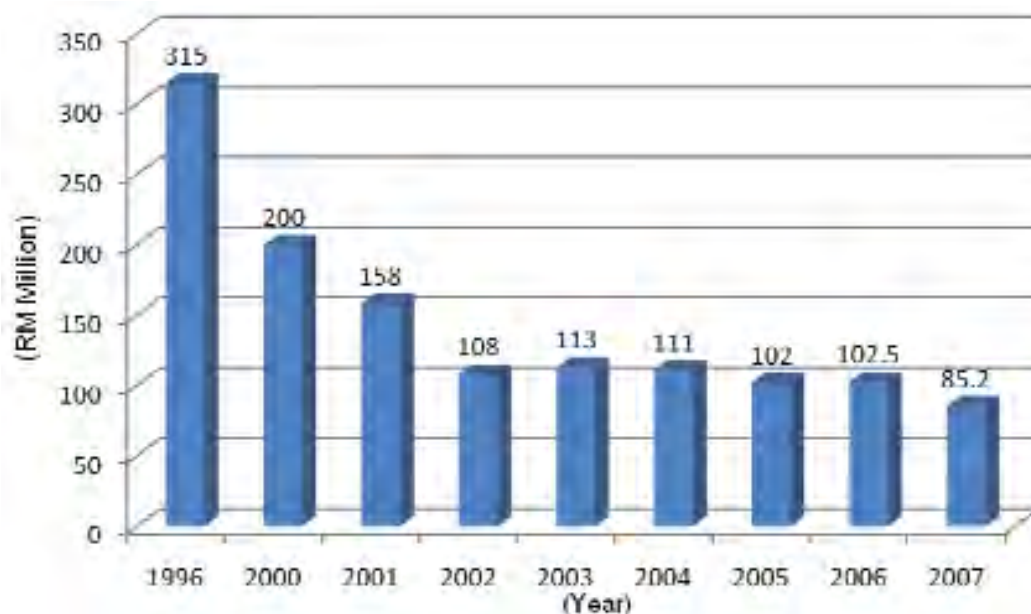
⁸ Universal Music Malaysia was formed in 1995 as the Malaysian branch of the Universal Music Group (UMG). In 1998 it merged with Polygram Recording Company that was in existence since 1988. UMG leads the music industry accounting for about a quarter of the global sales.

Yet the music industry is most affected by the downloading of music from Internet sites, some of which offer free music while others are legal sites that sell online. Downloading and burning are done in the privacy of homes and are difficult to monitor. Sites proposing free music offer what is known as “world music” ranging from traditional to modern music in all languages. Such sites are popular among music fans, who download songs onto their computers and later burn them onto optical discs.

According to industry sources, the music industry is a high-risk business with a mere 10 per cent chance of commercial success. Home-production of CDs and the easy availability of cheaper pirated versions have reduced the turnover of companies by as much as 50 per cent over the last decade or so, impacting new investment. For instance, Universal Music Malaysia, a leader in the music industry, experienced a drastic reduction in its turnover from about RM38 million in 1995 to RM20 million in 2005 (Manisekaran, 2005). For the industry as a whole, income from total recorded music sold fell sharply from RM315 million in 1996 to RM113 million in 2003, and has since declined gradually to 85.2 million in 2007 (Chart 5.1). The number of legitimate retail outlets has also declined, as retailers find it difficult to survive under current market conditions.

The decreasing number of new recordings reflects fewer entrants into the music industry, including artistes, songwriters, composers and studio workers such as sound engineers. Recording companies prefer the few well-known artistes who dominate the industry. Many songwriters and composers find it difficult to earn a living from songwriting and composing and the majority rely on a more permanent job for a steady income. Most local artistes rarely have staying power and last at most 5 to 10 years in the profession. Very few local artistes succeed in breaking into the international market (Manisekaran, 2005).

Chart 5.1 Total Recorded Music Sold*



Note: * Includes physical music, digital music, & mobile music

Source: Recording Industry Association of Malaysia

Apart from piracy that has cut into their margins, the music industry has been battling rising production costs. There has been a sharp increase in advertising and marketing costs. Every media platform, such as radio, TV, press and magazine, has raised advertising rates for the music industry by more than 30 per cent. The recent petrol price hike has likewise pushed up distribution and delivery costs.

On a positive note, concerts and performances have become a valuable source of income for artistes. By giving live performances, artistes have been able to showcase their skills and talents, improve their stagecraft and help market their albums. In addition, the Annual Music Industry Award (Anugerah Industri Muzik), introduced in 1994 to honor local talents and give due recognition to artistes, musicians, composers, producers and others involved in the production of an album, has been a resounding success. It has been able to command an extensive television viewership, capture a regional audience and help promote artistes, both locally and regionally.

The interests of the music industry in Malaysia are represented by the Recording Industry Association of Malaysia (RIM). This body currently represents 112 recording companies engaged in the production, manufacturing and distribution of local and international sound, music video and karaoke recordings, which account for some 95 per cent of the legitimate recordings in the music market⁹. Its main functions include the protection of intellectual property rights of recording companies and the rights of the artistes, as well as monitoring and reviewing legislation, regulation and policies affecting the music industry. It works with the Government at various levels to fight music piracy.

In 2000, an umbrella body called the Persatuan Karyawan Malaysia or KARYAWAN was formed to look after the welfare of all creative and performing artistes in Malaysia, i.e. all those involved in the music, film, entertainment and broadcasting industries. Its objectives go beyond the protection of copyright to include a wide range of issues facing the local entertainment industry, such as:

- Limited formal representation at the governmental level;
- Unemployment of musicians, singers and actors;
- Lack of talent sourcing activities;
- Lack of long-term financial retirement plan;
- Lack of social or welfare services;
- Lack of professional training and education;
- Lack of management know-how;
- Lack of protection for artistes' rights.

KARYAWAN has successfully initiated a number of programs to assist those in the entertainment industry. With respect to the financial retirement plan, KARYAWAN had created a pension scheme in 2004 for legendary and veteran artistes who had made an invaluable contribution to the country's entertainment industry. Since the creation of the pension scheme, eight legendary artistes who had contributed immensely to the arts and entertainment industry have been receiving a total of RM500 per month and will continue to do so for the rest of their lives (Manisekaran, 2005).

In an attempt to revive the spirit of the local artistes and to discover hidden talents, a new program called Akademi Fantasia was introduced in 2003 with the support of the private pay station ASTRO. This annual event has been well received by the Malaysian public and has led to the discovery of new talents.

⁹Source: Recording Industry of Malaysia: <http://www.rim.org.my>.

A number of measures have been introduced by the Government to address piracy inherent in the music industry. A high-level Task Force was formed in 1999 consisting of relevant government bodies and industry members to seek solutions to reduce the incidence of piracy. In 2003, a National Anti-Piracy Campaign was launched with the support of local artistes and the recording industries.

The Optical Discs Act was introduced in 2000 to curb piracy at the manufacturing level. The manufacturing of optical discs could not take place without a valid license and a manufacturing code. Manufacturers are also required to keep records of raw materials, suppliers and customers. Forensic tests have been carried out on seized optical discs in order to trace the source of production. Hologram stickers were introduced in 2002¹⁰ to enable customers to distinguish between counterfeit and original products. The stickers were placed on all mediums or devices on which data may be stored in digital form and read by means of laser or any other means such as CD, VCD, CD ROM, DVD, LD, video cassette or audio cassette. The enforcement division was beefed up with additional manpower to ensure effective enforcement of the Copyright Act. All of these measures have led to a drop in the incidence of piracy in the country.

Theatrical Production and Opera

The performing arts industry in the country can be divided into traditional vs modern or contemporary theatre.

Traditional theatre in Malaysia long remained a very small industry with the majority of performers working on a part-time basis. At present, traditional theatre is performed at functions and arts festivals and is closely associated with the tourism industry and the promotion of national culture and heritage. Performances are also put on at the international level as part and parcel of arts festivals and tourism promotions.

Traditional theatre essentially consists of the Malay Opera or *Bangsawan*, the *Mak Yong*,¹¹ a traditional dance-drama, and the *Wayang Kulit* or shadow puppet performance. The Malay Opera was a popular form of entertainment until the advent of television. The *Wayang Kulit* is the most well known of the performing arts outside Malaysia and is most popular in the state of Kelantan. Like dance drama, the impact of cinema and television has resulted in a decline in the art form. Today, there are only a handful of master puppeteers known as *dalangs*. The Chinese opera which was popular until the 1960s is now a fading industry.

Modern Malaysian theatre on the other hand first emerged in the capital city of Kuala Lumpur, and today there are companies and theatres in major cities around the country. Given the cultural diversity of the country, contemporary Malaysian theatre is diverse with productions in Bahasa Melayu, Chinese, Tamil and English. They include art forms ranging from comedy and mime to puppetry and children's theatre.

Contemporary theatre has made a comeback with the emergence of a number of new production companies since the late 1980s. These new companies established by some of the leading playwrights, actors and dancers have contributed to the growing professionalism and profitability of the performing arts industry, giving rise to a new breed of artistes who are able to survive solely as artistes.

Some of the leading companies that have taken the performing arts industry to new heights include The Actors Studio (TAS), The Five Arts Centre¹², Instant Café' Theatre and the Sutra Dance Company. The largest of these is TAS, which was set up by a husband-and-wife team in 1989 to stage meaningful theatre, nurture performing arts in the young, and provide training in acting, music, dance, creative movement, creative writing, singing and production.¹³

¹⁰ The Trade Description (Original Label) Order 2002 took effect from 15 January 2003.

¹¹ *Mak Yong* is a traditional form of dance-drama from Pattani and Kelantan performed by all female casts. Similar to *Mak Yong* is the dance-drama of Kedah, known as *Mek Mulong*.

¹² The Five Arts Centre was established in 1983.

¹³ Source: TAS: <http://www.theactorsstudio.com.my>

TAS took the lead in the 1990s to improve the marketing and publicity of theatrical performances by successfully soliciting corporate sponsorship. Today, corporate support of the performing arts has increased within the context of corporate social responsibility.

TAS has actively engaged in the establishment of performance venues to ensure adequate space is available for regular performances. In 2005, TAS joined forces with another social and cultural foundation, Penyayang, establishing the Kuala Lumpur Performing Arts Centre (KLPAC) with corporate support. Today, KLPAC has become a national hub for performing arts in the country. KLPAC is well-equipped, with several studios and auditoriums and a performing arts academy. The Centre carries out professional training, workshops and lectures in all forms of performing arts.

State commitment to the performing arts had strengthened with the establishment of a separate new Ministry of Culture, Arts and Heritage¹⁴ in 2004 to promote and develop the industry. The new Ministry, now known as the Ministry of Unity, Culture, Arts and Heritage, has a wide range of programs to “highlight and popularize the arts and culture” and to “preserve the national heritage in its tangible and intangible form”.

5.3 Motion Picture and Video

The local film industry essentially consists of the Malay film industry that produces largely for the local Malay market. In recent years, however, a more Malaysian outlook has evolved with the emergence of a group of independent film makers whose low-budget productions are targeted at a wider international audience.¹⁵

Until the 1980s when the National Film Development Corporation (FINAS) was established, the local film industry was primarily driven by the private sector. However, the establishment of FINAS in 1981 set the stage for a larger State role in the film industry. The main objectives of FINAS are to promote, maintain and facilitate the development of the film industry in the country. In line with these objectives, the Corporation provides training, financial assistance, facilities and amenities, equipment, research and marketing. It also maintains a resource centre and grants licenses to members of the film industry.¹⁶

FINAS provides financial assistance under various schemes. Financing for the production of quality short films, documentary or animation, including script development, is provided under the Film Art and Multimedia Development Fund, which is managed by a committee comprising film-makers and film activists. Loans are also available under the Feature Film Loan Scheme handled by the Ministry of Unity, Culture, Arts and Heritage, FINAS and the Small and Medium Enterprise Bank. Funds are available for production costs as well as for publicity and promotion. Financing of up to RM1.5 million or not more than 90 per cent of production costs, whichever is lower, is available at an interest rate of four per cent per annum.

FINAS certifies all films produced in Malaysia, and principal photography cannot commence in the absence of a valid license from FINAS. A valid producer's license (also issued by FINAS) is a prerequisite for applying for a film license. All crew and cast must be registered with FINAS or be members of associations approved by FINAS.

Although access to exhibitions remains a contentious issue for Malaysian producers, FINAS does require mandatory screening of all films it certifies as Malaysian filmed in Bahasa Melayu. *Syarat Wajib Tayang* or the Compulsory Screening Scheme requires exhibitors to screen certified films for a minimum of seven consecutive days, after which the exhibitor can make a commercial determination about whether to extend

¹⁴ Previously, arts and culture was combined under the tourism industry and was known as Ministry of Culture, Arts and Tourism.

¹⁵ This group is led by producers like Amir Muhammad, James Lee, and Yasmin Ahmad. While their films have won accolades overseas, they continue to face difficulties at home, particularly with regard to censorship.

¹⁶ Source: FINAS, <http://www.finas.gov.my>.

the season. FINAS also determines the release dates for certified films in order to ensure that they are spread throughout the year and to avoid too many competing for audiences simultaneously.

A government entertainment tax of 25 per cent applies to cinema tickets. Producers of certified Bahasa Melayu language feature films can qualify for the Entertainment Tax Returns. For every Malaysian Ringgit of cinema tax raised from the release of certified films, 25 per cent is retained by the Government and the balance is split equally between the exhibitor and the producer.

With technological advancements such as digital video cameras, animation, graphic and editing software is readily available and affordable and has equipped the younger generation with the tools to make films. This has led to the emergence of a new breed of young independent film-makers with a more multiracial approach to film-making. Their films are produced in English or in languages commonly used in the country and hence fail to qualify for State support from FINAS. These films often have to battle with film censorship as they are deemed contrary to the local Malay culture.

Production of local movies has doubled, rising from 16 movies in 2003 to 30 movies in 2007 (Table 5.3). Likewise, the total number of other types of productions, such as drama, documentary and animation, increased steadily from 375 in 2003 to 527 in 2007 or by some 41 per cent. However, the cost of producing movies has escalated. The average cost of producing local movies increased by about 15 per cent from RM1.48 million in 2003 to RM1.7 million in 2007, while for other productions the increase was around 13 per cent over this period. The production of commercials also increased from 1,232 in 2003 to 1,677 in 2007. However, there was a noticeable decline in their average cost of production from RM0.08 million to RM 0.04 million or by 50 per cent during this period.

Local films face stiff competition from imported films. The total number of all types of films¹⁷ imported increased from 8,723 in 2004 to 9,282 in 2007. The Malaysian film market is multilingual, and the different market segments are served by films from the leading film industry centers around the world. The Malaysian Indian community is served by films from India, the Malaysian Chinese population by films from China, Hong Kong, Singapore and Taiwan and, given the similarity between Bahasa Melayu and Bahasa Indonesia, there is a ready local market for Indonesian films. In addition, local films have to compete with audiovisual material, including music from South Korea and Japan.



Table 5.3 Malaysian Film Industry Statistics, 2003-2007

Local films produced (number)	2003	2004	2005	2006	2007
Total production cost (RM million)	16	22	23	28	30
Average production cost: local films (RM million)	23.75	43.20	29.77	38.94	51.0
	1.48	1.96	1.29	1.39	1.7
Number of other productions (number)	375	528	527	615	527
Total production cost of other productions (RM million)	90.9	124.25	128.51	158.95	146.11
Average production cost: Other productions (RM million)	0.24	0.24	0.24	0.26	0.27
Number of commercial productions (number)	1,232	1,401	1,560	1,517	1,577
Total production costs of commercials (RM million)	98.19	63.64	101.10	84.62	73.86
Average production cost: commercial productions (RM million)	0.08	0.05	0.06	0.05	0.04
Import of all types of films (number)	-	8,723	11,508	11,508	9,282
Number of admissions (million)	12.8	16.7	25.9	27.9	33.6
Total box office takings (RM million)	172	205	241	255	326
Number of cinema screens (number)	203	215	222	247	388

Note: * Sourced from United International Pictures

Source: FINAS

The cinema exhibition industry, which was hard hit by the advent of home videos, has, however, witnessed a revival. Cinema admissions almost tripled from 12.8 million in 2003 to 33.6 million in 2007, despite the rise in ticket prices. One major development has been the shift from stand-alone movies to multiplexes which can house as many as 12 screens in one movie theatre. The trend is towards less seats and more ambience.

According to industry sources, the incidence of piracy has declined as the "newness" of pirated DVDs has faded. Total gross box office takings almost doubled from RM172 million in 2003 to RM326 million in 2007. As a result, some of the major local cinema chains, such as the Golden Screen Cinema and Tanjong Golden Village, have increased their investment. During this period, there was a twofold increase in the total number of screens from 203 in 2003 to 388 in 2007.

¹⁵ This includes feature, documentary, musical, animation, trailer, sports, commercial, comedy, promotion, reality TV, game shows and education films.

Table 5.4 Total Collection by Film Language, 2003-2007 (Percentage)

Year	Malay	Chinese	Tamil	English	Indonesia	Others	Total
2003	24.2	13.6	4.5	56.9	0.4	0.5	100.0 (96.74)
2004	21.9	17.5	3.7	53.2	0.1	3.8	100.0 (124.62)
2005	12.3	15.9	7.1	61.4	1.0	2.4	100.0 (217.35)
2006	12.6	16.8	4.7	60.8	0.7	4.4	100.0 (234.98)
2007	10.4	9.8	4.9	69.7	1.4	3.8	100.0 (289.31)

Note: Figures in parentheses denote RM million

Source: FINAS

Hollywood continues to dominate the local cinema industry, holding a market share of over 60 per cent since 2005 (Table 5.4). Tamil and Chinese movies also saw some growth during this period. In contrast, the share of collection from local Malay language movies declined by more than 10 percentage points from 24.2 per cent in 2003 to 10.4 per cent in 2007, despite the gradual increase in the number of local Malay films produced and released in the market. The commercial viability of Malay movies has weakened with the increase in production costs from some RM1.3 million per movie in 2005 to about RM1.7 million per movie in 2007 (Table 5.3).

5.4 Radio and Television

The broadcasting industry has evolved from radio to television to satellite TV. These shifts in broadcasting have paralleled a shift towards greater private sector participation with the liberalization and reregulation of the industry. At present, there are over 30 radio network stations, six television station operators, and one subscription television operator.

Public Broadcasting

The public broadcaster, Radio Television Malaysia (RTM), comes under the purview of the Malaysian Broadcasting Department, Ministry of Information. It provides very comprehensive service through 32 radio stations nationwide, two overseas broadcasting stations (Voice of Malaysia and Voice of Islam¹⁸) and two television channels (RTM 1 and RTM 2), together with a range of other services including publishing. Since 1995, it has hosted a website.¹⁹

In an increasingly competitive broadcasting environment, RTM provides multi-lingual schedules of cultural, educational and information programs, including its own daily news service, on both radio and television, to national audiences. Its emphasis is on original material.²⁰ At present, dramas are outsourced, with regular payments to the three copyright collecting societies.

¹⁸ Voice of Malaysia is broadcast in 8 languages, i.e. English, Malay, Mandarin, Arabic, Thai, Myanmar, Indonesian and Tagalog, while Voice of Islam is broadcast in Malay and English.

¹⁹ Source: Radio Televisyen Malaysia, www.rtm.gov.my.

²⁰ Source: Radio Televisyen Malaysia, see www.rtm.gov.my.

The objectives of RTM are to inform, educate, and entertain. Although it has a social responsibility, it has begun to emphasize economic performance. RTM was previously funded publicly through funds obtained from television licensing. Since the abolition of the television license, it has been subsidized by the State. In recent years, its revenue from advertisements has been on the rise, increasing 15 per cent from RM2.86 billion in 2006 to RM 3.28 billion in 2007.²¹

The television commercials industry is afforded some protection by the Made-in-Malaysia regulation, which specifies that all commercials for local products and services must be at least 70 per cent locally produced. Television commercials are also subject to the Malaysia Code of Advertising.

Commercial Broadcasting

There are two relatively large integrated media investment groups that carry out commercial broadcasting, i.e. Media Prima Berhad (MPB) and ASTRO All Asia Networks Plc (ASTRO). Both media groups compete for a relatively small but growing domestic market and both have ventured into the international market for broadcasting and entertainment.

MPB's TV networks include TV3, NTV7, 8TV, and TV9, all of which are free-to-air channels. Together, these accounted for some 50 per cent of the nation's viewership (AGB Nielson Media Research). TV3 is the flagship television station of the media group. It was launched in 1984 as the nation's first private TV network and is currently the largest free-to-air station in the country, holding the nation's Top 10 programs. In 2007, TV3 accounted for some 44 per cent of advertising income and some 32 per cent of total television viewership, including pay-TV.²²

The three remaining channels target different market segments. The 8TV channel made its debut in 2004 and targets the urban youth and the Chinese audiences in the country with high quality foreign programs and unique local content. It has also launched a series of locally produced reality shows such as the One in a Million, which has been a highly successful talent search program. Channel NTV7 is another network that has successfully captured the local Chinese market, especially with its local Chinese drama. TV9, the newest of the networks, targets the young semi-urban and rural Malays who are perceived to have more traditional Malay values. Apart from entertainment and news, it broadcasts programs that are not available on the other networks, such as religious programs. The inclusion of TV9 in ASTRO, the pay-TV, has enabled it to reach a wider audience, especially in Sabah and Sarawak. MPB has also operated a free-to-air TV network in Ghana since 1997 and has been able to capture some 10 per cent of the total advertising market in Ghana.

MPB further operates two radio networks – Hot FM and Fly FM. Hot FM had some 4.3 million viewers in 2007, while Fly FM is the number two English radio station in the country (AGB Nielson Media Research). Fly FM has been able to maximize its client reach and frequency through an integrated marketing plan with the other media channels of MPB.

The media group has also launched the country's first third generation (3G) mobile television service, which serves as a channel for users to view programs from their television networks on a 3G-enabled mobile device at reasonable rates.

Satellite TV in the country is provided by MEASAT Broadcast Network Systems.²³ Their ASTRO service commenced in 1996 and is a direct-to-home platform, providing over 100 pay-TV channels and 17 digital

²¹ Syafiq Alfonso Abdullah, Briefing and Updating by Broadcasting Industry, Presentation at the Workshop on Copyright Industries in Malaysia: Performance and Prospects, organized by MyIPO in Cooperation with WIPO, August 2008.

²² Source: Media Prima Berhad: <http://www.mediaprima.com.my>

²³ MEASAT Broadcast Network Systems enjoys a 20-year license for satellite direct-to-home transmission in the country.

radio channels across Malaysia and Brunei to some 2.2 million subscribers in four main languages. ASTRO's service is delivered via the Malaysia East Asia Satellite (MEASAT), which covers Malaysia and other Southeast Asian countries. ASTRO has turned into a regional player with subsidiaries in Hong Kong and Philippines, an Indian joint venture to provide direct-to-home satellite services in India, as well as an ASTRO-branded subscription pay-TV service to over 100,000 subscribers in Indonesia under a trademark license agreement.²⁴ The ASTRO group of companies is actively engaged in origination, aggregation and distribution of content. In 2007, its in-house production amounted to 1,700 hours and comprised entertainment, information and news programs. Its eight FM terrestrial radio stations in the four main languages are very popular: they account for half of all radio listeners in the country and command a substantial portion of the advertising revenue of the radio industry.²⁵ A subsidiary of the Group of Companies creates Bahasa Malaysia and Bahasa Indonesia content distribution to these markets, thereby providing a platform for leading local producers and directors to actively engage in the film industry. The subsidiary in Hong Kong, Celestial Pictures, owns and distributes the world's largest Chinese film library. Through its subsidiary in the Philippines, it produces popular animated content.

ASTRO advertising revenue has been growing steadily with new entrants. Total advertising revenue stood at RM3.8 billion in 2004, rising to RM5.5 billion in 2008 (Table 5.5). However, its revenue from radio advertising has increased significantly with market leadership in terms of listenership. Revenue from radio advertising revenue grew at an impressive rate of 7.6 per cent during this period, accounting for some 68 per cent of total radio advertising income.

ASTRO has successfully penetrated the mass market with the introduction of new channels and aggressive marketing. Currently its penetration rate for all households is around 40 per cent (Table 5.6). Though the penetration rate is lower among Malay households, in terms of total customer base, Malays accounted for about half, while the Chinese and Indians represented about 32 and 13 per cent, respectively.

Table 5.5 Revenue from Advertisements, ASTRO (RM million)

	2004	2005	2006	2007	2008	Average annual rate of growth
Total advertising revenue	3,831	4,458	4,560	4,748	5,531	0.1
Total radio advertising revenue	165	168	181	203	246	7.6

Source: ASTRO: <http://www.astro.com.my>

Table 5.6 ASTRO Penetration Rate (Percentage)

Ethnicity	2007	2008
Malay	34	40
Chinese	47	46
Indian	66	69
Others	14	16
Total	37	40

Source: ASTRO: <http://www.astro.com.my>

²⁴ Source: ASTRO: <http://www.astro.com.my>

²⁵ Source: *ibid*

5.5 Software and Databases

The software and databases industry is one of the fastest-growing sectors in the economy. Digital technology has been adopted to create a wide range of original local content in the area for education, entertainment, commerce and industrial activities for both local and foreign markets. The industry grew at around seven per cent per annum from 2000 to 2005, exporting some RM5 billion worth of exports per annum²⁶. As noted earlier, the industry accounted for more than a quarter of the value added and about one fifth of employment in the core copyright industry group in 2005.

The industry has received strong State support in the form of investment in essential ICT infrastructure development, fiscal and financial incentives and skills training. The Multimedia Super Corridor (MSC), set up in 1996 to build a cluster of local ICT companies and a sustainable ICT industry, continues to provide the platform and enabling environment to develop the ICT industry. Companies set up within the MSC have access to modern physical infrastructure (fiber optic) and a number of fiscal incentives such as income tax exemption for up to 10 years, 100 per cent investment tax allowance, free import of multimedia equipment and employment of foreign knowledge and IT workers. A number of flagship applications were initiated to spearhead the development of the multimedia industry. These included the Electronic Government, Smart School, Government Multipurpose Card and Telehealth as well the R&D Cluster, e-Business, and Technopreneurship programs. These State-driven initiatives have contributed to the dynamism of the software and database industry. MSC has now entered the second phase with the expansion of the concept to several new cybercities and cybercenters located throughout the country.

Heavy investment in ICT infrastructure has paralleled an increase in ICT adoption in the country. The penetration of personal computers (PCs) installed doubled from 9.4 per 100 population to 21.8 in 2005, while Internet dial-up subscription penetration doubled from 7.1 per 100 population in 2000 to 13.9 in 2005 (Table 5.7). The number of cellular phone subscription increased fourfold from 5.0 million in 2000 to 19.5 million by 2005. To narrow the digital divide in the country, a program of universal access was established. Telecenters were established in under-served areas, tariffs for telephone and Internet subscription were revised, and PC ownership was promoted. Customized content and online applications were developed to promote the uptake of the ICT facilities and services.

The ICT industry was liberalized and a new regulatory framework was developed. The Malaysian Communications and Multimedia Commission (MCMC), set up in 1998, is the regulator for the communications and multimedia industry. It is charged with implementing and promoting the Government's national policy objectives for the communications and multimedia sector, in addition to overseeing the development of the regulatory framework for the converging industries of telecommunications, broadcasting and online activities.²⁷

The Communications and Multimedia Act 1998 provides for the Content Forum to develop the Content Code and to enforce the Code containing governing standards and practices in the communications and multimedia industry.²⁸ The Content Code demonstrates a commitment towards self-regulation by the industry in compliance with the Communications and Multimedia Act 1998. The Communications and Multimedia Content Forum of Malaysia developed the Communications and Multimedia Content Code, officially launched on October 21, 2004, the full text of which is now available online.²⁹

²⁶ Source: MSC Malaysia: <http://www.msomalaysia.my>

²⁷ Source: Malaysian Communications and Multimedia Commission, www.mcmc.gov.my.

²⁸ Communications and Multimedia Content Code, Communications and Multimedia Content Forum of Malaysia, 2004, available online at: http://www.mcmc.gov.my/mcmc/facts_figures/codes_gl/guidelines/pdf/ContentCode.pdf.

²⁹ Ibid.

In 2000, the licensing regime for the applications service providers was further liberalized to create a self-regulatory environment. This led to an increase in the number of application service providers (ASP) licenses issued for Internet access and Voice over Internet Protocol (VoIP) services. In 2005, the Malaysian Information, Communications and Multimedia Services (MylCMS) Blueprint was completed, outlining the principles for the orderly and integrated development of the convergence of the three key sectors in the ICT industry, namely cellular telephony, Internet and broadcasting.

Table 5.7 Selected ICT Indicators, 2000 & 2005

Indicator	2000	2005
Cellular phone subscriptions		
Number of subscriptions (million)	5.0	19.5
Penetration rate (%)	21.8	74.1
Personal computers installed		
Number of units installed (million)	2.2	5.7
Penetration rate (%)	9.4	21.8
Internet dial-up subscriptions		
Number of subscriptions (million)	1.7	9.7
Penetration rate (%)	7.1	13.9
Internet broadband subscriptions		
Number of subscriptions	-	190,630
Penetration rate (%)	-	1.9

Note: * Refers to penetration rate per 100 population

Source: Malaysian Communications and Multimedia Commission and Economic Planning Unit as cited in Malaysia (2006), Table 5-1, p.135

A special RM150 million content fund was established under the Ninth Malaysia Plan, 2006–2010 to support digital content development and to promote and nurture creative content developers. Funds are made available through the Multimedia Development Corporation (MDeC) Technopreneur Pre-seed Fund (RM150,000 each) and the MDeC Malaysia R&D Fund (RM120 million). In addition, private funding is also available.

The number of MSC companies more than doubled from 621 in 2001 to 1,421 in 2005, of which 50 per cent were engaged in software development for general enterprise solutions and data warehousing, and high-end specialized applications and e-commerce (Table 5.8). The development of local software has been predominantly in English, but of late, there has been some software development in the national language, especially in the local open source arena. The total number of jobs created by the MSC companies increased from 14,438 in 2001 to 27,288 in 2005, with over 88 per cent consisting of knowledge workers in 2005. They exported about 1.6 billion worth of exports in 2005 and registered 119 IPs. Over 1,815 IPs have been registered since the scheme was launched³⁰. IP protection is encouraged through funding under the IP Grant Scheme. MSC companies can apply for funds of up to 70 per cent of the total costs incurred in application to register trade/service marks, patent and industrial design.

³⁰ Sourced from MSC Malaysia: <http://www.msomalaysia.my>

With the increase in demand for offshore shared services and outsourcing (SSO) worldwide, MSC has been able to market itself as a global SSO destination. By the end of 2005, about 50 companies were engaged in SSO activities, providing about 2,000 jobs for skilled workers (Malaysia, 2006, p.137).

The entertainment software industry, which includes console, computer and mobile games, is a fast-growing market segment. The more popular games are those with an action orientation. The online gaming and mobile game market in Malaysia is estimated to have grown by about 46 per cent and generated income through subscription revenue amounting to some RM30 million in 2005. The industry is being driven by an increase in PC ownership, stronger broadband growth, increased mobile penetration, new technologies and platforms, wealth creation, and high cellular telephone usage.³¹

Table 5.8 Selected MSC Indicators, 2001 & 2005

Category	2001	2005
MSC-status company (number)*	621	1,421
Locally owned	410	1,033
Foreign owned	198	349
Joint venture (50-50)	13	39
Job creation (number)*	14,438	27,288
Knowledge workers	12,169	24,252
Others	2,269	3,036
Investment (RM billion)	3.16	5.11
Revenue (RM billion)	-	7.21
Exports (RM billion)	-	1.57
R&D expenditure (RM million)	-	670
IPs registered (number)	-	119

Note: * Cumulative figures

Source: *Multimedia Development Corporation and Economic Planning Unit as cited in Malaysia (2006), Table 5-3, p.146*

The Government has earmarked the creative multimedia cluster as a new source of growth and has introduced a number of new support measures, including the launch of the MSC Creative Applications and Development Centre (CADC). The CADC aims to foster strategic collaboration between local companies and institutions of higher learning to spawn R&D activities in high-value-added content development such as visualization, computer graphics imaging and production design. The creation of special zones such as the Digital Media Zone in Cyberjaya and the setting-up of similar Creative Zones in newly designated cybercenters as digital content development hubs are aimed at creating a sustainable pool of content providers.

³¹ Rajkumar, M, Entertainment Software Industry in Malaysia, presentation at the Workshop on Copyright Industries in Malaysia: Performance and Prospects, 28 August, 2008.

There, two main industry organizations that represent the interests of the ICT industry are the Association of the Computer and Multimedia Industry of Malaysia (PIKOM) and the Business Software Alliance (BSA). PIKOM is a locally based organization that actively lobbies and advises the Government on the issues and problems faced by the industry. Its membership stands at over 750 companies which are engaged in a whole spectrum of ICT products and services and which account for some 80 per cent of the total volume of ICT business in the country. BSA is an international body that has an active presence in Malaysia. Its primary objective is to address piracy and related copyright concerns.

5.6 Copyright Collecting Societies

There are currently five copyright collecting societies (CCS), of which three are operational:

- The Music Authors Copyright Protection Bhd. (MACP), which administers the public performance, broadcast and diffusion rights in musical and associated literary works on behalf of its members;
- The Public Performance Malaysia Pte. Ltd. (PPM), which administers the recording industry's rights; and
- The Performers and Artistes Rights Malaysia Pte. Ltd. (PRISM), which administers the collection of royalties for performers in the public performance of music.

The three CCCs employed a total of 66 workers and collected a total of RM 48.5 million worth of royalties in 2007 (Table 5.7).

Table 5.9 Total Royalties Collected by Copyright Collecting Societies, 2004-2007 (RM million)

Year	MACP	PPM	PRISM	Total
2004	18.11	16.59	0.13	34.83
2005	20.69	18.78	0.31	39.78
2006	22.31	18.98	0.48	41.77
2007	24.69	22.72	1.10	48.50

Source: MACP, PPM, PRISM as collated by RIM.

Music Authors Copyright Protection Bhd. (MACP)

The MACP was established in 1989 and represents the majority of composers, authors and publishers of music in Malaysia. It is also a member of the International Confederation of Societies of Authors and Composers (CISAC) and administers the rights of owners of foreign musical works. There are about 2,200 local members and 2.5 million from around the world. Currently, it owns or controls for Malaysia the public performance rights of close to 98 per cent of all music created in the world and probably all of the works that enjoy copyright.

The Public Performance Malaysia Pte. Ltd. (PPM)

PPM is a national non-profit-making body set up in 1988 as a subsidiary of the International Federation of Phonographic Industry (IFPI) to exercise the recording industry's rights in Malaysia and to grant licenses for the public performance and broadcasting of all sound recordings. The PPM therefore represents the recording industry for the convenience of users of sound recordings and music videos including karaokes (as contained in cassettes, CDs, LDs, VCDs, DVDs, etc).³² PPM is currently responsible for the administration of rights for broadcasting and public performance and the collection of royalties on behalf of IFPI and the Recording Industry Association of Malaysia (RIM).

³² Sourced from Public Performance Malaysia: <http://www.ppm.org.my>

PPM issues licenses for the following usages of the recordings:

- i. Public performance (i.e. playing or showing in public);
- ii. Communication to the public (including broadcast);
- iii. Copying or reproduction for the purpose of (i) and (ii) above; and
- iv. Commercial rental.

Examples of establishments and businesses that may require a public performance license include mobile discos, hotels and hotel ballrooms, night clubs, cinemas, restaurants, jukeboxes, fashion shows and amusement parks.

The Performers and Artistes Rights Malaysia Pte. Ltd. (PRISM)

PRISM was formed in 2001 by artistes in the music industry, i.e. by singers, musicians and secessionists. Its main objectives include:

- The protection and enforcement of the rights of performers, i.e. the recording artistes in the music industry; and
- The collection and administration of royalties for public performance, broadcasting and communication on behalf of the performers.

On February 17, 2003, a Memorandum of Understanding was signed by PRISM and PPM to authorize PPM to collect royalties on behalf of PRISM. Some 600 local and 100,000 foreign artistes are members of PRISM.

The Copyright Act does not decide the royalty rate and the mode of payment. PPM and MACP collect royalties for public performance of music in public places through mechanical means such as tapes, records, CDs videos, radios, TVs, karaoke, juke boxes or even telephone music on hold. MACP, by virtue of its role, collects for the live performance of music, while PPM does not collect for the live performance. Generally, both these CCSs base their rates on the importance of the music to the user. If music is the main feature of entertainment, such as in dancing halls and karaoke halls, the rates are higher but if the music is not the main feature as in the case of piped music in retail outlets, the rates are lower. This ultimate decision is left to the CCSs that are familiar with the international trends in determining the rates.

6. Trade in Copyright-based Industries

6.1 Introduction

Export and import data on copyrighted products were gathered at the eight-digit SITC code. There were a total of 11 products that can be classified as copyrighted materials.

Exports and imports are valued on a customs basis in current Malaysian Ringgit and the value of re-exports is excluded to obtain the value of domestic exports and imports.

Trade figures capture only a fraction of the total value of the copyrighted products as cautioned in several country studies (WIPO, 2004, p.145). For instance, trade data merely capture the initial transaction value at the border and fail to include the total value generated by the copyrighted products. A good example is the import of a film, where only the value of the master copy is included, but not the additional revenue from copies sold in the market. Therefore, the trade data tends to grossly underestimate the true value of the export and import of copyrighted products.

In addition, trade in intangible copyrighted products such as cultural performances is not included in trade statistics, accentuating the underestimation of foreign currency earnings from copyrighted products.

6.2. Trade Contribution

Exports of core copyright-based products doubled from RM1.5 billion in 2000 to RM3.1 billion in 2005, accounting for some one per cent of the total value of exports (Table 6.1). In contrast, imports of copyrighted goods have declined from about RM1.9 billion to about RM1.6 billion during this period, representing some 0.4 per cent of total imports. As a result, net earnings from copyrighted products rose to RM1.6 billion in 2005 from a net loss of RM0.5 billion in 2000.

The largest export item was musical instruments, and parts and accessories, which accounted for some 84 per cent of total export of copyrighted goods. It more than doubled from about RM1 billion in 2000 to RM2.6 million in 2005 (Table 6.2).

Table 6.1 Copyright Contribution to Trade, 2000-2005

	2000	2005	Growth rate (%)
Exports of copyright goods (RM million)	1,489.8	3,056.1	15.5
Total printed matter (% of total copyright)	35.2	15.8	(1.6)
Musical instruments and parts and accessories thereof (% of total copyright)	64.8	84.2	21.6
Import of copyright goods (RM million)	1,940.7	1,589.1	(3.92)
Total printed matter (% of total copyright)	34.1	50.1	3.8
Musical instruments and parts and accessories thereof (% of total copyright)	65.9	49.9	(9.1)
Net revenue (RM million)	(450.9)	1,589.1	-
Total Malaysian exports (RM million)	373,270.3	311,458.9	7.4

Note: Figures in brackets denote negative values

Source: Annual Trade Statistics, Department of Statistics, Malaysia.

	2000	2005	Growth rate (%)
Total Malaysian imports (RM million)	481,253.0	399,632.2	-2.0
% of Malaysian exports	0.4	1.0	-
% of Malaysian imports	0.4	0.4	-

Table 6.2 Trade in Copyrighted Goods, 2000 & 2005 (RM million)

SITC	Item	2000		2005	
		Export	Import	Export	Import
892	Total printed matter	524.0	661.5	484.1	796.6
892-1	Books, pamphlets, maps and globes	353.3	295.3	349.5	3363.8
892-2	Newspaper, journals and periodicals	26.4	30.9	7.5	31.7
892-4	Postcards, personal greeting, message or announcement cards	8.4	11.5	6.2	10.4
892-8	Printed matter, not elsewhere classified	135.9	323.8	120.8	390.7
898	Musical instruments and parts and accessories thereof	965.8	1,279.2	2,571.9	792.5
898-1	Pianos and other string instruments	65.7	50.9	23.3	27.1
898-2	Musical instruments, excluding pianos and other string musical instruments	427.8	64.1	138.9	93.5
898-4	Magnetic tapes for sound	48.0	39.8	22.6	35.2
898-5	Other prepared or unrecorded media for sound recording	294.8	630.0	2,551.0	350.8
898-6	Magnetic tapes recorded	8.7	28.1	5.5	13.1
898-7	Records and other recorded media for sound	116.3	442.0	124.9	262
898-9	Parts and accessories of musical instruments	4.3	29.3	6.3	10.6

Source: Annual Trade Statistics, Department of Statistics Malaysia

7. International Comparisons

Several countries have carried out similar studies to estimate the contribution of copyright industries in their economies. The findings of these studies are drawn to compare and contrast the relative significance of activities in Malaysia protected by copyright and related rights.

A total of 14 countries have been selected for comparative analysis based on data availability. The definitions and approach used in some of the country studies differ somewhat. Nonetheless, they provide a broad indication of the relative significance of copyright-related activities in their respective economies.

Table 7.1 Contribution of Copyright-Based Industries to GDP and Employment in Selected Countries

Country	% of GDP	% of Employment
United States (2001)	12.0	8.9
Canada (2001)	5.4	6.9
Australia (2000)	3.3	3.8
Singapore (2001)	5.7	5.8
Hungary (2002)	6.7	7.2
Republic of Croatia (2002)	4.8	4.2
Colombia (2003)	3.4	5.8
Russian Federation (2004)	6.1	7.4
Ukraine (2005)	2.1	1.2
Philippines (1999)	4.8	11.1
Mexico (2003)	8.1	11.0
Jamaica (2005)	4.8	3.0
Bulgaria (2005)	3.4	2.8
Lebanon (2005)	4.8	4.5
Malaysia (2001)	5.3	5.8
Malaysia (2005)	5.8	7.5

Source: WIPO (2006); WIPO (2008); Unpublished country reports (see reference)

The United States of America undoubtedly leads all other nations in terms of the contribution of copyright-based industries to GDP. Total copyright-based industries in the US accounted for some 12 per cent of GDP in 2001 compared to about 5.3 per cent for Malaysia (Table 7.1). However, copyright-based industries are more labor-intensive in Malaysia and therefore accounted for some 5.8 per cent of total employment compared to 8.9 per cent in the United States. This was also true for all other countries where the contribution to employment is much higher than to GDP. Mexico clearly leads all other developing economies in terms of the contribution of copyright-based industries to the economy. In some of the labor surplus economies, such as the Philippines and Mexico, copyright industries are an important source of employment, accounting for as much as 11 per cent of national employment.

The GDP and employment ratios of copyright-based industries in Malaysia are also consistent with the findings of the Singapore economy, with which Malaysia shares similar development experiences. About 5.7 per cent of Singapore's GDP is attributable to copyright-related activities, while their employment contribution is around 5.8 per cent. The relative values for Malaysia are 5.3 per cent and 5.8 per cent. Clearly, even in a small labor-scarce economy such as Singapore, copyright-related activities are relatively

labor intensive. This is a characteristic feature of the creative and cultural industries the world over.

A comparative analysis of the core copyright industry group is more meaningful as the industry classifications are broadly similar. Table 7.2 shows the performance of the core copyright industries in each of the countries. In all countries where data is available, the core copyright industry group was about half the size of the total copyright-based industries, both in terms of value added and employment. Core copyright activities are almost twice as significant in the United States of America, which registered the highest contribution to GDP. The core copyright industries in Malaysia accounted for 2.8 per cent of GDP, which is about the same as in Singapore. In some developing economies, such as the Philippines, Hungary, Republic of Croatia and Ukraine, the core copyright industries are relatively more significant.

Table 7.2 Contribution of Core Copyright Industry Groups to GDP and Employment in Selected Countries

Country	% of GDP	% of Employment
United States (2001)	4.9	4.3
Canada (2001)	n.a	n.a
Australia (2000)	n.a	n.a
Singapore (2001)	2.9	3.6
Hungary (2002)	4.0	4.2
Republic of Croatia (2002)	3.3	2.8
Colombia (2003)	1.8	1.6
Federation of Russia (2004)	2.4	4.4
Ukraine (2005)	3.3	1.9
Philippines (1999)	3.5	8.8
Mexico (2003)	2.6	3.4
Jamaica (2005)	n.a	n.a
Bulgaria (2005)	1.9	1.6
Lebanon (2005)	2.5	2.1
Malaysia (2001)	2.8	3.5
Malaysia (2005)	2.9	4.7

Source: Same as in Table 7.1

8. Impact of Copyright-based Industries on the Economy

8.1. Introduction

Establishment surveys provide an estimation of the direct contribution of an industry to the economy. However, the activities of an industry have a direct as well as an indirect impact on the economy, and the input-output (I-O) table, which records all inter-industry transactions in the economy, can be used to estimate the total impact of any change in industry activity.

The input-output table shows not only the demand for inputs resulting from an increase in output of a particular industry, but also the long chain of production effects that arise as a result of demand for inputs to produce products demanded by the first industry. The following estimates the impact of the core copyright industries on the economy using the 2000 input-output table.

The 2000 I-O table consist of 92 production sectors and of this, the core copyright activities are captured by the following 9 I-O sectors (See Appendix 3):

- I-O code 36 Printed matter
- I-O code 69 Wholesale and retail
- I-O code 72 Communication
- I-O code 78 Business services
- I-O code 83 Private non-profit institutions
- I-O code 84 Entertainment
- I-O code 85 Radio and television broadcasting
- I-O code 86 Recreation
- I-O code 94 Other public administration

Many of these sectors include output from copyright and non-copyright activities. It is assumed that the input structure of the I-O sector to which a subsector of the core copyright industry belongs reflects the input-output structure of the core copyright activities. For instance, the I-O Code 36: Printed matter, may well represent the input structure of press and literature.

8.2 Impact of Core Copyright Industries on the Economy

The I-O table records both the demand and supply responses of an industry's activities. Hence, when an industry such as "printed matter" increases its production, there is an increase in demand for inputs from other industries that supply inputs to "printed matter". This increase in demand for inputs from the other sectors is termed the "backward linkage". An industry with a higher backward linkage induces more productive activities throughout the economy. On the other hand, an industry may supply inputs to one or more industries. This indicates the "forward linkage" of an industry with the industries to which it supplies inputs. An industry with a higher forward linkage is relatively more sensitive to changes in other industries' output.

If a large portion of the total inputs is imported, the impact on the economy of an increase in production of an industry is reduced by the amount of "leakages" via imported inputs. Table 8.1 shows the input structure of core copyright industries. The core copyright industries purchased about 21 per cent of its inputs from other domestic industries and imported about 15 per cent of its total inputs from overseas. Total wages received by labor amounted to about 18 per cent while gross profit was about 45 per cent. The core copyright industry is not very input-intensive and provides relatively high gross returns to capital.

Table 8.1 Input Structure of Core Copyright Industries, 2000

Sector	Input Coefficient
Total domestic intermediate inputs	0.2119
Imports	0.1549
Value added	0.6332
Wages	0.1799
Operating surplus	0.4533
Total	1.0000

The total impact of the core copyright industries vis-à-vis other industries is evaluated using a computable general equilibrium (CGE) model of the Malaysian Economy.³³ The CGE model is constructed using the 2000 Input-Output Table for Malaysia, and the impact of changes in industry output on value added, employment and exports is simulated. The analysis takes into account both the direct and indirect impact of output changes on the economy. Tables 8.2 shows the impact on value added, employment and exports following a 10 per cent increase in the output of the various core copyright industries as well as other sectors for a comparative analysis.

The communications industry has the highest impact on GDP and employment. A 10 per cent increase in its value added increases total GDP by 10.7 per cent and total employment by 28.3 per cent. Printed matter, wholesale and retail and recreation are the other core copyright industries that have a relatively higher impact on the economy, especially in terms of GDP and employment. These three core copyright industries have a higher impact on the GDP and employment compared to other larger industries such as knitted fabrics, furniture and bank services.

Overall, the core copyright industries tend to have a higher impact on employment than GDP. They are also domestic-oriented industries, with minimal impact on exports. In other words, they are less exposed to external shocks.

Table 8.2 Impact of a 10 Per Cent Increase in Value Added by Sector on GDP, Employment and Exports (Percentage Change)

Industry	GDP	Employment	Exports
Core Copyright Industries			
Printed matter	1.30	3.63	0.34
Wholesale and retail	1.44	3.83	*
Communication	10.7	28.3	*
Business services	0.40	10.00	2.10
Private non-profit institutions	0.10	0.30	0.30
Entertainment	0.90	2.40	*
Radio & TV broadcasting	0.30	0.30	*
Recreation	1.00	2.80	*
Other public administration	0.10	0.30	*
Selected Sectors			
Oil palm primary products	1.7	4.5	24.0
Knitted fabrics	0.5	1.4	17.3
Furniture	0.4	0.9	11.3
Bank services	0.8	2.5	0.29
Insurance	3.4	8.9	0.7
Buildings and construction	1.2	3.2	*

Note * Negligible

³³The Malaysian General Equilibrium Model (MGEM) is a detailed multi-dimensional CGE of the Malaysian economy developed using the Johansen's technique and solved with the GEMPAK Software.

9. Conclusion

Copyright-based industries in Malaysia have played an increasing role in the growth and development of the Malaysian economy. The estimated contribution of value added in 2005 was RM30.2 billion or 5.8 per cent of GDP. The industry also employed about 817,000 workers or 7.5 per cent of the total workforce.

Exports of copyrighted products in 2005 came to RM3.1 billion or one per cent of total export earnings. More importantly, the trade balance turned positive to reach RM1.6 billion in 2005 from a net loss of RM0.5 in 2005, largely due to the double-digit growth in exports of copyrighted products.

Of particular significance was the pace at which the industries grew. They recorded annual average growth of 11.1 per cent from 2000 to 2005, surpassing the national growth rate of 6.6 per cent. They also outperformed all other services and resource-based industries, with the exception of mining and quarrying, which recorded the highest growth at 13.1 per cent.

Productivity or real value added per worker in the copyright-based industries in 2005 was RM34,848, which is higher than that for agriculture, construction and government services. The copyright industries of Malaysia are also relatively more labor intensive and help generate employment.

The industry is not very input intensive and provides relatively high gross returns to capital. The total impact of the core copyright industries on GDP and employment is comparable to many of the larger industries such as furniture, knitted fabrics or bank services.

The encouraging performance of the copyright-based industries in Malaysia reflects the importance of copyright activities as a potential engine of growth, especially with the shift towards a services-based economy. Creative and information-based activities cut across all aspects of the economy, depending directly or indirectly on copyright protection. The level of copyright protection is crucial to fostering R&D and attracting new investments, including foreign direct investment.

Yet data and information on the copyright-based industries are far from adequate. Given the higher incidence of microenterprises and individual operators, characteristic of the creative and information sectors, data and information on this group of industries are not well captured by the current statistical system in the country. Data on some copyright-based sub-sectors that fall within the manufacturing sector are very comprehensive, but for the bulk of the copyright-based industries that fall under services, the database is weak.

The pilot project is at best an exploratory study that quantifies the contribution of the copyright-based industries to the economy. Given the high level of data aggregation on copyright-based industries generated by the Department of Statistics, there is reason to believe that the contribution of copyright-based industries is underestimated.

There is also an apparent lack of awareness of the importance of copyright among consumers as well as producers of copyright works. Professionals in the creative fields such as authors, composers, lyricists and designers pay scant attention to the importance of protecting their creations, as many of them do not depend on their creativity for a livelihood.

Knowledge and content that underpin copyright-based activities have emerged as the main factors of economic growth, and as the economy shifts towards a service-oriented structure, copyright will become

more relevant. Therefore, it is essential that the copyright-based industries be closely monitored, evaluated and prioritized. It is within this context that the following recommendations are made.

The more immediate response is to establish an institutional framework to facilitate systematic and regular data collection and reporting on copyright-based industries. This should be part and parcel of the ongoing process by the Department of Statistics to improve the database on the service sector. A Working Committee led by MyIPO and with representation from the Department of Statistics and all related copyright-based agencies such as the Ministry of Unity, Culture, Arts and Heritage, Ministry of Communications, Energy and Water, Ministry of Information, the Central Bank, Copyright Collecting Societies and the various industry organizations should be set up to explore the most cost-effective means of generating key economic data on copyright-based industries.

Many of the ongoing establishment and household surveys must be reviewed to evaluate how they can be expanded and improved to generate important statistics on the creative and information industries protected by copyright. All secondary sources of data must be identified, and the agencies collating copyright-based data must be made responsible for generating such data on a regular basis.

The Department of Statistics should also link up with the relevant industry organizations and provide professional assistance to facilitate the generation of copyright industry data at a more disaggregated level on a regular basis.

As the nation shifts towards a more service-oriented economy and as trade in services becomes central to bilateral and multilateral negotiations, it would be timely and useful to generate trade data on the service sector, allowing more accurate estimates of the trade in copyrighted products. Inter-agency cooperation between the relevant agencies in the public and private sectors has to be beefed up to initiate data collection and reporting on trade in services.

There is a need to conduct more in-depth sector-specific studies of the creative and informative sectors that are protected by copyright. Such studies can assist in improving the assessment of the contribution of copyright-based industries to the economy as well as identifying the issues and challenges faced by the industry in prioritizing policies.

MyIPO should initiate collaborative programs such as workshops, seminars and advocacy campaigns with the various industry organizations to enhance the level of awareness of the importance of copyright among consumers as well as the creators of copyrighted works.

The study provides strong empirical evidence of the dynamism of the copyright-based industries in Malaysia, demonstrating the importance of copyright-based industries in the nation's drive towards a knowledge and information-based economy. The study is at best an exploratory study that contributes to more evidence-based policy-making with respect to the development of copyright-based industries within the context of the overall development of the economy.

The study has provided robust empirical evidence to assist policy-makers in designing appropriate strategies for the development and protection of copyright-based industries in the country. It has also developed an explicit and sound framework for updating and improving the database on the creative and information-based sectors that are protected by copyright.

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Appendix 1

Mapping of Copyright-Based Industries

The 2000 Malaysian Standard Industrial Classification (MSIC) is almost identical to the International Standard Industrial Classification (ISIC). As WIPO also classifies copyright industries using the ISIC Codes, the concordance between the three classifications was traced to map out Malaysia's copyright industries. By and large, the three industry categories merged easily as the MSIC code is very similar to the ISIC. The few differences are highlighted below.

- i. **Computers and equipment:** The "Wholesale of computers, computer peripheral equipment and software" is classified by ISIC code as 5151, but the equivalent MSIC code is 5153.
- ii. **Photocopiers:** The "Wholesale of other machinery, equipment and supplies" falls under ISIC code 5159, but is 5152 under MSIC.
- iii. **Blank recording material:** The "Wholesale of electronic and telecommunication parts and equipment" falls under ISIC 5152, but is classified under MSIC 5151.

The list of Malaysian copyright industries and their respective MSIC codes are detailed in the Appendix Tables 1.1 to 4.

Appendix Table 1.1
Press and Literature

Economic Activity	Description	2000 MSIC Code
1. Authors, writers and translators	Authors, composers, sculptors, entertainers and other individual artistes	92142
2. Newspapers and books	Publishing of newspapers, journals and periodicals	22120
3. News and feature agencies	Printed news supply services	92201
	Picture supply services	92202
	Other news agency services	92209
4. Magazines/periodicals	Publishing of newspapers, journals and periodicals	Incl. 1.1(2)
5. Book publishing	Publishing of books, brochures, musical books, maps and other publications	22110
6. Cards and maps, directories and other published material	Other publishing	22190
7. Pre-press printing, and post press of books, magazines, newspapers and advertising materials	Printing	22210
	Services related to printing	22220
8. Wholesale and retail of press and literature	Wholesale of books, magazines, newspapers stationery	51392
	Retail sale of books, magazines, newspapers stationery	52394
9. Libraries	Library and archive activities	92310

Appendix Table 1.2
Music, Theatrical Production, and Operas

Economic Activity	Description	2000 MSIC Code
1. Composers, lyricists, arrangers, choreographers, writers, directors, performers and other personnel	Theatrical producer, singer group band and other orchestra entertainment services	92141
2. Printing and publishing of music	Publishing of recorded media	22130
3. Production/manufacturing of recorded music	Reproduction of recorded media	22300
4. Retail sale and rental of recorded music	Retail sale of musical instruments, music tapes, records, compact disc and video tapes	52354
	Wholesale of musical instruments, records and music tapes	51397
	Rental of videotapes, incl. compact discs and laser discs.	71303
5. Artistic and literary creation and interpretation	Included in Table 1.2 item 1	Incl in 1.2 (1)
6. Performers and allied agencies (booking, ticket agencies, etc.)	Included in Table 1.2 item 1	Incl in 1.2 (1)

Appendix Table 1.3
Motion Picture and Video

Economic Activity	Description	2000 MSIC Code
1. Writers, directors and actors	Authors, composers, sculptors, entertainers and other individual artistes	Incl in 1.1(1)
2. Motion picture and video production and distribution	Motion picture and video production and distribution	92112
3. Motion picture exhibition	Motion picture projection services	92120
4. Video rental and sales, video on demand	Renting of personal and household goods n.e.c.	Incl in 2.3 (3)
	Motion picture and video production and distribution	Incl in (1.3)(2)
5. Allied services	Reproduction of recorded media	Incl in 1.2(3)

Appendix Table 1.4
Radio and Television

Economic Activity	Description	2000 MSIC Code
1. National radio and television broadcasting companies	Production of radio programs	92131
	Production of television programs	92132
2. Other radio and television broadcasters	Included in Table 1.4 item 1	Incl in 1.4 (1)
3. Independent producers	Other business activities (74992)	Incl in 1.1(1)
4. Cable television	Television and radio transmission services	64202
5. Satellite television	Included in Table 1.4 item 4	Incl in 1.4(4)
6. Allied services	Included in Table 1.4 item 4	Incl in 1.4(4)

Appendix Table 1.5
Music, Theatrical Production, and Operas

Economic Activity	Description	2000 MSIC Code
1. Studios and commercial photography	Photographic activities	74940
2. Photo agencies and libraries	Services related to printing	Incl in 1.1(7)
	Library and archives activities	Incl in 1.1(10)

Appendix Table 1.6
Software and Databases

Economic Activity	Description	2000 MSIC Code
1. Programming, development and design, manufacturing	Software consultancy and supply services	72200
2. Wholesale and retail of pre-packaged software	Wholesale of computer hardware, software and peripherals	51530
3. Database processing and publishing	Database processing services	72400
	Database activities	72300

Appendix Table 1.7
Visual and Graphic Arts

Economic Activity	Description	2000 MSIC Code
1. Artists	Included in Table 1.1 item 1	Incl in 1.1(1)
2. Art galleries and other wholesale and retail	Included in Table 1.1 item 1	Incl in 1.1(1)
3. Picture framing and other allied services	Included in Table 1.5 item 1	Incl in 1.5(1)
4. Graphic design	Included in Table 1.1 item 1	Incl in 1.1(1)
	Included in Table 1.5 item 2.	Incl in 1.5(2)

Appendix Table 1.8
Advertising Services

Economic Activity	Description	2000 MSIC Code
1. Agencies buying services	Advertising	71300

Appendix Table 1.9
Copyright Collecting Societies

Economic Activity	Description	2000 MSIC Code
1. Copyright collecting societies	Activities of professional organizations	91120

Appendix Table 2
Interdependent Copyright Industries

Economic Activity	Description	2000 MSIC Code
1. TV sets, radios, VCRs, CD & DVD players	Manufacture of television and radio receivers, sound or video recording or reproducing Apparatus, and associated goods	32300
	Wholesale of household appliances, radio and TV equipment, musical instrument, records and music tape	Incl in 1.2(4)
2. Computers and equipment	Retail sale of electrical household appliances, radio and TV equipment	52332
	Manufacture of computer and computer peripherals	30002
	Wholesale of computer hardware, software and peripherals	51530
	Retail sale of computers, computer equipment and supplies and non-customized software.	52360
	Renting of office machinery and equipment (including computers)	71230
3. Musical instruments	Manufacture of musical instruments	36920
	Wholesale of musical instruments	Incl in 2 (1)
	Retail sale of musical instruments, music tapes, records, compact disks and video tapes	52354
4. Photographic and cinematographic instruments	Manufacture of photographic equipment	33202
	Wholesale of photographic equipment and supplies	51394
	Retail sale of photographic equipment	52381
5. Photocopiers	Manufacture of office and accounting Machinery	30001
6. Blank recording material	Wholesale of office machinery and business equipment	51520
	Manufacture of chemical products n.e.c	24290
	Wholesale of telecommunications equipment and accessories	51511
	Retail sale of telecommunications equipment	52370
7. Paper	Manufacture of pulp, paper and paperboard	21010
	Wholesale of other intermediate products, waste and scrap	51491

Appendix Table 3
Partial Copyright Industries

Economic Activity	Description	2000 MSIC Code
1. Apparel, textiles and footwear	Manufacture of clothing	18101
	Custom tailoring and dressmaking	18102
	Manufacture of miscellaneous wearing apparel n.e.c.	18109
	Manufacture of made up textile articles, except apparel	17210
	Manufacture of footwear	19200
	Wholesale of textiles, clothing and footwear	5131
	Retail sale of textiles clothing, footwear and leather goods	5232
2. Jewelry and coins	Manufacture of jewelry and related articles	36010
	Wholesale of jewelry, watches, clocks and silverware	51393
	Retail sale of jewelry, watches, clocks and silverware	52392
3. Other crafts	Wholesale of handicrafts and artificial flowers	51325
	Retail sale of handicrafts and artificial flowers	52396
4. Furniture	Manufacture furniture	3610
	Wholesale of furniture, furnishings, wall paper and floor coverings	51398
5. Household goods, china and glass	Rental of furniture	71302
	Manufacture of glass and glass products	26100
	Manufacture of knitted and crocheted fabrics and articles	17300
	Manufacture of other wood products	2029
	Manufacture of other fabricated metal	2899
	Wholesale of other household hardware and kitchenware	51396
	Retail sale of household appliances, articles and equipment	5233
6. Wall coverings	Manufacture of carpets and rugs	17220
	Manufacture of carbon paper	21001
7. Toys and games	Manufacture of toys and games	36940
	Wholesale of games and toys	51323
8. Architecture, engineering, surveying	Architectural consultancy services	74211
	Engineering consultancy services	74212
9. Interior design	Other business services	74999
10. Museums	Included in Table 1.1 item 10	Incl in 1.1(10)

Appendix Table 4
Non-Dedicated Support Industries

Economic Activity	Description	2000 MSIC Code
1. General wholesale and retailing	Wholesale on a fee or contract basis	51100
	Wholesale of sports goods and athletic goods and equipment	51321
	Wholesale of pharmaceutical, orthopedic and medical goods, perfumery, cosmetics and toiletries	51391
	Wholesale of optical goods	51395
	Wholesale of other household goods, e.g. cleaning materials, fancy goods and other miscellaneous goods	51399
	Wholesale of electrical and electronic components and wiring accessories	51512
	Wholesale of machinery and equipment	5159
	Retail sale of pharmaceutical, medical and orthopedic goods, perfumery, cosmetic and toilet articles	52310
	Retail sale of hardware, paint and glass	52340
	Retail sale of sports goods	52351
	Retail sale of bicycles	52352
	Retail sale of recreational goods	52356
	Retail sale of spectacles and other optical goods	52382
	Retail sale of scientific and precision equipment	52383
2. General transportation	Tram services	601
	Public bus service	60211
	Light rail transport/monorail service	(not in 4.2(1))
	Freight transport (road haulage)	60230
	Sea transport	6110
	Air transport	62
	Cargo handling/stevedoring services	6301
	Storage and warehousing services	6302
	Other supporting transport services	6303
	Shipping and forwarding agency services	6309
3. Telephony and Internet	Post and other courier services	64120
	Telecommunications	6420

Appendix 2

Estimation of Copyright Factors

In measuring the economic contribution of copyright industries to the economy, it is important to include the contribution of both the “core” and “non-core” copyright industries. The “non-core” industries are those that support or are interrelated to the core copyright industries. These include:

- i. Interdependent Copyright Industries
- ii. Partial Copyright Industries; and
- iii. Non-Dedicated Support Industries.

For the core copyright industries, all of the industry activities are included in measuring the economic contribution of copyright industries. For the non-core copyright industries, however, only a fraction of their activities is included as reflected by the copyright factor. The copyright factor is a percentage ratio that expresses the importance of copyright activities in a given industry. The survey responses, personal interview and secondary data as well as experiences of other countries were relied upon to estimate the copyright factors for Malaysia. The survey responses to three key questions on copyright activities are summarized in Appendix Tables 2.1 to 2.3.

The following explains the estimation of the copyright factors for the three “non-core” copyright industries.

i. Interdependent Copyright Industries

Products from *interdependent* copyright industries are jointly consumed, and hence their activities are generally dependent on the availability of copyright work. In other words, they support the use of the copyright content, and hence they are sometimes referred to as “copyright-related” or “copyright hardware”.

According to WIPO, “statistically, the interdependent copyright industries add a relatively little portion – in average between 1.0 per cent to 1.5 per cent to GDP over and above what the core industries contribute.

Appendix Table 2.1
Importance of Copyright in Daily Operations

Industry	Very Significant	Significant	Slightly Significant	Insignificant	Total
Interdependent Copyright Industries	13	6	3	12	34
1. TV sets, radios, VCRs, CD and DVD players	3	2	0	0	5
2. Computers and equipment	3	2	0	0	5
3. Musical instruments	2	1	1	1	5
4. Photographic & cinematographic equipment	1	0	0	4	5
5. Photocopies	1	1	0	3	5
6. Blank recording equipment	2	0	2	1	5
7. Paper	1	0	0	3	4
Partial	3	9	12	8	32
1. Apparel, textiles and footwear	0	3	3	0	6
2. Jewelry & coins	0	0	1	0	1
3. Other crafts	0	0	1	0	1
4. Furniture	2	4	2	1	9
5. Household goods, china and glass	0	2	1	1	4
6. Wall coverings and carpets	0	0	1	1	2
7. Toys and games	1	0	1	1	2
8. Architecture, engineering and surveying	0	0	0	2	2
9. Interior design	0	0	2	1	3
10. Museums	0	0	0	1	1
Non-dedicated Support	1	1	5	20	27
1. Wholesale and retail	0	0	0	10	10
2. General transportation	0	0	0	10	10
3. Telephony and Internet	1	1	5	0	7

Appendix Table 2.2.

Receipt or Payments for Intellectual Property

industry	Yes	No	Total
Interdependent Copyright Industries	18	21	34
1. TV sets, radios, VCRs, CD and DVD players	4	1	5
2. Computers and equipment	4	1	5
3. Musical instruments	1	4	5
4. Photographic & cinematographic equipment	1	4	5
5. Photocopies	1	4	5
6. Blank recording equipment	1	3	4
7. Paper			
Partial	16	16	32
1. Apparel, textiles and footwear	5	1	6
2. Jewellery & coins	1	0	1
3. Other crafts	0	1	1
4. Furniture	2	5	9
5. Household goods, china and glass	2	2	4
6. Wall coverings and carpets	1	1	2
7. Toys and games	1	1	2
8. Architecture, engineering and surveying	0	2	2
9. Interior design	1	2	3
10. Museums	0	1	1
Non-dedicated Support	3	24	27
1. Wholesale and retail	0	10	10
2. General transportation	0	10	10
3. Telephony and Internet	3	4	7

Appendix Table 2.8
Annual Expenditure on Royalties, Patents and Licensing Fees (Percentage)

Industry	0%	0-10%	10-20%	More than 20%	Total
Interdependent Copyright Industries	25	7	1	1	34
1. TV sets, radios, VCRs, CD and DVD players	4	0	0	1	5
2. Computers and equipment	1	3	0	1	5
3. Musical instruments	4	1	0	0	5
4. Photographic & cinematographic equipment	4	1	0	0	5
5. Photocopiers	4	1	0	0	5
6. Blank recording equipment	5	0	0	0	4
7. Paper					
Partial	21	9	2	0	32
1. Apparel, textiles and footwear	1	4	1	0	6
2. Jewelry & coins	0	1	0	0	1
3. Other crafts	1	0	0	0	1
4. Furniture	6	2	1	0	9
5. Household goods, china and glass	3	1	0	0	4
6. Wall coverings and carpets	2	0	0	0	2
7. Toys and games	1	1	0	0	2
8. Architecture, engineering and surveying	2	0	0	0	2
9. Interior design	3	0	0	0	3
10. Museums	1	0	0	0	1
	1				
Non-dedicated Support	125	0	0	0	27
1. Wholesale and retail	10	0	0	0	10
2. General transportation	10	0	0	0	10
3. Telephony and Internet	5	2	0	0	7

The copyright factors for Malaysia's interdependent industries are largely based on survey responses and personal interviews. The mail responses were limited and generally showed a lower dependence on copyright content for their activities. Telephone and personal interviews were, however, more effective, since additional probing questions on the following issues were posed to elucidate the copyright content in the respective industries. The issues raised include:

- Expenditure on research and development (R&D)
- Number of personnel engaged in technology and R&D activities
- Significance of copyright activities in the industry

For each of the seven industry subsectors, a minimum of five large companies were interviewed over the phone, except for paper, where four of the larger companies were interviewed. In general, firms with higher foreign participation had a higher level of R&D activities and a larger copyright content.

ii. Partial Copyright Industries

In the case of partial copyright industries, only that portion attributable to works and other protected subject matter is included in the estimation of their economic contribution to the economy. There are 10 industries that are classified as partial copyright industries:

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

The copyright factors for apparel, textiles and footwear, and furniture were estimated through personal interviews and surveys. These two groups of industries are relatively large and well established in Malaysia and hence exhibited a higher copyright content than the rest of the industries.

For the remainder of the partial copyright industry groups, the survey response was poor, and telephone interviews were more useful in estimating the copyright factors. An average of the results from the survey and the weighted average of the copyright factors in the Singapore and Hungarian studies were used to compute the copyright factors for the different industry subsectors. A number of indicators that may well reflect the copyright content of these industries were used as weights.³⁴

- GDP per capita
- Patent and copyright protection
- Availability of information and technology personnel
- Expenditure on R&D
- Basic research; and
- Entrepreneurship

iii. Non-Dedicated Copyright Industries

The non-dedicated copyright industries are those in which only a portion support and facilitate the distribution of core CB industries and are not already included in the “core” category. These industries include:

- General wholesale and retail;
- General transportation; and
- Telephony and Internet.

The copyright factors for the distribution industries were estimated using the weighting method that has been adopted in a number of studies, as shown below:

³⁴The data for 2000 was sourced from The Global Competitiveness Reports and the World Competitiveness Yearbook.

$$\text{Copyright Factor for NDCI} = \frac{\text{ValueAdded (Core + Interdependent + Partial)}}{\text{ValueAdded(Non - Distribution GDP)}}$$

The copyright factor for the non-dedicated distributive industries is a ratio of the value added of the core, interdependent and the partial copyright industries to the value added of the non-distribution sectors of the GDP (WIPO, 2003, p.59). The distributive sectors include wholesale and retail and transportation. The ratio was calculated for the years 2000 to 2005 as shown in Appendix Table 2.4 The wholesale, retail and transportation are given a lower factor than the Internet, as the Internet in general provides the basic infrastructure for copyright industries.

The copyright factors derived through this method generally reflected the findings of the survey and interviews.

Appendix Table 2.4
Copyright Factors

Interdependent Copyright Industries	Copyright Factor (%) (2000-2005)						
1. TV sets, radios, VCRs, CDs and DVD players	40						
2. Computers and equipment	40						
3. Musical instruments	30						
4. Photographic and cinematographic instruments	25						
5. Photocopiers	20						
6. Blank recording material	20						
7. Paper	15						
Partial Copyright Industries	Copyright Factor (%) (2000-2005)						
1. Apparel, textiles and footwear	15.0						
2. Jewelry and coins							
3. Other crafts	26.7						
4. Furniture	35						
5. Household goods, china and glass	0.38						
6. Wall coverings and carpets	1.08						
7. Toys and games	26.7						
8. Architecture, engineering and surveying	5.28						
9. Interior design	5.28						
Non-Dedicated Support Industries	Copyright Factor (%)						
	2000	2001	2002	2003	2004	2005	
1. General wholesale and retail	5.59	6.28	6.44	6.52	6.45	6.77	
2. General transportation	5.59	6.28	6.44	6.52	6.45	6.77	
3. Telephony and Internet	7.26	8.16	8.37	8.48	8.39	8.80	

Appendix 3

List of Malaysian Core Copyright Industries at 2-digit Activity/Commodity Input-Output Classification

I. CORE COPYRIGHT INDUSTRIES

No.	Economic Activity	MSIC 2000	I-O Code	Activity Description
1	Press and Literature			
1.1	Authors writers, translators	92142/74999	84	Entertainment
1.2	Newspapers	22120	36	Printing
1.3	News and feature agencies, etc	92201/2/9	78	Business services
1.4	Magazines, periodicals	22120	36	Printing
1.5	Book publishing	22110	36	Printing
1.6	Cards and maps, directories and other published material	22190	36	Printing
1.7	Pre-press, printing, and post press of books, magazines, newspapers, advertising materials	22210/20	36	Printing
1.8	Wholesale and retail of press and literature (book stores, newsstands, etc)	51392/52394	69	Wholesale and retail trade
1.9	Libraries	92310	94	Other public administration
2	Music, Theatrical Production, Operas			
2.1	Composers, lyricists, arrangers, choreographers, writers, directors, performers, and other personnel	92142/92199 92499	84 86	Entertainment Recreation
2.2	Printing and publishing of music	22130	36	Printing
2.3	Production/manufacturing of recorded music	22300	36	Printing
2.4	Wholesale and retail of recorded music (sale and rental)	52354/51397 71303	69 78	Wholesale and retail trade Business services
2.5	Artistry and literary creation and interpretation	92149 92142	84 84	Entertainment Entertainment
2.6	Performers and allied agencies (bookings, ticket agencies, etc.)			
3	Motion Picture and Video			
3.1	Writers, directors, actors	92142	84	Entertainment
3.2	Motion picture and video distribution	92112	84	Entertainment
3.3	Motion picture exhibition	92120	84	Entertainment
3.4	Video rentals and sales, video on demand	71303 92112	78 84	Business services Entertainment
3.5	Allied services	22300	36	Printing
4	Radio and Television	92131/2	85	Radio and television broadcasting
4.1	National radio and television broadcasting companies			
4.2	Other radio and television broadcasters	92131/2	85	Radio and television broadcasting
4.3	Independent producers	74999	78	Business services
4.4	Cable television (systems and channels)	64201/2/3/9	72	Communication

Appendix 3 Continued

No.	Economic Activity	MSIC 2000	I-O Code	Activity Description
4.5	Satellite television	61201/2/3/10	72	Communication
4.6	Allied services			
5	Photography			
5.1	Studios and commercial photography	74940	78	Business services
5.2	Photo agencies and libraries	22220	36	Printing
		74999	78	Business services
		92310	86	Recreation
6	Software and Databases			
6.1	Programming, development and design, manufacturing	72220	78	Business services
6.2	Wholesale and retail prepackaged software (business programs, video games, educational programs, etc)	51530	69	Wholesale and retail trade
6.3	Data processing and publishing	72400/72300	78	Business services
7	Visual and Graphic Arts			
7.1	Artists	92142	84	Entertainment
7.2	Art galleries and other wholesale and retail	92142	84	Entertainment
7.3	Picture framing and other allied services	74940	78	Business services
7.4	Graphic design			
8	Advertising Services			
8.1	Agencies buying services	74300	78	Business services
9	Copyright Collecting Societies			
	Copyright Collecting Societies	91120	83	Private non-profit institutions

Appendix 4

Questionnaire

ECONOMIC CONTRIBUTION OF COPYRIGHT- BASED INDUSTRIES IN MALAYSIA

Part A: Company Particulars

Year of establishment: _____ Number of years in copyright activities: _____

Primary business activity: _____

Ownership (please tick only one):
_____ Wholly local _____ Majority local
_____ Wholly foreign _____ Majority foreign

Name of contact person: _____ Telephone No: _____

Part B: Estimation of Economic Contribution to Economy

B1. Total turnover/Sales (Inclusive of all indirect taxes) for financial year 2006

MR _____

B2. Total estimated cost of production for financial year 2006

- | | |
|--|----------|
| a. Total wages and salaries (inclusive of EPF/SOCSO, etc): | RM _____ |
| b. Raw materials | RM _____ |
| c. Other physical inputs (supplies, packaging, etc) | RM _____ |
| d. Transport and freight charges | RM _____ |
| e. Professional & management fees, license fees & royalties | RM _____ |
| f. Others (electricity, water, advertising, rent, postage, etc.) | RM _____ |

Total Cost of Production RM _____

i. Depreciation RM _____

B3. Total investment in plant & equipment RM _____

B4. Closing stock of finished goods for financial year 2006: RM _____

B5. Total workforce (as at December 31, 2006)

a. Number of full-time personnel.

Managers	_____
Professional & technical staff	_____
Clerical, sales & service staff	_____
Production & transport workers	_____

Total number of full-time personnel _____

b. Number of part-time personnel _____

B3. What percentage of your product/service is exported? _____ %

Part C: Estimation of Copyright Activities in Firm

C1. How important is copyright in the daily operations of your firm?
(Please circle one of the following options below).

1. Very significant 2. Significant 3. Slightly significant 4. Insignificant

C2. Does your firm receive or pay any form of payments for the use of intellectual rights in the form of royalties, patents or other licensing fees in the course of your business?

1. Yes 2. No (please proceed to question C5)

C3. On average, what percentage of annual total expenditure does your business spend on royalties, patents or other licensing fees?

_____ %

C4. In your opinion, what percentage of turnover in the company is attributable to copyright or creative activities in your firm?

_____ %

C5. What percentage of the workforce in your business is involved in creative activities? Creative activities include product/service creation and development, for example "A jewelry craftsman drawing the designs for his jewelry".

Number of full-time personnel _____ persons

Number of part-time personnel _____ persons

The Economic Contribution of Copyright-Based Industries in the Netherlands



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Simon Bremer
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Summary

This report quantifies the economic contribution of the copyright-based industries in the Netherlands. It provides insight into the extent to which economic activities are grounded in copyright-protected products, including goods and services protected by the law on copyright and related rights. The report updates a series of comparable studies which have been conducted approximately every four years since 1986. The present study makes use of data from 2005 and is the first to be conducted in accordance with the guidelines of the World Intellectual Property Organization (WIPO). The WIPO Guide is a recently developed methodology to determine the economic contribution of the copyright-based industries and aims to make national studies in this area as internationally comparable as possible.

The WIPO Guide provides guidelines on how to measure added value, employment and the position in the balance of trade of the copyright-based industries. In 2005 the added value of the Dutch copyright-based industries was 30.5 billion euros, equal to 5.9 per cent of Gross Domestic Product (GDP). Employment in the Dutch copyright-based industries totaled 567,214 full-time equivalents (FTEs), equal to 8.8 per cent of total employment in the Netherlands. The balance of trade surplus in these industries was 2.4 billion euros, equal to 6.9 per cent of the total for the Netherlands.

The Guide identifies the copyright-based industries in core sectors, partial industries, interdependent industries and non-dedicated industries. The most important sub-sectors in the core industries are software and databases and press and literature, followed by advertising. The other sub-sectors are music, theatrical productions and opera, motion pictures and video, radio and television, photography, visual and graphic arts and copyright organizations. Software and databases represents 8.1 billion euros added value and 142,000 FTEs. Press and literature has an added value of 6.9 billion euros and 129,000 FTEs. Advertising has an added value of 1.8 billion euros and 49,000 FTEs.

This is the first study to distinguish between core industries — where copyright plays a primary role — and partial, interdependent and non-dedicated industries. Partial industries are those in which only a portion of their products are copyright-protected (e.g. furniture, jewelry). Interdependent industries create products that facilitate copyright-protected products (e.g. television and paper). The non-dedicated industries play a facilitating role in broadcasting and distribution (e.g. telecommunications, transport). These industries are included only partially because not all their economic activities can be attributed to copyright-protected products. The core industries comprise approximately two-thirds of the total and the other industries account for the remaining one-third.

The economic contribution of the copyright-based industries has now been measured in 17 countries in accordance with the WIPO Guide, including both developed and developing countries. On average the copyright-based industries comprise 5.4 per cent of GDP and 5.8 per cent of total employment. The Dutch score above average on both aspects; in terms of added value the Netherlands comes in fifth, relative to the other 16 countries, and in terms of employment it takes third place.

Because this study is the first to follow the WIPO Guide, quantitative comparison with previous research is possible only to a certain extent. The SEO study conducted in 2000 (using data from 1998) mainly investigated the core industries. Between 1998 and 2005, these core industries grew annually by 4.4 per cent on average while employment grew by 7.4 per cent. The SEO study from 2003 and research based on the *Brief Cultuur en Economie* (White Paper Culture and Economy) are quantitatively incomparable because they study different subjects; the multimedia and creative sectors respectively.

Introduction

1.1 Background

The economic characteristics of copyright are gaining increased attention, both nationally and internationally. There is growing insight into the fact that copyright plays a substantial role in the economy in terms of the production, distribution and consumption of copyright-protected products. These products are goods and services protected by copyright or related rights law. The expanding potential of electronic distribution has only further broadened the scope of copyright. The present study aims to quantify the contribution of the copyright-based industries in the Netherlands; that is, we provide insight into the extent to which economic activities are grounded in copyright-protected products. This survey of the economic contribution of the copyright-based industries enhances the likelihood of focusing more attention on the provision of adequate copyright protection.

The Netherlands has a long tradition of quantifying the economic contribution of the copyright-based industries; the first Dutch study on this subject appeared in 1986, commissioned by *Stichting Auteursrechtbelangen* (the Foundation for Copyright Interests), with the involvement of the Ministry of Economic Affairs, since then, the research has been repeated about every four years. The last SEO report dates from 2003, using data from 2000; it was the first to be commissioned by the Ministry of Economic Affairs. However, this particular study focused differently from the previous studies, namely on the multimedia cluster. It consisted of a brief quantitative analysis and case studies that described the market structure and innovativeness of the cluster.

The present study is an update in a series of previous studies on the copyright-based industries and provides insight into the current situation and developments over time using data from 2005. The challenge has been to conduct the study in accordance with the WIPO Guide.

In 2003, WIPO developed a methodology to determine the economic contribution of the copyright-based industries,¹ a main goal of the Guide being to make national studies in this area as internationally comparable as possible. The present research is the first Dutch study to follow the WIPO Guide and at present 16 other countries have carried out similar research on the economic contribution of the copyright-based industries in accordance with the Guide, including the United States, Canada, Hungary, and Singapore.

Following the WIPO Guide has meant that this study is not easily comparable with those of previous years. As the 2003 study was focused differently (on the multimedia cluster), this rules out the possibility of making a quantitative comparison with this particular study; this also holds for the research conducted in the *Brief Cultuur en Economie* (White Paper on Culture and Economy) that focused on the cultural and creative sector as its main objective.² However, with a few minor adaptations, the study from 2000 is comparable with several portions of the current research, thus enabling an analysis of the development of copyright-based industries over time.

¹ A first meeting to update the Guide took place in Singapore in October 2008.

² Based on a report by Marlet, G. and Poort, J., 2005: *Omvang en belang van de creatieve productie in Nederland* (Scope and Value of Creative Productions in the Netherlands), in: *Cultuur en creativiteit naar waarde geschat* (Evaluating Culture and Creativity), *Atlas voor Gemeenten* (Guide for Municipal Authorities)/SEO Economic Research.

1.2 Research according to the WIPO Guide

A valid assessment of the economic contribution of copyright entails measuring the following three variables for each of the industries that are dependent on or influenced by copyright:

- (1) added value;
- (2) employment;
- (3) position of trade balance.

Subsequently, the magnitude of the contribution by the copyright-based industries can be related to the total Dutch economy. More specifically, this concerns the added value of copyright-based industries as a percentage of Gross Domestic Product and employment in the copyright-based industries as a percentage of total Dutch employment. The trade balance position indicates whether more copyright-protected goods are imported than exported. This required data on both exports and imports, the position of the trade balance being the actual difference between the two.

The WIPO Guide recommends taking the following four steps:

1. identification and classification of industries;
2. data collection;
3. data analysis;
4. analysis and presentation of results.

Identification and Classification of Industries

The first step was to determine which industries formed part of the copyright-based industries, and details can be found in the Guide; i.e. with reference to the codes assigned by the International Standard Industrial Classification (ISIC) it identifies the industries belonging to the copyright-based sector.

The WIPO Guide sets out four categories of industries:

- *core copyright industries*: industries wholly engaged in the creation, production and manufacturing, performance, broadcasting, communication and exhibition of copyright-protected products (e.g. music and movies);
- *partial copyright industries*: industries in which certain activities are related to the creation, production, manufacturing, performance, broadcast, communication and exhibition of copyright-protected products.(e.g. jewelry and furniture);
- *interdependent copyright industries*: industries engaged in production, manufacturing and sales of equipment and utilities that facilitate the creation, production, manufacturing, performance, broadcast, communication and exhibition of copyright-protected products (e.g. television and paper);
- *non-dedicated copyright industries*: industries in which certain activities are related to facilitating the broadcast, communication, distribution or sales of copyright-protected products which do not belong to the core industries (e.g. telecommunications and transport).

The WIPO Guide indicates which industries come under the various sector headings. Previous Dutch studies included the interdependent and partial industries but to only a limited extent.

Data Collection

In the Netherlands we have access to very good official statistics and we have based our research on these.

For added value, we used the production statistics gathered by the Central Dutch Institute of Statistics (CBS). Their statistics on the added value of companies are based on survey material and broken down into industry levels. For employment we used the data on jobs and self-employed occupations derived from the Social Statistics File (SSB) made available by the CBS. Data for the SSB were collected by the tax authorities and local governmental administration and cover the entire Dutch population. For the balance of trade figures, we used external trade data from Eurostat, which contain information on import and export values of more than 7,000 product categories. (For an explanation of the data sources and certain necessary data operations, see Appendix A.)

The most recent production statistics available were from 2005 and given the necessity of these data for the research, we chose to use the statistics for the entire study (even if other more recent data were available). The Guide considers a time-lag of two to three years to be fairly reasonable.

Data Analysis and Presentation

Data analysis deals with the following challenges:

Ascribing percentages to industries in the partial, interdependent and non-dedicated sectors

Industries that form part of the core sector may be considered as belonging fully to the copyright-based industries. For the partial, interdependent and non-dedicated industries, however, not all of their activities are either copyright protected or should be considered as part of the copyright-related economy. Therefore, the various industries were accorded a percentage (between 0 and 100 per cent). The determination of these percentages, also known as copyright factors, is described in the Appendices.

Breakdown of Core Industries into Sub-Sectors

The core industries can be broken down into eight sub-sectors (press and literature, motion pictures and video, software and databases, etc.), the WIPO Guide indicating which ISIC code should be ascribed to which sub-sector. However, a complication arose because the WIPO Guide does not ascribe all codes only to one sub-sector. For example, ISIC code 2222 (service activities related to printing) was ascribed to press and literature and photography. Consequently, we have had to decide how such industries should be distributed among the different sub-sectors and an explanation of the procedure we followed is set out in the Appendices.

This report presents the results of the analysis based on the collected data and compares them with the results of previous national and international studies. Our findings have been summarized in illustrative tables and figures to provide a clear overview.

1.3 Report Structure

The report is structured as follows: Chapter 2 presents the most important findings on the economic magnitude of copyright in terms of value added, employment and balance of trade. We analyzed the core, partial, interdependent and non-dedicated industries and broke the core industries down into sub-sectors. In Chapter 3 we compare our results with findings in other countries and with Dutch studies from previous years. The Appendices present an overview of the methodology as we have opted to keep methodological discussion to a minimum in the main text.

2. Economic Contribution of the Copyright-Based Industries in 2005

This Chapter presents and discusses the research findings. Section 2.1 provides an overview of the results. The core industries were fully included in our calculations and the partial, interdependent and non-dedicated industries were included insofar as their economic activities could be attributed to copyright-protected products. Explanation of the accounted fraction is contained in the Appendices.

Sections 2.2 and 2.3 investigate certain issues in more detail; in Section 2.2 the core industries have been broken down into sub-sectors and Section 2.3 discusses the partial, interdependent and non-dedicated industries in detail.

2.1 Overview

2.1.1 Value Added

In 2005 the value added of the copyright-based industries was 30.5 billion euros (Table 2.1³). This is equal to 5.9 per cent of GDP, which in 2005 was 513,407 million euros.

The core industries together had a total value added of 20.6 billion euros; the other industries 9.9 billion euros. The former comprised the largest part of the copyright-based economy (approximately two thirds), the partial, interdependent and non-dedicated industries approximately one third. The core industries also comprised 4.0 per cent of GDP.

Table 2.1 The Added Value of the Copyright-Based Industries

	Added value (in 1,000 euros)	Added value (% of GDP)
Core industries	20,605,451	4.0
Partial industries	1,929,665	0.4
Interdependent industries	4,634,920	0.9
Non-dedicated industries	3,329,507	0.6
Total	30,499,542	5.9

2.1.2 Employment

In 2005 employment in the copyright-based industries was 567,214 FTEs (see Table 2.23), equivalent to 8.8 per cent of total employment in the Netherlands, which in 2005 was 6,478,000 FTEs. Both employees and the self-employed have been included in these calculations; the same being true for part-time workers.

Employment in the core industries was 398,828 FTEs; in the other industries 168,386 FTEs. The former also comprised the greater part of the copyright-based economy in terms of employment (approximately 70 per cent), the partial, interdependent and non-dedicated industries making up about 30 per cent. Employment in the core industries was equal to 6.2 per cent of the total employment in the Netherlands.

³ When calculating totals a large number of digits has been included; because of this the total number can deviate from the sum of the numbers shown in the Table.

Country comparison (latest available years)

	Number of employed (in FTEs)	Number of employed as % of total employment
Core industries	398,828	6.2
Partial industries	37,000	0.6
Interdependent industries	69,716	1.1
Non-dedicated industries	61,640	1.0
Total	567,214	8.8

Source: Own calculation by SEO Economic Research, based on data on Jobs and Self-Employed in 2005 made available by CBS and held in the Social Statistics File (SSB).

2.1.3 Foreign Trade

In 2005, the balance of trade surplus for the copyright-based industries was 2.4 billion euros (see Table 2.3). This was equivalent to 6.9 per cent of the total trade surplus in the Netherlands.

Imports and exports were measured on the basis of products rather than industries. As articles progress from raw material to final product, they go through the entire production chain. The role of distribution channels such as transport, wholesale and retailing is unknown and irretrievable when registering final products. Therefore, the trade balance cannot accurately be broken down and the non-dedicated industries are not included.

If we look at products closely related to the core industries, it appears that the following achieved a significantly high surplus on the balance of trade:

- recorded CDs and DVDs, surplus of 504 million euros;
- advertising material, surplus of 130 million euros.

The balance of trade deficit was relatively high for:

- console games, with a deficit of 609 million euros.

A major part of the surplus was created in the interdependent industries, particularly the petrochemical industry (see Table 2.3). This industry supplies input for the production of audio players, household appliances, copiers, etc. Paper and pulp products also sustained a deficit.

Table 2.3 Balance of Trade for Copyright-Based Products (in 1,000 euros)

	Surplus balance of trade (in 1,000 euros)	As percentage of total surplus (%)
Core industries:	1,210	3.5
Interdependent and partial industries	1,145	3.4
Total	2,355	6.9

2.2 Core Copyright Industries broken down into Sub-Sectors

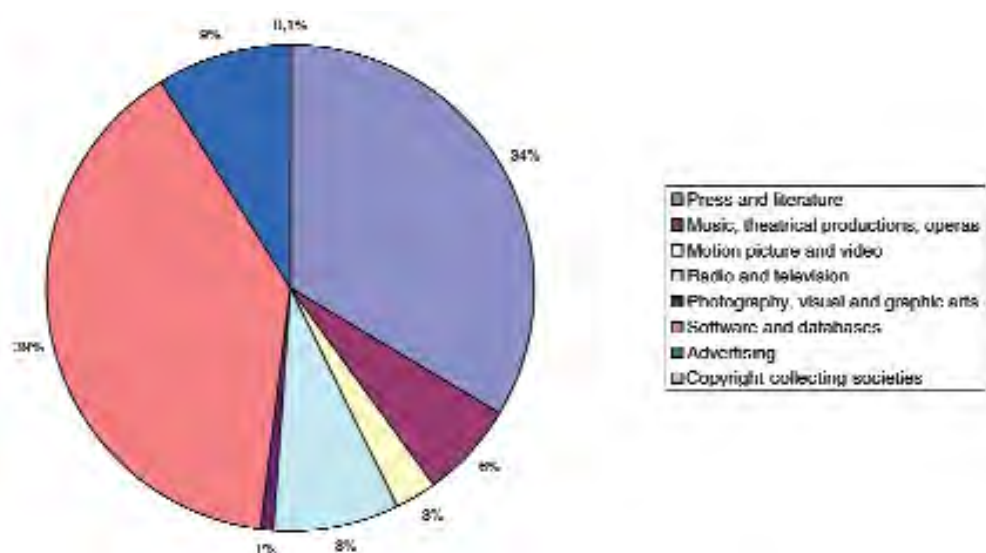
2.2.1 Overview

The core industries can be broken down into the following eight sub-sectors:

- press and literature
- music, theatrical productions, opera
- motion pictures and video
- radio and television
- photography, visual and graphic arts
- software and databases
- advertising
- copyright collecting societies

The pie charts below break down the total value added (Figure 2.1) and employment (Figure 2.2) of the core sectors into the various sub-sectors. The software and databases sub-sector realized the highest value added (39 per cent of the core sector) and employment (35 per cent). The value added in the latter has mainly been realized by development and production of tailor-made software and by software consultancy. In second place, in terms of both value added (34 per cent) and employment (32 per cent), was press and literature. These two sub-sectors were followed by advertising, for which the value added was nine per cent and employment which represented 13 per cent of the core industries. Radio and television, music, theatrical productions and opera, motion pictures and video, and photography, visual and graphic arts followed.

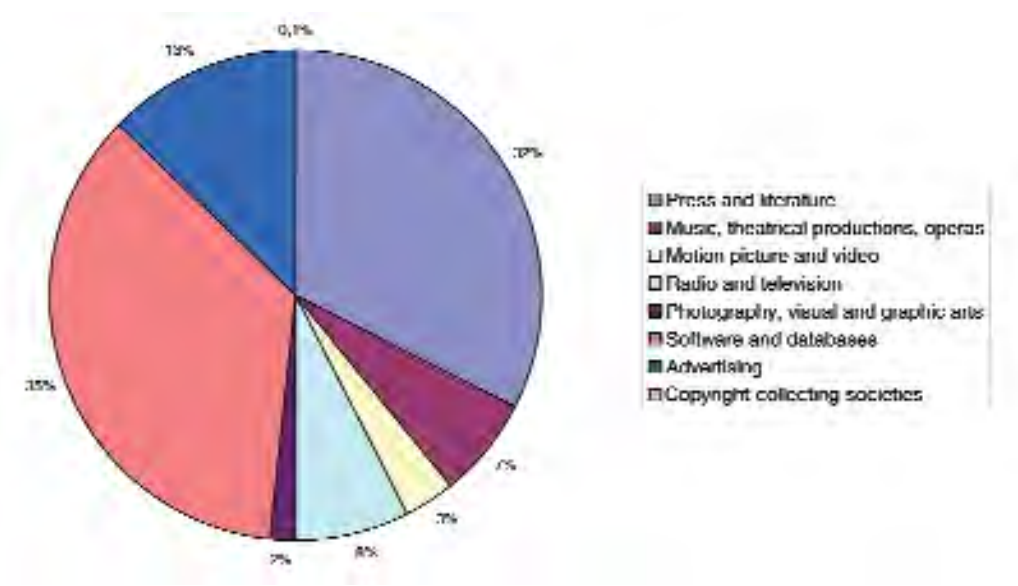
Figure 2.1 Breakdown of the Value Added of Core Sectors into Sub-Sectors



Source: Own calculation SEO Economic Research based on data made available by CBS, consisting of production statistics for 2005.



Figure 2.2 Breakdown of Employment in Core Sectors into Sub-Sectors



Source: Own calculation SEO Economic Research based on data made available by CBS, consisting of data relating to employees and self-employed workers for 2005 from the Social Statistics File (SSB).

2.2.2 Press and Literature

This sub-sector consists of writing, translation, publishing, distribution (also via libraries) and sales of:

- books, puzzle books, brochures, leaflets, etc.;
- dictionaries and encyclopedias;
- cards and maps;
- newspapers and magazines.

In 2005, the sub-sector had a value added of 6.9 billion euros, which is equal to 1.4 per cent of GDP. Employment consisted of 129,000 FTEs, equal to 2.0 per cent of the total employment. Press and literature comprised 34 per cent of the value added and 32 per cent of the employment in the core industries. In economic terms it was the second most important sub-sector within the core industries, after software and databases.

2.2.3 Music, Theatrical Productions, Opera

This sub-sector consists of industries involved in:

- the creation, production and performance of music, theatrical productions and opera as well as the facilitation thereof (such as musical instruments, theater requisites, booking agencies, ticket offices);
- recording, production, distribution and sales of recorded music;
- printing and publishing of music.

In 2005, the sub-sector had a value added of 1.3 billion euros, equivalent to 0.3 per cent of GDP. Employment consisted of 27,000 FTEs, equivalent to 0.4 per cent of the total. Music, theatrical productions and opera comprised six per cent of the added value and seven per cent of employment in the core industries.

2.2.4 Motion Pictures and Video

This sub-sector consists of industries involved in:

- the creation, production, distribution and screening of movies (taking account of the complete production chain from scenario writers to screening);
- video rentals and sales (including video-on-demand);
- allied services (such as translation and dubbing).

In 2005, this sub-sector had a value added of 567 million euros, equivalent to 0.1 per cent of GDP. Employment consisted of 13,000 FTEs, equivalent to 0.2 per cent of the total. Motion pictures and video comprised three per cent of the value added and three per cent of employment in the core industries.

2.2.5 Radio and Television

This sub-sector consists of:

- national public and commercial broadcasting companies;
- independent radio and television producers;
- cable and satellite television (systems and channels) companies.

In 2005, the sub-sector had a value added of 1.7 billion euros, equivalent to 0.3 per cent of GDP. Employment consisted of 30,000 FTEs, equivalent to 0.5 per cent of the total. Radio and television comprised eight per cent of the value added and eight per cent of employment in the core industries.

2.2.6 Photography, Visual and Graphic Arts

This sub-sector consists of:

- commercial photography and studios;
- photo agencies and libraries;
- graphic design;
- creation, exhibition (mainly galleries), distribution and sales of the visual arts;
- picture framing and other allied services.

In 2005, the sub-sector had a value added of 169 million euros, equivalent to 0.03 per cent of GDP. Employment consisted of 6,000 FTEs, equivalent to 0.10 per cent of the total. Photography, visual and graphic arts comprised one per cent of the value added and two per cent of employment in the core industries.

2.2.7 Software and Databases

This sub-sector consists of:

- programming, development and design of software;
- manufacturing, wholesale and retail of pre-packaged software (business applications, video games, educational programs, etc.);
- database processing and publishing.

In 2005, the sub-sector produced a value added of 8.1 billion euros, equivalent to 1.57 per cent of GDP. Employment consisted of 142,000 FTEs, equivalent to 2.20 per cent of the total. Software and databases comprised 39 per cent of the value added and 35 per cent of employment in the core industries. This means that within the core industries, this is by far the most important sub-sector for the Dutch economy.

2.2.8 Advertising

This sub-sector consists of:

- advertising agencies;
- buying and selling advertising services.

In 2005, the sub-sector produced a value added of 1.8 billion euros, equivalent to 0.35 per cent of GDP. Employment consisted of 49,000 FTEs, equal to 0.77 per cent of the total. Advertising comprised nine per cent of the value added and 13 per cent of employment in the core industries.

2.2.9 Copyright Collecting Societies

This sub-sector covers copyright collecting societies that accumulate and distribute copyright-related payments and trade organizations closely related to copyright. For the collective management societies, it should be emphasized that the relevant measure was their total value added in terms of salaries and not turnover (not the total of payments collected). The copyright organizations had a value added of 27 million euros in 2005, equivalent to 0.01 per cent of GDP. Employment consisted of 476 FTEs, equivalent to 0.01 per cent of total employment.⁴ These organizations comprised 0.1 per cent of the value added and 0.1 per cent of employment in the core industries.

2.3 Partial, Interdependent and Non-Dedicated Copyright Industries

2.3.1 Copyright Factors

For the core industries we assumed that all their economic activities were related to copyright-protected products. However, for the partial, interdependent and non-dedicated industries this was not the case. Therefore only a fraction of the value added, employment and balance of trade in these industries could be ascribed to the copyright-based economy. This was achieved by attributing to each industry a copyright factor: for example, a copyright factor of 25 per cent meant that one quarter of the industry was considered a part of the copyright-based economy.

To determine the copyright factors, we based ourselves primarily on those used by other countries, mainly Singapore and Hungary (and indirectly the US). The Appendices provide a fuller explanation.

2.3.2 Partial Copyright Industries

Partial industries are those in which some of the activities relate to the creation, production, manufacturing, performance, broadcast, communication and exhibition of copyright-protected products. In practice this means that only some of the products made and sold by these industries are protected by copyright. The following groups in this sub-sector are:

- apparel, textiles, and footwear;
- jewelry and coins;
- other crafts;
- furniture;
- household goods, china and glass;
- wall coverings and carpets;
- toys and games;

⁴For determining employment we used data provided by the *Stichting Auteursrechtbelangen*, the Foundation for Copyright Interests, covering employment in the member organizations of the Foundation.

- architecture, engineering, surveying;
- museums.

The copyright factors for the various industries ranged from one to 50 per cent; on average a partial industry was taken into account with a copyright factor of 10.9 per cent. Using this measurement, we arrived at a value added of 1.9 billion euros for these industries (see Table 2.1). A major segment (26 per cent) consisted of architecture, engineering and surveying. Employment accounted for 37,000 FTEs (see Table 2.2), of which 9,000 FTEs could be ascribed to architecture, engineering and surveying.

2.3.3 Interdependent Copyright Industries

Interdependent industries are those engaged in the production, manufacturing or sale of equipment and utilities that facilitate the creation, production and manufacturing, performance, broadcasting, communication or exhibition of copyright-protected products. They include, inter alia: television sets, CD and DVD players, computers, musical instruments, paper, photographic instruments and blank recording material.

These industries do not produce copyright-protected products themselves, but without copyright-protected products they would not produce anything or substantially less; therefore they have been partially considered. The copyright factors ranged from 19 per cent to 35 per cent; on average a copyright factor of 24 per cent was taken into account in an interdependent industry.

These industries contributed 4.6 billion euros to the copyright-based economy (see Table 2.1). A major part (48 per cent) came from the manufacture of video and audio recorders and receivers and computers; wholesale of computers, computer peripheral equipment and software and wholesale in other machines, equipment and supplies. Employment related to copyright consisted of 69,746 FTEs (Table 2.2).

2.3.2 Non-Dedicated Copyright Industries

Non-dedicated industries are those in which some of the activities are related to facilitating the broadcast, communication, distribution and sales of copyright-protected products which do not belong to the core industries. These include telecommunications and Internet, general wholesale and retailing and also industries not dedicated to specific trade sectors but which facilitate numerous sectors. The non-dedicated industries have been included with a copyright factor of six per cent.

These industries contributed 3.3 billion euros to the copyright-based economy (see Table 2.1); their employment figure amounted to 61,640 FTEs (Table 2.2).

3 Comparison with Previous Research

In Section 3.1 we compare the present study with studies from other countries also carried out in accordance with the WIPO Guide and in Section 3.2 we discuss earlier Dutch studies, including them in a quantitative comparative analysis as far as possible.

3.1 International Comparison

This section compares the findings of our research after consideration of studies in 16 other countries, which were conducted in accordance with the WIPO Guide. We therefore assumed them to be comparable with our study.

The Table below shows that the available studies were not only carried out in developed countries, but in a number of developing countries such as Mexico, Peru and the Philippines. A major difference from studies in the developed world is that most developing countries have access to a limited number of official statistics and make use of their own surveys and proxies.

The only studies from the European Union (EU) came from Bulgaria, Hungary, Latvia and Romania. Other EU countries (such as Belgium) are currently undertaking a national survey while several others have conducted surveys in the past, such as Finland, Norway, Spain and the United Kingdom.

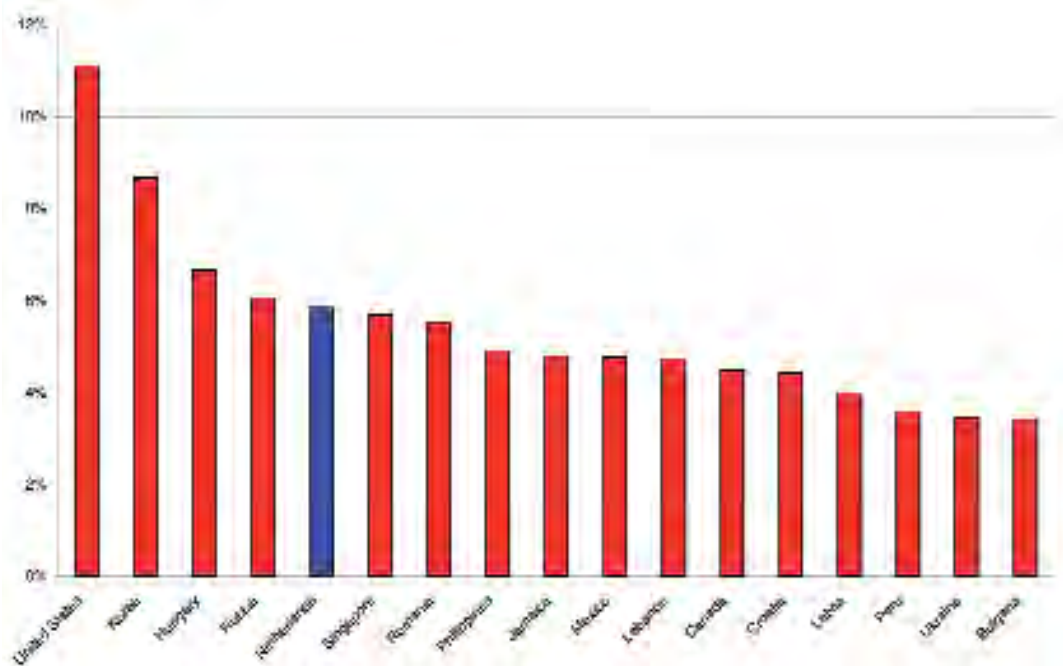
Table 3.1 An International Comparison of Copyright-Based Economies

Country	Value added as % of GDP	Employment as % of total employment
Bulgaria	3.4	4.3
Canada	4.5	5.6
Croatia	4.4	4.7
Hungary	6.7	7.1
Jamaica	4.8	3.0
Latvia	4.0	4.5
Lebanon	4.8	4.5
Mexico	4.8	11.0
Netherlands	5.9	8.8
Peru	3.6	2.5
Philippines	4.9	11.1
Republic of Korea	8.7	4.3
Russia	6.1	7.3
Romania	5.5	4.2
Singapore	5.7	5.8
Ukraine	3.5	1.9
United States of America	11.1	8.5

Source: WIPO, *SEO Economic Research* (only concerns studies conducted in accordance with the WIPO Guide).

Table 3.1 compares the economic contribution of the copyright-based industries in various countries. Figures 3.1 and 3.2 show the position held by the Netherlands. On average, copyright-based industries comprised 5.4 per cent of GDP, therefore, with 5.9 per cent, the Netherlands scored above average, coming in fifth in the group of 17 countries; only the United States of America and the Republic of Korea, with scores above eight per cent, realized substantially higher percentages. Remarkably, there were no systematic differences between developed and developing countries; for example, Canada scored lower than average, but its neighbor the United States of America scored highly. Hungary also scored well,

Figure 3.1 The Value Added of Copyright-Based Industries as a Percentage of GDP



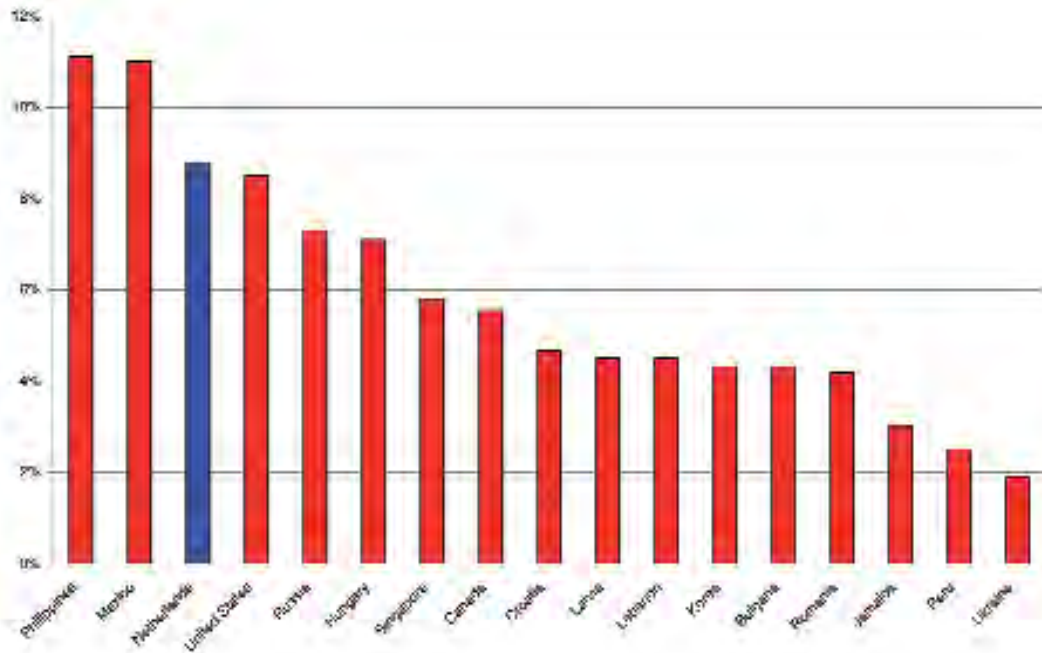
Source: WIPO, SEO Economic Research.

whereas Croatia and Bulgaria did not.

In terms of employment, the copyright-based industries comprised on average 5.8 per cent, and with 8.8 per cent, the Netherlands scored above average, taking third place in the group of 17 countries; only the Philippines and Mexico reported higher percentages (both above 10 per cent). The fact that the Netherlands showed a higher percentage of employment than value added implied that the productivity of copyright-based industries was lower than the Dutch average. The same was true for 10 out of the 17 countries; for the remaining seven, productivity of the copyright-based industries was higher than the national average; again no systematic differences appeared between developed and developing countries.



Figure 3.2 Employment in Copyright-Based Industries as Percentage of Total by Country



Source: WIPO, SEO Economic Research.

3.2 Comparison with Previous Dutch Studies

This section compares the present study with the SEO studies of 2000 and 2003, as well as with the study presented in the *Brief Cultuur en Economie* (White Paper on Culture and Economy). Since these studies differ in their choice of subject, the comparison was not without problems (see Table 3.2). We will discuss this in more detail in the following sub-sections, which will show that a quantitative comparison was only possible with the SEO study of 2000.

Table 3.2 Comparison with Previous Studies

Study	Subject	Value added as % of GDP	Employment as % of total employment	Surplus trade balance
SEO 2000	Copyright (core industries)	5.5	5.5	€384 million
SEO 2003	Multimedia cluster	6.8	6.2	Not measured
<i>Brief Cultuur en Economie</i>	Cultural sector	Not measured	3.2	Not measured
SEO 2008	Copyright (WIPO definition)	5.9	8.8	€2,355 million

It should be noted that making direct comparisons will no longer be an issue if future studies are also conducted in accordance with the methodology set out in the WIPO Guide.

3.2.1 SEO Study 2000

In 2000 SEO Economic Research conducted a study on the economic contribution of copyright-based industries for the Stichting Auteursrechtbelangen (the Foundation for Copyright Interests), using data from 1998: the study made no distinction between core and non-core industries. Some partial industries, such as architecture, surveying and scientific research were taken into account in part or entirely, implicitly or explicitly. The researchers found that the added value of the Dutch copyright-based industries was 17,385 million euros in 1998, equivalent to 5.5 per cent of GDP. Employment consisted of 338,481 FTEs, equivalent to 5.5 per cent of the Dutch total.

The 2000 study took no partial, interdependent and non-dedicated industries into account but defined the core industries somewhat more broadly than did the WIPO Guide. Therefore, quantitative comparison was only feasible in the core industry sub-sectors (press and literature, motion pictures and video, etc.). Care was nevertheless required in carrying out a comparative analysis. First, CBS data for 1998 were not available for all industries, in which case the researchers relied on other data sources, such as trade organizations or copyright collection agencies (such as Buma/Stemra). Further, the definition of sub-sectors was also slightly different. For example, in the current study music, theatrical productions and opera also includes amusement parks, whereas this was not the case in 2000. For software and databases we opted to draw a comparison with the total Internet and multimedia.

Table 3.3 shows added value in 1998 and annual growth between 1998 and 2005 for each sub-sector. Advertising and software and databases showed strong growth, in both cases by more than 10 per cent a year, while motion pictures and video grew by just under 10 per cent a year. The other sub-sectors showed moderate growth; photography and visual and graphic arts shrank slightly but overall the economic contribution of the copyright-based industries grew by 4.4 per cent per annum.

Table 3.3 Developments in Added Value 1998-2005

Sub-sector	Value added in 1998 (in million euros)	Annual growth 1998-2005
Press and literature	6,053	+2.0
Photography, visual and graphic arts	160	+0.8
Music, theatrical productions, opera	788	+7.6
Motion pictures and video	302	+9.4
Radio and television	1,533	+1.4
Software and databases	3,689	+11.9
Advertising	818	+15.7
Copyright collecting societies	35	-3.5

Source: WIPO

Note: Canadian and Singaporean estimates are understated

Table 3.4 shows employment in 1998 and annual growth between 1998 and 2005 for each sub-sector: it also shows that advertising and software and databases have grown substantially. Employment in photography, visual and graphic arts decreased strongly (-3.9 per cent). The fact that added value did not decrease (+0.8 per cent) in this sub-sector implies an increase in productivity. Advertising showed a decrease in productivity. Overall, employment increased by 7.4 per cent per annum.

Table 3.4 Developments in Employment: 1998-2005

Sub-sector	Employment in 1998	Annual growth 1998-2005
Press and literature	102,763	+3.3
Photography, visual and graphic arts	18,016	-13.9
Music, theatrical productions, opera	21,922	+3.0
Motion pictures and video	7,325	+8.3
Radio and television	14,193	+11.5
Software and databases	65,125	+11.8
Advertising	11,919	+22.6
Copyright collecting societies	523	-1.3

The surplus on the balance of trade was 384 million euros for copyright-protected products in 1998, which is almost four times lower than the present surplus of the core industries (1,210 million euros). However, it is not clear whether the same measurement methodology has been used.

3.2.2 SEO Study 2003

The subject of the SEO study from 2003 was not copyright as such but the multimedia cluster, which consists of the following four activities:

1. multimedia-enabling activities: production of software, consumer electronics, design and business consultancy;
2. content distribution: distribution via different electronic infrastructures;
3. content provision: broadcasting, entertainment, publishing and related business such as audiovisual production and publishing;
4. e-marketing: advertising, direct marketing.

The study showed that the value added of the multimedia cluster was 25,105 million euros in 2000, equivalent to 6.8 per cent of the Dutch economy. Employment consisted of 338,481 FTEs, which equaled 6.2 per cent of the Dutch total.

Analysis of the methodologies used in 2003 and the present study make it clear that they cannot actually be compared. The most important differences were:

- telecommunications was included at 50 per cent in 2003; in the present study at approximately 10 per cent;
- more of the ICT sector was included in the multimedia study than in the current study, the reason being that many ICT activities are unrelated to copyright;
- retail of copyright-protected products was not included in 2003, but is included in the present study (such as bookstores, stores for electrical household appliances, goods, radios, televisions and telecommunications equipment);
- the partial industries were not included in 2003 except for architecture, engineering and surveying (100 per cent); the figure in the present study is nine per cent;
- most interdependent and non-dedicated industries were not included in 2003, but if they were, they invariably had a higher copyright factor than in the present study.

Telecommunications and ICT both made a large contribution, accounting for almost 30 per cent of the entire multimedia cluster in 2003, with a value added of approximately 7.5 billion euros (acknowledging that these industries were not included for 100 per cent). Also, architecture, engineering and surveying made a big contribution (in 2000 four billion euros added value or 16 per cent of the multimedia cluster); this sub-sector was not fully included in the present study, only accounting for nine per cent. Overall, it is not surprising that the 2003 study found a higher share for the multimedia cluster in Dutch value added and employment than is currently found for the copyright-based industries. But, as further quantitative comparison would be non-productive, we have limited ourselves to a comparison with the 2000 report.

3.2.3 White Paper on Culture and Economy

The study discussed in this White Paper⁵ gave an overview of the employment, turnover and export of the Dutch cultural and creative sector in 2004. The business chain of creative industries consists of three stages:

- initial creation;
- material production;
- distribution and retail.

The study applied both a limited definition (creation) and a broad definition (creation, production, distribution). The White Paper estimated that the creative industries accounted for 150,000 jobs according to the limited definition and 240,000 jobs according to the broad definition (3.2 per cent of the Dutch total).

The broad definition coincided mostly with the core industries as defined by the Guide, an important exception being the sub-sector for databases and software, which was barely included (despite its importance). Further, architecture, apparel, interior design, jewelry, design of games and toys and technical design were included, although they are not core industries according to the Guide. Moreover, the research used another data source (LISA) that did not include part-time jobs and gave no information on part-time factors. On correcting for these differences, we observed that the findings were in the same order as in our current study.

Furthermore, the study discussed turnover and exports: exports from creative industries equaled 0.14 per cent of the total. Creative sector exports were still limited, but growing. There was little information available on turnover and added value. Creativity in the Netherlands is geographically concentrated in the northern part of the Dutch conurbation (Randstad), in the Gooi region and along the A2 motorway. The researchers estimated that every euro spent on production in the creative industries created 55 to 90 cents more production elsewhere in the economy. In stating this, they were underwriting the methodology followed by WIPO, thus leveling out the core industries with parts of the partial, interdependent and non-dedicated industries.

⁵ The results are based mainly on a report by Marlet, G. and Poort, J., 2005: *Omvang en belang van de creatieve productie in Nederland* (Scope and Value of Creative Productions in the Netherlands), in: *Cultuur en creativiteit naar waarde geschat* (Evaluating the Value of Culture and Creativity), Atlas voor Gemeenten (Guide for Municipal Authorities)/SEO Economic Research.

List of Abbreviations

- GDP: Gross Domestic Product
- CBS: Central Dutch Institute of Statistics, Centraal Bureau voor de Statistiek
- CPC: Central Product Classification (used by the United Nations)
- HS: Harmonized System (used by the European Union)
- ISIC: International Standard Industrial Classification
- SBI: Standard Business Categorization, Standaard Bedrijfsindeling
- SSB: Social Statistics Data File, Sociaal Statistisch Bestand
- WIPO: World Intellectual Property Organization

Commission of Accompaniment

The Commission of Accompaniment consisted of:

Piet Donselaar – Ministry of Economic Affairs

Margreet Groenenboom – Ministry of Economic Affairs (client)

Nicole Hagemans – Ministry of Justice

Lex Levisson – Ministry of Economic Affairs

Roel van de Ven – Ministry of Education, Culture and Science

Willem Wanrooij – *Stichting Auteursrechtbelangen*, the Foundation for Copyright Issues

Appendix A Explanation of the Methodology

Data Sources and Industry Codes

Table A.1 summarizes the data available from each source and the following sub-sections discuss these data in more detail.

Table A.1 Available Data and Data Sources

Variable	Source	Comment
Value added	CBS Production statistics (2005)	Coverage complete, but the information over-aggregated in some industries; disaggregation was done on the basis of employment information.
Number of employed persons	CBS Employees file and CBS Self-employed file (2005) derived from the Social Statistics files (SSB) (2005)	Coverage complete; the data file contains information on both employees and the self-employed.
Position on trade balance	Eurostat: external trade dataset (2005)	Since imports and exports are registered on the basis of production codes, products must be ascribed to industries. To do this we used the corresponding United Nations' table. ⁶

All data are available for 2005.

The WIPO Guide sets out which industries can be considered copyright-based industries and provides four-digit codes.⁷ The Guide used ISIC codes, which deviate somewhat from the Dutch SBI codes and Appendix B provides an overview. In most cases the industry codes could be replaced by an individual digit (the code number is different but the content is the same), but sometimes SBI codes go further in disaggregation. One example is ISIC code 2230: reproduction of recorded media. In the SBI system this is broken down into three codes, namely: 2231: reproduction of sound recording; 2232: reproduction of video recording; 2233: reproduction of computer media. This degree of refinement is actually an advantage when determining the sub-sectors of core industries.

Available Data and Data Operations

Number of Employees

For employment, we used data files on jobs and on self-employed persons from the Social Statistics File (SSB) made available by CBS. This File obtains data from several sources, including the tax authorities and local government administration: It is not a sample but covers the entire population including both employees and the self-employed.

⁶ www.unstats.org.

⁷ The number of digits determined the degree of aggregation. For example, code 5 stands for trade and repair of consumer products, code 52 for consumer retailing (not cars and motorcycles) and code 5247 for stores carrying books, magazines and school supplies. In reverse, adding codes 50-59 together formed code 5.

The industry in which every Dutch employee and self-employed person is active is documented, as well as the factor for every part-time job. By summing up the part-time factors we can calculate the full-time equivalents (FTEs) of employees per industry. For the self-employed we assumed the part-time factor to be 0.79, which is equivalent to the average part-time factor in the Netherlands (Source: CBS Statline). By adding the figures for employees and the self-employed we arrived at a total employment figure for FTEs.

Value Added

For the value added we used GDP against market prices. For most industries data on value added were available to the four-digit level, except for industry codes starting with a nine. Relevant to this research were codes 91 (employers, employees and trade organizations; religious and political organizations, other idealistic organizations, etc.) and 92 (culture, sports and recreation).

The question was which part of the aggregate in 91 and 92 should be ascribed to the copyright-based industries. Our answer was based on the ratio of employment as employment numbers were fully available. This served as a suitable proxy, given that it concerned labor intensive (and capital extensive) industries and meant that employment was a good approximation of economic contribution.

Balance of Trade

The aim was to calculate the position of every copyright-based industry. A problem arose in that international trade data are registered per product rather than at industry level.

The most detailed information for measuring the balance of trade came from Eurostat which collects import and export figures for European countries, although these data are gathered on product level, which means that they do not register the trading company (belonging to a certain industry), but only the product crossing the border. Since this report concentrates on industries rather than products, it was important to link the two and this we did with the help of a correspondence table (see the process on Figure A.1) that ascribes products to industries and was compiled by the UN. However, since the UN table utilizes its own product codings (CPC codes), it was necessary to use a second correspondence table to link the CPC codes to the harmonized system (HS) coding used in Europe. Fortunately the UN was able to provide the necessary table and we could therefore ascribe every product group listed in the Eurostat trade data to its corresponding industry.

However, when ascribing products to industries (i.e. in the correspondence tables) it was not possible to distinguish between, for example, a manufacturer and a wholesaler. If a wholesale company exported a chair, this was only registered as "chair" and not as "chair exported by a wholesale company". This chair must be ascribed to the wholesale industry, but because chairs cannot be distinguished from chairs exported directly by the manufacturer, a problem arose, and to deal with this we chose to ascribe products to the industries in which they are finished (in the case of the chair: furniture manufacture).

Figure A.1 Production and Sector Codes Relevant to Determining the Balance of Trade



Occasionally a product cannot be ascribed easily to one industry, in which case the product group (if the industry including this product formed part of a copyright-based industry) was ascribed partially to the copyright-based industries. We considered problem cases individually, taking care to avoid double-counting.

Breakdown of Core Copyright Industries

The core industries can be broken down into eight sub-sectors: press and literature; music, theatrical productions and opera; motion pictures and video; radio and television; photography, visual and graphic arts; software and databases; advertising and copyright collecting societies.

The Guide states which ISIC codes should be ascribed to each sub-sector but unfortunately it does not ascribe all ISIC codes uniquely to sub-sectors. For example, code 2222 (service activities relating to printing) has been ascribed to press and literature as well as photography. Appendix B lists which codes were not ascribed uniquely to sub-sectors. To break them down we proceeded as follows:

- first we calculated the values of sub-sectors based on the uniquely ascribed codes.
- second, we ascribed those codes with the assistance of SBI codes for information on content. For example ISIC code 2230 is divided into separate codes for music, video, and other.
- on the basis of the values, we found the remaining codes to be ascribed pro rata. For example, if the value of press and literature were five times higher than photography and design, the value of code 2222 would be attributed in a ratio of 5:1 to these sub-sectors.

Determination of Copyright Factors

Choice of Methodology

One challenge of the current study was to quantify the interdependent, partial and non-dedicated industries. It was a challenge because the core industries could not be fully ascribed to the copyright-based economy. In all available country studies the core industries conformed to the WIPO Guide. To determine the relevant size of the remaining three categories (the so-called non-core industries) two methods were available:

- leveling up the core industries by a given multiplier;
- attributing a copyright factor (between 0 and 100 per cent) to each sector code belonging to the relevant non-core industries.

At the moment there are four studies that follow the Guide available from developed countries, namely Canada, Hungary, Singapore and the United States of America (see Table A.2).⁸

Table A.2 Relevant Reports from Other Countries, Conducted According to the Guide

Countries	Year of publication	Year of data used	Organization conducting the study
United States of America	2006	2004 (2005, estimated)	Economists Incorporated
Canada	2006	2004	Connectus Consulting Inc.
Singapore	2004	2001	NUS Consulting
Hungary	2005	2002	Hungarian Patent Office

The first method (leveling-up) was used by Canada; total values for the core industries were increased by 35 per cent. Also, Watt (2004)⁹ argued that leveling up was useful, but mainly as an initial step in the research process. The other studies used the second method. On the basis of these results we calculated which multiplication was actually used. Table A.3 shows that this figure was on average about 80 per cent: it seems that Canada chose a relatively low multiplication.

Table A.3 Ratio of Non-Core/Core Industries (Multiplication)

Countries	Non-core/core industries	
	GDP	Employment
United States of America	71%	110%
Canada	35%	35%
Singapore	97%	61%
Hungary	68%	71%
Average (incl. Canada)	68%	69%
Average (excl. Canada)	79%	81%

Determining the Copyright Factor by Industry

A good guideline when determining copyright factors is to consider existing studies from other countries and we therefore based our study on data and information from Singapore and Hungary. To determine its copyright factors Singapore conducted a survey among 104 companies; Hungary used the same copyright factors as the United States of America in 1990 and adapted them slightly to its national circumstances. It is unclear whether the United States of America still uses these copyright factors, because it does not make this information publicly available.

We decided to use the methodology from Singapore and Hungary. Conducting a national survey is time-consuming and getting a decent response rate difficult (in Singapore this was only four per cent), in part because it may be difficult for companies to determine which part of their industries are copyright protected. Singapore and Hungary did not differ much in their copyright factors for the partial and non-dedicated industries.

⁸There are also reports available from developing countries, but we considered these too different to use as a benchmark. Moreover, official statistics are scarce in these countries, making it difficult to compare the research methodology.

⁹Watt, R., (2004). A Comment: The Copyright Factors. *Review of Economic Research on Copyright Issues*, Vol. 1(1), pp.71–78.

Copyright factors were first used in the SEO study of 2003. However, they only offered limited guidelines for the current research, because they were mainly used for industries that according to the Guide should not be included; this is related to the fact that the study had another focus (the multimedia cluster).

We set out below the copyright factors used:

Partial Industries

Hungary's copyright factor per industry was between 0.5 and 50 per cent with an average of eight per cent; Singapore's copyright factor per industry was between 0.4 and 42 per cent with an average of seven per cent. (An overview is given in Table A.4.) It is striking that the copyright factors used by Hungary and Singapore were so similar, i.e. in most cases where Singapore determined a high copyright factor, Hungary did the same; we therefore chose to take the average values of Singapore and Hungary as the copyright factors for our study.

Table A.4 Copyright Factors of Partial Industries

	Copyright factors		
	Netherlands	Singapore	Hungary
Apparel, textiles and footwear	0.5%/2.7%	0.4%	0.5%/5%
Jewelry and coins	33.5%	42%	25%
Other crafts	41%	42%	40%
Furniture	6.7%	8.3%	5%
Household goods, china and glass	0.55%	0.6%	0.5%
Wall covering and carpets	1.9%	1.7%	2%
Toys and games	46%	42%	50%
Architecture, engineering, surveying	9%	8.3%	10%
Museums	50%	Not included	50%
Total	10.9% ¹⁰		

Interdependent Industries:

Hungary took the interdependent industries fully into account; Singapore gave a copyright factor per industry code of between 20 and 35 per cent with an average of 28 per cent. Including these industries fully, the value of 100 per cent is incorrect in terms of content. Some industries in this category such as the manufacturing of paper, pulp, and paperboard (SBI code 2111) or wholesale in waste and scrap (SBI code 5149) clearly had a broader scope. Therefore, Singapore provides the best guideline at present. In our report we followed the copyright factors as used by Singapore and the factors used are listed in Appendix B.

Non-Dedicated Industries

Hungary used a copyright factor of 5.7 per cent for all industries; Singapore used a copyright factor of 6.4 per cent. Again, Hungary and Singapore were almost identical and we therefore used the average of both (six per cent) as the copyright factor for all non-dedicated industries.

¹⁰Weighted average over all partial industries.

Appendix B Copyright-Based Industries

Core Industries

WIPO Description	ISIC code	SBI code	Sub-sector
Publishing of books, brochures and other publications	2211	2211	press and literature
Publishing of newspapers, journals and periodicals	2212	2212	press and literature
Publishing of newspapers, journals and periodicals	2212	2213	press and literature
Publishing of music:	2213	2214	music, theatrical productions, opera
Other publishing	2219	2215	press and literature
Printing	2221	2221	press and literature
Printing	2221	2222	press and literature
Service activities related to printing	2222	2223	more than one
Reproduction of recorded media	2230	2231	music, theatrical productions, opera
Reproduction of recorded media	2230	2232	motion pictures and video
Reproduction of recorded media	2230	2233	software and databases
Wholesale of other household goods (50%, 50% partial industries)	5139	5143	more than one
Wholesale of computers, computer peripheral equipment and software (20%, 80% interdependent industries)	5151	5184	software and databases
Retail sale of electrical household appliances and radio and television goods (50%, 50% partial industries)	5233	5245	radio and television
Other retail sale in specialized stores (80%, 20% partial industries)	5239	5247	press and literature
Telecommunications (5%, 95% non-dedicated industries)	6420	6420	radio and television
Software publishing	7221	7221	software and databases
Other software consultancy and supply	7229	7222	software and databases
Database activities and on-line distribution of electronic content	7230	7230	software and databases
Data processing (50%, 50% non-dedicated industries)	7240	7240	software and databases
Advertising	7430	7410	advertising
Photographic activities	7494	7481	photography, visual and graphic arts
Other business activities n.e.c. (5%, 95% interdependent industries)	7499	7485	more than one
Other business activities n.e.c. (5%, 95% interdependent industries)	7499	7486	more than one
Other business activities n.e.c. (5%, 95% interdependent industries)	7499	7487	more than one
Activities of professional organizations	9112	9112	copyright organizations
Motion picture and video production	9211	9211	motion pictures and video
Motion picture and video distribution	9211	9212	motion pictures and video
Motion picture projection	9212	9213	motion pictures and video
Radio and television activities	9213	9220	radio and television
Dramatic arts, music and other arts activities	9214	9231	more than one
Dramatic arts, music and other arts activities	9214	9232	more than one
Fair and amusement park activities	9219	9233	music, theatrical productions, opera
Other recreational activities n.e.c.	9249	9272	music, theatrical productions, opera

Appendix B Copyright-Based Industries

Interdependent Industries

WIPO Description	ISIC code	SBI code	Copyright factor
TV sets, radio, VCR, CDs, DVDs, electronic games equipment and others			
Manufacture of television and radio receivers, audio or visual recording or reproducing apparatus	3230	3230	30%
Wholesale of other household goods	5139	5143	19%
Wholesale of other household goods	5139	5144	19%
Wholesale of other household goods	5139	5145	19%
Wholesale of other household goods	5139	5146	19%
Wholesale of other household goods	5139	5147	19%
Retail sale of household appliances, articles and equipment	5233	5244	33.3%
Retail sale of household appliances, articles and equipment	5233	5245	33.3%
Rental of personal and household goods	7130	7140	20%
Computer and office machinery/equipment			
Wholesale of computers, computer peripherals and software	5151	5184	30%
Manufacture of office, accounting and computing machinery	3000	3001	30%
Manufacture of office, accounting and computing machinery	3000	3002	30%
Renting of office machinery and equipment n.e.c.	7123	7133	35%
Wholesale of other machinery, equipment and supplies	5159	5181	30%
Wholesale of other machinery, equipment and supplies	5159	5182	30%
Wholesale of other machinery, equipment and supplies	5159	5183	30%
Wholesale of other machinery, equipment and supplies	5159	5185	30%
Wholesale of other machinery, equipment and supplies	5159	5187	30%
Wholesale of other machinery, equipment and supplies	5159	5188	30%
Musical instruments			
Manufacture of musical instruments	3692	3630	35%
Photographic and cinematographic instruments			
Manufacture of television and radio receivers, sound or video recording or reproducing apparatus	3320	3340	30%
Renting of other machinery and equipment	7129	7134	20%

WIPO Description	ISIC code	SBI code	Copyright factor
Paper			
Manufacture of pulp, paper and paperboard	2101	2111	25%
Manufacture of pulp, paper and paperboard	2101	2112	25%
Wholesale of other intermediate products, waste and scrap	5149	5157	25%
Wholesale of other intermediate products, waste and scrap	5149	5155	25%
Wholesale of other intermediate products, waste and scrap	5149	5156	25%
Other retail sales in specialized stores	5239	5248	33.3%
Blank recording material			
Manufacture of other chemical products n.e.c.	2429	2461	25%
Manufacture of other chemical products n.e.c.	2429	2462	25%
Manufacture of other chemical products n.e.c.	2429	2463	25%
Manufacture of other chemical products n.e.c.	2429	2464	25%
Manufacture of other chemical products n.e.c.	2429	2465	25%
Manufacture of other chemical products n.e.c.	2429	2466	25%
Wholesale of electronic and telecommunications parts and equipment	5152	5186	25%
Miscellaneous			
Other business activities n.e.c.	7485	7485	8%
Other business activities n.e.c.	7486	7480	8%
Other business activities n.e.c.	7487	7487	8%

Partial Industries

WIPO Description	ISIC code	SBI code	Copyright factor
Apparel, textiles and footwear			
Manufacture of wearing apparel	1810	1810	2.7%
Manufacture of wearing apparel	1810	1821	2.7%
Manufacture of wearing apparel	1810	1822	2.7%
Manufacture of wearing apparel	1810	1823	2.7%
Manufacture of wearing apparel	1810	1824	2.7%
Manufacture of made-up textile articles	1721	1740	2.7%
Manufacture of footwear	1920	1930	2.7%
Wholesale of textiles, clothing and footwear	5131	5141	2.7%
Wholesale of textiles, clothing and footwear	5131	5142	2.7%
Retail sale of textiles, clothing, footwear and leather goods	5232	5241	2.7%
Retail sale of textiles, clothing, footwear and leather goods	5232	5242	2.7%
Retail sale of textiles, clothing, footwear and leather goods	5232	5243	2.7%

WIPO Description	ISIC code	SBI code	Copyright factor
Jewelry and coins			
Manufacture of jewelry and related articles	3691	3621	33.5%
Manufacture of jewelry and related articles	3691	3622	33.5%
Other crafts:			
Activities of other organizations n.e.c.	9199	9133	41%
Furniture:			
Manufacture of furniture	3610	3611	6.7%
Manufacture of furniture	3610	3612	6.7%
Manufacture of furniture	3610	3613	6.7%
Manufacture of furniture	3610	3614	6.7%
Manufacture of furniture	3610	3615	6.7%
Household goods, china and glass:			
Manufacture of glass and glass products	2610	2611	0.55%
Manufacture of glass and glass products	2610	2612	0.55%
Manufacture of glass and glass products	2610	2613	0.55%
Manufacture of glass and glass products	2610	2614	0.55%
Manufacture of glass and glass products	2610	2615	0.55%
Manufacture of knitted and crocheted fabrics	173	177	0.55%
Manufacture of other products of wood	2029	2051	0.55%
Manufacture of other fabricated metal products n.e.c.	2899	2871	0.55%
Manufacture of other fabricated metal products n.e.c.	2899	2872	0.55%
Manufacture of other fabricated metal products n.e.c.	2899	2873	0.55%
Manufacture of other fabricated metal products n.e.c.	2899	2874	0.55%
Manufacture of other fabricated metal products n.e.c.	2899	2875	0.55%
Retail sale of household appliances, articles and equipment	5233	5244	0.55%
Retail sale of household appliances, articles and equipment	5233	5245	0.55%
Wall coverings and carpets:			
Manufacture of carpets and rugs	1722	1751	1.9%
Manufacture of other articles of paper and paper board	2109	2122	1.9%
Manufacture of other articles of paper and paper board	2109	2123	1.9%
Manufacture of other articles of paper and paper board	2109	2124	1.9%
Manufacture of other articles of paper and paper board	2109	2125	1.9%
Toys and games:			
Manufacture of games and toys	3694	3650	46%

WIPO Description	ISIC code	SBI code	Copyright factor
Architecture, engineering, surveying:			
Architectural and engineering activities and related technical consultancy	7421	7420	9%
Museums:			
Museum activities and preservation of historical sites and buildings	9232	9252	50%
Miscellaneous:			
Wholesale of other household goods	5139	5143	5%
Wholesale of other household goods	5139	5144	5%
Wholesale of other household goods	5139	5145	5%
Wholesale of other household goods	5139	5146	5%
Wholesale of other household goods	5139	5147	5%
Other retail sale in specialized stores	5239	5248	2.7%
Other retail sale in specialized stores	5239	5247	2.7%
General wholesale and retailing:			
Wholesale trade and commission trade, except for motor vehicles and motorcycles	51	51	6%
Retail trade, except for motor vehicles and motorcycles; repair of personal and household goods	52	52	6%
General transportation			
Land transport	60	60	6%
Water transport	61	61	6%
Air transport	62	62	6%
Supporting and auxiliary transport activities	630	631	6%
Supporting and auxiliary transport activities	630	632	6%
Supporting and auxiliary transport activities	630	633	6%
Supporting and auxiliary transport activities	630	634	6%
Post and courier activities	641	641	6%
Telephony and Internet:			
Telecommunications	6420	6420	6%
Database activities and online-distribution of electronic content	7240	7240	6%

The Economic Contribution of Copyright-Based Industries in Peru

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Executive Summary

As many studies show, the importance of creative and content-creation industries in the performance of modern economies is growing. With the Peruvian economy growing at an average rate of 6.5% in the period 2002-2007, it is essential to know the place and role that copyright industries have in the creation of value added, employment and trade flows. In this document, the economic contribution to these economic aggregates in the Peruvian case is estimated.

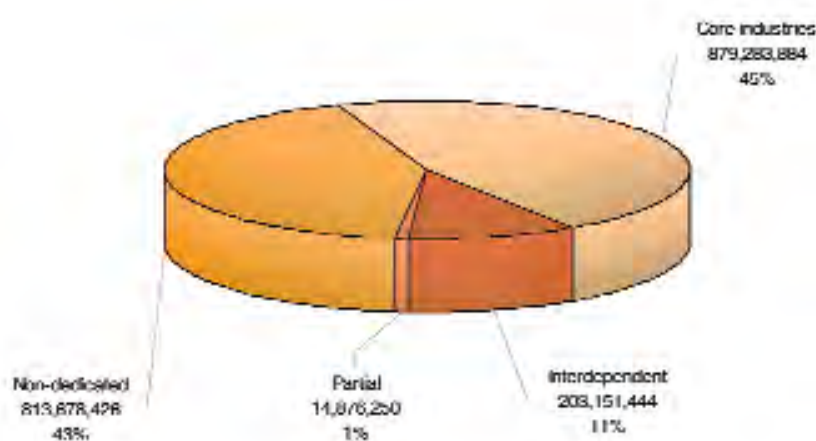
The results show that in 2005 Peruvian copyright-based industries contributed US\$ 1,911 million of value added – 2.7% of the national total – and 596,000 jobs, which represented 4.5% of the total employment. Core (45% for value added and 46% for employment) and non-dedicated copyright industries (43% for value added and 50% for employment) are the most important in terms of their contribution to these variables.

Table ES.1. Copyright-Based Industries' Contribution to National Economy, 2005

Copyright-based industries	Value Added (US\$)	As a percentage of National V.A.	Employment (number)	As a percentage of National employment
Core industries	879,283,884	1.23%	276,625	2.09%
Interdependent	203,151,444	0.28%	18,950	0.14%
Partial	14,876,250	0.02%	8,743	0.07%
Non-dedicated	813,678,426	1.14%	291,632	2.20%
Total	1,910,990,004	2.67%	595,950	4.50%

Source: Chapter 4 tables.
Prepared by the authors

Figure ES.1. Copyright-Based Industries' Share of Value Added, 2005



Source: Chapter 4 tables.
Prepared by the authors

Copyright-based industries' contribution to national exports is still minor, with US\$ 143 million, including services exports, an amount equivalent to 0.8% of the country's total goods and services exports. Core industries represent the main exporting activities based on copyright; on the other hand, CBIs' imports reached US\$ 652 million in 2005, an amount equivalent to 5.4% of the total national goods imports. In this case, the main importing activities are the interdependent industries.

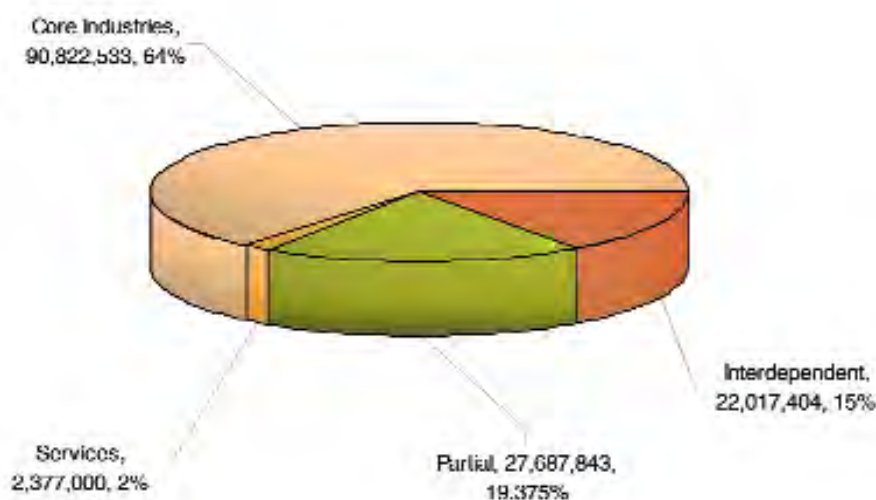
Table ES.2. Copyright-Based Industries' Trade Statistics, 2005

Copyright-based industries	Exports (US\$)	As a percentage of National exports	Imports (US\$)	As a percentage of National imports
Core Industries	90,822,533	0.52%	21,850,948	0.18%
Non-Core Industries				
Interdependent	22,017,404	0.13%	520,264,468	4.31%
Partial	27,687,843	0.16%	11,732,856	0.10%
Services	2,377,000	0.01%	97,898,640	0.81%
Total	142,904,780	0.823%	651,746,912	5.395%

Source: Chapter 4 tables.

Prepared by the authors

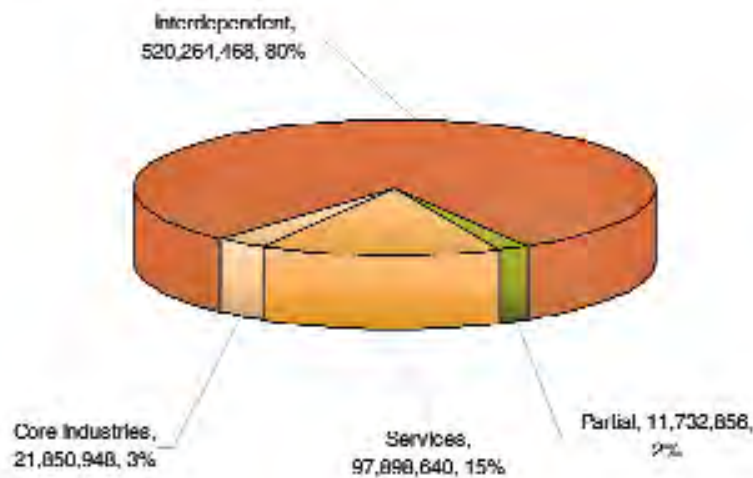
Figure ES.2. Copyright-Based Industries' Share of Exports, 2005



Source: WIPO

Note: Canadian and Singaporean estimates are understated

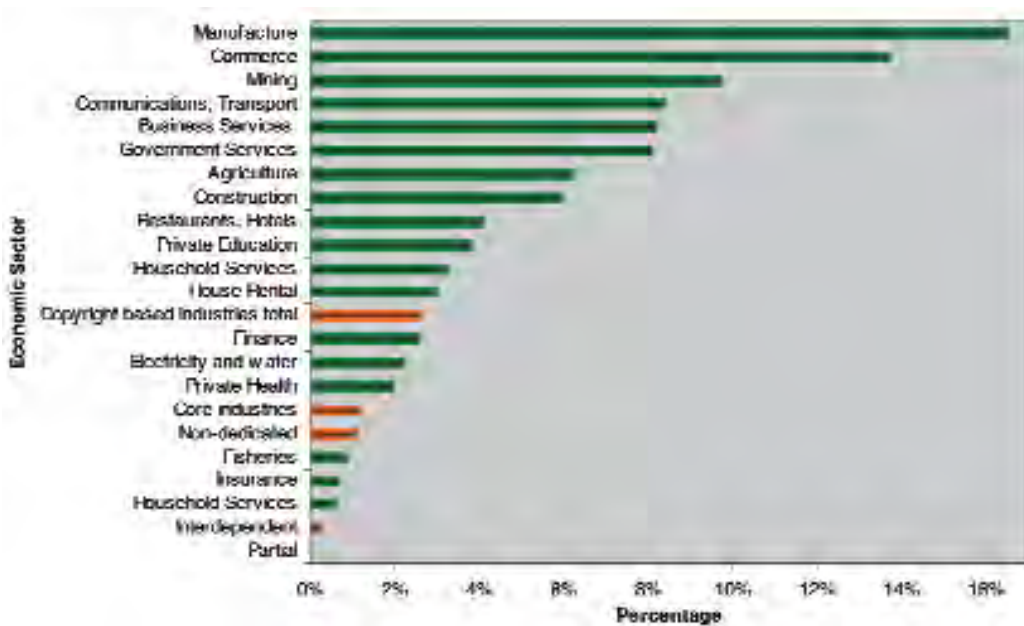
Figure ES.3. Copyright-Based Industries' Share of Imports, 2005



Source: Chapter 4 tables.
Prepared by the authors

The total contribution of copyright-based industries to the value added (2.6%) is similar to house rental (2.98%), finance (2.56%), and water and electricity supply (2.25%). Core industries contribute 1.22% to total value added (US\$ 997,045,973) while non-core industries' contributions are slightly higher, at 1.59% (US\$ 218,841,372). Economic sectors with similar importance in value added are communications (2.00%), private health (1.98%) and fisheries (0.86%).

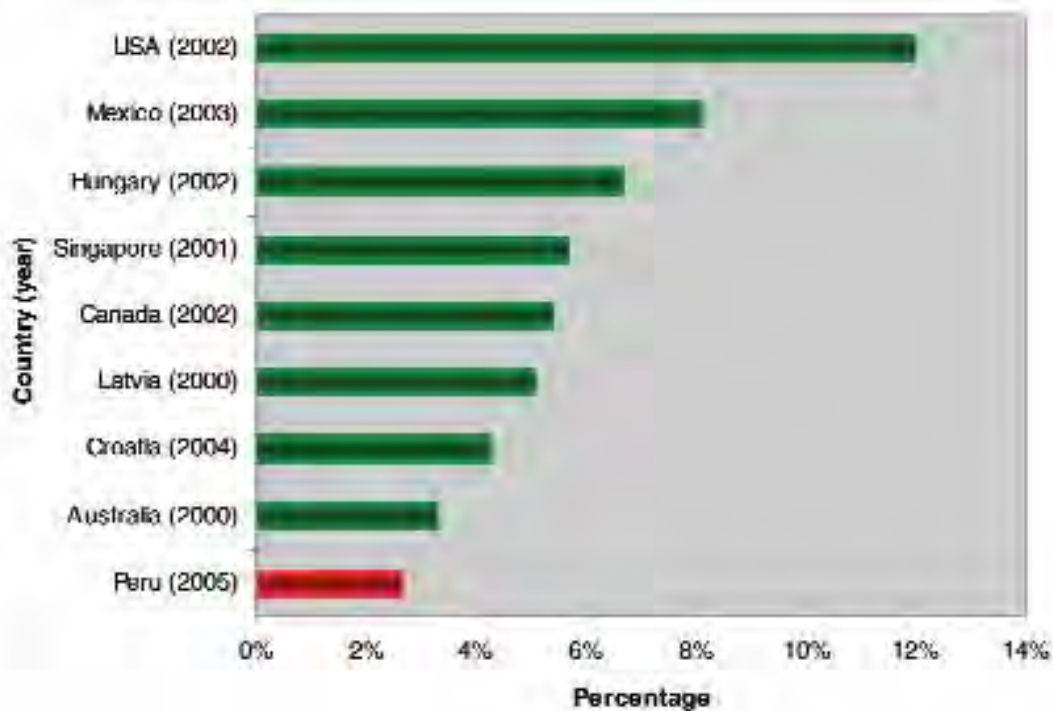
Figure ES.4. Percentage of Total Value Added by Economic Sector, 2005



Source: BCRP and tables in chapters 4 and 5.
Prepared by the authors

Overall, the Peruvian copyright-based industry is smaller than the copyright-based industries of other countries in the world. The total value added of copyright industries in 2005 was US\$ 1,911 million, which represented 2.6% of the total value added of the Peruvian economy. This is lower than the results of other Latin American countries, such as Mexico (8.1%), and of other countries around the world, including Singapore (5.7%), Hungary (6.7%) and the USA (12%).

Figure ES.5. International Comparison of Copyright-Based Industries' Contribution to Value Added (percentage)

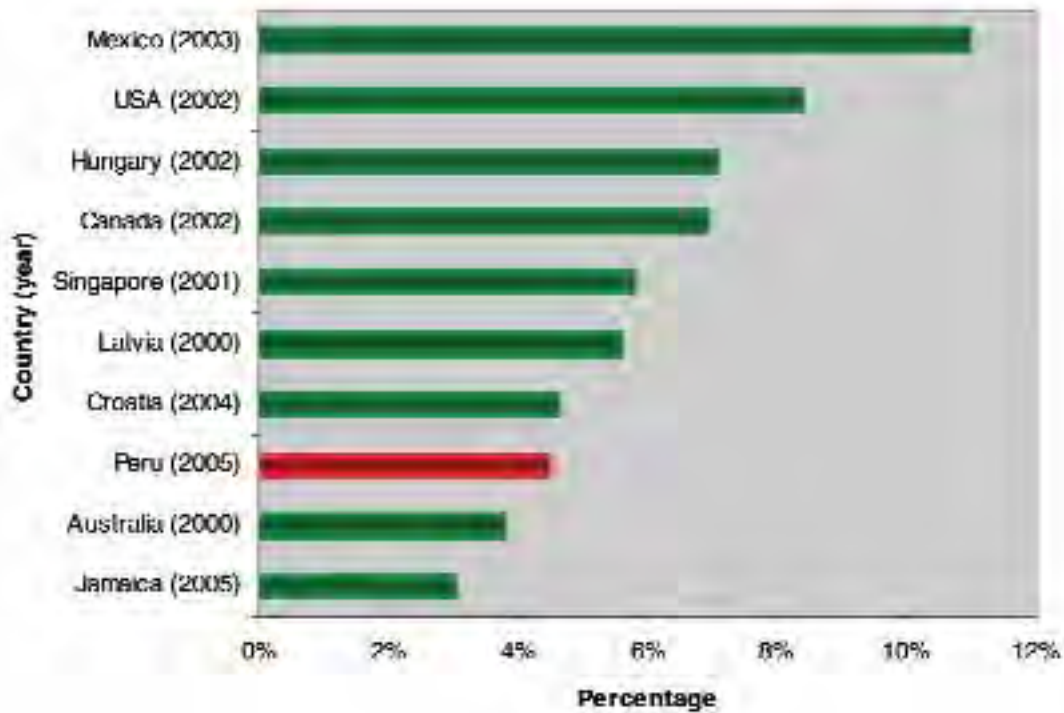


Source: WIPO and UNICAMP, Márquez-Mees et al. (2006), WIPO (2006), WIPO (2007) and tables in chapter 4. Prepared by the authors

In the Peruvian economy most of the value added of copyright industries is attributed by core industries, with US\$ 879 million representing 1.22% of the national value added in 2005 (and 46% of the value added of copyright industries). This contribution is similar to the results observed in the cases of Mexico, Singapore and USA (in which core industries represent roughly 50% of the total contribution of copyright-based industries).

The contribution of Peruvian copyright industries to employment is higher than its contribution to output, with 4.5% of the national employment (595,950 jobs). This is lower than the result for Mexico (11%) as well as countries from other regions, but higher than Jamaica (3%). Since core industries only account for 276,625 jobs (2.09% of national employment), which represent 46.4% of the total of copyright industries, their contribution to total employment is higher than the one observed for some countries, such as Mexico (31% of the employment on copyright-based industries), but lower than results for other countries, such as USA (48%), Hungary (59%), Jamaica (59%), Singapore (63%) and Philippines (79%).

Figure ES.6. International Comparison of Copyright-Based Industries' Contribution to Employment (percentage)



Source: WIPO and UNICAMP, Márquez-Mees et al. (2006), WIPO (2006), WIPO (2007) and tables in chapter 4.
Prepared by the authors

It is important to point out that the estimations presented in this study are the result of what we considered the most conservative measurement of the economic contribution of CBIs to the economy. Whenever some assumptions were made the decision was to remain conservative. Another rationale to consider is the fact that some activities are underestimated, and others are not estimated at all due to lack of data. Indeed, there are some specific activities for which there is no information available at all; for example, there is no available data on micro enterprises, informal activities, or self-employment and outsourcing employment. This is a future task for public agencies, private agents and other private organizations: to deepen the systematization and collection of data for those activities for which at the moment there is no complete information and for those for which there is no information at all.

1. Introduction

The culture, information and content-production industries, i.e. the creative industries, have a growing importance in countries' economies. Since the early seventies, many efforts have been made to measure the contribution of these industries to the national economy, mainly in developed countries¹.

Peru's economy has been growing at an average rate of 6.5% in the period 2002-2007; in such an environment, it is essential to know what has been the role that specific industries have in the performance of the country. An emerging economy needs the inputs that information and content production provide, making copyright-based industries particularly critical. In a world in which not only physical capital, natural capital and labor, but also knowledge and culture are main factors of production, it is not possible to have sustainable growth without the contribution of copyright-based industries.

The objective of the study is to estimate the economic contribution that Copyright-Based Industries (CBIs) make to the national economy, by generating value added, employment and trade flows. Some copyright-based industries, mainly cultural and information industries, are very well known by their economic impact on the economy; nevertheless, some of the copyright components of many activities are not taken into account. This study aims to give a complete assessment by not only including the core copyright industries but also the other copyright-related activities (non core).

In 2003, the World Intellectual Property Organization (WIPO) issued a methodological guide with the aim of helping to reveal the place that CBIs have in the economy, entitled "Guide on Surveying the Economic Contribution of the Copyright-Based Industries". This methodological document has been used in a series of countries and their results have been published; other countries have recently finished their studies, and others are in the process of doing so.

In 2006, the National Institute for the Defense of Competition and the Protection of Intellectual Property (INDECOPI)² requested support from WIPO to carry out the study in Peru, with the purpose of increasing public awareness of the economic contribution of the CBIs. The knowledge generated by the study will provide policy-makers with useful information that will help design national development strategies.

As mentioned, the methodology used in this study is based on the WIPO Guide, with adaptations due to the scarcity of available data on public statistics, as well as limited dissemination by private agents of their financial information. This adaptation is mainly made for the calculation of value added and is explained in detail in chapter four. In the case of the core CBIs. The approach followed relies on private financial information available for the main companies in each sector. For the interdependent and partial industries, the information came from the database provided by the Ministry of Production (PRODUCE), complemented by the copyright factors found in the literature. For the non-dedicated support industries, the aggregate statistics of the Statistics and Informatics National Institute (INEI) in Peru allow these to be grouped into General Wholesale and Retailing, and Transport and Communications, complemented with the copyright factors.

¹For a detailed account of the studies and the countries that have developed such studies see the Introduction of the Hungarian Report in WIPO (2006).

²Public agency created by Law Decree N° 25868 in November 1992. It is ascribed to the Presidency of the Council of Ministers by order of Law N° 27789, with technical, economic, budgetary and administrative autonomy.

In the case of employment, the estimations rely mainly on the Annual Economic Survey (EEA) 2005 provided by INEI and the data collected in the interviews. A comprehensive explanation of the methodology can be found in chapter 2. Although almost all the estimations on employment are based on this source of information, for some activities of the interdependent CBIs the source used is the National Household Survey (ENAHO 2005).

Finally, the estimation of trade flows – that is, exports and imports – has been calculated using the equivalence for the ISIC code and the Common Nomenclature of the Andean Community Members (NANDINA) obtained from PRODUCE³, which indicates which custom code corresponds to which ISIC code. The information on exports and imports for the different custom codes has been obtained from the National Customs Administration Superintendence Statistical Yearbook (SUNAD, 2005a and 2005b).

We would like to thank all the experts, managers, officers, presidents of unions, presidents of Copyright Collecting Societies, professionals of the creative industries, and other CBIs-related people we interviewed for providing us with the information we needed; their wise advice and time are priceless⁴. Special acknowledgments to Dimiter Gantchev, Acting Director of the Creative Industries Division in the World Intellectual Property Organization, for his patience and invaluable comments on the drafts of the document; to José Luis Zofio, Associate Professor of the Department of Economic Analysis at the Universidad Autónoma de Madrid, for his wise expert advice, always instructive and constructive, on the methodology and all technical matters concerning the estimation, as well as for his continuous support as advisor of the study; to Martín Moscoso, Head of the Copyright Office of the National Institute for the Defense of Competition and the Protection of Intellectual Property, for his sustained support in establishing the contacts with the experts, managers, presidents of unions, presidents of the Copyright Collecting Societies, and other people related to the CBIs that we interviewed, and to José Tavera, Economic Studies Manager of the National Institute for the Defense of Competition and the Protection of Intellectual Property, for his timely help and persistence in asking for the information from the public institutions and for from the invaluable assistance provided in general by him and his team.

We would also like to offer our grateful thanks to the research assistants for their participation in the different steps of the process to make this report a reality. To Ricardo Álvarez, for his perseverant search of information in the initial stages of the work; to Efraín Rodríguez, for his competent work on the organization of the first sets of information; to Luis Miguel Espinoza and Juan Manuel del Pozo, for their dedicated and efficient assistance on the estimations of the economic variables of the study and search of more information; and to Roberto Piselli, for his efficient management of the databases, and proficient assistance with the final document. Any errors that this study may have are entirely the responsibility of the authors.

The document has five sections including the introduction. Chapter 2 explains in detail the methodology followed; chapter 3 presents the legal background of copyright protection in Peru, as well as an international comparison; chapter 4 shows the results of the estimation of the economic contribution of CBIs to the economy for core, interdependent, partial and non-dedicated copyright-based industries; and in chapter 5 the conclusions and recommendations are offered.

³ Correlacionador Código CIU Rev. 3 – Partida arancelaria NANDINA.

⁴ The list of interviews can be found in Annex A.

2. Study Methodology and Sources of Information

The methodology of the study is based on the guidelines presented in the WIPO Guide (2003). Many sources have been used and some difficulties regarding the collection of data have been faced. In view of the lack of official and systematic collection of data on the CBIs, some adaptation had to be done for the estimation of the value added; the details are explained in this chapter. For employment, the main source was the Annual Economic Survey 2005 provided by the Statistics and Informatics National Institute (INEI), for which it was necessary to apply the methodology given by the INEI in order to obtain the nationwide figures. The estimation of exports and imports had as the main source the National Customs Administration Superintendence (SUNAD) Statistical Yearbook; nevertheless, it has been necessary to apply the equivalence for the ISIC code and the Common Nomenclature of the Andean Community Members (NANDINA), which indicates which custom code corresponds to which ISIC code.

The selected year for estimation is 2005, based on two considerations. First, the collection of information started at the end of 2006 and finished in May 2008, making 2005 the most recent year for which official information was available. Second, since the adopted methodology is also partially based on the firms' private information, 2005 was not too recent, meaning that the requested information would not be too sensitive from a company perspective.

2.1. Value Added Estimation Methodology

The first option in terms of estimating the contribution to value added of the CBIs was to use the input-output table and apply the output approach. Nonetheless, the last available input-output table made by INEI dates back to 1994, and is thus inappropriate for making a calculation for the year 2005, since the table has been made obsolete by the changes in Peru's productive structure in the last 14 years, and thus does not represent the dynamics and growth of copyright industries today.

The other main option is the income approach; however, information on compensation of employees, operating surplus/mixed income, consumption of fixed capital, other taxes on production, and other subsidies on production are not available for the CBIs for the year 2005. The Ministry of Production (PRODUCE) has estimates for some ISIC codes' activities for the press and literature sector, the music sector, and interdependent and partial CBIs; however, the last year available was 2000, thus making it necessary to make predictions for the year 2005. Annex B presents the detailed methodology used. For non-dedicated CBIs, the information on value added is available in the official statistics for the year 2005.

To complete the estimation of the other activities, we used a supplementary approach mentioned in the WIPO Guide (2003): calculation of value added on the basis of the financial statement reports. One suggestion of the Guide is to conduct a survey on the firms to obtain the information. In our case, it was not possible to survey a representative sample of sector companies, for two reasons. The first reason was that there are no records or lists of all companies dedicated to either copyright-protected or copyright-related activities to design the sample. The second reason was that even if it had been possible to draw a sample, to the extent that companies are not mandated to file data on their economic and financial performance, the response rate would have been low. The strategy followed to collect the companies' data included requests for interviews with members of industry associations, collective management societies, and qualified management and officials from private companies. There were different levels of success in the collection of data, making it necessary to make educated assumptions to calculate the estimates; these assumptions are explained in chapters 4 and 5.

In this way, the methodology that will be used in this study to estimate the value added of those activities for which no value added data was directly available takes the private Financial Statements of companies, mainly their Profit and Loss Statements, to estimate the Value Added. The base document used is the Handbook of National Accounting No. 76 (UN, 2000)⁵.

According to the WIPO Guide, Value Added is measured using the following equation:

$$VA = \Pi - W + \delta + T - S$$

Where:

Π = Operating surplus
 W = Compensation of Employees
 δ = Consumption of Fixed Capital
 T = Other Taxes on Production
 S = Other Subsidies on Production

For the previously mentioned reasons, this report is based on financial information on a company-based level, not on an aggregate level. To make this feasible, a correspondence was established between the individual financial information and the national/sector aggregate statistics. This correspondence is based on the Handbook of National Accounting No. 76, entitled "Links Between Business Accounting and National Accounting".

There are two steps needed to adjust the Financial Statements (FS) format to the National Accounts (NA) format. First, the information from the FS is reorganized into the NA format, to establish the so-called "intermediate accounts". The next step consists of adjusting this information with complementary information, given that some apparently similar concepts are in fact not equivalent. Therefore, the elements that make the VA are reviewed, emphasizing the "equivalents" in the Profit and Loss Statement and making the necessary adjustments.

Operating Surplus is defined as "the surplus or deficit accruing from production before taking account of any interest, rent or similar charges payable on financial or tangible non-produced assets borrowed or rented by the enterprise, or any interest, rent or similar receipts receivable on financial or tangible non-produced assets owned by the enterprise"⁶. In this study the Operating Income (OI) is established as the latter's equivalent at the individual level, defined as "the net sales income minus the costs of sales and operational expenses". This information can be found in the Profit and Loss Statement of each company. According to the Handbook, this concept is not exactly equivalent to the Operating Surplus, because one takes into account certain elements that the other doesn't (i.e. the Operating Income concept overestimates the Operating Surplus). Nevertheless, the differences are relatively unimportant and refer to elements of little value or probability⁷, with the exception of the dividends payable and Taxes on Income, which could create an upward slant.

Compensation of Employees is defined as "total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the latter during the accounting period."⁸ This definition

⁵ According to this document, there are three ways to obtain this information. The first is by using censuses or surveys, but this only works in countries where the companies involved are either willing or mandated to provide this information. In Peru, this information is considered private unless the companies are listed in the stock market. The other option is to use all of the public information provided by companies listed in the stock market, public and regulated companies, and also to ask for the cooperation of the tax agency (the National Superintendency of Tax Administration (SUNAT). Although public information was used in the study in some cases (i.e. from El Comercio, which is listed in the stock market, or Telefónica, which is a regulated company), the National Superintendency of Tax Administration does not provide this information for private companies and has not been used as a source for obtaining this information. A third option is to adopt French and OCAM standards which, however, are not relevant for this report.

⁶ Definitions obtained from the OECD's Glossary of Statistical Terms, found at: <http://stats.oecd.org/glossary/index.htm>.

⁷ For instance, extraordinary earnings or losses (e.g. due to natural disasters, expropriations, etc.), the cumulative effect of changes in accounting principles, or the discontinued operation of segment and capital transfers (e.g. irregular taxes).

⁸ *Ibidem*.

is a synonym of total payroll costs (TPC). It includes not only wage and salary costs but also other compensations related to the work. This information is only obtained by disaggregating the companies' costs.

Consumption of Fixed Capital is defined as "the reduction in the value of the fixed assets used in production during the accounting period resulting from physical deterioration, normal obsolescence or normal accidental damage". This concept is related to depreciation and amortization (D+A), which are related to the temporal deterioration of tangible and intangible assets, respectively. This information can be found disseminated in different areas of the Profit and Loss Statement of each company. On one side, we have the depreciation of the equipment "directly" used in production (i.e. the production plant), which is found within the cost of manufactured goods (part of cost of goods sold). On the other side, we have the depreciation of the equipment used in administration and sales, both of which are included in operating expenses. Because of this, the depreciation total can only be correctly estimated if itemized information is available for operating expenses and the cost of manufactured goods. Unfortunately, according to the Handbook, even if the itemized information is available, this concept will not be equivalent to Consumption of Fixed Capital for two reasons. The first reason is that companies use calculation methods of depreciation based on a tax rationale, which can bias the results. This is why it is necessary to use Financial Statements created for analytic use, and not those created for tax purposes. Second, the primary difference consists of the assessment of depreciated assets. In company accounting, the cost in books is used as asset value, whereas in national accounting the current prices should be used.

However, the Handbook mentions that many developing countries, due to the lack of information, use the depreciation as proxy for the Consumption of Fixed Capital. Likewise, it is also said that many of the differences between the National Accounting and the Financial Statements concern low-value transactions. If the assets may not be revalued, the gap between the two variables will not be significant.

Other Taxes on Production is defined as "taxes other than those incurred directly as a result of engaging in production; they mainly consist of current taxes on the labor or capital employed in the enterprise". This concept refers to special expenses that the State can impose on the companies: for example, property taxes, business licenses, stamp taxes, levies on use on vehicles, taxes on pollution, or taxes on employment. In the Profit and Loss Statement it appears under operating expenses.

Other Subsidies on Production were not taken into account during the calculation, due to the fact that the Peruvian State did not subsidize any private companies during 2005.

Thus, added value of the analyzed sectors has been calculated in the following way:¹⁰

$$VA - OI + W + (D + A)$$

Where:

VA = Value Added
OI = Operating Income
W = Total Payroll Costs
D = Depreciation
A = Amortization

⁹ Ibidem.

¹⁰ There is a financial indicator that adds up the operating income (net sales less production expenses), depreciation and amortization. This indicator of gross earnings is the EBITDA or earnings before interest, taxes, depreciation and amortization. EBITDA is generally calculated by deducting production expenses from net sales and adding depreciation and amortization costs.

Data for the four variables has been obtained, when possible, from the interviews with experts. Among these are CEOs, managers, high-ranking officials, association presidents, presidents of collective management societies, analysts, and others.

2.2. Employment Estimation Methodology

The Statistics and Informatics National Institute (INEI) provided the information on employment¹¹ contained in the Annual Economic Survey (EEA 2005)¹². The sampling frame of this survey considered a stratified sampling method, using the businesses' net sales. The strata considered were the forced stratum (which includes big business, along with all the hydrocarbon and electricity businesses and universities)¹³, the middle stratum (middle-sized business) and the small stratum (small business). The economic sectors¹⁴ included in the survey are:

- Agribusiness
- Communications and transport
- Construction
- Education
- Electricity
- Fisheries
- Hydrocarbon
- Housing
- Manufacturing
- Public companies
- Restaurants
- Services
- Trade
- Travel agencies
- Universities

According to the INEI, the coverage of the survey is nationwide and it is representative at a sectoral level, so that with the adequate expansion factors we can estimate the figures for the whole economy. Given that the expansion factors were not provided, it was necessary to calculate them according to the methodology given by the INEI.

As known, the expansion factors allow the calculation, from a representative sample, of population estimates (in this case the total population of businesses in the economy). The expansion factor for each business included in the sample is the inverse of its selection probability. The expansion factor methodology for the EEA 2005 of the INEI establishes that the selection probabilities can be expressed as:

$$P_h = \frac{n_h}{N_h}$$

Where:

- n_h : Number of selected businesses in economic sector h.
- N_h : Total number of businesses in economic sector h.
- P_h : Selection probability for economic sector h.

The expansion factor is calculated as the selection probability inverse:

¹¹ In the sample it is possible to identify the economic activities at a four-digit level.

¹² Includes the outsourcing of employment.

¹³ For middle and small strata, a sample is taken, and for the forced stratum, the sample is the universe. Nevertheless, the rate of response is not 100%.

¹⁴ The request for information made by the National Institute for the Defense of Competition and the Protection of Intellectual Property (INDECOP) detailed all the economic activities that the scope of the study includes (based on the WIPO Guide, WIPO, 2003). Thus, even when the whole database of the EEA is not available publicly, we are sure that for the CBIs the information is complete.

$$W_h = \frac{1}{P_h}$$

Where:

W_h : Expansion factor for economic sector h.

However, since not all the businesses selected in the sample answered the survey, the expansion factors have to be adjusted using a "non answer" correction coefficient. The formula for this coefficient is:

$$\frac{n_h}{n'_h}$$

Where:

n_h : Number of selected businesses in economic sector h.

n'_h : Number of businesses that answered the survey in economic sector h.

The adjusted expansion factor is:

$$W'_h = W_h * \frac{n_h}{n'_h}$$

$$W'_h = \frac{1}{\frac{n_h}{N_h}} * \frac{n_h}{n'_h}$$

$$W'_h = \frac{N_h}{n'_h}$$

Hence, by exploring the data of the EEA, we can calculate the number of businesses that answered the survey in each economic sector, and the EEA 2005 sampling frame includes the total number of businesses in each economic sector (as seen on table 2.2.1), we can then calculate the adjusted expansion factor for each sector.

The procedure to calculate the expansion factors started with the association of the economic sectors with all their related ISIC codes at the four-digit level. This process was done using the description of the ISIC codes¹⁵. Then the expansion factors at the two-digit level were calculated following the INEI methodology presented above. In table 2.2.2 the expansion factors are shown.

Although almost all the estimations on employment are based on this source of information, some activities of the interdependent CBIs took as a source the National Household Survey (ENAHO 2005). In table 4.3.2 in chapter four these activities are detailed.

Table 2.2.1. Total Number of Businesses in Each Economic Sector

Economic Sector	Total number of businesses
Travel agencies	3,095

¹⁵The economic sectors included in the EEA 2005 were associated with all their related ISIC codes, assigning an ISIC code only to one economic sector. Then, using the ISIC codes identified for each economic activity, a match was made with the economic sectors

Table 2.2.1. Total Number of Businesses in Each Economic Sector

Economic Sector	Total number of businesses
Travel agencies	3,095
Agribusiness	3,767
Education	11,709
Trade	125,253
Construction	12,169
Public companies	221
Housing	5,432
Hydrocarbon	34
Fisheries	2,411
Manufacturing	40,031
Electricity	54
Communications and transport	25,079
Universities	48
Restaurants	10,524
Services	112,624
Total	352,451

*Source: INEI. Dirección Nacional de Censos y Encuestas – Dirección Ejecutiva de Censos y Encuestas de Empresas y Establecimientos. (s/f) Encuesta Económica Anual 2005. Diseño Muestral.
Prepared by the authors*

Table 2.2.2. Expansion Factors

Economic Sector	Expansion factor
Travel agencies	10.02
Education	36.71
Trade	50.69
Construction	21.61
Housing	8.05
Hydrocarbon	1.79
Fisheries	12.06
Manufacturing	21.28
Electricity	1.26
Communications and transport	28.76
Universities	0.15
Restaurants	15.59
Services	96.92

Note: The Agribusiness and the Public Companies expansion factors were not calculated.

*Source: INEI. Dirección Nacional de Censos y Encuestas – Dirección Ejecutiva de Censos y Encuestas de Empresas y Establecimientos. (s/f) Encuesta Económica Anual 2005. Diseño Muestral.
Prepared by the authors*

In order to calculate the employment for each of the CBIs at the country level, it was necessary to assume that the four-digit activities have the same behavior as the corresponding two-digit-level activity (sector). Thus the expansion factor of sector i (at a two-digit level) was assigned to activity j (at a four-digit level). This assumption may have introduced some bias in the estimation. As mentioned before, the EEA 2005 sampling frame considered three strata according to the size, so expansion factors in each economic sector should be calculated for each stratum. However, the available data did not include information to make this distinction. Thus, the bias comes from the fact that implicitly we are assuming the same behavior among the three strata.

While the process of estimation was developed, some results on the estimations on employment for some activities were not consistent with the common perception captured in the interviews and with other relevant statistical evidence, mainly getting what would be qualified as overestimations. Thus it was necessary to make some adjustments to have more conservative estimations for employment. Specifically, the expansion factor of Services, 96.92, was assigned to its corresponding four-digit level CBIs' activities in the first place. To correct the overestimation, this factor was changed by the smallest possible reasonable (in the sense of the nearest behavior to that activity) factor which is 21.28 (Manufacture). These changes are indicated in the table that presents the factors assigned to the CBIs' activities (table 2.2.3).

Table 2.2.3. Expansion Factors Assigned to Each CBI Activity at the ISIC Four-digit Level

ISIC Code	Expansion factor
1. Core Copyright Industries	
Press and Literature	
Class: 9214 - Dramatic arts, music and other arts activities*	21.28
Class: 2212 - Publishing of newspapers, journals and periodicals	21.28
Class: 2212 - Publishing of newspapers, journals and periodicals	21.28
Class: 2211 - Publishing of books, brochures and other publications	21.28
Class: 2219 - Other publishing	21.28
Class: 2221 - Printing	21.28
Class: 2222 - Service activities related to printing	21.28
Class: 5239 - Other retail sale in specialized stores	50.69
Music	
Class: 9214 - Dramatic arts, music and other arts activities*	21.28
Class: 9219 - Other entertainment activities n.e.c.*	21.28
Class: 2213 - Publishing of music**	1
Class: 2230 - Reproduction of recorded media*	21.28
Class: 7130 - Renting of personal and household goods n.e.c.*	21.28
Motion Picture and Video	
Class: 9211 - Motion picture and video production and distribution*	21.28
Class: 9212 - Motion picture projection*	21.28
Radio and Television	
Class: 9213 - Radio and television activities*	21.28
Class: 6420 - Telecommunications	28.76
Software and Databases	
Class: 7221 - Software publishing	96.92

Table 2.2.3. Expansion Factors Assigned to Each CBI Activity at the ISIC Four-digit Level (cont.)

ISIC Code	Expansion factor
Advertising Services	
Class: 7430 - Advertising	21.28
Photography, Visual and Graphic Arts	
Class: 7494 - Photographic activities	21.28
Copyright Collecting Societies	
Class: 9112 - Activities of professional organizations	96.92
2. Interdependent Copyright Industries	
Class: 3230 - Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	21.28
Class: 3000 - Manufacture of office, accounting and computing machinery	21.28
Class: 3692 - Manufacture of musical instruments	21.28
Class: 3320 - Manufacture of optical instruments and photographic equipment	21.28
Class: 2429 - Manufacture of other chemical products n.e.c.	21.28
Class: 2101 - Manufacture of pulp, paper and paperboard	21.28
3. Partial Copyright Industries	
Class: 1810 - Manufacture of wearing apparel	21.28
Class: 1721 - Manufacture of made-up textile articles	21.28
Class: 1920 - Manufacture of footwear	21.28
Class: 3691 - Manufacture of jewelry and related articles	21.28
Class: 3610 - Manufacture of furniture	21.28
Class: 2610 - Manufacture of glass and glass products	21.28
Class: 173 - Manufacture of knitted and crocheted fabrics and articles	21.28
Class: 2029 - Manufacture of other products of wood	21.28
Class: 2899 - Manufacture of other fabricated metal products n.e.c.	21.28
Class: 1722 - Manufacture of carpets and rugs	21.28
Class: 2109 - Manufacture of other articles of paper and paperboard	21.28
Class: 3694 - Manufacture of games and toys	21.28
Class: 7421 - Architectural and engineering activities and related technical consultancy	96.92
4. Non-Dedicated Support Industries	
Division: 51 - Wholesale trade and commission trade, except of motor vehicles and motorcycles	50.69
Division: 52 - Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	50.69
Division: 60 - Land transport; transport via pipelines	28.76
Division: 61 - Water transport	28.76
Division: 62 - Air transport	28.76
Class: 630 - Supporting and auxiliary transport activities	10.02
Class: 6420 - Telecommunications	28.76
Class: 7240 - Database activities and on-line distribution of electronic content	96.92

Source: INEI-PRODUCE, EEA 2005.

2.3. Trade-flows Estimation Methodology

The estimation of trade flows – that is, exports and imports – is based on the selection of the custom codes corresponding to the ISIC codes of the CBIs' activities. The equivalence for the ISIC code and the Common Nomenclature of the Andean Community Members (NANDINA) obtained from PRODUCE¹⁶, indicating which custom code corresponds to which ISIC code, has been used for this purpose. The information on exports and imports for the different custom codes has been obtained from the National Customs Administration Superintendence Statistical Yearbook (SUNAD 2005a and 2005b).

¹⁶Correlacionador Código CIU Rev. 3 – Partida arancelaria NANDINA.

3. The Legal Framework for Copyright and Related Rights in Peru

3.1. Overview

Peru has signed the main international agreements on Copyright and Related Rights. Among these are the Berne Convention for the Protection of Literary and Artistic Works, the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT).

Also, as a country member of the Andean Community, in 1993 Peru adopted Decision 351 (Common Regime on Copyright and Related Rights). Legislative Decree No. 822 (Copyright Law) was subsequently promulgated in 1996, followed in 2003 by Law No. 28131 (Law of Interpretive Artists and Performers).

An important Trade Promotion Agreement (TPA) was signed between Peru and the United States of America on April 12, 2006. After the corresponding implementation process, which will be further explained, the TPA entered into force on February 1, 2009.

With respect to the Copyright Law, Article 2.17 states that a work is any personal and original intellectual creation capable of being disclosed or reproduced in any form that is or may yet become known. With regard to the requisite of originality, the Intellectual Property Chamber of the Tribunal of the National Institute for the Defense of Competition and the Protection of Intellectual Property (INDECOPI) issued Resolution No. 286-1998-TPI-INDECOPI on March 23, 1998, establishing the following as mandatory premises:

"Originality of the work must be understood as a creative and individualized expression (or representative form) of the work, and as a minimum it should be a creation with individuality. The work must express the author's own work, bearing the stamp of his personality.

Anything forming part of cultural (artistic, scientific or literary) heritage will not be considered as individual, nor a form of expression that is derived from the nature of things or a mere mechanical application of the provisions in some legal norms, nor a form of expression that is a simple technique or simple instructions that require only manual ability for their performance.

Consequently, not all material produced by the efforts of its creator deserves copyright protection. Likewise, even though a creation is certainly devoid of individuality that has been copied very textually, such circumstance does not convert this into a work."¹⁷

With regard to copyright and related rights, the Copyright Law and the Law of Interpretive Artists and Performers recognize the following moral and economic rights, also indicating the duration of such protection:

¹⁷ Non-official translation.

Table 3.1.1. Copyrights, Acknowledged by the Copyright Law and the Law of Interpretive Artists and Performers

Category (copyright)	Description	Protected rights	Duration of protection
Literary works	<p>Expressed in written form:</p> <ul style="list-style-type: none"> - Books - Magazines - Pamphlets or other writings - Journalistic articles, editorials and commentaries. - Slogans and phrases - Computer programs (software) <p>Expressed orally:</p> <ul style="list-style-type: none"> - Lectures - Addresses - Sermons - Educational presentations 	<p>Moral Rights:</p> <ul style="list-style-type: none"> - Disclosure - Authorship - Integrity - Alteration or amendments - Withdraw the work from the market - Access <p>Economic Rights: Exclusive right to carry out, authorize or prohibit</p> <ul style="list-style-type: none"> - Reproduction - Public communication - Distribution - Translation, adaptation, arrangement or any other transformation. - Import to national market. - Any other use of the work that is not provided for in the law as an exception to the economic rights. 	<ul style="list-style-type: none"> - The term of economic rights shall be the lifetime of the author and 70 years following his death, regardless of the country of origin of the work. - In the case of collective works, computer programs and audiovisual works, economic rights shall lapse after 70 years following first publication or, in the absence of publication, following completion. - The above-mentioned periods shall be calculated from the first of January of the year following that of the author's death or where appropriate that of the disclosure, publication or completion of the work.
Musical works	<ul style="list-style-type: none"> - Musical compositions (melodies) 		
Stage works	<ul style="list-style-type: none"> - Dramatic works - Dramatic-musical works - Choreographic works - Mimed works 		
Audiovisual works	<ul style="list-style-type: none"> - Cinematographic works - Audiovisual works for television - Advertising announcements 		

Prepared by the authors

Table 3.1.1. Copyrights, Acknowledged by the Copyright Law and the Law of Interpretive Artists and Performers (Cont.)

Category (copyright)	Description	Protected rights	Duration of protection
Plastic works of art	<ul style="list-style-type: none"> - Sketches - Drawings - Paintings - Sculptures - Engravings - Lithographs 		
Works of applied art	An artistic creation with utilitarian functions or incorporated in a useful article, whether a work of hand-craft or produced on an industrial scale.		
Works of architecture			
Photographic works Maps, illustrations, outlines, plans, diagrams and three-dimensional works related to geography, topography, architecture or science			
Anthologies or compilations of several works or expressions of folklore, and databases (only if the collections are original in the selection, coordination or arrangement of their contents)			
Any other creation of the intellect that has original character and is capable of being disclosed or reproduced in any form that is or may yet become known.			

Prepared by the authors

Table 3.1.2. Neighboring Rights, Acknowledged by the Copyright Law and the Law of Interpretive Artists and Performers

Category (related rights)	Description	Rights protected	Duration of protection
Interpretive Artists and Performers	Individual who represents or performs an artistic work, with or without text, using his body or abilities, with or without instruments, that is exhibited or shown in public, being an interpretation and/or performance that may be spread by any medium of communication or be set to adequate support, created or to be created.	<p>Moral Rights:</p> <ul style="list-style-type: none"> - Right of authorship: To demand the recognition of his name, stage name and/or pseudonym, and vindicate its interpretation and performances. - Right of Integrity: To be against any deformation, mutilation or modification of its interpretation. - Right of Access: To have access to the sole copy of the support that contains his artistic creation, in order to exercise his other moral or economic rights. Access need not allege damage to the holder of the support nor an attempt at copyright violation. <p>Economic Rights:</p> <ul style="list-style-type: none"> - Economic Rights of Interpretive Artists and Performers to their non fixed interpretations or performances: exclusive right to authorize broadcasting and public communication, fixation. - Exclusive Right to authorize, carry out or prohibit reproduction - Exclusive Right to authorize distribution - Exclusive Right to make available to the public said interpretations or performances - Right to equitable remuneration for broadcasting, public communication, rent and transfer to a different format. - Exclusive Right to authorize dubbing - Compensation for private copy (in favor of the artist, the author and the producer of videogram and/or phonogram) 	The lifetime of the performer and 70 years thereafter, counted from the first of January of the year following his death.
Producers of phonograms	The person, whether natural person or legal entity, on whose initiative and responsibility and at whose direction the sounds of a performance or other sounds, or digitized representations thereof, are fixed for the first time.	<p>They have the exclusive right to carry out, authorize or prohibit any of the following acts:</p> <ul style="list-style-type: none"> - reproduction of their phonograms, either direct or indirect - distribution, rental or lending of copies of their phonograms to the public, or any other transfer possession thereof, for consideration - make the phonograms available to the public - inclusion of their phonograms in audiovisual works - alteration of their phonograms by technical means <p>Also, they have the right to receive remuneration for the communication of the phonograms to the public by any means or process. Such remuneration shall be shared equally among the performers.</p>	70 years, counted from the first of January of the year following that of the first publication of the phonogram.

Prepared by the authors

Table 3.1.2. Neighboring Rights, Acknowledged by the Copyright Law and the Law of Interpretive Artists and Performers (Cont.)

Category (related rights)	Description	Rights protected	Duration of protection
Broadcasting organizations	The person, whether natural person or legal entity, who decides on the material broadcast, has control over programming and the date and time of broadcasts.	They have the exclusive right to carry out, authorize or prohibit the following: <ul style="list-style-type: none"> - retransmission of their broadcasts by any means or process that is or may yet become known - recording of their broadcasts on any sound or audiovisual medium, including that of any isolated image included in the broadcast or transmission concerned - reproduction of their broadcasts They shall likewise have the right to receive equitable remuneration for the communication of their broadcasts or transmissions to the public where it takes place in places open to the public on payment of an admission charge or purchase of a ticket.	70 years, counted from the first of January of the year following that of the broadcast or transmission.
Recordings of moving images	The Law recognizes a right of exploitation in relation to recordings of moving images, with or without sound, that are not creations capable of qualifying as audiovisual works.	The producer enjoys, in relation to his audiovisual recordings, the exclusive right to authorize or not to authorize reproduction, distribution and communication to the public, including that of photographs taken in the course of production of the audiovisual recording.	70 years, counted from the first of January of the year following that of the disclosure of the recording, or that of its making if it has not been disclosed.
Photographs	Photographs or another form of fixation by means of a comparable process that does not qualify as a work according to the definition of the Copyright Law.	Exclusive right for photographer to authorize the reproduction, distribution and communication to the public thereof on the same conditions as are accorded to the authors of photographs.	70 years counted from the first of January of the year following that of the taking of the photograph.
Unpublished works in the public domain	Publication for the first time of a work that is in the public domain.	The same exploitation rights for the publisher in relation to the unpublished work in the public domain as would have accrued to its author.	10 years, counted from the first of January of the year following that of publication.

Prepared by the authors

INDECOPi's Copyright Office¹⁸, as indicated in the Copyright Law, is the competent national authority responsible for administratively assuring and protecting copyright and neighboring rights.

According to the Copyright Law, Collecting Societies are legally constituted, non-profit-making associations under civil law devoted to the management, in their own or by delegation of third parties, of copyright or neighboring rights of economic character on behalf and in the interest of a number of authors or owners of such rights. They must obtain authorization for functioning as such from INDECOPi's Copyright Office, as regulated in the Law. The status of the management society is acquired by virtue of this authorization. Currently there are the following Collective Management Societies in Peru:

1. Peruvian Association of Authors and Composers (APDAYC)
2. Peruvian Association of Visual Artists (APSAV)
3. National Association of Interpretive Artists and Performers (ANAIE)
4. Peruvian Union of Phonographic Producers (UNIMPRO)
5. Audiovisual Producers' Rights Management Association (EGEDA)

It should also be indicated that Legislative Decree No. 635, the Penal Code in force since April 1991, has undergone a series of modifications as concerns crimes against intellectual rights. The tendency has been to increase the penalties, thus seeking to continually reduce the violation of the exclusive rights granted for intellectual property.

Law No. 28289, the Law to Fight against Piracy, published in July 2004, modified Law No. 27595 of December of 2001, that had created the Commission to Fight Against Smuggling and Customs Fraud, providing for a change in its name, resulting now in the Commission to Fight against Customs Crimes and Piracy, also extending its functional competence to crimes against intellectual property. The Commission is composed of a multi-sectorial group of both State and private-sector entities, and is headed by the Minister of Production, exercising its functions through its Technical Secretariat. Law No. 29013 of May of 2007 modified the composition of members of the Commission as follows:

- a) Minister of Production
- b) A representative of the Ministry of Economy and Finance
- c) A representative of the Ministry of Foreign Commerce and Tourism
- d) A representative of the Ministry of the Interior
- e) A representative of the Ministry of Defense
- f) The Chief of the Peruvian Tax and Customs Administration (SUNAT)
- g) A representative of the Public Ministry
- h) The President of INDECOPi
- i) The President of the National Confederation of Private Business Associations (CONFIEP)
- j) The President of the National Society of Industries
- k) The President of Lima Chamber of Commerce
- l) A representative of the Micro and Small Enterprises Group
- m) A representative of the Regional Government of Tumbes
- n) A representative of the Regional Government of Loreto
- o) A representative of the Regional Government of Puno
- p) A representative of the Regional Government of Tacna

¹⁸In accordance with the amendment introduced by Legislative Decree No. 1033 (published on June 25, 2008; effective 60 days after its publication), the Copyright Office (ODA) is now named the Copyright Direction.

In 2003, the country's leading movie and video exhibition and rental companies, in cooperation with INDECOPI, joined efforts to implement what is being called the "Antipiracy Crusade Initiative" and, in this way, alert the population and the competent authorities to the increasing significance of piracy in Peru, as well as to suggest means for fighting this problem. The Phonographic Copyright Protecting Association (APDIF Peru) has a similar role for music phonograms.

Another provision in the fight against piracy is Ordinance No. 717, published in October 2004 by the Lima Metropolitan Council. This established a metropolitan policy of contributing to the prevention of trading products violating intellectual property rights, by means of the closing of those establishments that market or produce these types of products, as well as the seizure of such products. To do so, the municipal boroughs will have to disseminate the scope of this Ordinance and, provided that it is within the jurisdiction of the Lima Metropolitan Council, will have to adapt their norms to comply with the provisions of the Ordinance.

Administrative Resolution No. 122-2006-CE-PJ was published in November 2006. This established that the National Criminal Court and the 1st, 2nd, 3rd and 4th Supra-provincial Courts sitting in Lima also have competence for hearing cases involving tax and customs crimes and crimes against intellectual property, thus expanding their powers. It is thus possible to attack the large criminal organizations dedicated to smuggling, tax evasion and piracy. This mission must be reinforced with intense training for the magistrates.

Administrative Resolution No. 223-2007-CE-PJ of September 2007 specified the scope of Administrative Resolution No. 122-2006-CE-PJ, indicating that the competence of the National Criminal Court and the Supra-provincial Courts is reserved for massive and complex cases with national repercussions that involve criminal organizations¹⁹.

By Legislative Resolution No. 28766, published on June 29, 2006, the Trade Promotion Agreement between Peru and the United States of America was approved. In Chapter XVI of this agreement, provisions to observe and safeguard the Intellectual Property Rights were established, which have been incorporated into our legislation as follows, for the entry into force of the Agreement (February 1, 2009):

- I. Legislative Decree No. 1033 published on June 25, 2008
It aims to institutionally strengthen INDECOPI and consolidate its autonomy. With regard to the Copyright Office, a four-member Commission has been created inside, which resolves, in the first administrative instance, the annulment and cancellation of registration certificates and complaints of copyright infringement.
- II. Legislative Decree No. 1076 published on June 28, 2008. It has amended the Copyright Law in the following terms:
 - II.1. Incorporates two new definitions: rights management information and technological protection measures.
 - II.2. Establishes that producers of phonograms have the exclusive right to perform, authorize or prohibit: the making available to the public of phonograms in a manner that members of the public may access them from a place and a time that they choose.
 - II.3. Establishes that the rights holders recognized in the Law, its representatives or the Collecting Societies and their exclusive licensees or other authorized licensees, without prejudice to other actions that correspond to them, may require the cessation of the illegal activity of the offender and demand compensation for material and moral damages caused by the violation and the

¹⁹It is important to mention that after the publication date of the Administrative Resolution No. 094-2009-CE-PJ (April 7, 2009), Administrative Resolutions No. 122-2006-CE-PJ and No. 223-2007-CE-PJ are no longer applicable to new cases.

profits obtained by the infringer attributable to the infringement and which were not taken into account when calculating the amount of damages, or by choice of the right holder, the pre-established compensation, and the payment of costs and expenses.

- II.4. Establishes the cases of circumvention of technological protection measures, as well as a list of exceptions.
 - II.5. Incorporates the cases of infringements related to the removal or alteration of rights management information.
 - II.6. Specifies that the court authorities will destroy the infringing goods, at the request of the right holder, unless there are exceptional circumstances. It has also given these authorities the power to order the infringers to provide any information they have about those involved in any aspect of the infringement.
- III. Legislative Decree No. 1092 published on June 28, 2008
- Through this legislative decree the legal framework for the implementation of border measures for the protection of copyright, neighboring rights and trademark rights is established. It mentions that the right holder may submit an application to the Customs Administration to suspend the release of infringing goods. Similarly, the Customs Administration may initiate ex officio border measures for the suspension of the release of goods for the regime of import, export or transit, when there is reasonable suspicion to believe that they are infringing goods. As complementary provisions, it establishes that the Customs Administration and INDECOPI will implement an electronic system of information exchange of rights holders, and that the Customs Administration can implement a voluntary registration of rights holders and their representatives. Finally, it is noteworthy that the corresponding Implementing Regulation (Supreme Decree No. 003-2009-EF) was published on January 13, 2009.
- IV. Law No. 29263, published on October 2, 2008, and Law No. 29316²⁰, published on January 14, 2009
- Both laws incorporate significant changes to the Criminal Code of 1991. Consequently, taking into consideration the changes that were made in the Criminal Code with Law No. 27729 (2002) and Law No. 28289 (2004), now the criminal laws have the following wording:
- IV.1. Copy or unauthorized reproduction – is punishable with imprisonment for not less than two nor more than four years and a ten- to sixty-day fine, when the person that is authorized to publish a work does so in one of the following ways:
 - a) No mention in the copies of the name of the author, translator, adapter, compiler or arranger.
 - b) Stamping the name with additions or deletions affecting the reputation of the author as such, or in its case, the translator, adapter, compiler or arranger.
 - c) Publishing the work with abbreviations, additions, deletions, or any other amendment, without the consent of the right holder.
 - d) Publishing several products separately, when authorization has been given for publication in whole, or publishing them together, when only has authorization for the publication of them separately.
 - IV.2. Reproduction, dissemination, distribution and circulation of the work without the permission of the author – is punishable with imprisonment for not less than two nor more than six years and a thirty- to ninety-day fine, when the person, with respect to a work, an artistic performance, a phonogram or a broadcast or broadcasting transmission, or an audiovisual recording or

²⁰It is noteworthy that Law No. 29316 also amends the Copyright Law, ensuring that no hierarchy is established between authors and neighboring rights.

photographic image expressed in any form, does any of the following acts without the prior written authorization of the author or right holder:

- a) It is modified in whole or in part.
- b) It is distributed by sale, rental or public lending.
- c) It is publicly communicated or broadcasted, transmitted or retransmitted by any media or process reserved for the respective right holder.
- d) It is played, distributed or communicated in greater numbers than authorized in writing.

The penalty is not less than four nor more than eight years and a sixty- to one-hundred-and-twenty-day fine, when the agent reproduces in whole or in part, by any media or process, and if the distribution is made by sale, rental or public lending or other way of transfer the possession of the medium that contains the work or production that exceeds the two (2) Tax Units²¹, in a single act or different acts of a lower amount each.

IV.3. Aggravated penalties. The penalty is imprisonment for no less than four nor more than eight years and a ninety- to one-hundred-and-eighty-day fine when:

- a) Making available to the public an undisclosed or unpublished work, that was received in confidence from the copyright holder or someone on his behalf, without the consent of the right holder.
- b) The reproduction, distribution or public communication is made for commercial or other economic advantage, or by altering or deleting the name or pseudonym of the author, producer or right holder.
- c) Knowing the illicit origin of the copy or reproduction, it is distributed to the public, by any media, it is stored, hidden, or it is introduced or taken out of the country.
- d) Manufacture, assembly, import, export, modify, sell, rent, offer for sale or rent, or make up any other way to put in circulation devices, tangible or intangible systems, schemes or equipment that could transgress another device intended to prevent or restrict the making of copies of works, or impair the quality of copies, or capable of allowing or encouraging the receipt of an encrypted program, broadcasted or communicated in other ways to the public, by those who are not authorized to do so.
- e) Register in the Copyright Registry the work, interpretation, production or emission of others, or any other intellectual property, as own or as that of a person other than the true right owner.

IV.4. Plagiarism – is punishable with imprisonment for not less than four nor more than eight years and a ninety- to one-hundred-and-eighty-day fine, to whom with respect to a work, disseminate it as own, in whole or in part, copying or reproducing it literally, or trying to disguise the copying by certain alterations, assuming as own or to another, the authorship or ownership of others.

IV.5. Aggravated forms – is punishable with imprisonment for not less than four nor more than eight years and a ninety- to three-hundred-and-sixty-five-day fine:

- a) Who assumes falsely the quality of primary or derivative right holder of any rights protected by the copyright law and neighboring rights, and with that improper assumption, obtains the competent authority to suspend the act of communication, reproduction or distribution of the work, interpretation, production, broadcasting or any other protected intellectual property.
- b) Who carries out activities of a Collecting Society of copyright law or neighboring rights without the due authorization of the competent administrative authority.
- c) Who submits false statements in certificates of income; public assistance; used repertoire; identity of authors; allegedly obtained permission; number of copies produced, sold or distributed free of charge or any other adulteration of data likely to cause injury to any of the copyright or neighboring rights holders.

²¹ In 2009, the Tax Unit is equivalent to S/. 3,550.00 (approximately US\$ 1,109.00 at the average exchange rate of February 2009)

- d) If the agent that commits the crime integrates an organization intended to perpetrate illegal acts.
 - e) If the agent that commits any of the mentioned crimes is an official or public servant.
- IV.6. Circumvention of technological protection measures. A person who, for commercialization or other economic advantage, without authorization, circumvents any technological protection measure that is utilized by the producers of phonograms, artists or performers and authors of any work protected by intellectual property rights, shall be punished with imprisonment no more than two years and a ten- to sixty-day fine.
- IV.7. Products intended for the circumvention of technological protection measures. A person who, for commercialization or other economic advantage, manufactures, imports, distributes, offers to the public, provides or otherwise commercializes devices, products or components intended primarily for the circumvention of technological protection measures used by producers of phonograms, artists, performers and authors of any work protected by intellectual property rights, shall be punished with imprisonment no more than two years and a ten- to sixty-day fine.
- IV.8. Services intended for the circumvention of technological protection measures. A person who, for commercialization or other economic advantage, provides or offers services to the public primarily intended for the circumvention of technological protection measures that are utilized by the producers of phonograms, artists, performers and authors of any work protected by intellectual property rights, shall be punished with imprisonment no more than two years and a ten- to sixty-day fine.
- IV.9. Crimes against rights management information. Any person who, without authorization and for commercialization or other economic advantage, removes or alters, either by itself or through another, any information about rights management, will be punished with imprisonment no more than two years and a ten- to sixty-day fine. The same penalty will be imposed on the person who distributes or imports for distribution rights management information, knowing that this has been removed or altered without authorization; or distributes, imports for distribution, broadcasts, communicates or makes available to the public copies of works, interpretations or executions or phonograms, knowing that the rights management information has been removed or altered without authorization.
- IV.10. Labels, covers or packaging. The person who manufactures, commercializes, distributes, stores, transports, transfers or otherwise arranges for commercial or other economic advantage fake labels or covers attached or designed to be attached to a phonogram, a copy of computer software, documentation or packaging of computer software or a copy of a cinematographic or other audiovisual work, will be punished with imprisonment for no less than three nor more than six years and a sixty- to one-hundred-and-twenty-day fine.
- IV.11. Manuals, licenses or other documentation, or fake packaging related to computer software. The person that develops, commercializes, distributes, stores, transports, transfers or arranges for commercial or other economic advantage manuals, licenses or other documentation, or fake packaging for computer software, will be punished with imprisonment for no less than four nor more than six years and a sixty- to one-hundred-and-twenty-day fine.
- IV.12. Preventive seizure and definitive confiscation. In the crimes mentioned above it will proceed the preventive seizure of the copies and materials, equipment or media used to commit the illegal act and, if so, of the assets and any documentary evidence related to the crime. If necessary, the Public Prosecutor will ask the Judge for permission to read the documentation that is in the place of the intervention, and in the execution of that authorization the documentation related to the field of investigation will be seized. For the seizure is not required to identify individually all the materials, only if the necessary measures are taken so that during the judicial process all of them are identified. In this event the representative of the Public Ministry participates. Also, the Judge,

at the request of the Public Ministry, will order to search or to unlock the premises where the crime is being committed. In case of criminal conviction, the copies, illegal material, equipment and media used to commit the illegal action will be confiscated and destroyed, unless in exceptional cases evaluated by the judicial authority. In no case will the illegal copies be returned to the defendant.

- IV.13. Devices to assist the decoding of satellite signals carrying programs. A person who manufactures, assembles, modifies, imports, exports, sells, rents or distributes by any media a tangible or intangible device, whose primary function is to assist in decoding an encrypted satellite signal that carries programs without authorization from the legal distributor of that signal, will be punished with imprisonment for no less than four nor more than eight years and a ninety- to one-hundred-and-eighty-day fine.
- IV.14. Distribution of satellite signals carrying programs. The person who distributes a satellite signal carrying a program, originally encoded, in the knowledge that it was decoded without the authorization of the legal distributor of that signal, will be punished with imprisonment for no less than two nor more than six years and a thirty- to ninety-day fine.
- IV.15. Protection of encrypted satellite signals. Whoever receives a satellite signal that carries a program originally encrypted, knowing that it was decoded without the authorization of the legal distributor of the signal, will be punished with forty to eighty hours of community service or a ten- to sixty-day fine.

We believe that the recent legislative changes will be useful for advancing the goal of achieving adequate copyright and related rights protection in our country. Not only have penalties for cases of circumvention of technological protection measures and infringements related to the alteration of rights management information been established, but changes to the Criminal Code have been incorporated and provisions for the implementation of border measures have been issued. Similarly, INDECOPI has been institutionally strengthened and additional faculties have been granted to the judicial authorities.

Finally, to obtain better results in combating piracy, the administrative and judicial authorities should have more resources and people should be educated about respecting intellectual property.

4. The Economic Contribution of Copyright-Based Industries in Peru

4.1. Background and Basics of CBI Performance

The recent economic performance of the Peruvian economy is presented to provide context to the estimated figures for copyright-based industries. Of particular importance is the performance of the economy in 2005, which is the year used for the estimation of the CBIs. Since 2002, the Peruvian economy has been growing at rates above 4%; indeed, in the period 2002-2007, the real Gross Domestic Product (GDP) grew on average by 6.5%. Specifically, in the year 2005, the growth rate was 6.7%, and the value added reached US\$ 71.5 billion. Furthermore, according to INEI, in 2005 Peru reached fifth position in terms of growth rates in Latin America.

According to the National Household Survey (ENAHO) of 2005, applied by the INEI, the total working-age population was around 20 million. Of that number, 699,000 people are in the category of open unemployment, 631,000 are in hidden unemployment, and 5.5 million are inactive, leaving the employed population at 13.2 million.

The current account balance in 2005, according to the BCRP, showed a surplus equal to 1.4% of GDP in that year. In nominal terms, it was US\$ 1,148 million, a great improvement on the average of US\$ -2,124 million found in the 1991-2004 period. This surplus is explained by the positive trade balance, which was 6.7% of the GDP, that is to say, US\$ 5,286 million. Exports amounted to US\$ 17,368 million (21.9% of GDP) and imports were US\$ 12,082 million (15.2% of GDP). The main export products were traditional exports (mainly natural resource extraction), which accounted for US\$ 12,950 million, with mining representing 75% of this total. Non-traditional exports accounted for US\$ 4,277 million, and consisted mainly of agricultural and textile exports (US\$ 1,008 million and US\$ 1,275 million, respectively).

Table 4.1.1. Macroeconomic Indicators of the Peruvian Economy

Variable	Amount
Value Added (nominal US\$) ^{1/}	71,501,003,834
National Employment (units) ^{2/}	13,243,977
FOB Exports (US\$) ^{3/}	17,367,684,267
CIF Imports (US\$) ^{3/}	12,081,608,791
Trade Balance (US\$) ^{3/}	5,286,075,476

1/ Statistics and Informatics National Institute.

2/ Statistics and Informatics National Institute, National Household Survey (ENAHO) 2005.

3/ Central Reserve Bank of Peru.

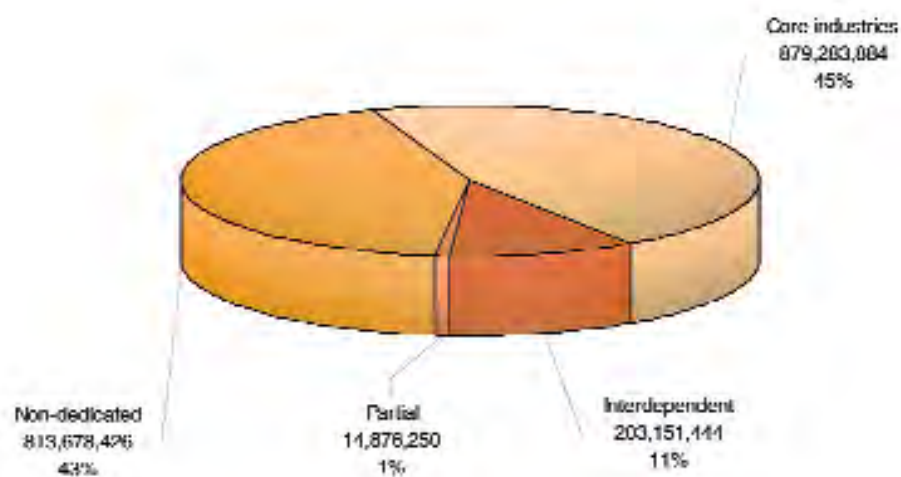
On aggregate, copyright-based industries' contribution to Peruvian value added represents 2.7% of its total, reaching US\$ 1,911 million in 2005. Their importance to employment is larger, with 596,000 jobs that represent 4.5% of the national employment. In both cases (see figures 4.1.1 and 4.1.2), the main contributors are core (45% for value added and 46% for employment) and non-dedicated CBIs (43% for value added and 50% for employment).

Table 4.1.2. Copyright-Based Industries' Contribution to National Economy, 2005

Copyright-based Industries	Value Added (US\$)	As a percentage of National V.A.	Employment (persons)	As a percentage of National employment
Core Industries	879,283,884	1.23%	276,625	2.09%
Interdependent	203,151,444	0.28%	18,950	0.14%
Partial	14,876,250	0.02%	8,743	0.07%
Non-Dedicated	813,678,426	1.14%	291,632	2.20%
Total	1,910,990,004	2.67%	595,950	4.50%

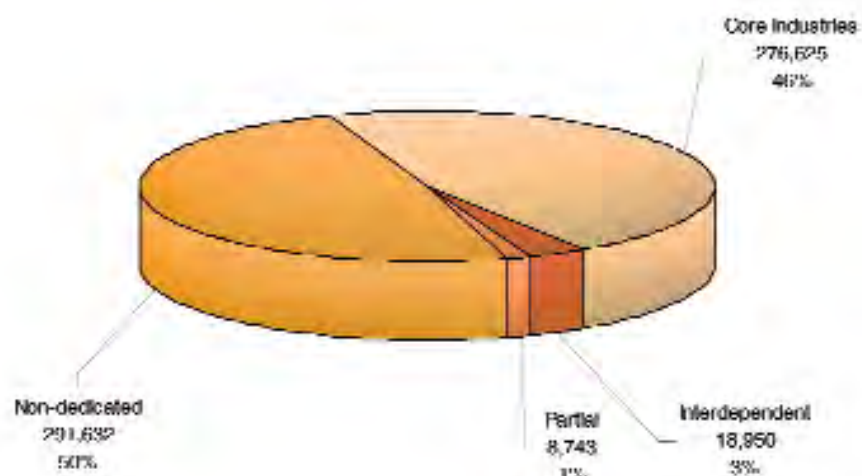
Source: Tables in chapters 4 and 5.
Prepared by the authors

Figure 4.1.1. Copyright-Based Industries' Share of Value Added, 2005



Source: Tables in chapters 4 and 5.
Prepared by the authors

Figure 4.1.2. Copyright-Based Industries' Share of Employment, 2005



Source: Tables in chapters 4 and 5.
Prepared by the authors

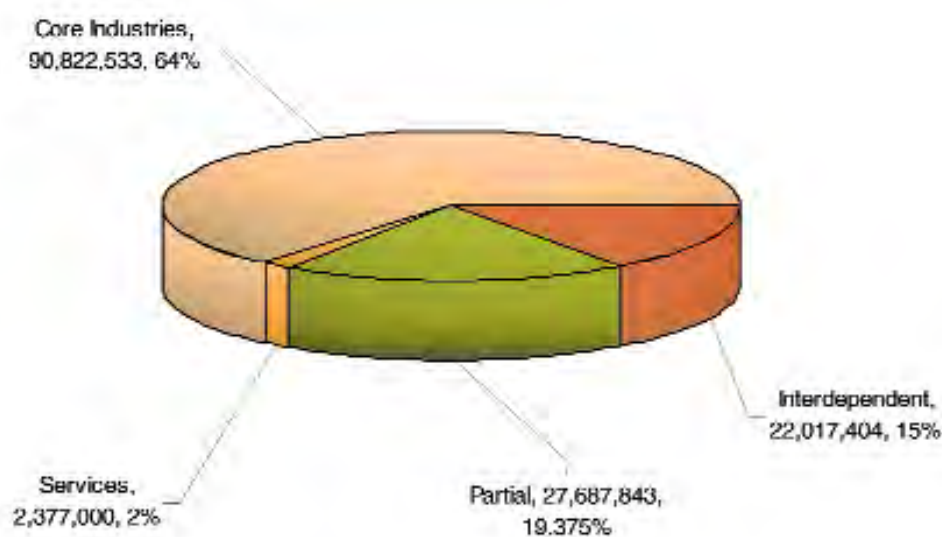
Core CBIs have an important role in total copyright-based industries' exports (as in the case of value added and employment). However, on aggregate, copyright-based industries' exports (US\$ 143 million) represent less than 1% of total national exports. Imports amount to US\$ 652 million (5.4% of national imports), with interdependent industries as the main importers, followed by services exports. Copyright-based industries' trade balance in 2005 was negative, representing almost 10% of the national trade balance.

Table 4.1.3. Copyright-Based Industries' Trade Statistics, 2005

Copyright-based Industries	Exports (US\$)	As a percentage of National exports	Imports (US\$)	As a percentage of National Imports	Trade Balance (US\$)	As a percentage of National Trade Balance
Core Industries	90,822,533	0.52%	21,850,918	0.18%	68,971,585	1.30%
Non-Core Industries						
Interdependent	22,017,404	0.13%	520,264,468	4.31%	-198,247,064	-9.13%
Partial	27,687,843	0.16%	11,732,856	0.10%	15,954,987	0.30%
Services	2,377,000	0.01%	97,898,640	0.81%	-95,521,640	-1.81%
Total	142,904,780	0.82%	651,746,912	5.40%	-508,842,132	-9.63%

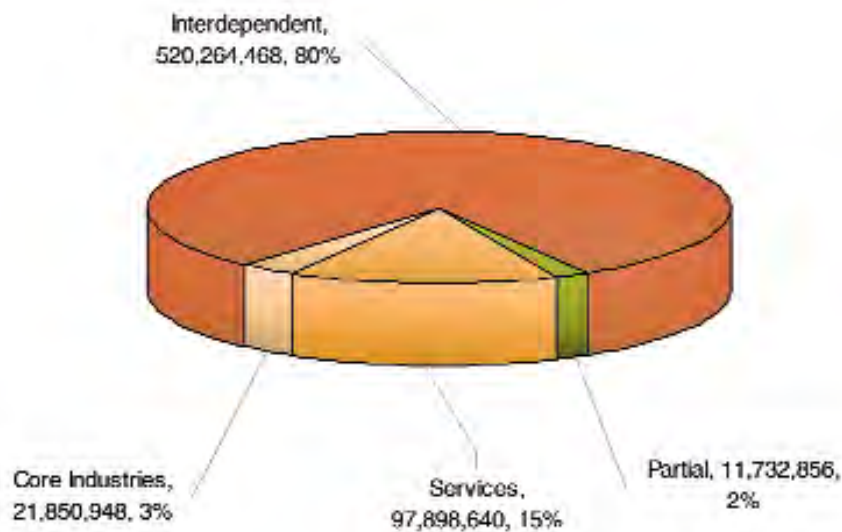
Source: Tables in chapters 4 and 5.
Prepared by the authors

Figure 4.1.3. Copyright-Based Industries' Share of Exports, 2005



Source: Tables in chapters 4 and 5.
Prepared by the authors

Figure 4.1.4. Copyright-Based Industries' Share of Imports, 2005

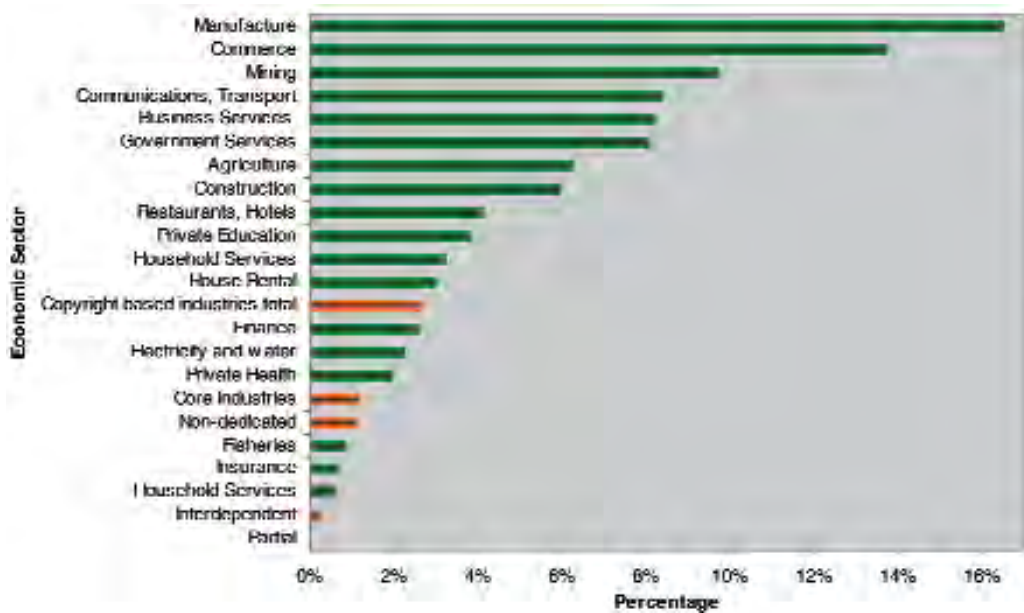


Source: Tables in chapters 4 and 5.
Prepared by the authors

Comparison with Other Economic Sectors

The total contribution of copyright-based industries to the value added (2.6%) is similar to the contributions of house rental (2.98%), finance (2.56%), and water and electricity supply (2.25%). Core industries contribute 1.22% to total value added (US\$ 997,045,973) while non-core industries' contribution is slightly higher, with 1.59% (US\$ 218,841,372). Economic sectors with similar importance to value added are communications (2.00%), private health (1.98%) and fisheries (0.86%).

Figure 4.1.5. Percentage of Total Value Added by Economic Sector, 2005



Source: BCRP and tables in chapters 4 and 5.
Prepared by the authors

4.2. Core Copyright Industries

According to the WIPO Guide (2003): "The core copyright industries are industries that are wholly engaged in creation, production and manufacturing, performance, broadcast, communication and exhibition, distribution and sales of works and other protected subject matter". Thus all creation of value added, employment and trade flows are assigned to these industries as their contribution to the economy. In chapter 5, the specific methodology and assumptions to make the estimations are explained in detail. Since it was not possible to obtain reliable data on value added for photography, visual and graphic arts, its contribution to the national value added was estimated, assuming the same value-added-to-employment ratio as the motion picture industry and adding up the royalties distributed by APSAV (US\$ 4,000).

Contribution to Value Added

In 2005, core copyright industries' contribution to value added was the most important among copyright-based industries, with 1.2% of the total value added generated in Peru. The total value added contribution is US\$ 879 million. However, core industries have great differences in their stages of development and contribution, as table 4.2.1 shows.

Table 4.2.1. Core Industries' Contribution to Value Added, 2005 (millions of US\$)

Core copyright industries	Value Added (US\$)	As a percentage of National V.A.
Press and literature	629,782,639	0.8808%
Music	12,665,521	0.0177%
Motion picture	11,042,989	0.0154%
Software	78,798,096	0.1102%
Radio and TV	100,772,357	0.1409%
Advertising	42,900,000	0.0600%
Photography, visual and graphic arts ^{1/}	2,381,365	0.0033%
Copyright Collecting Societies	940,918	0.0013%
Total	879,283,884	1.2298%

1/ Assuming the same value-added-to-employment ratio as the motion picture industry and adding up the royalties distributed by APSAV (US\$ 4,000).

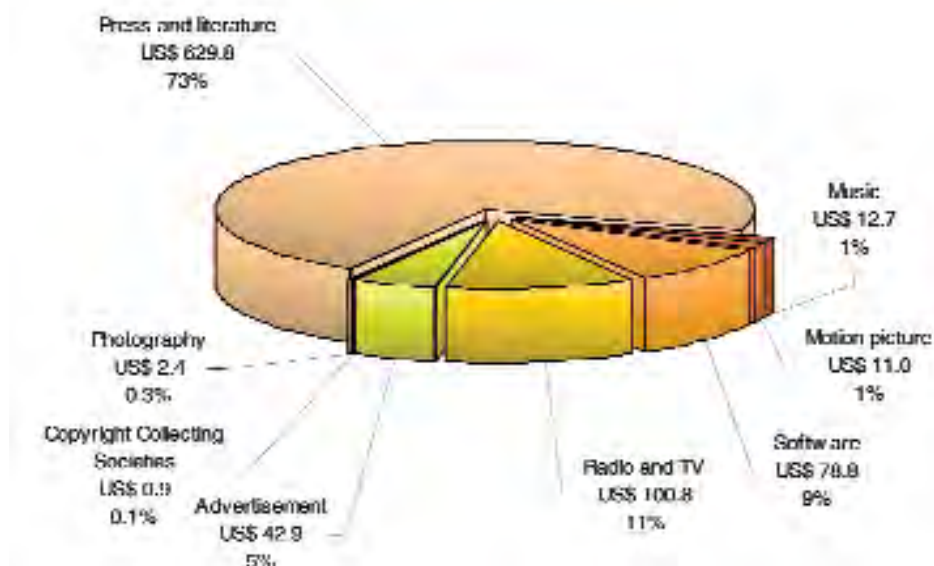
Source: INEI.

Source: Tables in chapter 5.

Prepared by the authors

Among the different core industries, the largest contribution to value added is made by press and literature, which accounts for 73% of the core industries' contribution. Other industries of importance are radio and TV (11%) and software (9%). The contribution of each core copyright industry can be found in table 4.2.1, while their relative importance can be observed in figure 4.2.1.

Figure 4.2.1. Core Industries' Contribution to Value Added, 2005 (millions of US\$)



Source: Tables in chapter 5.
Prepared by the authors

Contribution to Employment

Core copyright industries' contribution to total employment in Peru is the second highest for copyright-based industries, with 2.09%. As in the case of value added, the magnitude of the contribution to employment varies considerably between the different industries. For example, while 148,578 jobs can be attributed to press and literature, only 149 can be credited to copyright collecting societies. The detailed data can be found in table 4.2.2.

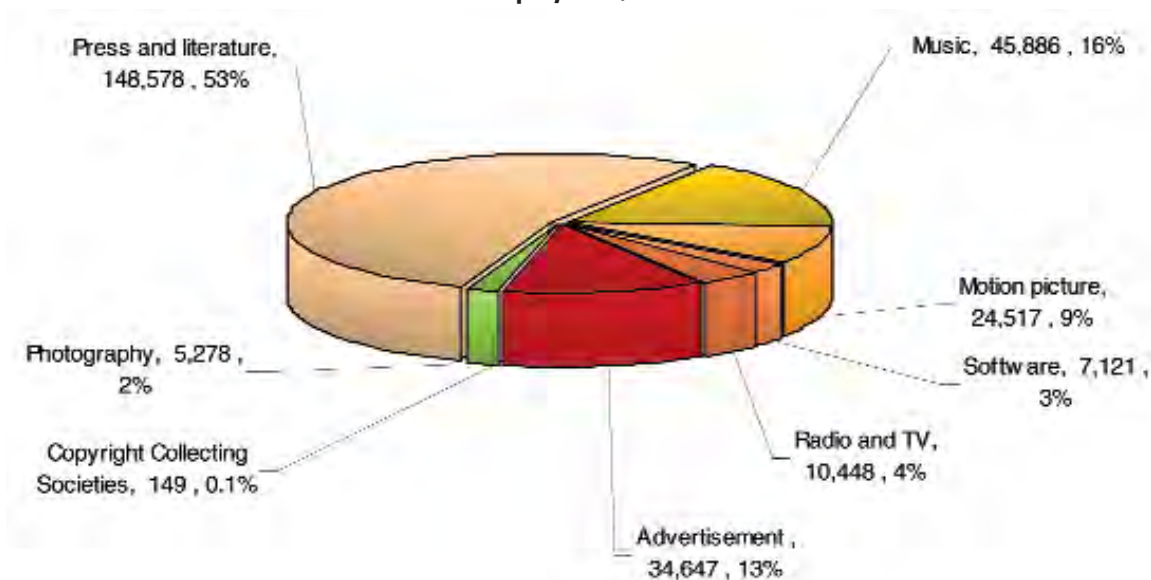
Table 4.2.2. Core Industries' Contribution to Employment, 2005

Core copyright industries	Employment (number)	As a percentage of National Employment
Press and literature	148,578	1.1219%
Music	45,886	0.3465%
Motion picture	24,517	0.1851%
Software	7,121	0.0538%
Radio and TV	10,448	0.0789%
Advertising	34,647	0.2616%
Photography, visual and graphic arts ^{1/}	5,278	0.0399%
Copyright Collecting Societies	149	0.0011%
Total	276,625	2.0887%

1/ EEA, 2005 (see chapter 2 for the methodology of estimation).
Source: Tables in chapter 5.
Prepared by the authors

The largest contributor to employment among the core industries is – as in the case of value added – press and literature (53% of the core industries' employment), followed by the music and advertising industries (16% and 13%, respectively). The relative importance of core industries to employment is shown in figure 4.2.2.

Figure 4.2.2. Core Industries' Contribution to Employment, 2005



Source: Tables in chapter 5.
Prepared by the authors

Contribution to Trade

Core copyright industries in Peru are the most important in terms of foreign trade, as they are the only group with a positive trade balance, which in 2005 reached US\$ 69 million and represented 1.3% of the national trade balance. This result is explained by the fact that core industries are the copyright industries group with the largest number of exports (US\$ 90 million, which amounted to 0.5% of total Peruvian exports). At the same time, core industries' imports in 2005 reached US\$ 22 million (0.2% of the national imports). However, it should be noted in relation to this result that no import statistics for software were available.

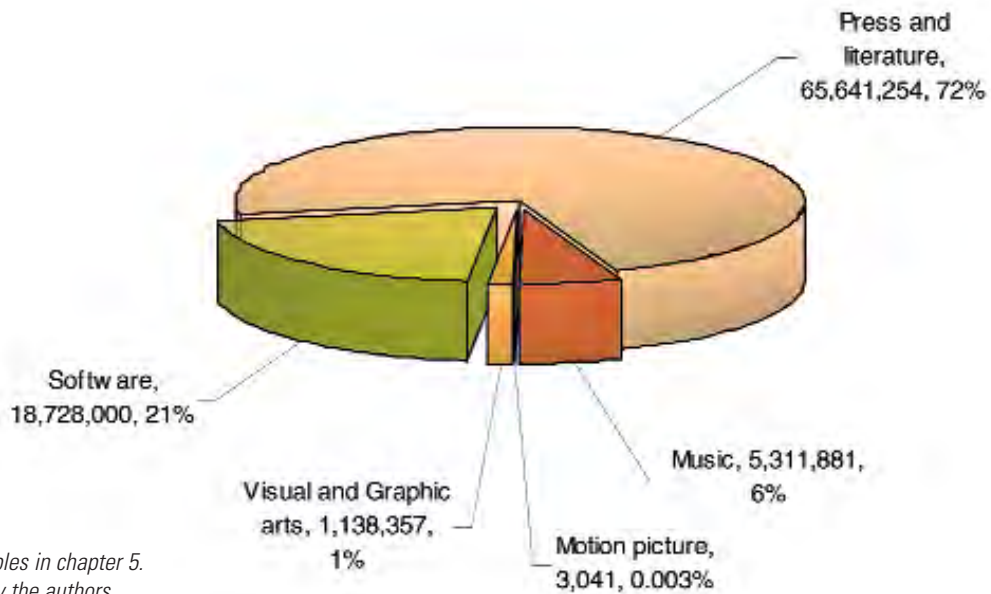
Table 4.2.3. Core Industries' Trade Balance, 2005

Core Industries	Exports (US\$)	As a percentage of National exports	Imports (US\$)	As a percentage of National imports	Trade Balance (US\$)	As a percentage of National Trade Balance
Press and literature	65,641,254	0.378%	3,279,853	0.027%	62,361,401	1.180%
Music	5,311,881	0.031%	18,287,413	0.151%	-12,975,532	-0.245%
Motion picture	3,041	0.000%	213,372	0.002%	-210,331	-0.004%
Software	18,728,000	0.108%	n.a.	n.a.	n.a.	n.a.
Visual and graphic arts	1,138,357	0.007%	70,310	0.001%	1,068,047	0.020%
Total	90,822,533	0.523%	21,850,948	0.181%	68,971,585	1.305%

Source: Tables in chapter 5.
Prepared by the authors

The most important economic activity among the core industries' exports is press and literature, with US\$ 66 million, which represents 72% of the core industries' exports. Software and music exports are located in second and third place, with 21% and 6%, respectively.

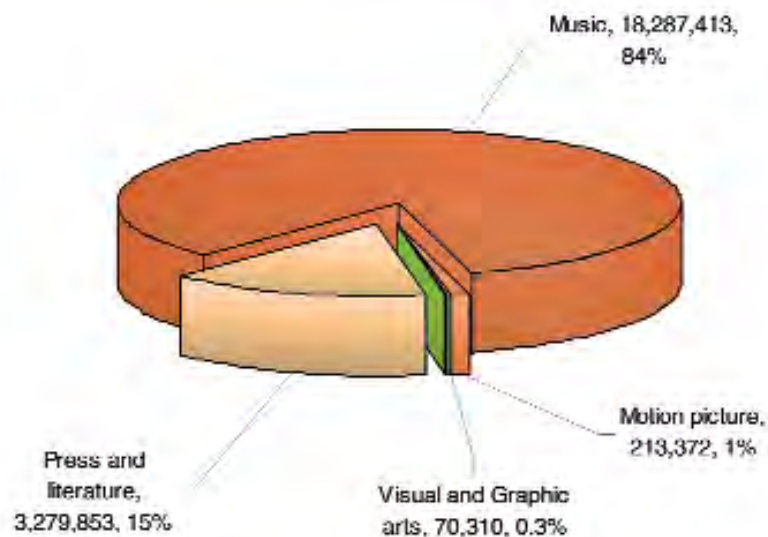
Figure 4.2.3. Economic Activities' Exports Share, Core Industries, 2005 (US\$)



Source: Tables in chapter 5.
Prepared by the authors

In the case of imports, music (84%) and press and literature (15%) account for most of the imports, although the lack of data related to software imports should be considered in this result.

Figure 4.2.4. Economic Activities' Imports Share, Core Industries, 2005 (US\$)



Source: Tables in chapter 5.
Prepared by the authors

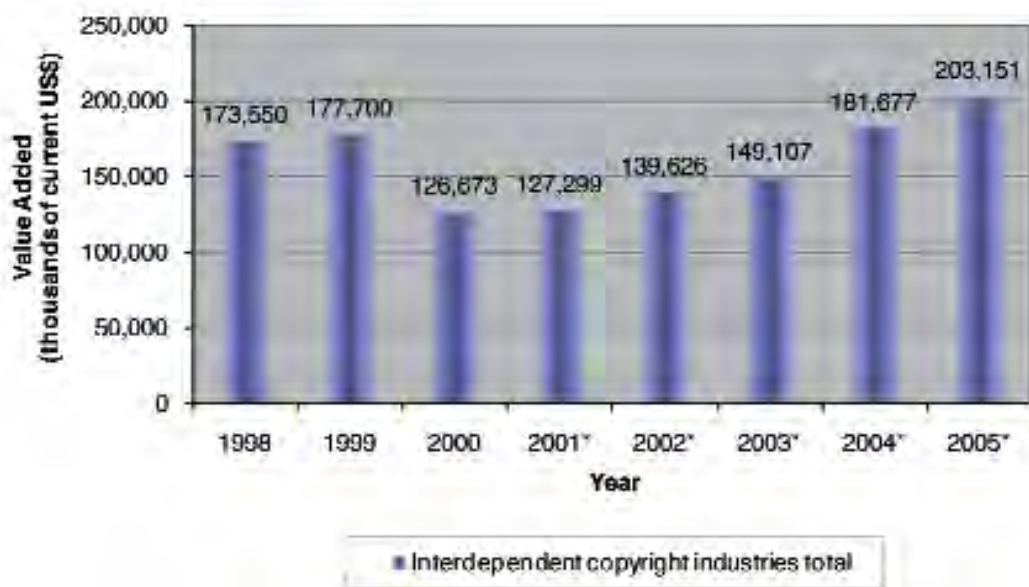
4.3. Interdependent Copyright Industries

According to the WIPO Guide (2003): “Interdependent copyright industries are industries that are engaged in production, manufacture and sale of equipment whose function is wholly or primarily to facilitate the creation, production or use of works and other protected subject matter.” This means that these activities would not be developed unless there are copyrights; then they are a hundred percent CBIs.

Contribution to Value Added

Interdependent industries’ contribution to the total Peruvian value added between 1998 and 2005 – after a drastic reduction in the year 2000 – has been steadily increasing, reaching more than US\$ 203 million in 2005. Figure 4.3.1 shows the evolution of these industries between 1998 and 2005.

Figure 4.3.1. Interdependent Copyright Industries’ Contribution to Value Added 1998-2005 (thousands of current US\$)



*Data for the years 2001-2005 was estimated by the authors. See Annex B for the methodology.

Source: PRODUCE and INEI.

Prepared by the authors

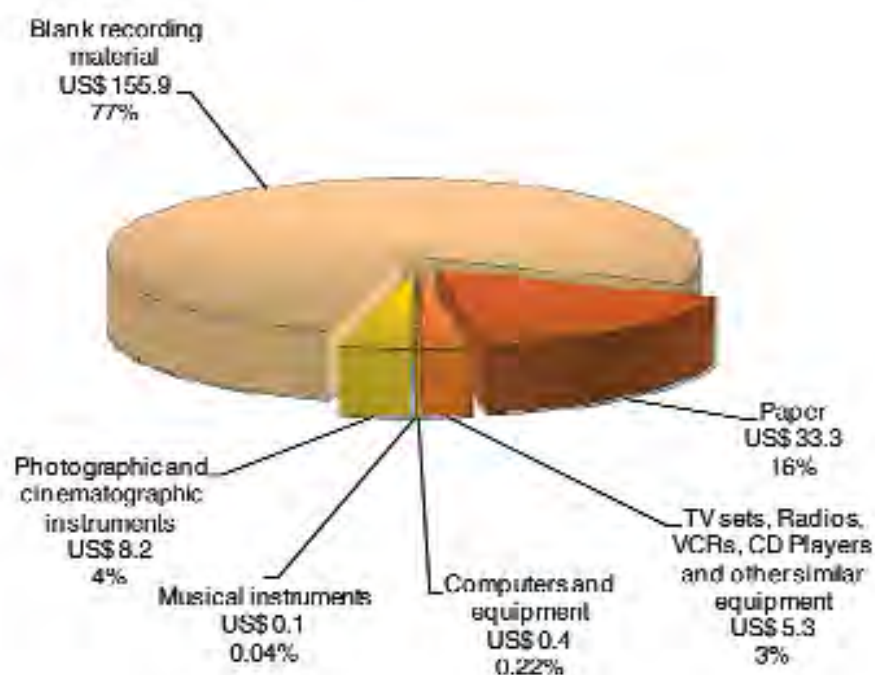
Between the copyright-based industries’ main groups, interdependent industries are located in third place in terms of their contribution to national value added, with 0.284%. Blank recording material is the most important of the interdependent industries, having added US\$ 156 million to the Peruvian value added in 2005, which represents 77% of the industries’ contribution. The paper industry is the second in importance, with 16% of the contribution based on the US\$ 33 million of value added that it contributed in that year. The details of the interdependent industries’ contribution to national value added and their relative importance can be found in table 4.3.1 and figure 4.3.2, respectively.

Table 4.3.1. Interdependent Industries' Contribution to Value Added, 2005

Economic activity	V. A. (US\$)	As a percentage of total V.A
TV sets, radios, VCRs, CD players and other similar equipment	5,253,082	0.007%
Computers and equipment	441,595	0.001%
Musical instruments	88,776	0.000%
Photographic and cinematographic instruments	8,150,361	0.011%
Blank recording material	155,899,222	0.218%
Paper	33,318,408	0.047%
Total	203,151,444	0.284%

Source: PRODUCE.
Prepared by the authors

Figure 4.3.2. Interdependent Industries' Contribution to Value Added, 2005 (millions of US\$)



Source: PRODUCE.
Prepared by the authors

Contribution to Employment

Interdependent industries contribute 18,950 jobs, which represent 0.143% of the total national employment. This makes this group of industries the third largest in terms of its contribution to national employment. The paper industry is the most important in its contribution, with 9,023 jobs, which accounts for 48% of the group total, while the blank-recording-material and photographic-and-cinematographic-instruments industries also play an important role (29% and 20% of the group employment, respectively). The details can be found in table 4.3.2 and figure 4.3.3.

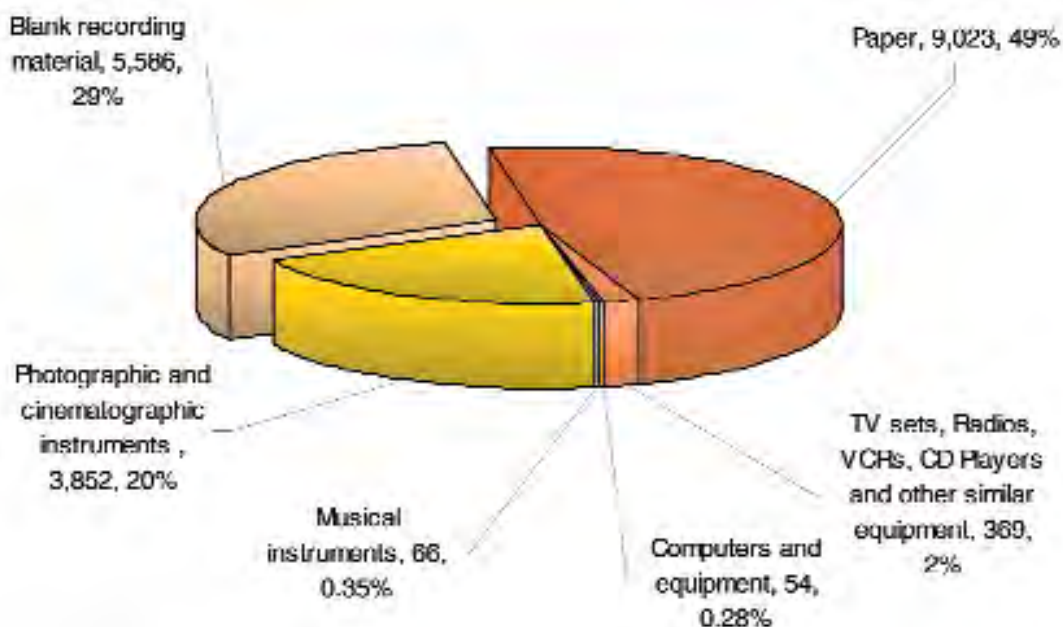
Table 4.3.2. Interdependent Industries' Contribution to Employment, 2005

Economic activity	Total Employment	As a percentage of national employment
TV sets, radios, VCRs, CD players and other similar equipment ^{1/}	369	0.003%
Computers and equipment ^{1/}	54	0.0004%
Musical instruments ^{1/}	66	0.0005%
Photographic and cinematographic instruments ^{2/}	3,852	0.029%
Blank recording material ^{1/}	5,586	0.042%
Paper ^{2/}	9,023	0.068%
Total	18,950	0.143%

Source: INEI.

Prepared by the authors

Figure 4.3.3. Interdependent Industries' Contribution to Employment, 2005



Source: INEI.

Prepared by the authors

Contribution to Trade

Interdependent industries' contribution to Peruvian exports reached US\$ 22 million in 2005. While they represent the third-largest copyright industry group in terms of exports, they are also the main importers, with 4% of the CIF imports of the country (US\$ 520 million). Every activity considered in this group had a negative trade balance in 2005 (see table 4.9. for details), which resulted in a total negative trade balance of US\$ 498 million, roughly 9% of the total trade balance for Peru.

Table 4.3.3. Interdependent Industries' Trade Balance, 2005

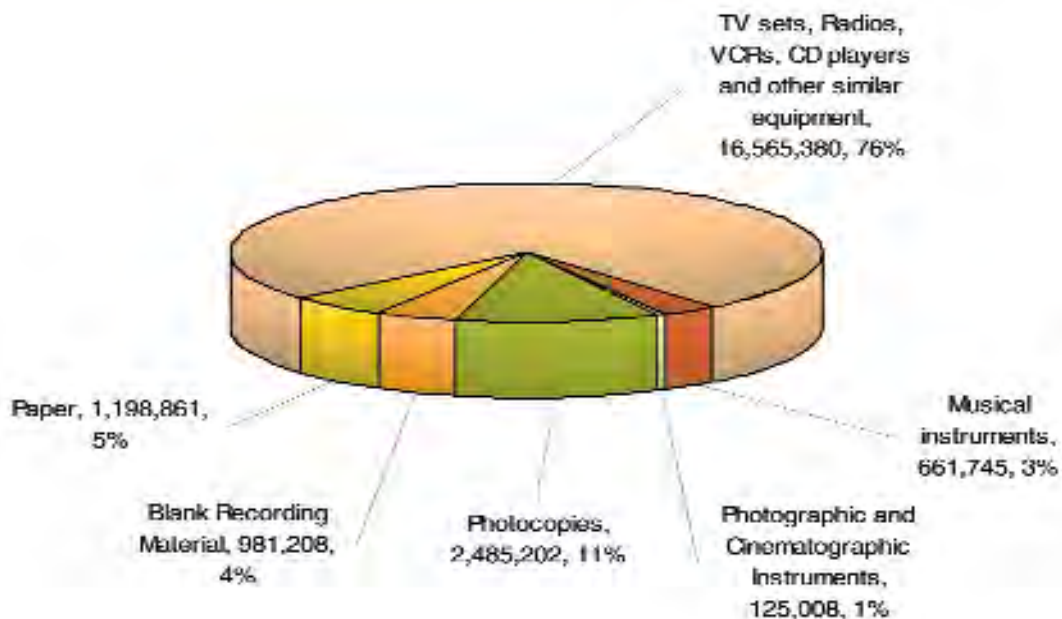
Economic activity	FOB Exports (US\$)	As a percentage of total FOB exports	CIF Imports (US\$)	As a percentage of total CIF imports	Trade Balance (US\$)
TV sets, radios, VCRs, CD players and other similar equipment	16,565,380	0.10%	155,064,518	1.28%	-138,499,138
Musical instruments	661,745	0.00%	4,784,648	0.04%	-4,122,903
Photographic and cinematographic instruments	125,008	0.00%	17,817,719	0.15%	-17,692,711
Photocopies	2,485,202	0.01%	163,659,428	1.35%	-161,174,226
Blank recording material	981,208	0.01%	56,391,344	0.47%	-55,410,136
Paper	1,198,861	0.01%	122,546,811	1.01%	-121,347,950
Total	22,017,404	0.13%	520,264,468	4.31%	-498,247,064

Source: SUNAD and PRODUCE.

Prepared by the authors

Among interdependent industries, exports are explained mainly by TV sets, radios, VCRs, CD players and other similar equipment (76%) and photocopies (11%), as shown in figure 4.8. In the case of imports, the main activities are photocopies (31%), TV sets, radios, VCRs, CD players and other similar equipment (30%), paper (24%) and blank recording material (11%).

Figure 4.3.4. Economic Activities' Exports Share, Interdependent Industries, 2005 (US\$)

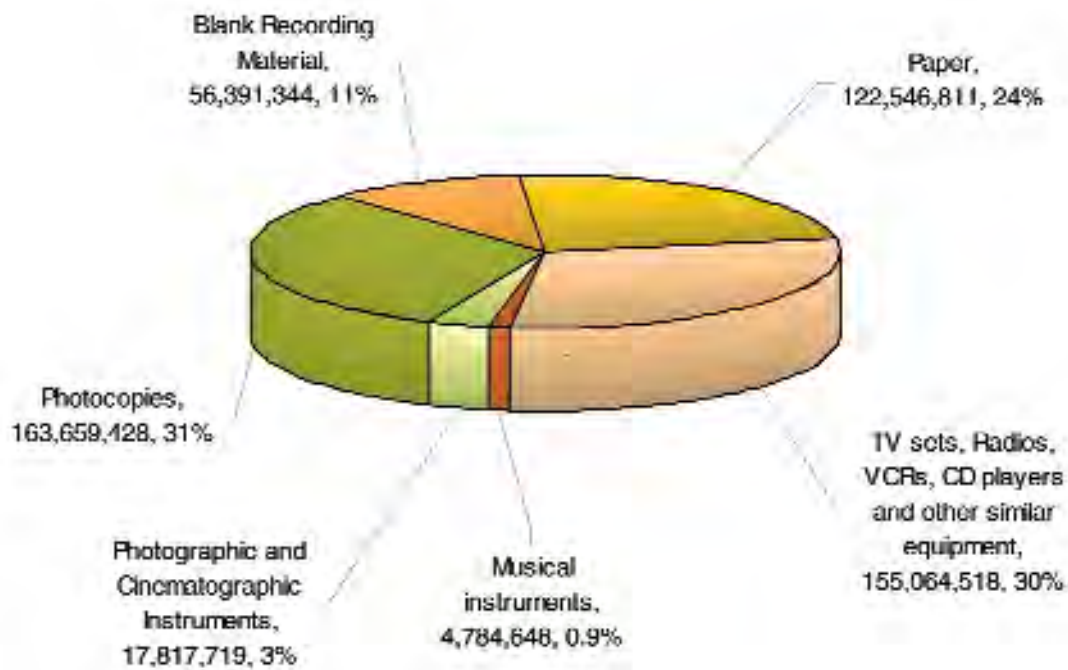


Source: SUNAD and PRODUCE.

Prepared by the authors



Figure 4.3.5. Economic Activities' Imports Share, Interdependent Industries, 2005 (US\$)



Source: SUNAD and PRODUCE.
Prepared by the authors

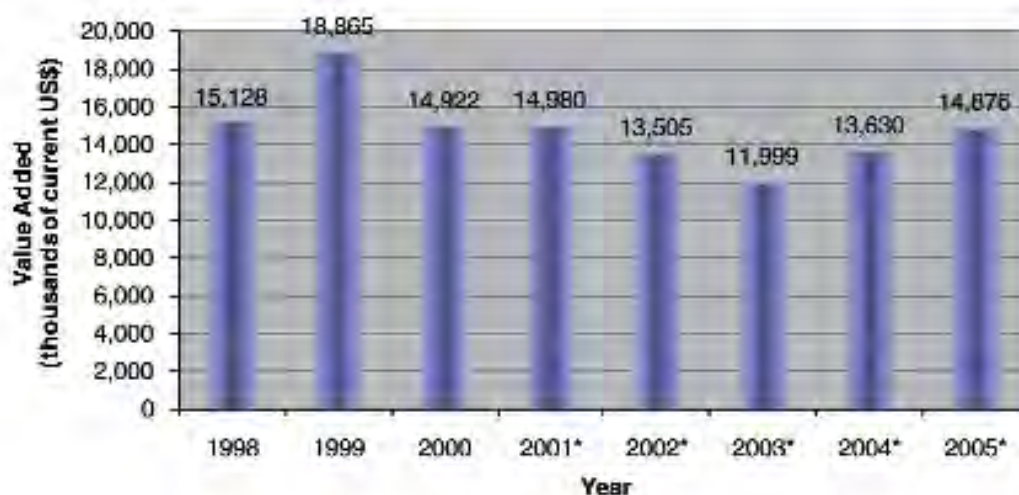
4.4. Partial Copyright Industries

According to the WIPO Guide (2003): "The partial copyright industries are industries in which a portion of the activities is related to works and other protected subject matter and may involve creation, production and manufacturing, performance, broadcast communication and exhibition or distribution and sales." In this way the measurement of the economic contribution of partial CBIs has to consider the copyright factors. They weight the contribution to the economy in such a way that the proportion of the activity attributable to copyright is obtained. The copyright factors used in this study are the Mexican ones (Márquez-Mees et al., 2006). Although Peru and Mexico do not necessarily have the same economic development and dynamics, Mexican factors were the closest available factors. Mexico is a Latin American economy and factors from developed countries would have introduced more bias to the estimates.

Contribution to Value Added

Total value added for the partial copyright industries for the 1998-2005 period shows that, while there is variability in its contribution, it is in the range between US\$ 12,000 and US\$ 19,000.

Figure 4.4.1. Partial Industries' Contribution to Value Added, 1998-2005 (thousands of current US\$)



Note: Data for the years 2001-2005 was estimated by the authors. See Annex B for the methodology.

Source: PRODUCE and INEI.

Prepared by the authors

Partial copyright industries account for the smallest contribution to value added among the copyright-based industries. For the year 2005, their total contribution to Peruvian value added – related to copyright – was less than US\$ 15 million, which represented 0.021% of the national value added.

Table 4.4.1. Partial Industries' Contribution to Value Added, 2005

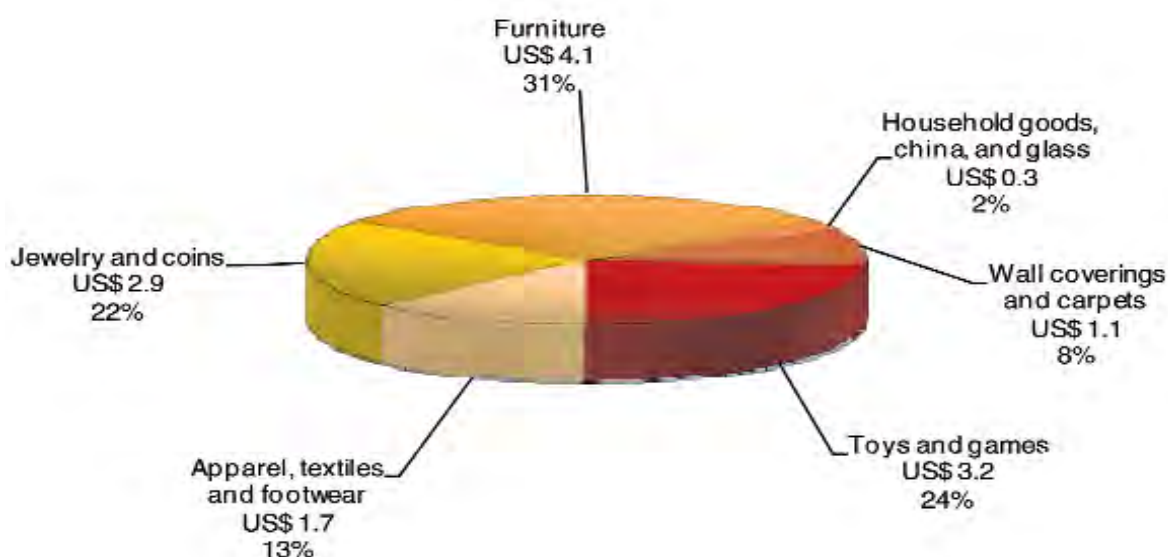
Economic activity	Copyright factor	V.A. (US\$)	As a percentage of total V.A
Apparel, textiles and footwear	0.005	1,729,743	0.002%
Jewelry and coins	0.250	2,887,713	0.004%
Furniture	0.050	4,091,847	0.006%
Household goods, china, and glass	0.005	1,365,210	0.002%
Wall coverings and carpets	0.020	3,227,922	0.005%
Toys and games	0.500	1,573,815	0.002%
Total		14,876,250	0.021%

Source: PRODUCE and INEI.

Prepared by the authors

The most important activity is the furniture industry, with 31% of the contribution to value added, followed by toys and games (24%) and jewelry and coins (22%).

Figure 4.4.2. Partial Industries' Contribution to Value Added, 2005 (millions of US\$)



Source: PRODUCE and INEI
Prepared by the authors

Contribution to Employment

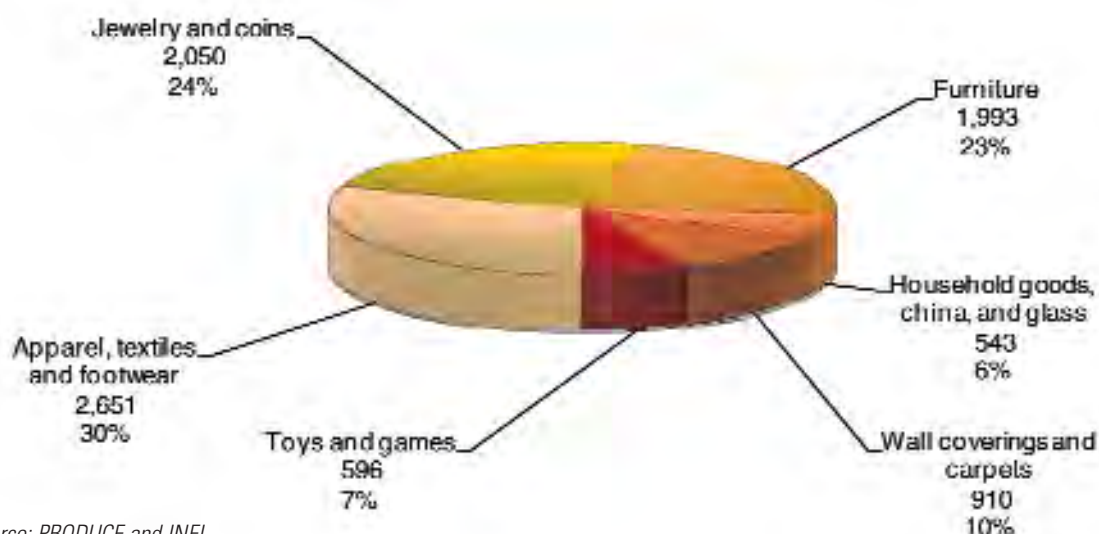
As in the case of value added, the contribution to employment of this group of industries is the smallest of all copyright-based activities, with only 8,743 jobs (0.066% of national employment). The activities which account for the largest number of jobs within the partial copyright industries are apparel, textiles and footwear (30%), jewelry and coins (24%), and furniture (23%).

Table 4.4.2. Partial Industries' Contribution to Employment, 2005

Economic activity	Copyright factor	Total Employment	As a percentage of national employment
Apparel, textiles and footwear	0.005	2,651	0.020%
Jewelry and coins	0.250	2,050	0.015%
Furniture	0.050	1,993	0.015%
Household goods, china, and glass	0.005	543	0.004%
Wall coverings and carpets	0.020	910	0.007%
Toys and games	0.500	596	0.004%
Total		8,743	0.066%

Source: PRODUCE and INEI.
Prepared by the authors

Figure 4.4.3. Partial Industries' Contribution to Employment, 2005



Source: PRODUCE and INEI.

Prepared by the authors

Contribution to Trade

With US\$ 28 million in exports in 2005 – corresponding to copyright – partial copyright industries represented 0.2% of the total exports of goods, and were the second-largest export group among CBIs. Partial copyright industries' exports were led by jewelry and coins (85%), and apparel, textiles and footwear (7%), which coincidentally are the only activities in the group with a positive trade balance. In the case of imports, toys and games is the main import activity (57%), although the rest of the activities have shares of imports between 7% and 12% (excluding architecture, engineering, and surveying, which represents only 0.3% of partial industries' imports). Partial industries' imports amount to US\$ 12 million, resulting in a US\$ 16 million trade balance. The details are shown in table 4.4.3, as well as in figure 4.4.4 and figure 4.4.5.

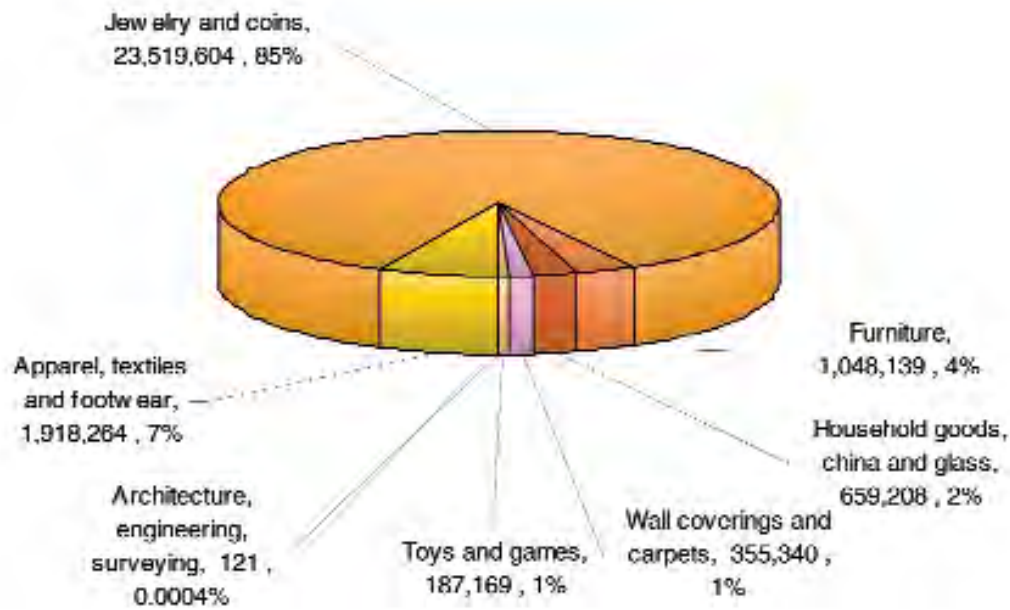
Table 4.4.3. Partial Copyright Industries' Trade Balance, 2005

Economic Activity	Copyright factor	FOB Exports corresponding to copyright (US\$)	As a percentage of total FOB exports	CIF Imports corresponding to copyright (US\$)	As a percentage of total CIF imports	Trade Balance corresponding to copyright (US\$)
Apparel, textiles and footwear	0.005	1,918,264	0.01%	765,684	0.01%	1,152,580
Jewelry and coins	0.250	23,519,604	0.14%	795,912	0.01%	22,723,692
Furniture	0.050	1,048,139	0.01%	1,454,647	0.01%	-406,508
Household goods, china and glass	0.005	659,208	0.00%	965,191	0.01%	-305,983
Wall coverings and carpets	0.020	355,340	0.00%	1,022,669	0.01%	-667,329
Toys and games	0.500	187,169	0.00%	6,694,641	0.06%	-6,507,472
Architecture, engineering, surveying	0.100	121	0.00%	34,114	0.00%	-33,994
TOTAL		27,687,843	0.16%	11,732,856	0.10%	15,954,987

Source: SUNAD and PRODUCE.

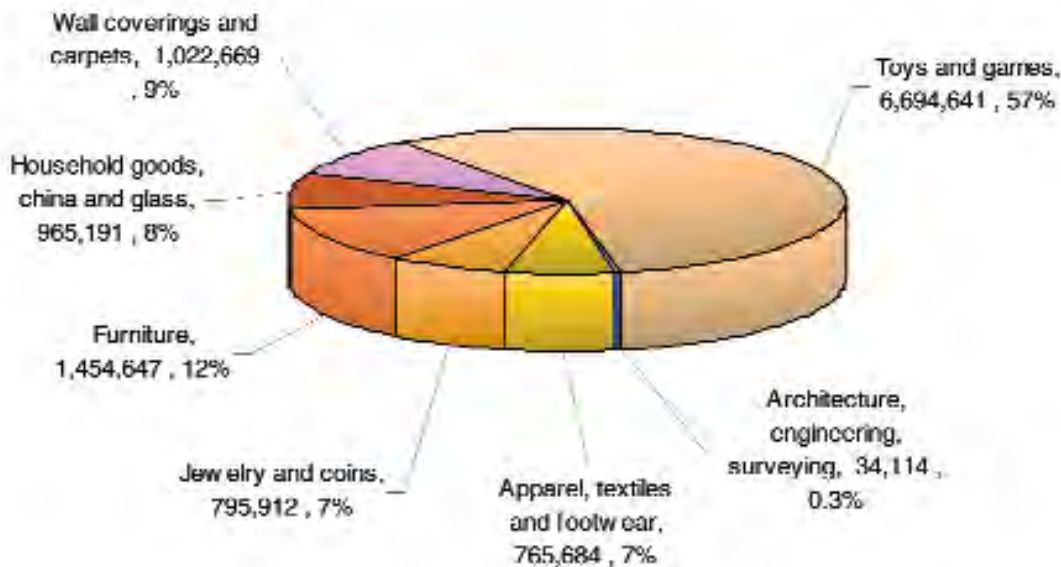
Prepared by the authors

Figure 4.4.4. Partial Industries' Exports Share, 2005 (US\$)



Source: SUNAD and PRODUCE.
Prepared by the authors

Figure 4.4.5. Partial Industries' Imports Share, 2005 (US\$)



Source: SUNAD and PRODUCE.
Prepared by the authors

4.5. Non-Dedicated Support Industries

According to the WIPO Guide (2003): "The non-dedicated support industries are industries in which a portion of the activities is related to facilitating broadcast, communication, distribution or sales of works and other protected subject matter, and whose activities have not been included in the core industries." As with partial CBIs, these activities contribute in part to the CBIs' value added, employment and trade flows.

Contribution to Value Added

Non-dedicated support industries' value added contribution corresponding to copyright is the second largest among copyright-based industries. In 2005, this amount reached US\$ 814 million, representing 1.14% of the total national value added. Details can be seen in table 4.5.1.

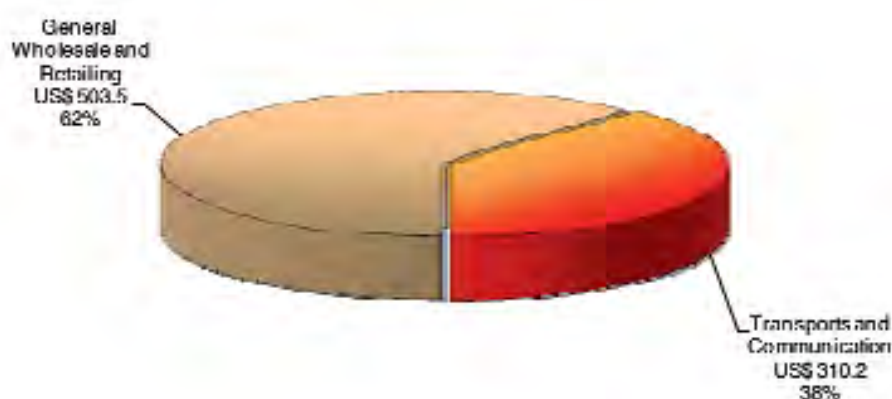
Table 4.5.1. Non-Dedicated Industries' Contribution to Value Added, 2005

Activity	Gross Value Added In 2005	Copyright factor	Value Added corresponding to copyright	As a percentage of total V.A
General wholesale and retailing	8,833,200,829	0.057	503,492,447	0.704%
Transport and communications	5,441,859,280	0.057	310,185,979	0.434%
Total	14,275,060,109		813,678,426	1.138%

Source: INEI.
Prepared by the authors

The main activity in this group is general wholesale and retailing, with 62% of the value added contribution, while transport and communications represents the other 38%, as shown in figure 4.5.1.

Figure 4.5.1. Non-Dedicated Industries' Contribution to Value Added, 2005 (millions of US\$)



Source: INEI.
Prepared by the authors

Contribution to Employment

Non-dedicated industries' contribution to national employment (corresponding to copyright) is the largest among copyright-based industries, with almost 292,000 jobs. This contribution represents 2.20% of the total national employment. The main contribution is made by general wholesale and retailing, with 81% of the total (237,000 jobs), while the rest corresponds to transport and communications (13%) and telecommunications (6%). The details can be found in table 4.5.2 and figure 4.5.2.

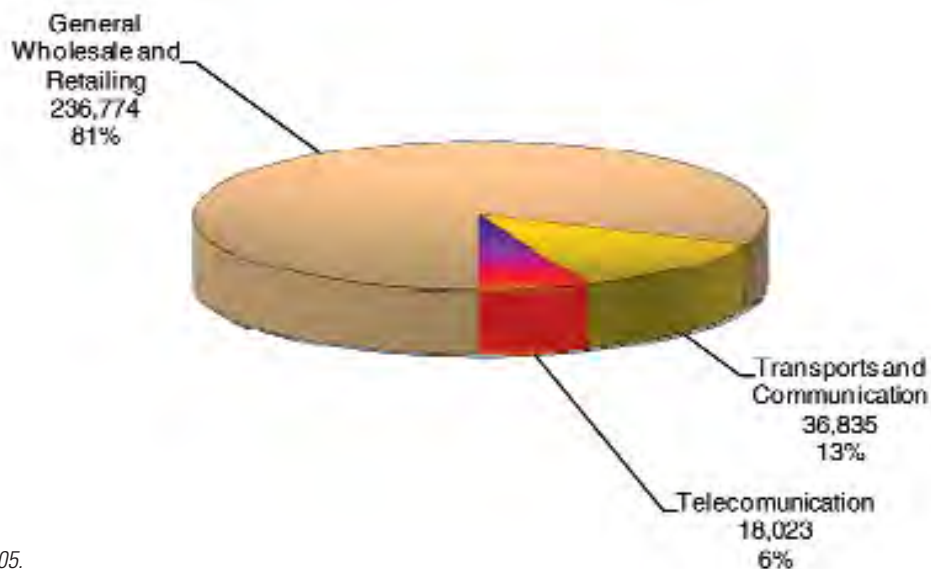
Table 4.5.2. Non-Dedicated Industries' Contribution to Employment, 2005

Activity	Total Employment	Copyright factor	Employment corresponding to copyright	As a percentage of national employment
General wholesale and retailing	4,153,929	0.057	236,774	1.788%
Transport and communications	646,225	0.057	36,835	0.278%
Telecommunication	316,198	0.057	18,023	0.136%
Total	5,116,352		291,632	2.202%

Source: EEA 2005.

Prepared by the authors

Figure 4.5.2. Non-Dedicated Industries' Contribution to Employment, 2005



Source: EEA 2005.

Prepared by the authors

4.6. Services (Trade Balance)

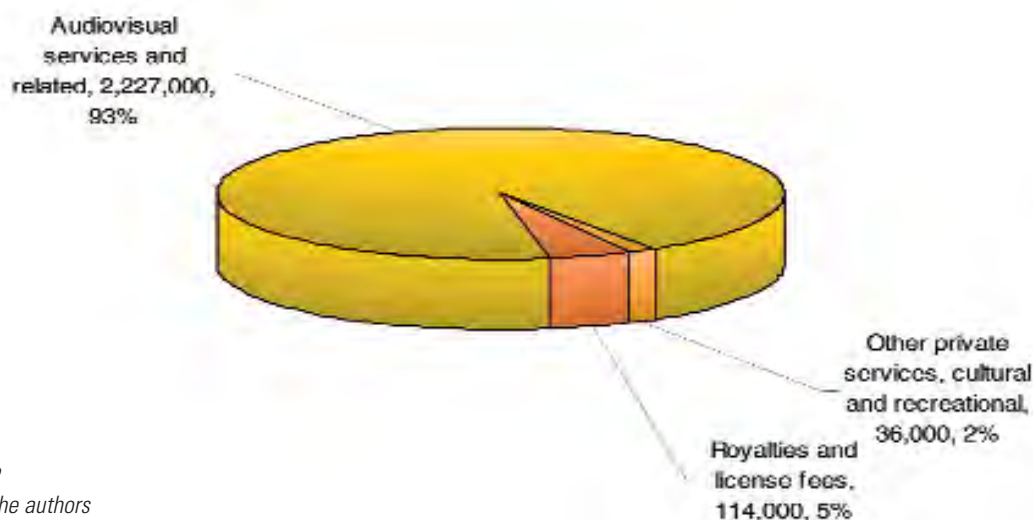
Trade data is usually based on customs information, which means that only the value of traded goods is recorded. In the case of copyright industries, the services exports –such as personal services, royalties and license fees – must be considered. The available data shows that the most important services exports are the audiovisuals and related, with more than US\$ 2.2 million, which accounts for 93% of the total. Royalties and license fees account for 5% of services exports, and the rest (2%) are attributed to other cultural and recreational services. Services imports are mainly in royalties and license fees, with US\$ 98 million accounting for 91% of total services imports. Audiovisuals and related services imports in 2005 reached US\$ 8 million, representing 5% of services imports. In comparison, services imports exceed exports, resulting in a negative trade balance of US\$ 96 million in 2005. The detailed data is shown in table 4.6.1, and the distribution of exports and imports in figures 4.6.1 and 4.6.2.

Table 4.6.1. Services Trade Balance, 2005

Services	FOB Exports (US\$)	As a percentage of total FOB exports	CIF Imports (US\$)	As a percentage of total CIF imports	Trade Balance (US\$)
Personal services, cultural and recreational	2,263,000	0.013%	8,715,300	0.072%	-6,452,300
<i>Audiovisual services and related</i>	2,227,000	0.013%	8,094,000	0.067%	-5,867,000
<i>Other private services, cultural and recreational</i>	36,000	0.000%	621,300	0.005%	-585,300
Royalties and license fees	114,000	0.001%	89,183,340	0.738%	-89,069,340
Total Services	2,377,000	0.014%	97,898,640	0.810%	-95,521,640

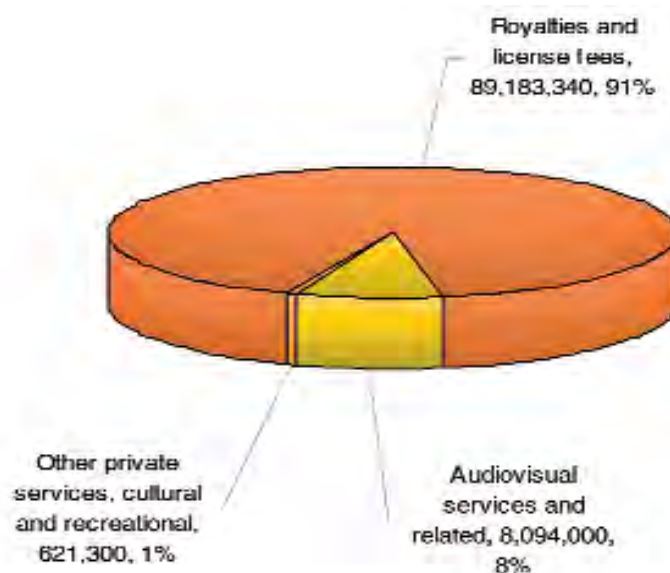
Source: BCRP.
Prepared by the authors

Figure 4.6.1. Copyright-Related Services' Exports Share, 2005 (US\$)



Source: BCRP.
Prepared by the authors

Figure 4.6.2. Copyright-Related Services' Imports Share, 2005 (US\$)



Source: BCRP.
Prepared by the authors

4.7. Classification of Copyright-Based Industries in Peru

After the collection of data from many sources of information, we have arrived at the identification of the activities related to copyright industries, based on Annex II of the WIPO Guide. The list presented in this section shows all the identified activities for which information has been found; nevertheless, it's a future task for public agencies, private agents and other private organizations to deepen the systematization and collection of data for those activities for which at the moment there is not complete information and for those for which there is no information at all. In the following table, the availability of information for the three indicators (value added, employment and trade balance) is shown.

Table 4.7.1. Classification of Copyright-Based Industries in Peru

Economic Activity	ISIC Rev. 3.1 code	Value added	Employment	Trade balance	Description
1. Core Copyright Industries					
Press and Literature					
Authors, writers, translators	9214		x		Class: 9214 - Dramatic arts, music and other arts activities
Newspapers	2212	x	x	x	Class: 2212 - Publishing of newspapers, journals and periodicals
Magazines/periodicals	2212	x	x	x	Class: 2212 - Publishing of newspapers, journals and periodicals
Book publishing	2211	x	x	x	Class: 2211 - Publishing of books, brochures and other publications
Cards, maps, directories and other published material	2219	x	x	x	Class: 2219 - Other publishing
Pre-press, printing, and post-press of books, magazines, newspapers, advertising materials	2221	x	x	x	Class: 2221 - Printing
	2222	x	x	x	Class: 2222 - Service activities related to printing
Wholesale and retail of press and literature (book stores, news-stands, etc.)	5239	x	x		Class: 5239 - Other retail sale in specialized stores

Table 4.7.1. Classification of Copyright-Based Industries in Peru (cont.)

Economic Activity	ISIC Rev. 3.1 code	Value added	Employ- ment	Trade balance	Description
Music					
Composers, lyricists, arrangers, choreographers, writers, directors, performers and other personnel	9214	x	x		Class: 9214 - Dramatic arts, music and other arts activities
Printing and publishing of music	9219		x		Class: 9219 - Other entertainment activities n.e.c.
Production/manufacturing of recorded music	2213			x	Class: 2213 - Publishing of music
Wholesale and retail of recorded music (sale and rental)	2230	x	x		Class: 2230 - Reproduction of recorded media
Performances and allied agencies (bookings, ticket agencies, etc.)	7130	x	x		Class: 7130 - Renting of personal and household goods n.e.c.
Motion Picture and Video					
Motion picture and video production and distribution	9214	x	x		Class: 9214 - Dramatic arts, music and other arts activities
Motion picture exhibition	9211	x	x	x	Class: 9211 - Motion picture and video production and distribution
Video rentals and sales, video on demand	9212	x	x		Class: 9212 - Motion picture projection
	9211	x	x	x	Class: 9211 - Motion picture and video production and distribution
Radio and Television					
National radio and television broadcasting companies	9213	x	x		Class: 9213 - Radio and television activities
Other radio and television Broadcasters	9213	x	x		Class: 9213 - Radio and television activities
Cable television (systems and channels)	6420	x	x		Class: 6420 - Telecommunications

Table 4.7.1. Classification of Copyright-Based Industries in Peru (cont.)

Economic Activity	ISIC Rev. 3.1 code	Value added	Employment	Trade balance	Description
Software and Databases					
Programming, development and design, manufacturing	7221	x	x		Class: 7221 - Software publishing
Advertising Services					
Agencies, buying services	7430		x		Class: 7430 - Advertising
Photography, Visual and Graphic Arts					
Picture framing and other allied services/Studios and commercial photography	7494		x		Class: 7494 - Photographic activities
Copyright Collecting Societies					
Copyright Collecting Societies	9112	x	x		Class: 9112 - Activities of professional organizations
2. Interdependent Copyright Industries					
TV sets, radios, VCRs, CD players, DVD players, cassette players, electronic game equipment, and other similar equipment	3230	x	x	x	Class: 3230 - Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods
Computers and equipment	3000	x	x	x	Class: 3000 - Manufacture of office, accounting and computing machinery
Musical instruments	3692	x	x	x	Class: 3692 - Manufacture of musical instruments
Photographic and cinematographic instruments	3320	x	x	x	Class: 3320 - Manufacture of optical instruments and photographic equipment
Photocopiers	3000	x	x	x	Class: 3000 - Manufacture of office, accounting and computing machinery
Blank recording material	2429	x	x	x	Class: 2429 - Manufacture of other chemical products n.e.c.
Paper	2101	x	x	x	Class: 2101 - Manufacture of pulp, paper and paperboard

Table 4.7.1. Classification of Copyright-Based Industries in Peru (cont.)

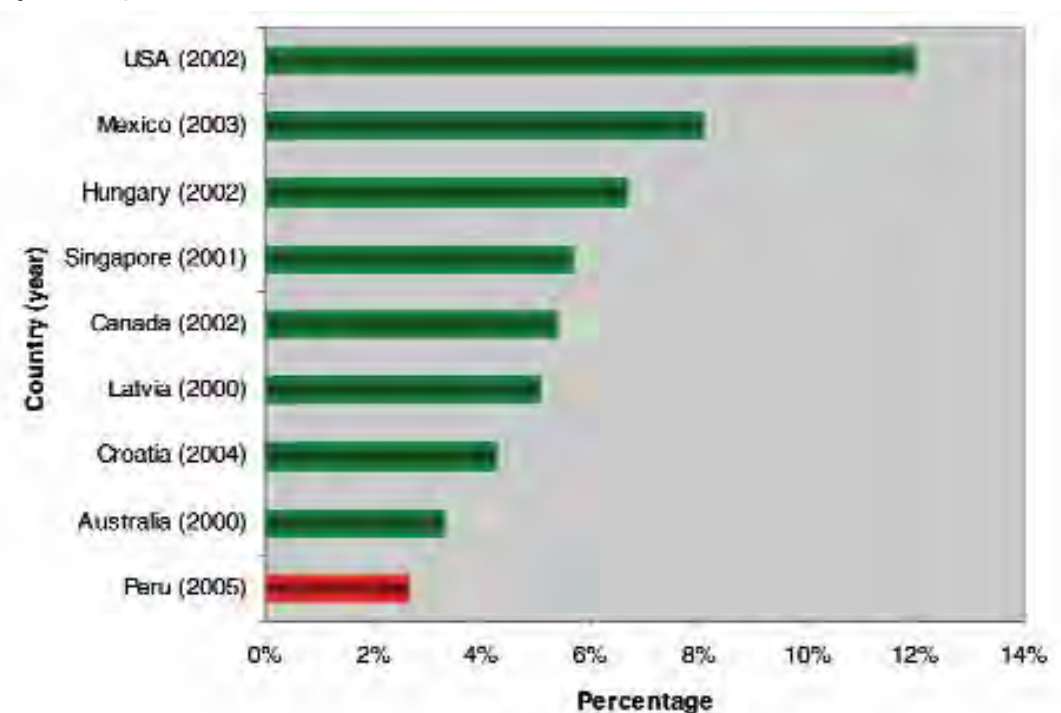
Economic Activity	ISIC Rev. 3.1 code	Value added	Employment	Trade balance	Description
3. Partial Copyright Industries					
Apparel, textiles and footwear	1810	x	x	x	Class: 1810 - Manufacture of wearing apparel
	1721			x	Class: 1721 - Manufacture of made-up textile articles
	1920	x	x	x	Class: 1920 - Manufacture of footwear
Jewelry and coins	3691	x	x	x	Class: 3691 - Manufacture of jewelry and related articles
Furniture	3610	x	x	x	Class: 3610 - Manufacture of furniture
Household goods, china and glass	2610	x	x	x	Class: 2610 - Manufacture of glass and glass products
	173	x	x	x	Class: 173 - Manufacture of knitted and crocheted fabrics and articles
	2029			x	Class: 2029 - Manufacture of other products of wood
	2899			x	Class: 2899 - Manufacture of other fabricated metal products n.e.c.
Wall coverings and carpets	1722			x	Class: 1722 - Manufacture of carpets and rugs
	2109	x	x	x	Class: 2109 - Manufacture of other articles of paper and paperboard
Toys and games	3694	x	x	x	Class: 3694 - Manufacture of games and toys
Architecture, engineering, surveying	7421			x	Class: 7421 - Architectural and engineering activities and related technical consultancy
Non-Dedicated Support Industries					
General wholesale and retailing	51	x	x	n.a.	Division: 51 - Wholesale trade and commission trade, except of motor vehicles and motorcycles
	52	x	x	n.a.	Division: 52 - Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods
General transportation	60	x	x	n.a.	Division: 60 - Land transport; transport via pipelines
	61	x	x	n.a.	Division: 61 - Water transport
	62	x	x	n.a.	Division: 62 - Air transport
	630	x	x	n.a.	Class 630 - Supporting and auxiliary transport activities
Telephony and Internet	6420		x	n.a.	Class: 6420 - Telecommunications
	7240		x	n.a.	Class: 7240 - Database activities and on-line distribution of electronic content

Note: n.a. stands for not applicable
 Prepared by the authors

4.8. International Comparisons

Overall, the Peruvian copyright industry is smaller than those of other countries of the region and of the rest of the world. The total value added of copyright industries in 2005 was US\$ 1,911 million, which represented 2.6% of the total value added of the Peruvian economy. This is lower than the results for other Latin American countries such as Mexico (8.1%) and for other countries around the world, including Singapore (5.7%), Hungary (6.7%) and the USA (12%).

Figure 4.8.1. International Comparison of Copyright-Based Industries' Contribution to Value Added (percentage)

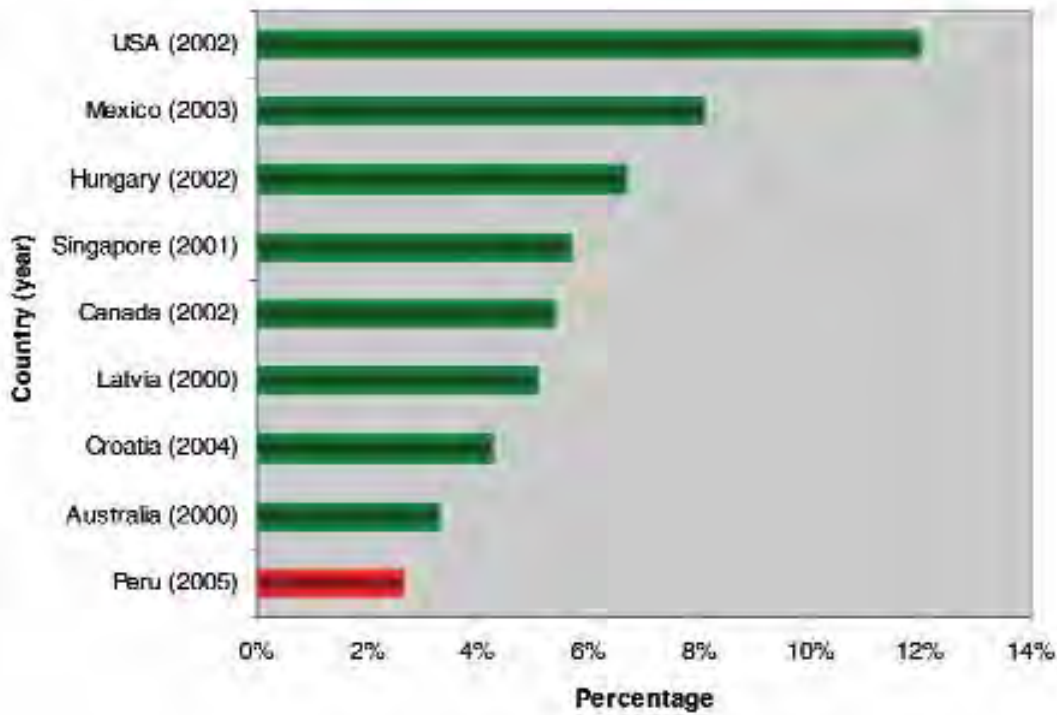


Source: WIPO and UNICAMP (no date), Márquez-Mees et al. (2006), WIPO (2006), WIPO (2007) and tables in chapter 4. Prepared by the authors

In the Peruvian economy most of the value added of copyright industries is contributed by core industries, which, with US\$ 879 million in 2005, represented 1.22% of the national value added (and 46% of the value added of copyright industries). This contribution is similar to the results observed in the cases of Mexico, Singapore and USA (in which core industries represent roughly 50% of the total impact of copyright-based industries).

The contribution of Peruvian copyright industries to employment is higher than its contribution to output, with 4.5% of national employment (595,950 jobs). This is lower than the result for Mexico (11%), as well as countries from other regions, but higher than Jamaica (3%). Since core industries only account for 276,625 jobs (2.09% of national employment), which represent 46.4% of the total of copyright industries, their contribution to total employment is higher than the contributions observed for other countries, such as Mexico (31% of the employment for copyright-based industries), but lower than results for other countries such as USA (48%), Hungary (59%), Jamaica (59%), Singapore (63%) and Philippines (79%).

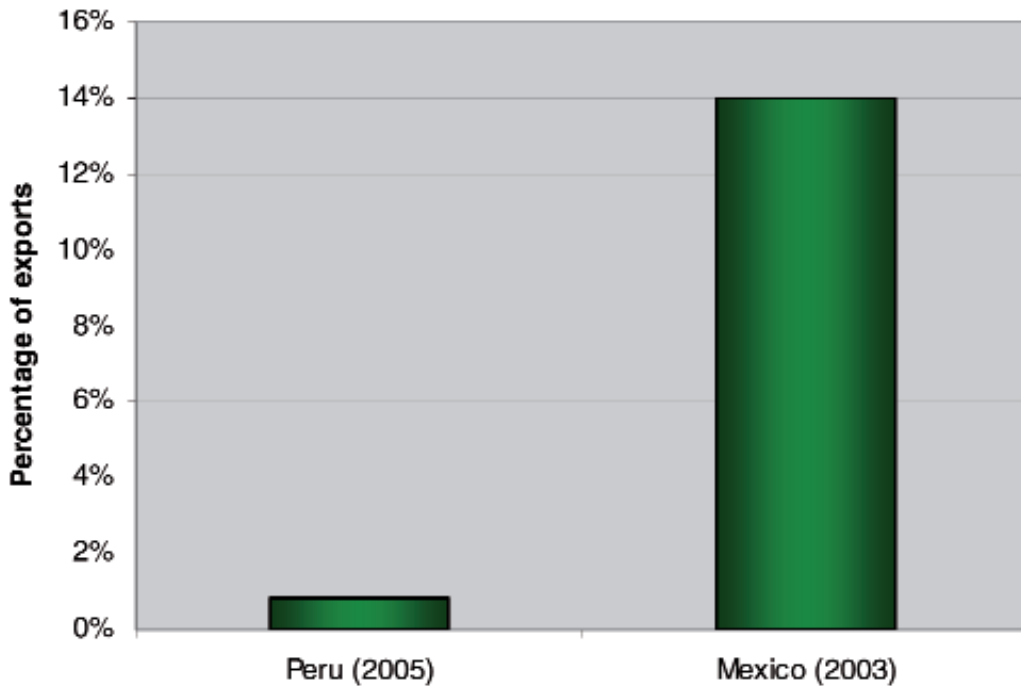
Figure 4.8.2. International Comparison of Copyright-Based Industries' Contribution to Employment (percentage)



Source: WIPO and UNICAMP (no date), Márquez-Mees et al. (2006), WIPO (2006), WIPO (2007) and tables in chapter 4. Prepared by the authors

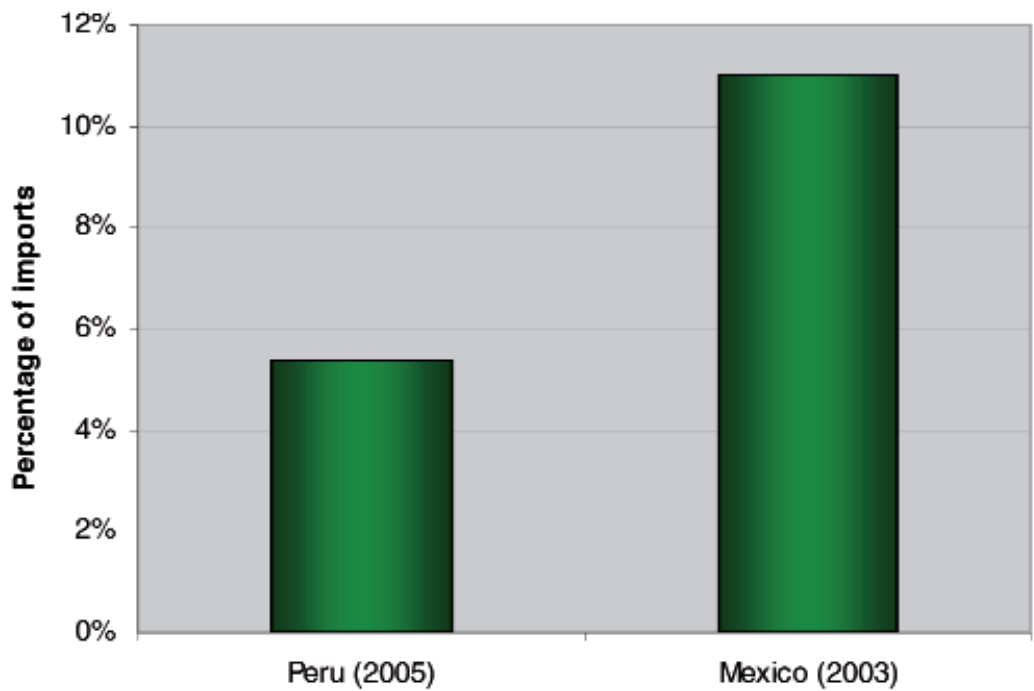
In terms of trade flows, Peru's CBIs' contribution to exports represented a lower percentage of total exports than Mexico's (figure 4.7.3).

Figure 4.8.3. International Comparison of Copyright-Based Industries' Contribution to Exports (percentage)



Source: WIPO and UNICAMP (no date), Márquez-Mees et al. (2006), WIPO (2006), WIPO (2007) and tables in chapter 4. Prepared by the authors

Figure 4.8.4. International Comparison of Copyright-Based Industries' Contribution to Imports (percentage)



Source: WIPO and UNICAMP (no date), Márquez-Mees et al. (2006), WIPO (2006), WIPO (2007) and tables in chapter 4. Prepared by the authors

5. Description and Estimation of the Economic Contribution of the Main Core Copyright-Based Industries

5.1. Press and Literature

The areas within the publishing sector in Peru are: newspapers, books and magazines, among others. As in other countries, these activities are not only related, but performed by the same firms. One of the important characteristics of the Peruvian press and literature sectors is the important role that the main newspapers play in the publishing industries.

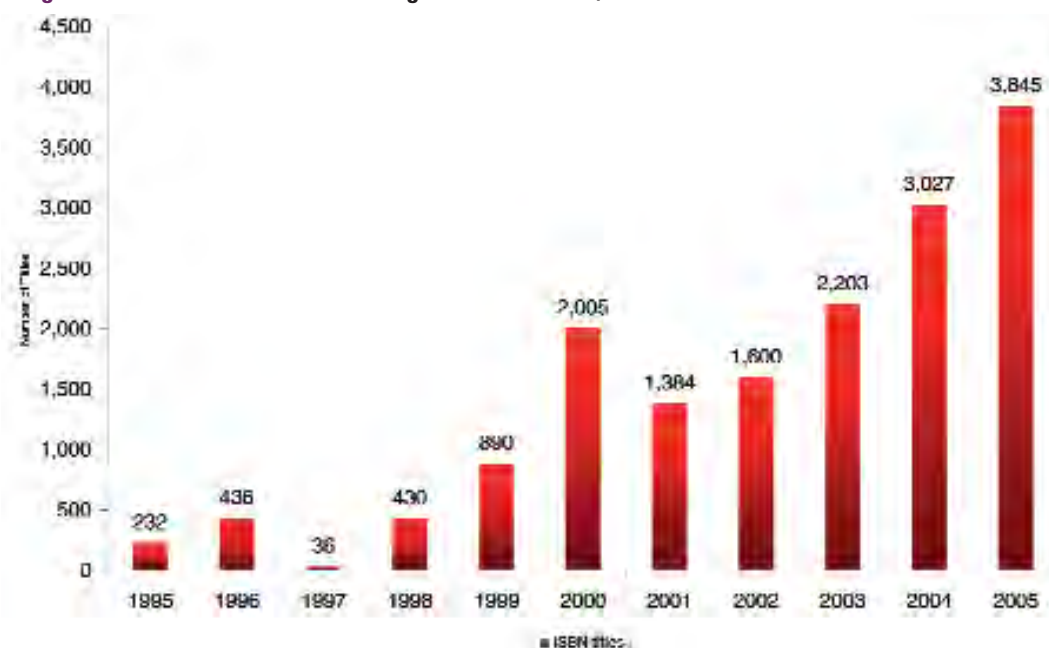
Publishers are grouped in the Peruvian Book Chamber (CPL), which by December 2006 had registered as associates 110 companies (CPL, 2006). Some of the most important publishers in the last five years, in terms of titles (not number of copies printed), according to the International Standard Book Number (ISBN) registry, are shown in table 5.1.1. The number of titles published in Peru has grown in the last 10 years from 232 titles to more than 3,800 (Antonioli, 2006, see figure 5.1.1).

Table 5.1.1. Top 40 Publishers, According to ISBN 2000-2005 (Titles)

Publisher	Total	2000	2001	2002	2003	2004	2005
Pontificia Universidad Católica del Perú	668	241	77	70	96	61	123
Editorial San Marcos	637	0	1	12	11	225	388
Santillana	532	63	29	74	131	112	123
Corporación Gráfica Navarrete	323	90	31	63	62	32	45
UNMSM	308	30	17	57	64	57	83
Empresa Editora El Comercio	295	40	54	74	107	11	9
Asociación Editorial Bruño	293	27	24	15	44	77	106
Ediciones COREFO	232	0	0	0	86	104	42
Q W Editores	231	0	0	0	41	41	149
Ediciones PEISA	221	15	57	38	49	40	22
Grupo Editorial Norma (y Carvajal)	212	38	10	21	25	37	81
Orbis Ventures	205	0	0	0	0	54	151
Fondo Editorial del Congreso	188	54	35	25	17	27	30
Briceño Editores	182	0	100	12	31	39	0
Universidad del Pacífico	181	35	26	38	35	24	23
Editorial Hozlo	177	63	29	20	25	20	20
Universidad San Martín de Porres	177	63	21	13	17	26	37
Asociación Editorial Hemisferio	175	0	14	8	0	36	117
Ministerio de Educación	175	19	21	14	11	53	57
Universidad Peruana de Ciencias Aplicadas	167	29	13	6	20	18	81
Editora y Distribuidora Palomino	141	0	0	0	17	54	70
Asociación Hijos de San Pablo	135	22	11	23	41	22	16
Empresa Editora Macro	129	0	0	0	38	35	56
Ministerio de Salud	128	26	43	10	6	11	32
Biblioteca Nacional del Perú	119	67	27	3	6	10	6
Instituto de Estudios Peruanos	113	24	14	15	15	22	23
Organización Panamericana de la Salud	106	22	24	25	16	9	7
Universidad de Lima	106	34	18	17	20	10	7
Universidad Ricardo Palma	106	0	14	23	25	25	19

Source: Agencia Peruana del ISBN; CERLALC: *Repertorio Integrado de Libros en Venta en Iberoamérica (Rilvi)*, National Library of Peru - BNP (2005). Prepared by Antonioli (2006).

Figure 5.1.1. Number of Titles Registered at ISBN, 1995-2005



Source: Antonioli (2006).

With regard to the number of copies sold, the document prepared by Fernández-Baca et al. (2004a), whose research extends until the year 2003, gives an account of a progressive increase in the total number of books sold nationally since 1997 – interrupted only in 1998 – as shown by the following table.

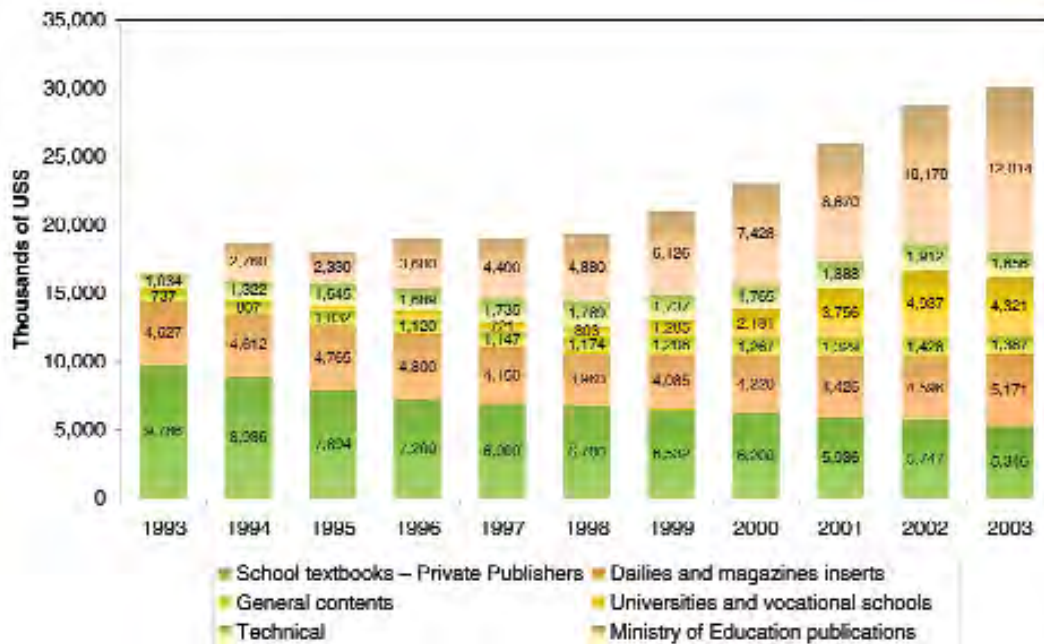
Table 5.1.2. Total of Books Sold, Not Including Books from the Ministry of Education (by number of copies), 1993-2003

Year	Total national books	Total imported books	Total
1993	14,516,981	1,874,019	16,391,000
1994	11,860,193	4,062,807	15,923,000
1995	8,892,714	6,852,286	15,745,000
1996	12,789,050	2,557,950	15,347,000
1997	9,833,163	4,819,837	14,653,000
1998	7,384,747	7,041,253	14,426,000
1999	9,087,571	5,759,429	14,847,000
2000	10,619,027	5,013,973	15,633,000
2001	10,824,859	6,510,141	17,335,000
2002	11,023,925	7,596,075	18,620,000
2003	11,610,117	6,470,994	18,081,111

Source: Fernández-Baca et al. (2004a), with data from the Peruvian Publishing Industry Chamber (CAPERIAL) and the Customs Administration (Superintendencia Nacional de Administración Aduanera - SUNAD), for headings 4901100000 and 4901990000, less imports of manuals and catalogs by companies, and not-for-profit imports of bibles and religious books by church organizations.

According to the same source, the book sales for the period 1993-2003 show an increasing trend, reaching approximately US\$ 30 million (see figure 5.1.2). If we analyze the sales by category, it is possible to appreciate how educational texts published by the Ministry of Education have progressively replaced private industry publication of school texts.

Figure 5.1.2. Book Sales by Categories, Including Books from the Ministry of Education (in thousands of dollars), 1993-2003

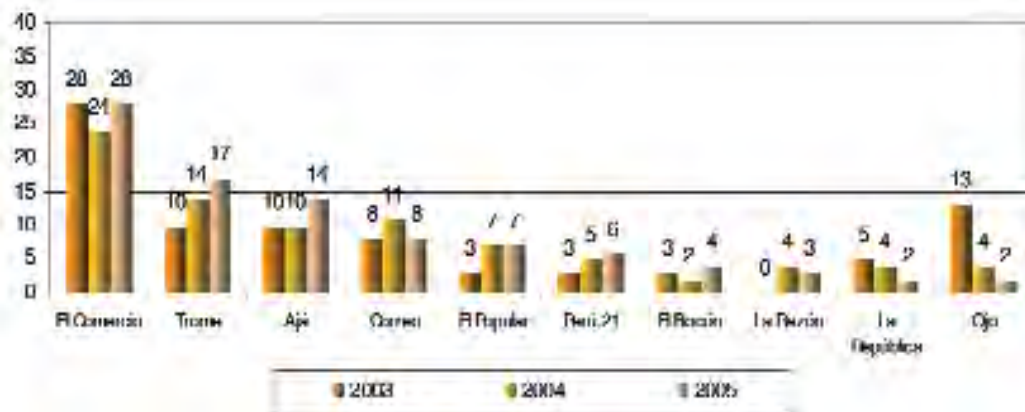


Source: Fernández-Baca et al. (2004a)

On the other hand, the newspaper industry is composed of 88 newspapers published in Peru in 2005 as shown in Annex D. Most of these newspapers are published in Lima, 34 in all, accounting for 38.63% of the total, followed by other important cities such as Trujillo, Arequipa and Chiclayo, with 3.50%.

According to Apoyo Opinión y Mercado (2005), El Comercio is the top recalled newspaper. It is also the most frequently read newspaper (see figure 5.1.3).

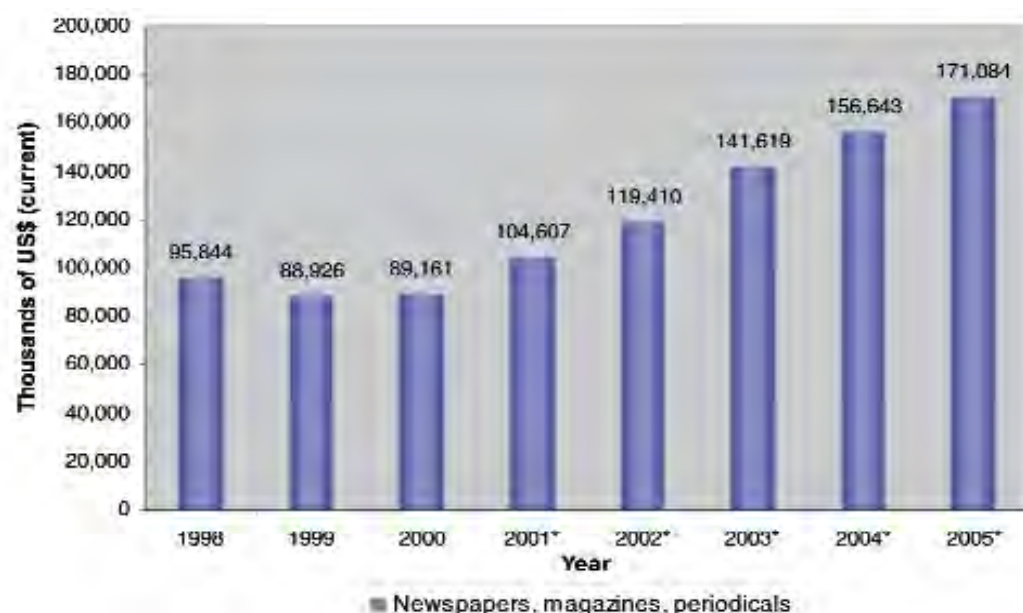
Figure 5.1.3. Most Frequently Read Newspaper (in percentages), 2003-2005



Note: Based on total number of interviewed regular newspaper readers (600).
Source: Apoyo Opinión y Mercado (2001)

Using the information of the Ministry of Production (PRODUCE) for the period 1998-2000, we estimated the evolution of the value added for newspapers, magazines, and periodicals (ISIC code 2212, see chapter Annex B for the estimation methodology) for the years 2002-2005. In figure 5.1.4, we observe an increasing trend which reaches a peak in 2005 with US\$ 171 million.

Figure 5.1.4. Newspapers, Magazines, Periodicals Value Added (thousands US\$), 1998-2005



*Data for the years 2001-2005 was estimated by the authors. See Annex B for the methodology.

Source: PRODUCE and INEI.

Prepared by the authors

It is important to point out that, in Peru, the newspaper sellers are grouped in the Federation of Newspaper, Magazines and Lotteries Salespersons of Peru (FENVENDRELP). This federation operates at the national level and groups together 62 unions in Lima and 48 in the rest of the country, affiliating approximately 18,600 members nationally, grouped into vendors, deliverers and news-stand salespersons²². These, according to an interview²³, receive between 25% and 30% commission (on sale price) for each sale from Monday to Saturday, and between 30% and 35% on Sundays, depending on the front page or cover sale price. The same source estimates that the daily net income of each one of its affiliates, on average, is around US\$ 9.01 in 2005, for newspaper sales, making a total net income of around US\$ 61.7 million dollars.

Table 5.1.3. Evolution of Net Income Newspaper Sales, 1999-2001 and 2004-2005

Year	Sales (US\$)
1999	51,184,657.14
2000	69,296,151.21
2001	47,247,375.82
2004	61,421,588.57
2005 ^{1/}	61,718,181.82

1/ Based on an interview with FENVENDRELP.

Source: FENVENDRELP, IDI-EPTH-USMP (2005).

Prepared by the authors

²² Its members are 8,000 street sellers and 2,200 news-stands in Lima and Callao, and 7,500 street sellers and 900 news-stands in the rest of the country, approximately.

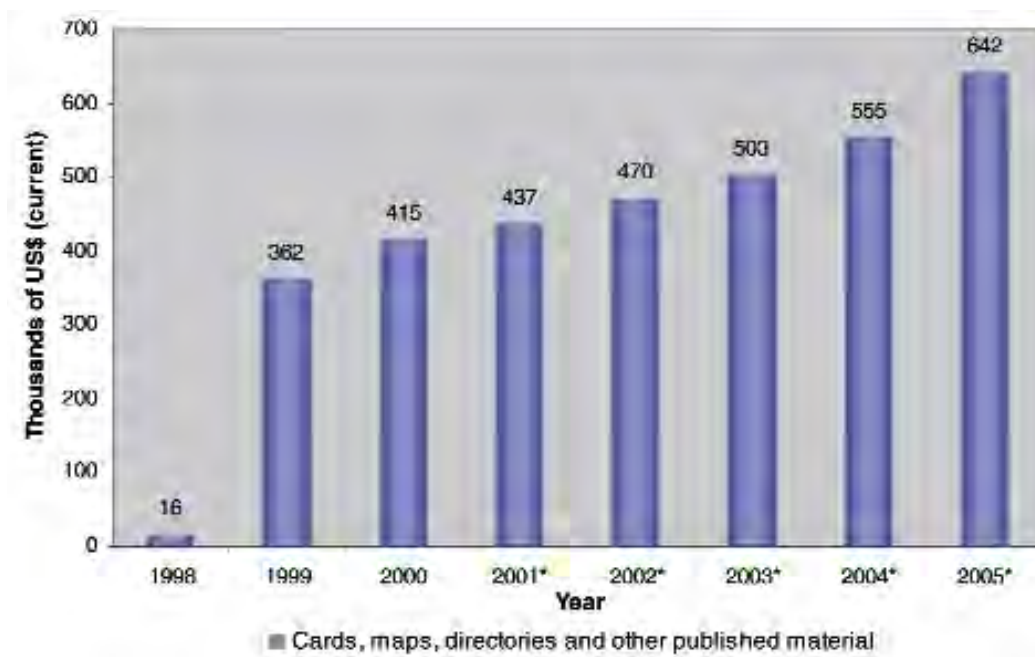
²³ Interview with the General Sub-Secretary, Rufino Quilca.

Other activities that also enter this sector are:

- Cards, maps, directories and other published material (ISIC code 2219)
- Pre-press and printing activities (ISIC code 2221)
- Post-press of books, magazines, newspapers, advertising materials (ISIC code 2222)

Based on the information of PRODUCE (1998-2000), we have estimated the evolution of these activities for the years 2001-2005, using the evolution of the rate of growth of the production volume index (ISIC code 2212, present before and 2221), when available, and the rate of growth of the manufacturing sector (ISIC code 2219 and 2222)²⁴. In the three cases, the increasing trend is clear. Cards, maps, directories and other published material grew from US\$ 16,000 to US\$ 642,000 (figure 5.1.5). Pre-press and printing activities presented the most important growth, rising from US\$ 117 million to US\$ 339 million²⁵ (figure 5.1.6). Finally, post-press of books, magazines, newspapers, and advertising materials had US\$ 9.7 million in 1998 and US\$ 17 million in 2005 (figure 5.1.7).

Figure 5.1.5. Cards, Maps, Directories and Other Published Material Value Added (thousands US\$), 1998-2005



*Data for the years 2001-2005 was estimated by the authors. See Annex B for the methodology.

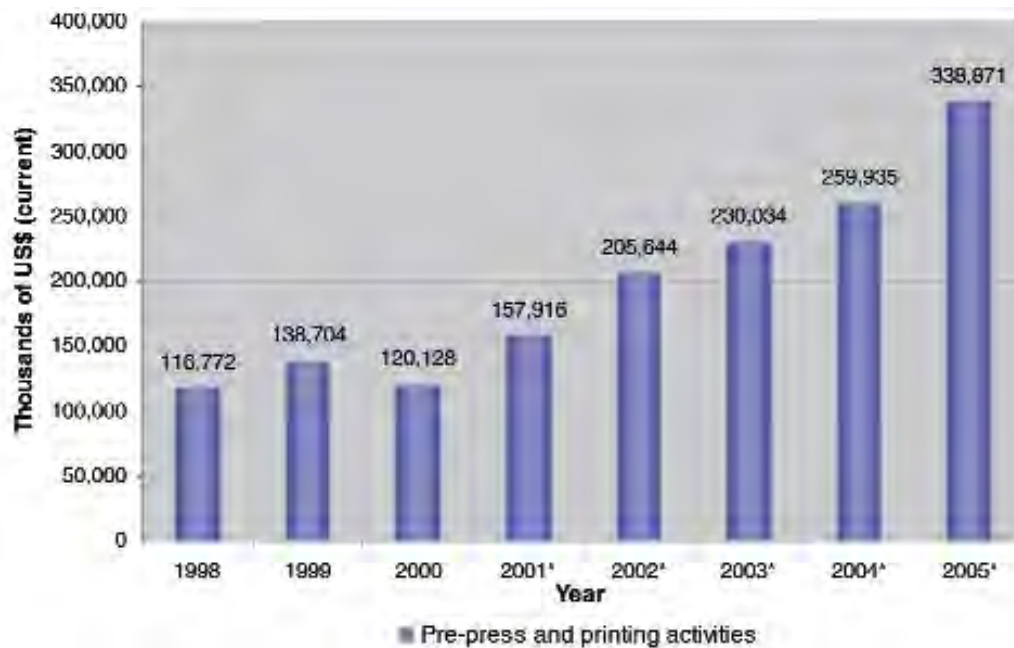
Source: PRODUCE and INEI.

Prepared by the authors

²⁴ For more details, see Annex B for the methodology.

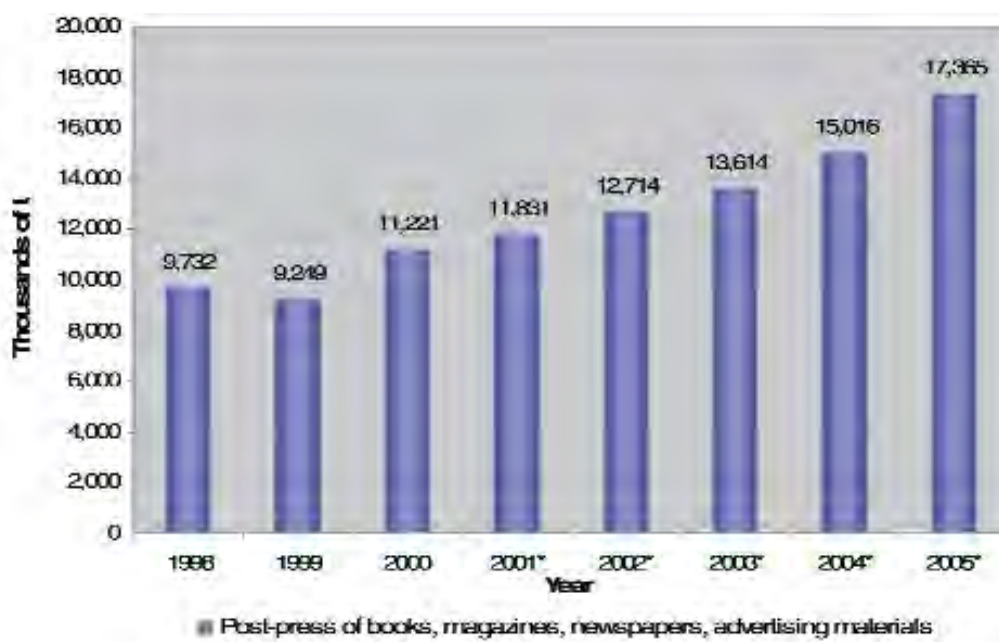
²⁵ It is worth noting that the estimation of this activity is based on the growth of the production volume index of the activity itself, which is more accurate than assigning the growth of the manufacturing sector, which is more conservative.

Figure 5.1.6. Pre-press and Printing Activities Value Added (thousands US\$), 1998-2005



*Data for the years 2001-2005 was estimated by the authors. See Annex B for the methodology.
Source: PRODUCE and INEI.
Prepared by the authors

Figure 5.1.7. Post-press of Books, Magazines, Newspapers, Advertising Materials Value Added (thousands US\$), 1998-2005



*Data for the years 2001-2005 was estimated by the authors. See Annex B for the methodology.
Source: PRODUCE and INEI.
Prepared by the authors

Value Added Estimation

The calculation of value added for the press and literature industries is based on three main sources:

- Ministry of Production (PRODUCE), 2000
- Individual Financial Statements from the El Comercio Publishing Company for the year 2005
- Federation of Newspaper, Magazines and Lotteries Salespersons of Peru (FENVENDRELP), 2005

From the information of PRODUCE it was possible to estimate the value added of four activities, under the ISIC code review 3.1. These activities are (see table 5.1.4):

- Newspapers, magazines, periodicals: ISIC 2212, Publishing of newspapers, journals and periodicals
- Cards, maps, directories and other published material: ISIC 2219, Other publishing
- Pre-press, printing, and post-press of books, magazines, newspapers, advertising materials: ISIC 2221, Printing and ISIC 2222, Service activities related to printing

Table 5.1.4. Value Added for Available Press and Literature ISIC, 2005

Economic activity	ISIC Rev.3.1. code	Description	Value added (US\$) ^{1/}
Newspapers, magazines, periodicals	2212	Publishing of newspapers, journals and periodicals	171,083,521.8
Cards, maps, directories and other published material	2219	Other publishing	641,675.5
Pre-press, printing, and post-press of books, magazines, newspapers, advertising materials	2221	Printing	338,870,972.6
	2222	Service activities related to printing	17,364,796.6
Total			527,960,966.5

1/ Estimation based on the rate of growth of the manufacturing sector (ISIC 2219 and 2222) and on the rate of growth of the production volume index of the ISIC (2212 and 2221). For more details on this methodology, see Annex B.

One important firm that operates in both the press and the newspaper industry is El Comercio. Due to the fact that this firm is listed in the stock market, its financial statements²⁶ are public information, making it the only company for which it was possible to obtain this kind of data²⁷. We will work under the assumption that this is the main company for the newspaper sector. We based this assumption on some empirical facts. In the newspaper industry, El Comercio accounts for 51.1% of the advertising investment; this means that it receives nearly US\$ 34.5 million on this kind of investment, more than the sum of all the other companies (see table 5.1.5). Linked to the production of newspapers, the company is also involved in the book publishing business. In terms of titles, it accounts for 3.89% of the industry²⁸. Unfortunately, press and publishing do not appear separately in the financial statement of El Comercio, which has made it impossible to calculate them individually.

²⁶ We are particularly interested in its Profit and Loss Statement.

²⁷ It was not possible to obtain the information for the second newspaper of Peru, La República (see Annex A for the dates of the interviews with the Commercial Projects Head and the Corporate Services Manager).

²⁸ The La República interviewed executives said that this firm was more important than El Comercio in the publishing sector in the year 2005; nevertheless, they do not present data on the issue.

Table 5.1.5. Advertising Investments in Newspapers

Newspaper	Amount in US\$	Share (%)
El Comercio	34,500,000	51.1
El Peruano	9,400,000	13.9
Trome	4,700,000	7.0
Expreso	4,500,000	6.7
La República	2,800,000	4.2
Correo	2,400,000	3.6
Perú 21	2,000,000	3.0
Gestión	1,800,000	2.7
Guía de clasificados	900,000	1.3
La Razón	800,000	1.2
Ajá	790,000	1.2
Ojo	700,000	1.0
El Bocón	550,000	0.8
El Popular	370,000	0.5
El Chino	300,000	0.4
Extra	300,000	0.4
Todo Sport	290,000	0.4
Líbero	200,000	0.3
El Men	90,000	0.1
La Primera	70,000	0.1
Total	67,460,000	100

Source: 17.65% rate book data.

Note: It was based on information on broadcasted seconds (in television and radio) and in published announcements (newspapers and magazines) monitored by Media Check during 2005. Investment amounts were calculated based on real tariffs or those agreed by a bargain (between the contracting parts). The general investment analysis has eliminated the free announcements, or those considered as contributions of media to public goods entities.

Given this level of concentration, and under the assumption²⁹ that the rest of the companies operate with the same structure of costs and earnings, it is valid to consider El Comercio as the relevant company when it comes to analyzing the Added Value on newspapers, since it represents a considerable proportion of the industry analyzed.

Total sales and costs are taken from the Profits and Losses Statement of El Comercio for the year 2005 (see table 5.1.6). The operating income is US\$ 47.6 million and its value added is around US\$ 73.9 million. The assumption is that El Comercio has a market share of 35%³⁰ of the press and literature (newspaper and publishing) industries. Thus, the value added of these two industries is US\$ 246.4 million for the whole market.

²⁹ This is a working assumption that may be changed when more accurate information is available.

³⁰ Interview with the General Director of the Fondo Editorial de la Pontificia Universidad Católica del Perú Publisher, and the former executive of Santillana Publisher, the first and third publishing companies in Peru respectively in terms of ISBN registered titles.

Table 5.1.6. Newspaper and Publishing (Press and Literature) Industries' Estimated Value Added (thousands of US\$), 2005

Heading (in thousands of US\$):	El Comercio	Industry total
A: Total sales ^{1/}	101,282.12	289,377.49
B: Total costs ^{1/}	53,669.70	153,341.99
C: Operating income (A+B)	47,612.42	136,035.50
D: Depreciation ^{2/}	7,920.00	22,628.57
E: Amortization ^{2/}	238.48	681.39
F: Payroll ^{2/}	18,144.55	51,841.56
G: EBITDA (C+D+E)	55,770.91	159,345.45
H: Value added (G+F)	73,915.45	211,187.01
Assumptions		
Exchange rate 2005 (soles to the USD) ^{3/}		3.30
El Comercio Publishing Company market share		35%

1/ Profit and Loss Statement, Empresa Editora El Comercio, obtained from CONASEV (National Commission for the Supervision of Companies and Securities), www.conasev.gob.pe

2/ Notes to the Financial Statements, Empresa Editora El Comercio, 2005. Obtained from CONASEV, www.conasev.gob.pe

3/ BCRP, www.bcrp.gob.pe

Prepared by the authors

Thus, since from the PRODUCE we had that the newspaper industries had a value added of US\$ 171 million, and from the financial statements of El Comercio we estimated US\$ 211.2 million of value added for both the newspaper and literature industries, we end up with US\$ 40.1 million for the book publishing industry (see table 5.1.10).

The estimation of retail sales of newspapers is based on the information provided by the Federation of Newspaper, Magazines and Lotteries Salespersons of Peru (FENVENDRELP). This federation operates at the national level and groups together 62 unions in Lima and 48 in the rest of the country, affiliating approximately 18,600 members nationally, grouped into vendors, deliverers and news-stand salespersons³¹. These, according to an interview with the General Sub-Secretary of the Federation³², receive between 25% and 30% commission (on sale price) for each sale from Monday to Saturday, and between 30% and 35% on Sundays, depending on the front page or cover sale price. On average, the same source estimates that the daily net income of each one of its affiliates was approximately US\$ 9.01 in 2005³³, for newspaper sales, making a total net income of around US\$ 61.7 million dollars.

³¹ Its members are 8,000 street sellers and 2,200 news-stands in Lima and Callao, and 7,500 street sellers and 900 news-stands in the rest of the country, approximately.

³² Interview with the General Sub-Secretary, Rufino Quilca.

³³ From Monday to Saturday. Prices are higher on Sundays.

Table 5.1.7. Press and Literature Value Added, 2005

Economic activity	Value added^{1/} (US\$)
Newspapers, magazines, periodicals^{1/}	171,083,521.8
Book publishing	40,103,491
Cards, maps, directories and other published material^{1/}	641,675.5
Pre-press, printing, and post-press of books, magazines, newspapers, advertising materials^{1/}	356,235,769.2
Retail of newspapers^{2/}	61,718,181.8
Total	674,136,024.7

Source: PRODUCE, FENVENDRELP, El Comercio.

1/ Estimation based on the rate of growth of the manufacturing sector (ISIC 2219 and 2222) and on the rate of growth of the production volume index of the ISIC (2212 and 2221).

2/ Based on the information of FENVENDRELP

Prepared by the authors

Employment Estimation

The estimation of employment for this core industry is mainly based on the information of the Annual Economic Survey (EEA) 2005, and also uses the information provided by FENVENDRELP for the retail of newspapers. The methodological steps to make the estimation are detailed in chapter 2.

Table 5.1.8. Press and Literature Employment, 2005

Economic activity	ISIC	Employment	As a percentage of national employment
Newspapers, magazines, periodicals	2212	38,350	0.290%
Book publishing	2211	15,642	0.118%
Cards, maps, directories and other published material	2219	1,128	0.009%
Pre-press, printing, and post-press of books, magazines, newspapers, advertising materials	2221	66,048	0.499%
	2222	8,130	0.061%
Authors, writers, translators	9214 ^{1/}	681	0.005%
Retail of newspapers	5239	18,600	0.140%
Total		148,578	1.122%

1/ ISIC Code 9214, Dramatic arts, music and other arts activities is an activity present not only in the industry of press and literature, but also in the music industry. Thus, it was necessary to discern a criterion to assign the level of employment for both industries. The criterion was to assign employment to the activity proportional to the contribution to value added of the activity.

n.a.: not applicable

Source: EEA, 2005 and FENVENDRELP.

Prepared by the authors

Trade Balance Estimation

Using the correlator for the ISIC code and the Common Nomenclature of the Andean Community Members (NANDINA – Correlacionador Código CIIU Rev. 3 – Partida arancelaria NANDINA), which indicates which custom code corresponds to which ISIC code, we have estimated the exports and imports for the press and literature sector, as presented in the next table. The information has been taken from the National Customs Administration Superintendence – SUNAD (see table 5.1.9).

Table 5.1.9. Press and Literature Trade Balance, 2005

Economic Activity	ISIC Code / Nandina code	Description	FOB Exports (US\$)	CIF Imports (US\$)	Trade Balance (US\$)
	2212	Publishing of newspapers, journals and periodicals			
Magazines / periodicals // periodicals	4902100000	Newspapers and periodic publications, printed, published four times a week	8,963	21,734	-12,771
	4902900000	Newspapers and periodic publications, printed, except the ones published four times a week	1,127,851	3,258,119	-2,130,268
	Subtotal		1,136,814	3,279,853	-2,143,039
	2211	Publishing of books, brochures and other publications			
Book publishing	4901100000	Books, pamphlets and similar prints, in loose pages, even folded	981,845	696,738	285,107
	4901910000	Dictionaries and encyclopedias, even in volumes	5,225,000	3,327,730	1,897,270
	4901990000	Books, pamphlets and similar prints, except dictionaries or encyclopedias.	17,798,578	32,365,062	-14,566,484
	4903000000	Albums or stamp books for children and kids' notebooks to draw or to color	255,096	233,032	22,064
	4904000000	Hand-written or printed music, even with illustrations or bound.	5	26,320	-26,315
	4905100000	Terrestrial, lunar or celestial spheres, printed.	0	2,619	-2,619
	4905910000	Cartographic manufactures, in the form of books or brochures	876,324	20,080	856,244
	4905990000	The other printed cartographic manufactures (f.e. mural maps)	20,620	10,690	9,930
	Subtotal		25,157,468	36,682,271	-11,524,803

Table 5.1.9. Press and Literature Trade Balance, 2005 (cont.)

Economic Activity	ISIC Code / Nandina code	Description	FOB Exports (US\$)	CIF Imports (US\$)	Trade Balance (US\$)
	2219	Other publishing			
	4907001000	Post office stamps; fiscal and similar seals, stamped paper	0	35,922	-35,922
	4908100000	Glass transfers.	3,220	64,367	-61,147
	4908900010	Transfers (except glass)	127,230	354,734	-227,504
Cards, maps, directories and other published material	4909000000	Printed or illustrated postcards	320,940	372,263	-51,323
	4910000000	Printed calendars of any class, including calendar blocks.	98,420	164,639	-66,219
	4911911000	Stamps, engravings and photographs for education.	1,202,158	569,986	632,172
	4911990000	Other prints (f.e.: transport tickets)	2,766,585	9,388,329	-6,621,744
	Subtotal		4,518,553	10,950,240	-6,431,687
	2221	Printing			
	4820100000	Registry and accounting books, checkbooks (of notes, orders or receipts)	1,005,522	2,133,203	-1,127,681
	4820200000	Notebooks	7,429,471	4,033,893	3,395,578
	4820300000	Filing cabinets, bindings, folders and covers for documents	1,285,980	272,383	1,013,597
Pre-press, printing, and post-press of books, magazines, newspapers, advertising materials	4820400000	Prints in packages or folds, even with carbon paper.	25,118	132,349	-107,231
	4820500000	Samples or collections albums, of paper or cardboard.	620	486,048	-485,428
	4820900000	Covers for school books and other school, office or stationery articles	206,810	12,858	193,952
	4911100000	Advertising printings, merchandising catalogs and similar	24,832,477	2,439,889	22,392,588
	Subtotal		34,785,998	9,510,623	25,275,375
	2222	Service activities related to printing			
	8442501000	Printing typesets		18,745	-18,745
	8442509000	printing plates, cylinders and other printing elements	42,421	705,063	-662,642
	Subtotal		42,421	705,063	-662,642
Total			65,641,254	61,128,050	4,513,204

Source: SUNAD and information obtained through Código CIU Rev. 3 – Partida arancelaria correlation from PRODUCE.

Prepared by the authors

5.2. The Music Industry

Value Added Estimation

The music industry generates value added through the distribution of copyrights and related rights, the production and manufacturing of recorded music, the wholesale and retail of recorded music, and performances.

The distribution of copyright and related rights is as follows. The music industry, authors and composers have the moral rights³⁴ and the economic rights³⁵ over their works. The authors and composers receive compensation for three kinds of economic rights: public performance³⁶, royalties³⁷, and synchronization³⁸. Usually, the authors and composers become members of the relevant Copyright Collecting Society (CCS) which is entrusted with the collection of the public performance right. In Peru, the CCS is the Peruvian Association of Authors and Composers (APDAYC). The other two rights are collected by the author's respective music editors³⁹ (which, besides, have to ensure the publication and broadcasting of the work). In table 5.2.1, we can see that copyrights generated around US\$ 2.6 million in 2005.

Table 5.2.1. Distribution of Royalties APDAYC, 2005 (US\$)

	Amount (US\$)
Collection APDAYC	4,581,818
Overheads	1,430,159
Royalty distribution margin	2,390,341
Distributed royalties 2005	2,558,408

Source APDAYC

Prepared by the authors

Related rights belong to the producers and artists. In Peru, artists can join the National Association of Interpretive Artists and Performers (ANAIE), whereas producers become members of the Peruvian Union of Phonographic Producers (UNIMPRO). The artists (singers and performers) receive revenues for public performances (e.g. broadcast), royalties and synchronization. These rights are collected by their CCS, the ANAIE. Moreover, the artists get additional revenues from the bookings of their public performances (e.g. concerts).

The record producers or labels, which are in charge of financing the production of the record, receive revenues for the public performance (e.g. broadcasts) and synchronization of the records. In addition, they can sell any copy of the master tape and receive additional earnings⁴⁰ (deducting the royalties of the author, composers and artists). Their revenues for public performance are collected by their CCS, UNIMPRO. This institution collects both Copyright Collecting Societies' rights. The following table is based on information provided by UNIMPRO (table 5.2.2), and shows that the royalties to be paid in the year 2005 are US\$ 274,000.

³⁴ Moral rights relate to the individual nature of the work, which cannot be altered or waived. These rights recognize the creators' authorship and certain non-monetary rights. See INDECOPI (2004).

³⁵ Economic rights allow their holders to derive an economic benefit from the work. Contrary to moral rights, these rights (as with any other property right) may be ceded to a third party.

³⁶ Income received due to the public performance or reproduction for profits (e.g. radio broadcasts or concerts).

³⁷ Income received due to the sale of records.

³⁸ Income received due to the use of their work for a different purpose than that for which it was created (e.g. advertisement).

³⁹ Musical editors are represented by the Peruvian Chamber of Musical Editors (CAPEM).

⁴⁰ Once the record has been recorded, the producer has exclusive rights to copy, distribute, rent and disseminate it in digital format (producer related rights). See INDECOPI (2005).

Table 5.2.2. Public Dissemination, 2005 (US\$)

	TOTAL	UNIMPRO	ANAIE
Royalties from public dissemination 2005	537,364.27	268,682.14	268,682.14
Distributed royalties 2005	299,536.43	150,562.09	148,974.34
Total to be paid 2005	274,205.75	137,896.75	136,309.00

Source: UNIMPRO

Prepared by the authors

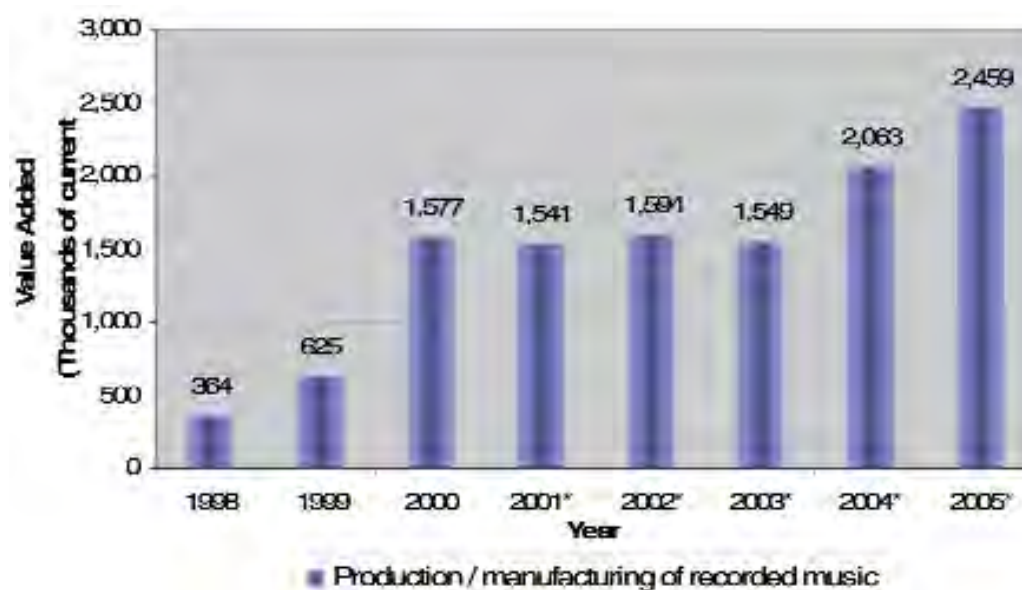
The production and manufacturing of recorded music is another important activity that generates value added within the music industry. The Ministry of Production (PRODUCE) has the information on value added for this activity for the years 1998 to 2000. Following the methodology described in Annex B, we estimated the value added for the period 2001-2005. In table 5.2.3 and figure 5.2.1 we can see that the value added in 2005 is almost US\$ 2.5 million, and that the trend is a growing one.

Table 5.2.3. Production/Manufacturing of Recorded Music, 2005

Economic activity	ISIC Rev. 3.1. code	Description	Value added (US\$)
Production/manufacturing of recorded music	2230	Reproduction of recorded music	2,458,584.35

Source: PRODUCE.

Prepared by the authors

Figure 5.2.1. Production/Manufacturing of Recorded Music, 2005

*Data for the years 2001-2005 was estimated by the authors. See Annex B for the methodology.

Source: PRODUCE and INEI.

Prepared by the authors

The value added generated by the wholesale distribution of recorded material has been estimated based on the sales of CDs and DVDs (in units) made in 2005, as reported by UNIMPRO (see table 5.2.4), and on the cost structure of a major distribution company (see table 5.2.5), assuming that all the distribution companies have the same cost structure.

Table 5.2.4. CD, DVD and Cassette Sales (units), 2005

Month	CD	DVD	Cassettes	Singles/Videos	Total
January	16,623	926	572	0	18,121
February	20,021	1,952	225	0	22,198
March	50,144	1,627	628	0	52,399
April	19,349	1,284	380	0	21,013
May	19,668	1,915	192	0	21,775
June	43,033	1,188	1,000	0	45,221
July	31,850	1,337	583	0	33,770
August	24,319	2,149	946	0	27,414
September	25,220	1,167	2,882	0	29,269
October	25,403	965	407	0	26,775
November	26,138	1,932	740	0	28,810
December	50,468	2,343	985	28	53,824
Total 2005	352,236	18,785	9,540	28	380,589

Source: UNIMPRO.

In the following table, we have the gross sales of a wholesale distribution company and its cost structure. Using this structure and the former information on sales for CDs and DVDs, we have estimated the value added for the distribution activity (see table 5.2.6)⁴¹.

On the other side, there has been a recurring finding in the interviews that indicates that live performances

Table 5.2.5. Cost Structure of Wholesale Distribution Company

Concept	US\$
Sales ^{1/}	476,360
Cost of plastic ^{2/}	182,100
Artistic royalties (20%)	95,272
Author royalties (7.5%)	35,727
Cost of payroll ^{3/}	52,500
Other management costs ^{4/}	6,000
Marketing (10%)	47,636
Net earnings	57,125
Value added^{5/}	109,625

1/ IGV discounted.

2/ US\$ 2.5 per unit.

3/ 5 employees, \$750 per month for 14 months.

4/ Rent 12 months US\$ 3,600, and services 12 months US\$ 2,400.

5/ Net earnings plus payroll.

Source: Ana María Carbonell, General Manager QC Entertainment SAC. (see annex I).

⁴¹ This is a conservative estimation for two main reasons: first, it assumes the same price for DVDs as CDs; and, second, it does not include cassettes and singles.

Table 5.2.6. Value Added of Distribution Companies Due to CDs and DVDs (units), 2005

Month	CD Value Added (US\$)	DVD Value Added (US\$)	CD and DVD Value Added (US\$)
January	25,018	1,394	26,411
February	30,132	2,938	33,070
March	75,467	2,449	77,916
April	29,120	1,932	31,053
May	29,601	2,882	32,483
June	64,765	1,788	66,553
July	47,935	2,012	49,947
August	36,600	3,234	39,835
September	37,956	1,756	39,713
October	38,232	1,452	39,684
November	39,338	2,908	42,246
December	75,955	3,526	79,481
Total	530,119	28,272	558,391

Prepared by the authors

(dance halls and live shows) represent an important source of revenue for the authors, composers, artists and executors. According to APDAYC, the collection of copyright coming from dance halls is approximately US\$ 402,000, while the collection of royalties due to live shows is around US\$ 389,000 (table 5.2.7). Based on this information, and knowing that show business entrepreneurs have to pay 19% of the value added tax (IGV) and 15% of the municipal live performance/show tax, and that in addition the payment to

Table 5.2.7. Dances and Shows: Royalties Collected by APDAYC, 2005 (US\$)

Category	Lima		Rest of the country		Total	
	Nº	Collection	Nº	Collection	Nº Total	Collection
Dances	3,286	266,014	3,174	135,791	6,460	401,805
Shows	1,292	254,114	997	134,442	2,289	388,556
Total	4,578	520,128	4,171	270,233	8,749	790,361

Source: APDAYC database.

Prepared by the authors

APDAYC is 8% (although APDAYC's rate is 10%, there is a discount of 25% when the payment is made in advance, with 80% of the payments made in advance due to this discount opportunity), we estimated the gross income of dances and shows. In table 5.2.8, the total gross income is around US\$ 14 million. Finally, making some reasonable (interview-based) assumptions about the profitability and payroll percentages of the gross income, net income is calculated. Knowing that value added may be approached by the summation of net income and payroll⁴², we end up with a total value added of US\$ 6.8 million.

⁴² Given that there is no depreciation and amortization. See chapter 2 for the details of this methodology to approach the value added.

Table 5.2.8. Value Added and Employment in the Music Industry, 2005 (US\$)

Category	APDAYC Collection	Gross Income ^{1/}	Net Income ^{2/}	Payroll ^{3/}	Value added (Net Income and Payroll)
Dances	401,805	7,294,938	2,188,481	1,276,614	3,465,095
Shows	388,556	7,054,392	2,116,318	1,234,519	3,350,836
Total	790,361	14,349,330	4,304,799	2,511,133	6,815,932

1/ Calculated considering that the payment of IGIV is 19%, the municipal tax to shows is 15% and the payment to APDAYC is 8% (although APDAYC's rate is 10% there is a discount of 25% when the payment is made in advance; 80% of the payments are made in advance due to this discount opportunity (Based on the interview with the President of APDAYC, Dr. Massé)).

2/ 30% profitability is assumed (based on the interviews with the officials of firms in the music sector).

3/ 25% labor costs on gross income is assumed (based on the interviews with the officials of firms in the music sector).

Prepared by the authors

Thus the result for the estimation of the contribution to value added by the music industry is the summation of four components, which can be seen in table 5.2.9. The first one accounts for the royalties paid to authors, composers, producers and artists. The second one stands for the production and manufacturing of recorded music. Next is the wholesale of music, and finally we have the value added generated by live performances. The estimation of all four components has been explained above.

Table 5.2.9. Value Added in the Music Industry, 2005 (US\$)

Economic Activity	ISIC	Value Added (US\$)	As a percentage of total V.A
Composers, lyricists, arrangers, choreographers, writers, directors, performers and other personnel; Artistic and literary creation and interpretation ^{1/}	9214	2,832,614	0.0040%
Production and manufacturing of recorded music ^{2/}	2230	2,458,584	0.0034%
Wholesale of recorded music (sale and rental) ^{3/}	7130	558,391	0.0008%
Performances and allied agencies (bookings, ticket agencies, etc.)	9214	6,815,932	0.0095%
Total		12,665,521	0.0177%

1/ Includes the copyrights (distributed royalties by APDAYC, US\$ 2,558,408), related rights (UNIMPRO and ANAIE, US\$ 274,206).

2/ ISIC 2230. Source: PRODUCE.

3/ Does not include retail.

Prepared by the authors

Employment Estimation

The main source for the estimation of employment is the Annual Economic Survey (EEA) 2005 obtained from INEI (see chapter 2 for the methodological details). The ISIC codes estimated with this survey are:

- Dramatic arts, music and other arts activities, ISIC code 9214
- Other entertainment activities n.e.c., ISIC code 9219
- Reproduction of recorded media, ISIC code 2230
- Renting of personal and household goods n.e.c., ISIC code 7130

Table 5.2.10. Employment in the Music Industry, 2005 (US\$)

Economic Activity	ISIC	Value Added (US\$)	As a percentage of national employment
Composers, lyricists, arrangers, choreographers, writers, directors, performers and other personnel;	9214 ^{1/}	200	0.00151%
Artistic and literary creation and interpretation	9219	40,435	0.305%
Production and manufacturing of recorded music ^{2/}	2230	174	0.001%
Wholesale of recorded music (sale and rental)	7130	4,597	0.035%
Performances and allied agencies (bookings, ticket agencies, etc.)	9214 ^{1/}	481	0.004%
Total		45,886	0.3465%

1/ ISIC Code 9214, Dramatic arts, music and other arts activities is an activity present not only in the industry of music, but also in the press and literature industry. Thus, it was necessary to establish a criterion to assign the level of employment for both industries. The criterion was to assign employment to the activity proportional to the contribution to value added of the activity.

2/ Assuming the same value-added-to-employment ratio as Composers, lyricists, arrangers, choreographers, writers, directors, performers and other personnel; Artistic and literary creation and interpretation.

Source: PRODUCE.

Prepared by the authors

Trade Balance Estimation

The imports and exports of records are detailed in the following table, which was obtained from information that was published on the Internet by the SUNAD, using the correlator for the ISIC code and the Common Nomenclature of the Andean Community Members (NANDINA – Correlacionador Código CIU Rev. 3 – Partida arancelaria NANDINA), which indicates which custom code corresponds to which ISIC code (see table Customs Administration Superintendence – SUNAD (see table 5.2.11).

Table 5.2.11. Exports and Imports of Music Industry in US\$, 2005

Economic Activity	ISIC Code / Nandina code	Description	FOB Exports (US\$)	CIF Imports (US\$)	Trade Balance (US\$)
	2213	Publishing of music			
	8524101000	Discs for disc players, for teaching	0	18,689	-18,689
	8524310000	Read-only no sound or image laser disks	235,948	13,159,746	-12,923,798
	8524320000	Read-only sound-only laser disks	67,300	1,525,397	-1,458,097
	8524390000	Other read-only laser disks	271,159	2,732,117	-2,460,958
	8524400000	No sound or image magnetic tapes	1,151	316,268	-315,117
	8524511000	Sound or similar to sound recording tape equal or narrower than 4mm width for teaching	15	41,737	-41,722
	8524519000	All other sound or similar to sound recording tape 4mm or narrower width	461	34,428	-33,967
	8524521000	Sound or similar to sound recording tape broader than 4mm and narrower than 6.5mm width for teaching	872	17,433	-16,561
	8524529000	All other sound or similar to sound 6.5mm width recording tape or narrower	434	1,662	-1,228
	8524531000	Sound or similar to sound 4mm recording tape or narrower than 6.5mm for teaching	16	39,128	-39,112
	8524539000	All other 6.5mm or narrower magnetic tape for sound or image recording	4,601,662	73,912	4,527,750
	8524600000	Magnetic band cards for sound or similar recording	132,478	29,938	102,540
	8524910000	All other read-only no sound or image disks or tapes	35	90,472	-90,437
	8524991000	Disks ("wax" and "flan"), tapes, films and other molds and matrices	0	3,278	-3,278
	8524999000	All other disks ("wax" and "flan"), tapes, films and other molds and matrices	350	203,208	-202,858
Total			5,311,881	18,287,413	-12,975,532

Source: SUNAD and information obtained through Código CIIU Rev. 3 – Partida arancelaria correlation from PRODUCE.

Prepared by the authors

5.3. The Motion Picture Industry

The Motion Picture industry is characterized by three main agents: the producers, the distributors⁴³ and the exhibitors. Thus we will measure the economic contribution of this industry to the whole economy through them. At present, the first activity, that of production, is small, with exhibition of foreign films predominant (mostly American films that make up 70% of total films) compared to the small number of national productions (around three or four a year). In the distribution and exhibition sectors we find a high level of concentration that will allow us to make some reasonable assumptions for the estimation.

Value Added Estimation

Since the first Peruvian feature film was released in 1913⁴⁴, the motion picture industry in Peru has been characterized by its small size and slow growth, due in part to small state budgets assigned to the industry. The National Movie Council (CONACINE)⁴⁵, a governmental agency, is supposed to have an annual budget of approximately US\$ 2.2 million to support national film making⁴⁶; nevertheless, it only gets roughly speaking 10% of this amount. Thus the financing of film-making is also done with foreign entrepreneurs who foster co-production, and with international funds.

According to information provided by the Chairman of CONACINE⁴⁷, there are about 200 registered production companies, and only 10 or 15 are actually operating. Hendrickx⁴⁸ indicates that since the period of time between the production of two different films can be significant, companies in Peru diversify their activities, so that not one of them is solely a movie production company⁴⁹. The most important are Inka, Aguadulce, Alpamayo, Argos and Lunallena.

Two other important features of film production activity in Peru are related to the short-lived nature of production companies, and the activity in areas outside of Lima. According to the President of the Peruvian Society of the Audiovisual Industry (SPIA), production activity is undertaken by small production companies, the majority of which are created to apply for funding, and tend to disappear once the competitions are over⁵⁰, thus creating a sector full of predominantly temporary companies. On the other hand, there is also activity in the provinces outside of Lima, characterized by the use of low-quality equipment. These activities have not been included in the estimation of the value added of production due to the lack of information.

The total number of national films produced by year is shown in table 5.3.1. Out of the total openings, Peruvian films represent 2.5% of pictures in the period 1999-2005. In 2003 the maximum number of national productions was reached, with the making of seven movies. This is also reflected in the attendance to Peruvian films.

⁴³ Another branch is the presentation of movies on television, first on premium cable channels, then on other cable channels and finally on free TV channels (Fernández-Baca et al., 2004c). In this survey this branch will not be covered because of the lack of information and its relatively small importance.

⁴⁴ Taken from <http://www.tvnovelasperu.com/cine/historia.htm>.

⁴⁵ Agency that belongs to the Ministry of Education. Its main role is to enforce the Peruvian Movie Industry Law (Law N° 26370) and represent Peruvian cinematography officially in Peru and abroad.

⁴⁶ The first film law was Law 19327, passed in 1972 during the military regime of Juan Velasco Alvarado. In 1992, however, during the period of Alberto Fujimori, certain articles of the law were removed, leading to a group splitting from the Peruvian Society of Film Directors (ACDP) and later forming the Peruvian Society of Film Directors and Producers (SOCINE). The second law (Law 26370) was passed in October of 1994 and was regulated in May of 1995. This law was created as a substitute for the law modified 2 years before, and recognized the cultural nature of the movie industry. It introduced a competitive awards system for the financing of short features, held every 3 months, and full features, held every 6 months, to be organized by the CONACINE. Nevertheless, since only around 10% of the overall budget was actually being given to CONACINE, the awards system could not be held and the award ceremonies always faced setbacks and difficulties. According to the Law, approximately 6 movies (no more than 3 per competition) and 48 short films (no more than 12 per competition) should be financed annually. Nevertheless, between 1996 and 2000, there were only 3 competitions on movies and 4 competitions on short films (Weber, 2000).

⁴⁷ Interview with Emilio Moscoso, CONACINE Chairman (see Annex A).

⁴⁸ Interview with Nathalie Hendrickx, Executive Producer of Argos Productions, member of the Peruvian Association of Cinematographic Producers (APCP), and Executive Board Member of CONACINE, and Augusto Tamayo, Film Maker, CEO of Argos Producciones and President of the Peruvian Association of Cinematographic Producers (APCP), (see Annex A).

⁴⁹ For example, the production companies also work in the advertising industry and make short films.

⁵⁰ Interview with Jorge Delgado, President of the Peruvian Society of the Audiovisual Industry – SPIA.

Table 5.3.1. National and Foreign Releases, 1999-2005

Year	Total openings	Foreign Films	Peruvian films	Percent Peruvian films
1999	155	152	3	1.9%
2000	161	158	3	1.9%
2001	170	166	4	2.4%
2002	173	170	3	1.7%
2003	179	172	7	3.9%
2004	177	173	4	2.3%
2005	177	174	3	1.7%
Total	1,092	1,065	27	2.5%

Source: 1999 to 2004, IDI-EPTH-USMP, and for the year 2005, Cinedatos.

Approximately, in most cases, 60% of the total cost of a Peruvian film is subsidized (by means of the prizes that CONACINE gives, even though these are low) and the other 40% is funded by the producer, who obtains money without the help of the State and is usually associated with others, particularly Mexican producers, in order to make a co-production. For that reason, 98% of total films are made up under any kind of subvention. There are also two international funds for economic aid in the production of films (Ibermedia and South Fund of the Ministry of Foreign Affairs of France)⁵¹.

As shown in table 5.3.2, an estimation of net earnings from internal exhibition may be done. In Peru, according to Hendrickx, the total film production cost in 2005 fluctuates between US\$ 120,000 (corresponding to *Un Día sin Sexo and Mañana te cuento*) and US\$ 250,000 (corresponding to *Piratas en el Callao*)⁵². Given the local attendance to exhibitions in the national territory, the total tickets sold for national productions was around 730,000, which made approximately US\$ 1.6 million (see table 5.3.3 for the price of tickets). Discounting all taxes, and assuming distributors earn on average 43% of net earnings, the total net earnings for national movies is around US\$ 215,000. These earnings are complemented with sales by cable channels, sales by premium channels, sales at Latin American level, etc. Thus, the sum of all this allows the cost to be recovered.

⁵¹ Hendrickx, Nathalie (see Annex A).

⁵² These are approximations that do not take into account the goods and services that many collaborators give in order to promote their services or goods.

Table 5.3.2. Estimated Production Profit Coming from National Exhibition, 2005

Film	Number of tickets sold ^{1/}	Gross earnings (US\$) ^{2/}	Production cost (US\$) ^{3/}	Net earnings of producers (US\$) ^{4/}
Piratas en el Callao	282,000	628,860	250,000	23,835
Mañana te cuento	288,000	642,240	120,000	159,661
Un día sin sexo	156,000	347,880	120,000	31,483
Total	730,000	1,618,980	490,000	214,980

1/ Cinedatos.

2/ Average ticket US\$ 2.23 (see table 5.3.3).

3/ Nathalie Hendrickx, Executive Producer of Argos Productions, member of the Peruvian Association of Cinematographic Producers (APCP), and Executive Board Member of CONACINE and Augusto Tamayo, Film Maker, CEO of Argos Producciones and President of the Peruvian Association of Cinematographic Producers (APCP).

4/ Discounting all taxes – 10% for municipalities and 19% of the IGV tax – (gross earnings are divided by $1.309=1.1*1.19$), the earnings of distributors of 43% (the assumption is that the rest goes to producers), and subtracting production costs. It does not include the earnings of sales to cable dissemination, sales abroad, etc.

Table 5.3.3. Average Price of Tickets (in US\$) 2002-2005

Year	Average Ticket Price
2002	2.56
2003	2.42
2004	2.30
2005	2.23

Source: Infodatos Perú / Cruzada Antipiratería.

Prepared by the authors

The production process consists of five stages⁵³: development of the project, preproduction, shooting, postproduction, launching campaign. The average distribution of costs for these stages is presented in table 5.3.4. Also, of the total cost, Hendrickx estimates that between 25% and 30% of total costs are due to payroll. In table 5.3.5, estimates for labor expenses are presented (payroll). They rise to US\$ 122,500. Thus, producer earnings, plus payroll, together make the value added US\$ 337,000.

Table 5.3.4. Cost Structure of National Film-making Process

Stage	Cost Percentage
Development of the project	8%
Preproduction	27%
Shooting	30%
Postproduction	27%
Launching campaign	8%

Source: Augusto Tamayo, Film Maker, CEO of Argos Producciones and President of the Peruvian Association of Cinematographic Producers (APCP), and Nathalie Hendrickx, Executive Producer of Argos Productions, member of the Peruvian Association of Cinematographic Producers (APCP), and Executive Board Member of CONACINE.

⁵³ Hendrickx, Nathalie (see Annex A).

Table 5.3.5. Production of Motion Picture Value Added Estimation (US\$), 2005

Film	Net earnings of producers^{4/}	Payroll^{1/}	Value Added
Piratas en el Callao	23,835	62,500	86,335
Mañana te cuento	159,661	30,000	189,661
Un día sin sexo	31,483	30,000	61,483
Total	214,980	122,500	337,480

1/ Assuming a 25% ratio between payroll and total cost, according to Augusto Tamayo, Film Maker, CEO of Argos Producciones and President of the Peruvian Association of Cinematographic Producers (APCP), and Nathalie Hendrickx, Executive Producer of Argos Productions, member of the Peruvian Association of Cinematographic Producers (APCP), and Executive Board Member of CONACINE.

Distributors' and exhibitors' value added are intimately related, and depend mainly on the attendance of the public to movie theaters. In figure 5.3.1 a decreasing tendency may be seen in the 1980s in terms of the number of people attending movie theaters, which caused the loss of alternative movie circuits called cineclubs (IDI-EPTH-USMP, 2005). This tendency started to change in the late 1990s, reaching in the period 1996-2004 an average annual growth rate of 21%. Box office estimates for the period 2002-2005 show the same trend (see figure 5.3.2).

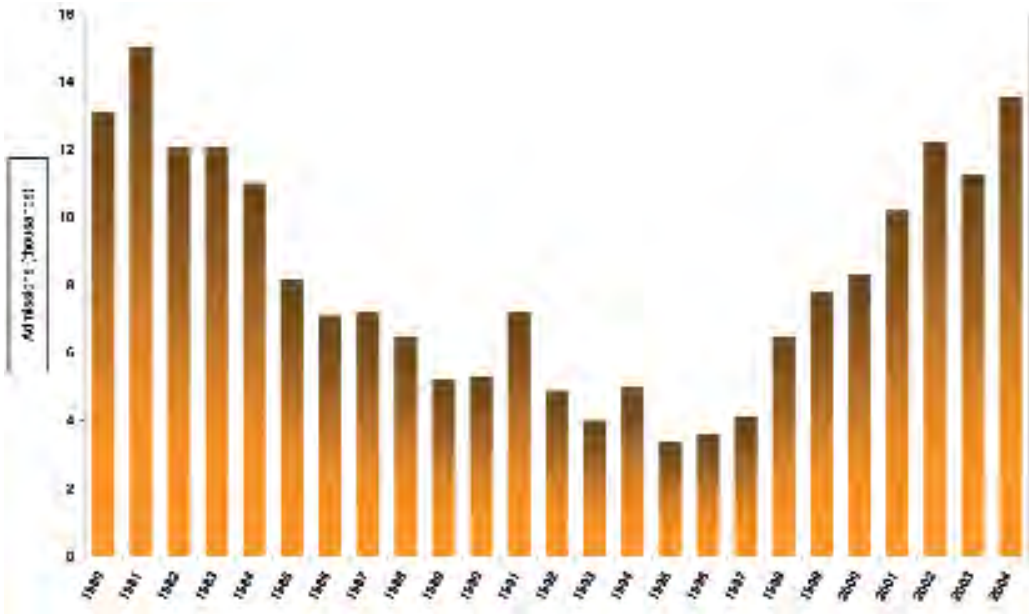
Technological and digital advances, as well as the application of marketing strategies, have enabled exhibitors to attract a larger number of consumers thanks to better-quality movie theaters. Nevertheless, the majority of these theaters are located in the city of Lima⁵⁴. Hernán Viviano, General Manager of Warner Bros – Twentieth Century Fox – Perú and Christian Alva, Marketing Manager of CinePlanet, revealed the different marketing strategies, like price sales and simultaneous premiers worldwide, among others, that are used to combat piracy; they consider piracy as another competitor and use these strategies to try to differentiate attendance to the movies as a more enjoyable and amusing experience than seeing a pirated copy of a movie at home. Nevertheless, attendance levels are still lower than in the early 1980s (when they averaged 16 million movie-goers annually), and, currently, the average per person is around five times per year, according to CinePlanet's Marketing Manager.⁵⁵ According to the data of Cinedatos (see table 5.3.6), four main companies share the majority of admissions: CinePlanet, Cinemark, UVK Multicines, and Cine Star. These four exhibitors account for 89.9% of the overall attendance in Peru.

⁵⁴ Actually, the exhibitors are increasingly expanding their operations in provinces, mainly on the coast. According to Fernández-Baca et al. (2004c), box office grew almost 180% in 2004 due to the opening of new multiplex movie theaters in other cities.

⁵⁵ Interview with Christian Alva (see Annex A).

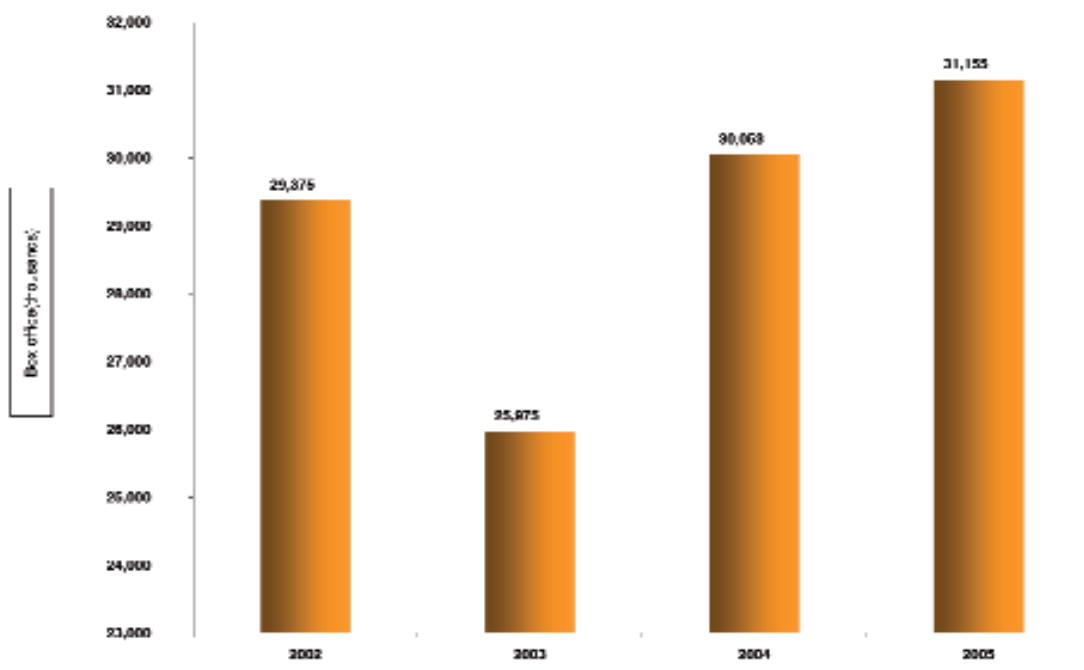


Figure 5.3.1. Annual Admissions to Movie Theaters (in thousands US\$), 1980-2005



Source: CinePlanet, Infodatos Perú / Antipiracy Crusade Initiative.
Prepared by the authors

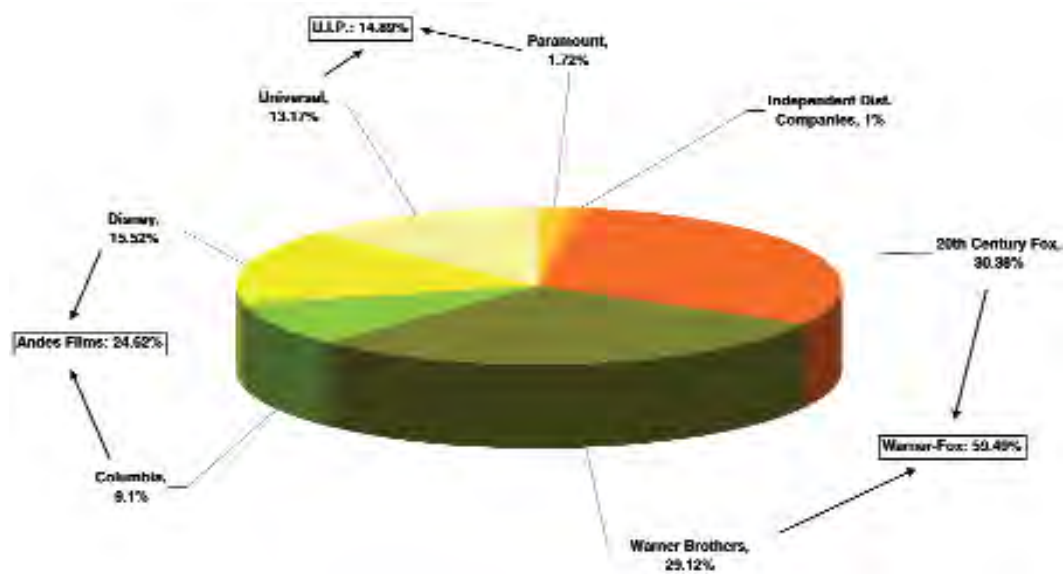
Figure 5.3.2. Annual Box Office Estimations (in US\$ thousands), 2002-2005



Source: Infodatos Perú / Antipiracy Crusade Initiative.
Prepared by the authors

By 2005, almost all of the distributors were multinational companies (figure 5.3.3). Among the most important we find Warner Brothers – Twentieth Century Fox – Perú, with almost 60% of the market. Andes Films has 24.62% of the market share and distributes Disney and Columbia pictures. In third place is United International Pictures (UIP), which manages Universal and Paramount films, with almost 15% of the market share. It is important to mention that market share among distributors varies considerably from one year to the next because these companies are subject to the commercial success of films distributed each year.

Figure 5.3.3. Market Share by Distributor, Peru, 2005



Source: Warner Bros – Twentieth Century Fox – Perú.

The estimated value added for the distributors is based on the net income by tickets sold per movie projection of the exhibitor, obtained once the municipalities charge their percentage (10%) per every ticket sold and the IGV is deducted (19%), from which the distributor gains a percentage. This is: After tax income for exhibitors * (1.1) * (1.19) = Gross income for exhibitors. Thus: After tax income for exhibitors = Gross income for exhibitors / 1.039.

Thus, roughly for each dollar that the exhibitor receives, he earns US\$ 0.76 after tax income. The distributors make profits from this after tax income generated by exhibitors, equal to a percentage of this total. According to Luis Dager, Sales Manager for United International Pictures Perú (UIP Perú), profits average 43% of the net earnings⁵⁶. Thus, for each dollar the exhibitor receives, the distributor has a participation in profits of US\$ 0.33.

Thus, according to the statistics from the CINEDATOS, the after income of exhibitors is around US\$ 17.6 million in 2005 and, with the calculations mentioned, gross earnings to distributors are US\$ 7.6 million. For exhibitors their gross earnings after tax and after distributors' gross earnings are approximately US\$ 10 million. The following table shows the earnings for each chain of movie theaters, as well as the results for the year 2005.

⁵⁶In other words, the earnings of distributors can be seen in this equation: Earning of distributor=0.43*After tax income

Table 5.3.6. Gross and Net Income for Exhibitors and Total Earnings for Distributors (US\$), 2005

Exhibitors	Attendance	Exhibitors' gross income (US\$)	Exhibitors' after tax income (US\$)	Distributors' gross earnings (US\$)	Exhibitors after tax and after distributors' gross earnings (US\$)
Cineplanet	5476,649	9,590,631	7,326,685	3,150,475	4,176,211
Cinemark	2,596,000	5,189,412	3,964,409	1,704,696	2,259,713
UVK	1,909,413	3,640,395	2,781,050	1,195,852	1,585,199
Star	2,600,724	2,773,518	2,118,807	911,087	1,207,720
Plaza Jesús María	561,925	848,236	648,003	278,641	369,362
El Pacifico	209,570	348,383	266,145	114,442	151,702
Primavera	396,557	486,210	371,436	159,718	211,719
Arenales	50,568	49,884	38,108	16,387	21,722
Bahía	31,267	43,435	33,182	14,268	18,914
Chimbote					
Colon	13,886	12,266	9,371	4,029	5,341
Huacho					
Junín	103,692	96,901	74,027	31,832	42,195
La Católica	14,551	26,170	19,992	8,597	11,396
Tacna	28,212	30,613	23,387	10,056	13,330
Total	13,993,013	23,136,054	17,674,602	7,600,079	10,074,523

Source: Cinedatos.

Prepared by the authors

As for the cost structure of the distribution sector, according to Luis Dager, there are three main expenses: the cost of film copies, principally imports, represents 15.35% of the total cost; the cost of advertising represents 61.11%; and the operation expense (that includes payroll of approximately 50%) represents 23.54%. The following table summarizes the expenses expressed as a percentage assuming every company has the same cost structure.

Table 5.3.7. Assignment of Distributor Income (in US\$), 2005

Heading	Percent of expense	Expense in US\$
Movie copies (imports)	15.35%	521,365.41
Advertising	61.11%	2,075,581.55
Operational expenses (wages, fixed costs, rentals)	23.54%	799,528.30
TOTAL	100.00%	3,396,475.27

Source: UIP.

Prepared by the authors

Earnings from operations, understood as the difference between total gross income (which, as mentioned before, totals US\$ 7.6 million) and total costs (which total US\$ 3.4 million), therefore equal US\$ 4.2 million. Depreciation and amortization are assumed to be zero. If the total payroll reaches 50% of the operational expenses, a percentage observed in many other industries, the total payroll amounts to US\$ 399,000. Value added therefore totals US\$ 4.6 million for the distribution sector.

Table 5.3.8. Estimated Value Added for the Distribution Sector in the Motion Picture Industry (in US\$), 2005

Heading	US\$
Total sales	7,600,079
Total costs	3,396,475
Earnings from operations	4,203,604
Depreciation ^{1/}	0.0
Amortization ^{1/}	0.0
Payroll	399,765
Value added	4,603,369

1/ Not available.

Prepared by the authors

Ideally we should use the cost structure to estimate the value added for exhibitors, but this information is not available⁵⁷. Although their cost structure is not the same as the distributors' it was the nearest cost structure available. Thus, assuming the same gross-earnings-to-value-added ratio as the one for distributors, the value added for exhibitors is US\$ 6.1 million. In table 5.3.9, we can see that on aggregate the value added contribution of the motion picture industry is US\$ 11 million.

Table 5.3.9. Estimated Value Added for the Motion Picture Industry (in US\$), 2005

Economic activity	ISIC	Value added (US\$)	As a percentage of total V.A
Motion picture production	9211	337,480	0.0005%
Motion picture distribution	9211	4,603,369	0.006%
Motion picture exhibition ^{1/}	9212	6,102,140	0.009%
Total		11,042,989	0.015%

1/ Assuming the same gross-earnings-to-value-added ratio as distribution.

Prepared by the authors

⁵⁷ None of the contacted exhibitors provided the information on cost structure.

Employment Estimation

The estimation of the employment generated by the motion picture industry is based on the information provided by the EEA (2005), specifically for the ISIC codes:

- Motion picture and video production and distribution, ISIC Code 9211
- Motion picture projection, ISIC Code 9212

The estimation methodology can be seen in chapter 2. Table 5.3.10 indicates that the employment generated by the above-mentioned activities is 1,532 and 22,984 workers, respectively, giving a total of more than 24,500 employees.

Table 5.3.10. Estimated Employment for the Motion Picture Industry (in US\$), 2005

Economic activity	ISIC	Total Employment (EEA 2005)	As a percentage of national employment
Motion picture production and distribution	9211	1,532	0.012%
Motion picture exhibition ^{1/}	9212	22,984	0.174%
Total		24,517	0.1851%

1/ Assuming the same gross-earnings-to-value-added ratio as distribution.

Prepared by the authors

Trade Balance Estimation

By means of the correlator for the ISIC code and the Common Nomenclature of the Andean Community Members (NANDINA – Correlacionador Código CIU Rev. 3 – Partida arancelaria NANDINA), and the information of the National Customs Administration Superintendence (SUNAD) of exports and imports, an estimation for the trade balance of the motion picture industry is made.

As the Executive Secretary of CONACINE mentions, the exports in this industry are very low; the figure can be seen in table 5.3.11 (US\$ 3,000). On the other hand the imports are around US\$ 213,000, giving a negative trade balance for the industry.

Table 5.3.11. Motion Picture Trade Balance, 2005

Economic Activity	ISIC Code / Nandina code	Description	FOB Exports (US\$)	CIF Imports (US\$)	Trade Balance (US\$)
	9211	Publishing of music			
Printing and publishing of music	3706100000	Cinematographic films, impressed and revealed, with or without sound registry	2,440	210,530	-208,090
	3706900000	Cinematographic films, impressed and revealed, with or without sound registry	601	2,842	-2,241
Total			3,041	213,372	-210,331

Source: SUNAD and information obtained through Código CIU Rev. 3 – Partida arancelaria correlation from PRODUCE

Prepared by the authors

5.4. Television and Radio Industry

Value Added Estimation

With the purpose of measuring the economic contribution of this industry, we will focus on public cable broadcasting services (cable TV) and private public interest broadcasting services (free-to-air radio and TV). Cable TV services are defined as “those that distribute multichannel and multipoint broadcasting signals through cables and radio waves, from one or more stations belonging to the same distribution system, inside of a concession area” (article 90 of Regulations). In Anglo-Saxon literature this service is known by the acronym CATV (Community Antenna Television). In these systems, the signals are transported using cables instead of an individual antenna receiver.

Subscribers of TV cable pay a pre-determined amount to receive the signals. Also, the companies that offer these services are subject to State regulation and supervision. For this reason, there is more information available for this industry as opposed to open air radio and TV, for which very little information is available. It is important to distinguish between the different types of signals that can be transmitted and received by cable television:

- From open channels: Signals that can be received by any conventional receiving device, in UHF and VHF frequencies.
- Via satellite: Transmissions from a satellite, using a reception satellite dish⁵⁹.
- Company-owned channels: Signals transmitted independently by each cable television company.
- Other services: Internet (OSIPTEL, 2002).

¹⁵In this industry, the General Regulations of the Telecommunications Law establish a classification for the services of telecommunications services based on two basic criteria. The first is a technological criterion, while the second relates to the nature and use of these services.

Based on technical criteria, services are classified as:

- Carriers
- Teleservices, also called final services
- Broadcasting
- Value added services

Depending on their nature they are classified as follows:

- Public Services
- Private Services
- Private Services of Public Interest

Title IV of the regulation combines both criteria to establish the following classification of broadcasting services:

- A. Public Broadcasting Services
 - a. Distribution of radio broadcasting by cable, in the following ways:
 - i. Wire or optic cable
 - ii. Multichannel multipoint distribution system (MMDS)
 - iii. Direct satellite broadcasting
 - b. Distribution of piped-in music
 - c. Any other classified by the Ministry as such
- B. Private broadcasting services (set up by an individual or company to satisfy his or her broadcasting needs within a determined area, such as closed circuit TV)
- C. Public-interest private radio or television broadcasting services targeting the general public. Regulations also distinguish between commercial and education radio broadcasting, and according to its operational confines, local and rural radio broadcasting.

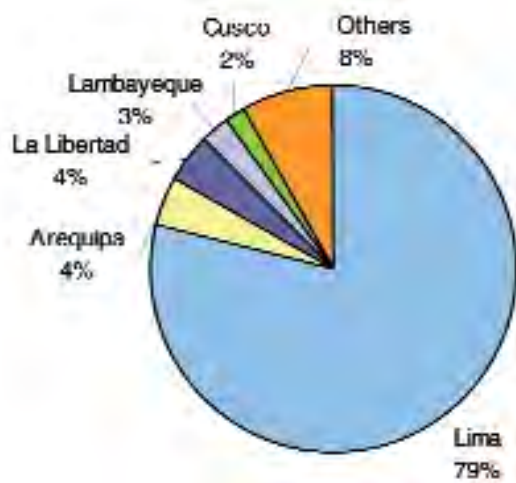
This classification embraces different criteria that take account of diverse considerations and policies, and is not consistent with the objective of distinguishing and measuring the contribution of copyright activities or industries to generating employment and creating value.

⁵⁹For satellite TV, “the signals are received directly from an orbiting satellite through small satellite dishes positioned in the subscribers’ homes” (OSIPTEL 2002). In contrast, the free signal from radio and TV transmissions comes from a transmission tower placed on the ground, which the users receive directly through an antenna. Another significant difference in relation to this study is derived naturally from the fact that cable TV and satellite TV users must pay for the services provided, generally a fee (for example a monthly fee, based on the number of channels provided). In contrast “open” radio and TV users receive the signal for free. In this case, the source of income for these broadcasting companies is limited mostly to advertising.

Most subscribers in “the paid television market” of Peru are served by companies that distribute their signals through physical means, primarily by coaxial cable. Direct broadcasting by satellite, provided by DirecTV Peru SRL, is still in its early stages and its subscribers account for only 0.8% of the total.

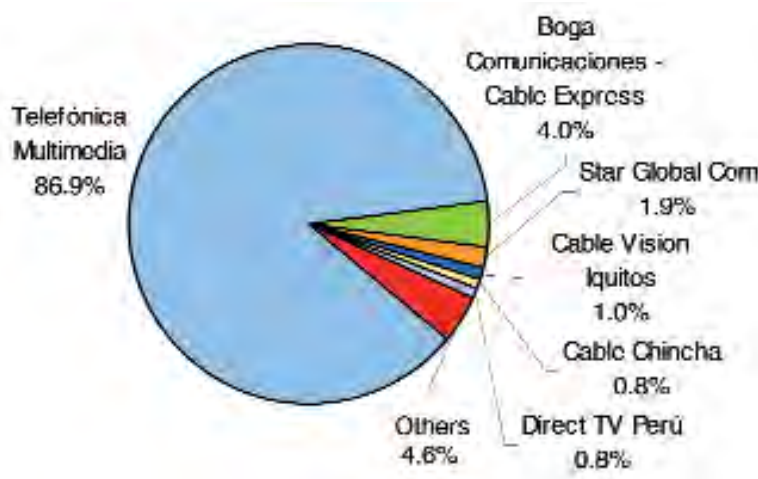
In general terms, the market has a high concentration level both in geographic terms and by the participation of operating companies. Out of the 564,000 registered subscribers in June of 2006, 79% were located in Lima, followed by Arequipa, La Libertad and Lambayeque with 4%, 4% and 3% respectively. Although the number of homes with access to these services has progressively increased during recent years, the percentage with access is still found to be around 15%.

Figure 5.4.1. Number of Cable TV Subscribers, by Department (percentages)



Source: Supervisory Agency for Private Investment in Telecommunications - OSIPTEL (2002)
Prepared by the authors

Figure 5.4.2. Cable TV Providers (percentages based on number of subscribers per company)



Source: Supervisory Agency for Private Investment in Telecommunications OSIPTEL (2002)
Prepared by the authors

The largest provider (Telefónica Multimedia) has 86.9% of the total number of subscribers, of which the majority (84.3%) live in Lima. The second-largest company (Boga Communications – Cable Express) operates in Lima and Chiclayo, but has a lower participation level that barely reaches 4% of the total subscribers, while the remaining companies operate primarily in local environments and provide services to a smaller number of homes.

It was possible to obtain the financial statements for the three largest companies, Telefónica Multimedia, Boga Communications and Star Global Com⁶⁰. Reflecting the high level of concentration mentioned earlier, these companies have 92.8% of the total number of subscribers (86.9%, 4% and 1.9% respectively). Based on this information, and following the methodology explained in chapter 2, a fairly accurate measurement of value added by companies is calculated⁶¹.

Given that Telefónica Multimedia represents almost 87% of the market, and knowing that its EBIDTA is US\$ 15.6 million (table 5.4.1), and that its payroll expenses are US\$ 5.5 million (see table 5.4.2)⁶², we estimate its value added to be US\$ 21.1 million. Assuming that the rest of the market has the same EBITDA-to-payroll ratio, we calculate that the value added for the whole cable TV activity is US\$ 24.2 million.

Table 5.4.1. Financial Indicators for the Top Cable TV Companies (thousands of US\$)

Account	Year 2005			Year 2004	
	Telefónica Multimedia ^{3/}	Star Global ^{4/}	Cable Express ^{4/}	Telefónica Multimedia	Star Global
Total revenues	110,315	4,094	4,035	100,877	4,126
Subscription ^{1/}	93,292	2,850	4,035	83,642	2,986
Advertising	9,188	-	-	6,769	0
Cablenet ^{2/}	5,582	-	-	8,172	0
Data transmission and circuit rental	-	1,242	-	-	-
Other services	2,254	1	-	2,294	1
Operating income	2,037	-313	-290	6,448	-321
Net income	1,836	-78	51	13,089	-106
EBITDA	15,561	150	897	13,774	12
Total assets	128,741	4,051	6,386	134,403	4,214
Net fixed assets	59,806	1,772	0	63,158	1,963
Total liabilities	42,609	1,429	3,790	42,426	1,593
Total investment for the year	8,292	183	248	2,878	179
Investment in infrastructure	8,292	0	172	2,878	n.a.
Total employment	332	60	56	n.a.	56
Employees and management	284	9	6	n.a.	7
Blue collar	0	51	28	n.a.	49
Other	48	0	22	n.a.	0

1/ Monthly subscription payment for cable television.

2/ Monthly subscription for Internet connection.

3/ Information from the 2005 and 2004 financial statements, except labor.

4/ Information from Resolution 121, published on the Supervisory Agency for Private Investment in Telecommunications - OSIPTEL website. Year 2004 not available

Source: OSIPTEL

⁶⁰ The information is available because these companies are regulated by the Supervisory Agency for Private Investment in Telecommunications – OSIPTEL.

⁶¹ For this industry, the data for the EBIDTA was already calculated and was used for the estimation of the value added. It should also be noted that this figure underestimates the total amount of salary received by workers in this industry. It only represents the wages and salaries of personnel directly linked to the company and not those of workers with service companies. According to the financial statements from Telefónica Multimedia, the expenses in "diverse services" make up the second most important category in operational expenses (the first being "signal rentals"). In 2005 it totaled US\$ 27 million, almost five times more than personnel expenses, which suggests that indirect employment is much larger than direct employment.

⁶² It was not possible to obtain the information on payroll of the other cable firms.

Table 5.4.2. Balance Sheet Telefónica Multimedia S.A.C., 2004 and 2005

Accounts	2004	2005
Assets		
Cash and banks	12,826	7,429
Accounts receivable, commercial, net	21,075	28,660
Accounts receivable from headquarters	21,246	22,164
Other accounts receivable	1,756	1,776
Stocks	1,365	1,836
Taxes and expenses paid in advance	4,340	1,985
Total Current Assets	62,609	63,851
Plant and equipment, net	63,158	59,806
Intangibles, net	936	733
Income tax and profit sharing deferred assets	7,700	3,441
Taxes and expenses paid in advance	-	911
Total non-current assets	71,794	64,890
Total assets	134,403	128,741
Liabilities and equity		
Bank overdrafts		56
Accounts payable, commercial	11,692	11,409
Accounts payable to headquarters	12,995	8,993
Other accounts payable	2,885	4,658
Total Current Liabilities	27,572	25,117
Deferred earnings	1,182	5,823
Income tax and profit sharing deferred liabilities	13,672	11,670
Total non-current liabilities	14,854	17,493
Total liabilities	42,426	42,609
Net equity		
Company equity	80,063	82,489
Legal reserves	1,312	2,700
Accumulated earnings	10,602	942
Total net equity	91,977	86,131
Total liabilities and equity	134,403	128,741
Total revenues from operations	100,877	110,315
Subscriptions	83,642	93,292
Advertising	6,769	9,188
Cablenet	8,172	5,582
Other	2,294	2,254
Cost of sales	0	0
Gross revenues	100,877	110,315
Operating expenses		
Signal rental	-28,586	-33,175
Diverse services	-20,086	-27,056
Sports events broadcasting	-9,568	-11,380
Payroll	-5,005	-5,501
Network rental	-16,379	-8,838
Depreciation and amortization	-7,326	-13,524
Sales commissions	-3,196	-3,693
Provision for doubtful collection	-2,891	-2,942
Other	-1,393	-2,169
Total operating expenses	-94,430	-108,279
Operating earnings	6,448	2,037
Other revenues (expenses)		
Financial, net	-452	2,879
Other, net	146	-756
Results from exposure to inflation	-1,436	
Total other revenues	-1,743	2,123
Earnings before taxes	4,705	4,160
Profit sharing	2,266	-628
Income tax	6,118	-1,695
Net Earnings (Loss) For Period	13,089	1,836

Source: Financial statements audited by Ernst & Young.
Prepared by INDECOPÍ

The second activity in this industry is open access TV. There are seven open access companies in Peru that operate on the VHF band, one of which is the state-owned TV company (Televisión Nacional del Perú – TNP). The first four companies make up 95% of advertising investment in 2005 (table 5.4.3). There are other companies that transmit their signals on UHF frequencies, but their economic importance is much lower.

Table 5.4.3. Advertising Investment in Television in Peru, 2005 (in US\$)

TV Channel	US\$	%
América TV	36,500,000	32.3%
Andina de Radiodifusión ATV	31,100,000	27.5%
Frecuencia Latina	23,800,000	21.1%
Panamericana Televisión	16,600,000	14.7%
TNP (government owned)	3,500,000	3.1%
OK Televisión	800,000	0.7%
Global Televisión	700,000	0.6%
TOTAL	113,000,000	100.0%

Source: 17.65% rate book data

Unlike cable TV stations, whose primary source of income is the monthly payments made by their subscribers, open air TV, as its name indicates, does not receive payment from any of its viewers. Just like the radio industry, the main source of income is the advertising investments by advertiser companies. Thus, it is reasonable to assume that the value added of these companies is proportional to the advertising investment they receive.

INDECOPI provided, financial statements of two TV open access firms, which together they generate value added of US\$ 36.5 million. Assuming that their importance in the open access activity is proportional to the advertising investment they receive, and that all firms have the same cost structure, the whole activity generates value added of approximately US\$ 61 million.

Table 5.4.4. Value Added in the Free Television Industry, 2005

Account	Companies 1 and 2^{1/}	Whole TV activity
Operating income	21,215.03	35,463.00
Depreciation	1,845.61	3,085.11
Payroll	13,477.40	22,528.80
Value added^{3/}	36,537.04	61,076.91

1/ INDECOPI data.

2/ 17.65% rate book data.

3/ According to the methodology explained in chapter 2, the value added is the summation of Operating income, Depreciation (and Amortization) and Payroll.

Prepared by the authors

The third contributor to the economy is the activity of radio. According to information available on the Ministry of Transportation and Communication (MTC) website, until 2006 there had been 2,589 licenses issued to radio broadcasting stations throughout Peru, with two-thirds on model frequency modulation and a fourth part on medium wave.⁶³

⁶³ www.mtc.gob.pe

There are two important associations of companies and organizations dedicated to radio in Peru. The first is the National Radio Coordinator (CNR), a non-profit civil organization that groups together primarily educational and community radio stations that operate in Peru.⁶⁴ The second is the Radio Committee, which groups together the commercial chains of radio stations. The top national and Lima-based radio stations are associated with radio broadcasting groups. These Peruvian radio broadcasting groups are listed below (table 5.4.5), and the most important radio stations in terms of advertising investment can be seen in table 5.4.6.

Table 5.4.5. Main Radio Broadcasting Groups in Peru, 2005

Radio broadcasting groups	Radio stations
RPP	RPP Noticias Studio 92 Corazón Oxígeno Felicidad (formerly Ke Buena) La Mega (94.3)
Corporación Radial del Perú	Ritmo Romántica La Inolvidable Moda Ñ (formerly Stereo 100) Radiomar Plus Incasat Planeta
Grupo Panamericana	Panamericana Honda Cero
Radiocorp	Okey FM Viva FM Fuego
Radio A/Z	Zeta Rock & Pop Radio A R-700
Cadena Peruana de Noticias Radio^{1/}	CPN Radio

1/ Is not properly a group but an only radio.

Source: Radio Committee

⁶⁴ <http://www.cnr.org.pe/>

Table 5.4.6. Distribution of Advertising Investment in Radio, 2005

Radio	Amount in US\$	% share
RPP	7,370,000	25.7%
Panamericana	3,030,000	10.6%
Studio 92	2,780,000	9.7%
Mar Plus	2,040,000	7.1%
Zeta Rock & Pop	1,170,000	4.1%
La Mega	1,150,000	4.0%
La Inolvidable	1,140,000	4.0%
Okey	1,140,000	4.0%
Radio A	1,100,000	3.8%
Radio Planeta	1,080,000	3.8%
Ke Buena	1,040,000	3.6%
Ritmo Romántica	1,010,000	3.5%
Oxígeno	800,000	2.8%
Moda	790,000	2.8%
Corazón	730,000	2.5%
CPN	670,000	2.3%
Viva	530,000	1.8%
1160 FM	520,000	1.8%
Radio Inca	450,000	1.6%
Stereo 100	140,000	0.5%
Total	28,680,000	100.0%

Source: 17.65% rate book data.

Unfortunately, in spite of many attempts were made to obtain information from the Radio Committee, we were unable to gather any direct information about the employment or value added that is generated by this activity⁶⁵. Thus the assumption made to estimate the value added generated by the radio sector was to assign the same value added to advertising investment received by the open access TV activity.

Although

the cost structure of the radio sector may not be the same as that of open access TV, it is the most similar within the CBIs, and they both depend to a very large extent on the advertising investment they receive, making them work in the same copyright industry.

Table 5.4.7 presents the figures for these investments in 2005 by type of advertising media. The figure for the total amount of TV advertising investment is US\$ 133 million, whereas the investment in radio amounted to US\$ 28.6 million. Consequently (given that open access TV value added is US\$ 61 million), the value added generated by the radio activity is US\$ 15.5 million. In table 5.4.8 is the summary of the value added estimation for the radio and television industry. The total value added is equal to US\$ 100.7 million.

⁶⁵ During our research we asked the Ministry of Transportation and Communication, who are charged with issuing and renewing radio and television permits, to provide information. The officials who were asked said the MTC does not have any information on economic variables like employment, revenues or value added for this industry.

Table 5.4.7. Advertising Investment by Type of Media in Peru (in US\$), 2005

Media	US\$	% share
Television	113,000,000	43.5%
Newspapers	67,400,000	25.9%
Radio	28,600,000	11.0%
Cable	12,000,000	4.6%
Magazines	12,000,000	4.6%
Street advertising ^{1/}	27,000,000	10.4%
Total	260,000,000	100.0%

1/ Estimated by SME Monitor

Source: 17.65% rate book. Figures based on air time seconds (radio and television) and newspaper area (dailies and magazines) monitored by Media Check in 2005. Investment figures based on market and negotiated rates. No exchange, free or charity advertising are included.

Table 5.4.8. Radio and Television Value Added, 2005

Economic activity	ISIC	Value added (US\$)	As a percentage of total V.A
National radio broadcasting companies ^{1/}	9213	15,458,402	0.0216%
National television broadcasting companies ^{2/}	9213	61,076,901	0.0854%
Cable television ^{3/}	6420	24,237,054	0.0339%
Total		100,772,357	0.1409%

1/ Assuming the same value added to advertising investment as open access TV.

2/ See table 5.4.3.

3/ Projecting Telefónica Multimedia value added for the industry.

Prepared by the authors

Employment Estimation

To estimate the employment in the radio and TV industry, two sources of information were used. In the first place, as has been done for the other core CBIs, the EEA 2005 has been used (see chapter 2 for the detailed methodology). In this survey there is information for the ISIC code 9213 (radio and television activities) which indicates 9,900 workers. On the other hand, table 5.4.1 shows the amount of employment in the three firms: Telefónica Multimedia (332), Star Global (60), and Cable Express (56). Given that these industries account for almost 93%, and assuming that the rest of the industry's firms have the same employment-to-advertisement ratio, the total employment for TV cable is estimated to be 483 employees. Thus the total employment for the radio and television industry is around 10,400 employees.

Table 5.4.9. Radio and Television Employment, 2005

Economic activity	ISIC	Total Employment	As a percentage of national employment
National radio and television broadcasting companies ^{1/}	9213	9,965	0.075%
Cable television ^{2/}	6420	483	0.004%
Total		10,448	0.079%

1/ EEA 2005.

2/ Using the information of the cable firms and their share in the market.

Prepared by the authors

5.5. The Software Industry

There are two sub-sectors of software producers in the software industry in Peru. On one side, there is the “off the shelf” software sub-sector, defined by Fernández-Baca et al. (2004d) as software designed for use by a large group of consumers with common needs, which is distributed in a standard fashion. In this case, we can consider software as a standard product that is sold in large quantities and includes operational systems and standard program applications. This sub-sector is characterized by the fact that most of the products come from foreign companies, as well as its vulnerability to piracy. The high levels of demand for these products, along with an effect known as “network externalities”, contribute to piracy. Foreign software production companies are grouped in the Business Software Alliance (BSA) and are responsible not only for distribution but also for providing technical services for systems software. Within these foreign companies there are some well-known firms such as the Microsoft Corporation (software for operating systems and applications), Adobe Systems Inc. (leader in digital technology platforms), Symantec Corporation (developer of information management), Autodesk (leader in digital software design for construction and infrastructures), Apple Computer Inc. (systems and applications software developer for Macintosh), Macromedia Inc. (web page solutions developer), Corel Corporation (graphic design, text and image composition software developer), Novell Inc. (software developer for network servers), Oracle (worldwide database that administers software), IBM (worldwide hardware and software producer),⁶⁶ etc.

On the other side, there is the sub-sector corresponding to application software, which, unlike the “off the shelf” software, responds to specific requirements from the companies, making “tailored” programs according to the needs of eventual clients. Once the program has been developed, the property rights are transferred to the company that bought the software.

On the national level, table 5.5.1 shows the top software producers in Peru, as well as the products that they specialize in. There is a predominant presence of national companies in the subsector of application software, which have found a “market niche” and are able to compete with foreign companies (Fernández-Baca et al., 2004d). Likewise, as described in a study by the Colombian Federation of the Software Industry (FEDESOFI) about Peru, the development of software by Peruvian companies seems to be a relatively concentrated activity in a small number of companies. The evidence provided reveals that the twenty largest companies have close to 90% of domestic production. This information is consistent with the estimations made by the Lima Chamber of Commerce (CCL, 2005) along with the Peruvian Software Producers Association (APESOFI), which indicate that in 2004 big software companies held a 53% market share, whereas medium-sized companies held 19%, and finally the small and micro companies (known as PYME for their Spanish acronym) held the remaining 27% (see figure 5.5.1).

Table 5.5.1. Buyers of Software Produced by Leading National Companies

Information Technologies solutions for:	Manufacturer
Banking and finance	NOVATRONIC, COSAPISOFT, RECOURSE, COMSA, O&S Consultores, VENTHORIX, ETERNET S.A.C., ROYAL SYSTEMS S.A.C
Deposits and securities	VENTHORIX
Mining	O&S Consultores, ENFOQUEWEB
Healthcare (pharmacies, clinics, etc.)	LOLIMSA, ETERNET S.A.C., ROYAL SYSTEMS S.A.C
Medical sales representatives	Corporación Medisys
Business management and administration	Sisconl, SISTESA, Royal Systems, Enterprise solutions, Software Business, AM Systems SAC, GMD, Pegaso IT, Net Partners, Exact SIIGO, Business Quality, Applisys, Asix, Sonda del Perú, OSIS, ACON SAC, COMSA, VENTHORIX, SISTEMAS Y GESTION SAC, ETERNET S.A.C.

⁶⁶ This paragraph is based on the description of international firms found in Fernández-Baca et al. (2004d)

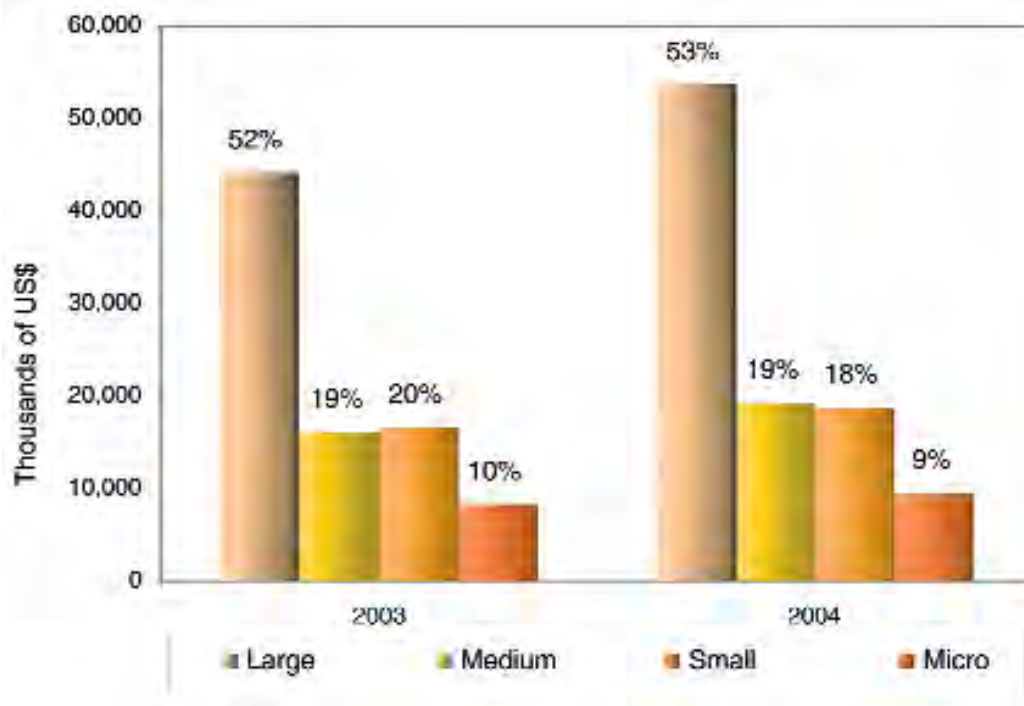
⁶⁷ Study made by the Lima Chamber of Commerce in collaboration with the Peruvian Software Producers Association.

Table 5.5.1. Buyers of Software Produced by Leading National Companies (cont.)

Information Technologies solutions for:	Manufacturer
Fixed asset monitoring	D.M.S., VENTHORIX, ETERNET S.A.C., ROYAL SYSTEMS S.A.C.
Government	COSAPISOFT, COMSA, VENTHORIX, SISTEMAS Y GESTION SAC, ETERNET S.A.C., ROYAL SYSTEMS S.A.C.
Document processing	SISTEMAS Y GESTION SAC, COMSA, ETERNET S.A.C., ROYAL SYSTEMS S.A.C.
Geographic Information Systems	TELEMATICA SA, COMSA
Human resource, access and attendance control	COSAPISOFT, DMS, COMSA, SISTEMAS Y GESTION SAC, ETERNET S.A.C., ROYAL SYSTEMS S.A.C.
Telecommunications	DEPESA, VISUAL SOFT, COMSA, VENTHORIX, ETERNET S.A.C., ROYAL SYSTEMS S.A.C.
Virus protection and IT security	HACKSOFT, KEEPERTECH S.A.
Internet and e-business	COSAPISOFT, DominioTech, AVATAR, Inexxo, Magia Comunicaciones, Eternet, Asix, Osis, COMSA, VENTHORIX, ENFOQUEWEB, ETERNET S.A.C., ROYAL SYSTEMS S.A.C.
Gas stations, hotels, restaurants, points of sale	DATA BUSINESS, TELECSA, ETERNET S.A.C., ROYAL SYSTEMS S.A.C.
Schools and libraries	ETERNET S.A.C., ROYAL SYSTEMS S.A.C.
Consulting and outsourcing	COSAPISOFT, PACNET, AVATAR, BACKGROUND, GMD, Transolutions Systems, COMSA, O&S Consultores, Sonda, Osis, VENTHORIX, SISTEMAS Y GESTION SAC, ENFOQUEWEB, ETERNET S.A.C., ROYAL SYSTEMS S.A.C.

Source: APESOFT, www.apesoft.org
 Prepared by the authors

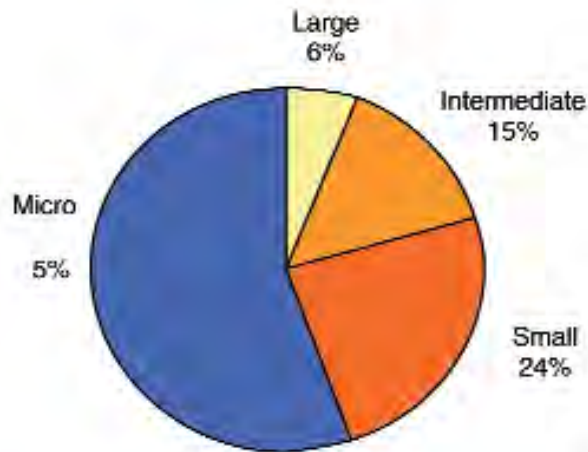
Figure 5.5.1. Company Participation in the Software Industry by Size, 2003-2004



Source: CCL (2005)
 Prepared by CCL (2005)

In terms of the number of firms, the industry is predominantly made up of micro (55%), small (24%) and intermediate (15%) firms, and large firms are a minority (6%). The figure provided by the CCL (2005) shows data for a representative sample of 139 firms in the sector (see figure 5.5.2).

Figure 5.5.2. Distribution of Software Companies by Size



Source: CCL (2005)
Prepared by CCL (2005)

The national companies are grouped together into the Peruvian Software Producers Association (APESOFT). It is important to point out that because the majority of these companies develop various products, more than half do not have registered copyrights for their products in the National Institute for the Defense of Competition and the Protection of Intellectual Property (INDECOPI) and, when they do, these are only for one of their products.

Value Added Estimation

The value added calculation for this industry is based on the methodology described in chapter 2, and on estimates made by the CCL (2005) in their study of the Peruvian software sector. In this study the estimation for the value of total sales is around US\$ 121.6 million, assuming that the total cost is 88% of this amount. According to the President of APESOFT⁶⁸ the average rate of return in the software industry is 12%. Thus, assuming this rate to estimate total costs will overestimate them; nevertheless, we decided to maintain a conservative estimation of value added rather than use another figure without any support. On the other hand, the same source indicated that the labor cost was approximately 60% of total costs. In table 5.5.2, the estimation of the software industry value added is reported (US\$ 78.8 million).

⁶⁸Rolando Liendo, President of APESOFT (see annex A for the date of the interview).

Table 5.5.2. Estimated Value Added for the Software Industry, 2005 (in thousands of US\$)

Account	US\$ thousands
Gross income ^{1/}	121,602.00
Cost ^{2/}	107,009.76
Operating income	14,592.24
Payroll ^{3/}	64,205.86
Value added^{4/}	78,798.10

1/ CCL, 2005, estimate.

2/ Average industry net rate of return 12% according to APESOFT President, Rolando Liendo. Thus, the estimation is an underestimation because it should use the cost-to-gross-income ratio, which is not available. The operating income may be greater than estimated. On the other hand, the figure for the depreciation, also not available, contributes to this underestimation, because as Chapter 2 establishes the depreciation is part of the value added.

3/ Assumed to be 50% of total costs.

4/ Summation of Operating income and Payroll.

Prepared by the authors

Employment Estimation

Employment was estimated based on CCL (2005) figures. This enabled an estimation to be made based on the assumption that the employment-to-sales ratio is the same in 2005 as in 2004. According to the source, in 2004 the industry employed 5,937 people, and the total sales were US\$ 101.4 million. In this way our estimation of employment for 2005 is 7,121 employees.

Table 5.5.3. Estimated Employment in the Software Industry, 2005

Activity	Number of workers
Software publishing ^{1/}	7,121.31

1/ Estimation, based on the year 2004 (CCL, 2005). Sales in 2004 of US\$ 101,379 and 5,937 employees, and assuming the same employee-to-sales ratio for the year 2005.

Prepared by the authors

Trade Balance Estimation

Trade balance estimations were based on figures found in the CCL (2005) for the software sector. Their estimation includes not only sales abroad, but also transfers to multinational companies that have development centers in Peru.

Table 5.5.4. Trade Balance Estimation for the Software Industry, 2005

Activity	US\$ thousands
Software exports 2005 1/	18,728.00

Source: CCL, 2005.

5.6. The Advertising Industry

We can identify different economic agents that intervene in the advertising industry. Among them, advertisers⁶⁹ and advertising receivers⁷⁰ participate in the generation of value added and employment through their relation with the agents that produce the advertisements. These are the advertising agencies and the media agencies. Although the media also participate to some extent in this industry, their value added has already been calculated for the radio and television industry and the press and literature industry.

Advertising agencies create and produce advertising content. They take into account the ideas and messages that the advertisers are trying to convey, generally about the products and services that they offer in the market, or about their products' brands, and try to keep these messages fresh in the consumers' minds. Advertising agencies can operate as intermediaries and subcontract a sizable part of the services required to produce advertising content.

The media agencies are organizations that link advertising companies with the communication media, providing specialized consulting services directed towards optimizing the advertisement investment's portfolio in the different media. The media agencies operate at a global level, with offices in many countries, frequently associated to or allied with advertising agencies. Initially, the larger advertising agencies had their own team of media experts (the media department), who were in charge of consulting with advertisers about scheduling advertising in various media. However, with the appearance of specialized media agencies, advertising agencies have become more focused on producing advertising content. Simultaneously, there has been a process of mergers and consolidation of providers and agencies worldwide.

The information about advertising investments is available at advertising agencies' and media providers' level. As shown in table 5.6.1, there is not as high a concentration level here as there is in other sectors. Nevertheless, the first four agencies lead the sector, as their combined share reaches 32.4% of total advertising investment. Of these, the first two (Starcom and Mindshare) make up 21% of the market, while the last two (Publicidad Causa and Mayo FCB) make up the remaining 11.4%. According to information published on the Peruvian Association of Advertising Agencies' (APAP) website, Starcom and Mindshare are transnational media providers, whereas Publicidad Causa and Mayo FCB are advertising agencies.

Table 5.6.1. Advertising Investment in Peru by Advertising Agencies and Media Providers, 2005 (US\$)

Company	Television	Newspapers	Periodicals	Radios	Total	As a percentage of total advertising investment ⁷¹	
						%	Accumulated
STARCOM	24,297,861	3,746,463	607,697	2,206,244	30,858,265	11.9%	11.9%
MINDSHARE	16,717,985	3,697,192	763,571	2,327,410	23,536,158	9.1%	20.9%
Publicidad Causa	10,126,145	1,956,093	803,008	2,374,311	15,259,557	5.9%	26.8%
MAYO FCB	9,414,938	2,597,721	468,906	1,710,607	14,192,172	5.5%	32.2%
Central Media Initiative	4,192,483	1,756,122	289,826	1,110,553	7,348,984	2.8%	35.1%
MediaEdge	5,864,996	586,658	227,712	571,942	7,251,308	2.8%	37.9%
OMD	4,147,727	1,264,416	334,626	770,557	6,517,326	2.5%	40.4%
OPTIMEDIA	3,200,385	793,816	266,719	872,245	5,133,165	2.0%	42.3%
LATINA	2,981,878	518,972	331,537	660,608	4,498,995	1.7%	44.1%
	2,773,829	230,499	166,032	943,077	4,113,437	1.6%	45.7%

⁶⁹ Companies that invest in advertising with the intent of introducing a new product or service to the market, or who are trying to increase their sales of an existing product. There are also entities that in one way or another are connected to the supervision and the (self) regulation of the advertising industry, or who represent associations of different companies and agencies that participate in this sector. Some of these are, to mention a few, the National Advertisers Association (ANDA), the Audiometric Studies Users Council (CUSEA), the National Advertising Supervision Council (CONAPU) and the Radio and Television Consulting Council (CONCORTV).

⁷⁰ Consumers or general public.

⁷¹ Including Omnicom (Optimum Media Direction - OMD, BBDO, DDB, Pragma), Inter Public (Initiative, Universal, Lowell, FCB-Mayo, McCann Erickson), WPP (Mindshare, Mediaedge, J. W. Thompson, Young & Rubicam), and Publicis (Zenith, Optimedia, Starcom, Publicis net, Leo Burnett, Quorum and Nazca), among others.

⁷² Publicidad Causa is a Peruvian company. Mayo FCB belongs to the US DraftFCB group.

Table 5.6.1. Advertising Investment in Peru by Advertising Agencies and Media Providers, 2005 (US\$) (cont.)

Company	Television	Newspapers	Periodicals	Radios	Total	As a percentage of total advertising investment ^{1/}	
						%	Accumulated
EURO RSCG PERÚ	2,042,683	626,480	297,760	537,947	3,504,870	1.3%	47.0%
McCann Erickson	1,436,595	802,959	84,349	68,178	2,392,081	0.9%	47.9%
Grey Com. Group	1,297,332	497,045	294,730	291,338	2,380,443	0.9%	48.8%
JWI	704,905	144,217	242,072	225,394	1,316,588	0.5%	49.3%
PROPERÚ	1,011,806	12,793	2,836	254,817	1,282,252	0.5%	49.8%
J & R Publicistas	327,875	464,018	19,434	181,671	992,998	0.4%	50.2%
CUARTZO IN	0	700,631	51,839	81,476	813,946	0.3%	50.5%
Young & Rubicam	302,657	131,470	16,349	141,103	591,579	0.2%	50.8%
Publicistas IMAA	218,176	0	0	350,883	569,059	0.2%	51.0%
DIMENSSION	460,107	10,476	1,388	11,814	483,783	0.2%	51.2%
Total	91,553,363	20,538,041	5,273,389	15,672,173	133,036,966	51.2%	
Distrib.by media	68.8%	15.4%	4.0%	11.8%	100%		

1/ Percent of total US\$ 260,000,000 advertising dollars for the year.

Source: Mediacheck y SME Monitor. Prepared by 17.65% rate book²³.

Another kind of agent that also operates within the advertising industry is the market research companies. They provide some input to the advertising agencies to make the advertising campaign. Nevertheless, this is not the only activity they undertake; they also produce opinion polls and conduct studies to analyze consumers' preferences and perceptions about products, which allow their clients to design their products. Thus, their contribution is not a hundred percent related to copyright. Some of the companies that operate in Peru are: Compañía Peruana de Investigación de Mercados (CPI), Peruana de Opinión Pública (POP), Apoyo Estudios de Opinión e Investigación de Mercado, and Arellano Investigación de Marketing S.A. The activities of these firms are not a hundred percent related to copyright. We have not been able to measure their partial contribution due to the lack of information.

Value Added Estimation

Based on the information obtained in the interviews with representatives of the advertising industry on the cost structure of the advertising agencies and the media agencies⁷⁴, given that we know that the total investment in advertising in 2005 was US\$ 260 million, and using the methodology presented in chapter 2, we have calculated the value added for this industry.

As the providers of the information declared, of the total advertising investment, advertising agencies get 18% as revenues⁷⁵, while media agencies get 3%. For advertising agencies, total costs are the summation of overhead costs (as an international rule, it is approximately 20% of the revenues) and payroll (approximately 55% of the revenues). Thus, total costs are around 75% of total revenues. For a media agency, net profits are approximately 20% of revenues (additionally we assumed that operation profits are the same as net profits) and payroll is 50% of revenues. The value added is obtained by adding operating profits and payroll. For advertising agencies, the value added is US\$ 37.4 million and for media agencies it is US\$ 5.5 million.

⁷³ Figures based on time broadcast in seconds by television and radio, and spaces in newspapers and periodicals monitored by Media Check in 2005. Investment figures were calculated based on actual market rates or rates negotiated between and agreed to by the parties. Exchanges of services, and free and public interest advertising, not included.

⁷⁴ In particular, the interviews with Mr. Bernardo Verjovski, General Manager of Analistas & Consultores, Mr. Álvaro Flores Estrada, APAP president, Mr. Carlos Trujillo, Mayo FCB New Business Manager, and Ms. Lone Strobach, President of the Media Agencies Association and General Manager of Mindshare.

⁷⁵ Revenue is defined as the subtraction of cost of billing (cost of subcontracting services, like model agencies, production teams, etc.) from the billing (payment from the hiring party).

Table 5.6.2. Advertising Value Added, 2005

Account	Advertising agencies (thousands of US\$)	Media agencies (thousands of US\$)	Total (thousands of US\$)
Revenues	46,800 ^{1/}	7,800 ^{2/}	54,600
Total costs	35,100 ^{3/}	6,240 ^{4/}	41,340
Operating profits	11,700 ^{5/}	1,560 ^{5/}	13,260
Payroll	25,740 ^{6/}	3,900 ^{6/}	29,640
Value added	37,440^{7/}	5,460^{7/}	42,900
Value added as a percentage of National Value Added	0.0524%	0.0076%	0.0600%

1/ 18% of total advertising investment. Revenue is defined as the subtraction of cost of billing (cost of subcontracting services, like model agencies, production teams, etc.) from the billing (payment from the hiring party).

2/ 3% of total advertising investment.

3/ For advertising agencies, total costs are the summation of overhead costs (as an international rule, it is approximately 20% of the revenues) and payroll (approximately 55% of the revenues). Thus, total costs are around 75% of total revenues.

4/ For a media agency, net profits are approximately 20% of revenues. Additionally we assumed that operation profits are the same as net profits.

5/ Revenues minus total costs.

6/ Payroll is 50% of revenues.

7/ Summation of operating profits and payroll.

Source: For information on advertising agencies, Álvaro Flores Estrada, APAP president, and Carlos Trujillo, Mayo FCB New Business Manager; and for media agencies, Ms. Lone Strobach, General Manager of Mindshare.

Prepared by the authors

Employment Estimation

For the estimation of the employment generated by the advertising industry the information of the EEA (2005) was used, specifically for the ISIC code:

- Advertising, ISIC Code 7430

The estimation methodology can be seen in chapter 2. In table 5.6.3. it can be seen that this industry contributes with the generation of 34,647 employments.

Table 5.6.3. Advertising Employment, 2005

Economic activity	ISIC	Total Employment	As a percentage of national employment
Agencies, buying services	7430	34,647	0.2616%

Source: EEA 2005.

Prepared by the authors

5.7. The Copyright Collecting Societies

Copyright Collecting Societies are an essential part of the core copyright-based industries because they contribute substantially to the process that sustains the functioning of the system; they are the link between the copyright owners (the creators)⁷⁶ and the users (Tavera and Oré, 2006). The Copyright Collecting Societies are non-profit institutions dedicated to collecting, administrating and distributing funds to their associates.

The five administration societies that operate in the country are:

- ANAIE: National Association of Interpretive Artists and Performers
Asociación Nacional de Artistas, Intérpretes y Ejecutantes
- APDAYC: Peruvian Association of Authors and Composers
Asociación Peruana de Autores y Compositores
- APSAV: Peruvian Association of Visual Artists
Asociación Peruana de Artistas Visuales
- EGEDA: Audio-visual Producers' Rights Management Association
Entidad de Gestión de Derechos de los Productores
- UNIMPRO: Peruvian Union of Phonographic Producers
Unión Peruana de Productores Fonográficos

National Association of Interpretive Artists and Performers (ANAIE)⁷⁷

The National Association of Interpretive Artists and Performers, ANAIE, primarily operates in relation to the audiovisual and recording industries. Created in 1993, it administrates the patrimonial and moral rights of performing artists that belong to the association, and collects the royalties for the public use of their audiovisual or recorded works in relation to the secondary uses of recordings (i.e. for commercials, whether they be for public or private use) both within the country and abroad. This international reach was achieved through representation contracts with its counterpart associations abroad (including Colombia, Venezuela, Chile, Bolivia, Ecuador, Brazil, Uruguay, Mexico, France, and Italy). It also authorizes public broadcasting, copying, direct or indirect reproduction of audiovisual products of its members, and collects royalties corresponding to events such as those performed in dance halls and shows, movie theaters, and on free, cable or satellite television broadcasts, and for the use of recordings in karaoke and other clubs, bars, hotels, hospitals, shopping centers and other public locations. Members associated with the ANAIE include a wide spectrum of artists, among them musicians, singers, actors, dancers, choreographers, orchestra conductors, and theater, television and film directors.

The relationship between the ANAIE and UNIMPRO establishes that the secondary royalty payments for records are shared by artists and record producers. Copyright Office – INDECOPI (ODA) has established that UNIMPRO shall assume its royalty collection and administration responsibilities. In 2005, a total of 1,198 artists collected royalties.

Peruvian Association of Authors and Composers (APDAYC)

The Peruvian Association of Authors and Composers (APDAYC) is a collective management society dedicated to collecting copyright royalties for authors and composers of music in Peru. The APDAYC has 16 offices in Lima and 23 offices in the provinces, and is the only society authorized by the Peruvian State to collect and distribute the royalties to authors and composers whenever their works are used and divulged⁷⁸.

⁷⁶ They group together copyright owners, i.e. holders of rights pertaining to creators of artistic or literary works, and owners of connected rights, i.e. moral rights.

⁷⁷ Registered under Card 16260 in the Lima and Callao Company Registry, and authorized as a Collective Management Society by Resolution No. 0047-2001/ODA-INDECOPI of INDECOPI's Copyright Bureau, and registered in that Bureau's registry as well.

⁷⁸ <http://www.apsav.org.pe/principal.htm>

Founded in 1952, it works on behalf of more than 4,000 authors and composers in Peru and represents all authors of the world through the International Confederation of Societies of Authors and Composers (CISAC), which, along with other similar institutions, administrates 98% of worldwide repertoires through 36 mutual international signed agreements.

Peruvian Association of Visual Artists (APSAV)⁷⁹

The Peruvian Association of Visual Artists (APSAV) is a collecting society that, since 2004 (four years after its creation), has been in charge of monitoring the usage of its members' works, as well as collecting and distributing royalties. Also, it is in charge of granting licenses for reproduction, distribution and public broadcasting of works, as well as the collection and distribution of royalties for copyright and related rights from its audiovisual associates in the industry, on both a national and international level. Likewise, it oversees the percentage of re-sales for original works. The number of its associates in 2005 totaled 127.

The Association also oversees the creative field (which ranges from drawings, collages, comics, and electronic art to sculpture, photography, carved installations, interventions, paintings and videoart) developed by artists of still and moving visual works independently of the works' material support. It administrates in a collective form the rights of 40,000 visual artists in the world using agreements with Spain, France, Germany, Mexico, Belgium, USA, Chile, and Venezuela, among others⁸⁰.

Audio-visual Producers' Rights Management Association (EGEDA)⁸¹

The Audio-visual Producers' Rights Management Association (EGEDA), through its Latin America branch EGEDA Peru, is the collective administration entity that, since its creation in 2002, has represented and defined the intellectual property rights for audiovisual producers and recorders, as well as rights-holders. These rights are described in the Copyright Law through Legislative Decree 822. EGEDA represents more than 8,000 producers at a worldwide level .

EGEDA objective is to ensure the protection of these rights and fight piracy and fraud in the audiovisual sector, as well as to promote the audiovisual sector of Peru. Also, it is responsible for the rights pertaining to administrators, such as retransmitted versions, public broadcasting of works and audiovisual recordings, and compensation for private copies, as well as the administration and protection of all other rights corresponding to the audiovisual producers described in the Copyright Law.

Peruvian Union of Phonographic Producers (UNIMPRO)⁸²

The Peruvian Record Producers' Union (UNIMPRO) groups together natural or incorporated record producers (producers of musical recordings) and performing artists for the administration of their rights. The administration of authors' and producers' rights is one of the union's responsibilities . Among its members are: Sony Music Entertainment Perú S.A., Distribuidora y Ventas S.A., Universal Music Perú S.A., Producciones IEMPSA S.A., Wika Discos S.A., Rosita Musical Service & Production E.I.R.L., Mega Entertainment E.I.R.L., and BMG Ariola de Colombia Sucursal Peruana S.A.

⁷⁹ It is registered as a civil non-profit organization in the Public Registry's Docket No. 11008511 and authorized as a collective management society by Resolution No. 00070-1999-ODA/INDECOPI, issued by the Copyright Bureau at INDECOPI.

⁸⁰ <http://www.apsav.org.pe/principal.htm>

⁸¹ It was authorized by Resolution No. 072-2002-ODA-INDECOPI dated June 11, 2002, published in the Regulations Booklet of El Peruano official gazette that year.

⁸² <http://www.egeda.com.pe/>

⁸³ Established by Resolution. No. 172-2001/ODA-INDECOPI dated 19.06.2001, published August 1, 2001, in "El Peruano" official gazette.

⁸⁴ <http://www.unimpro.org/index2.htm>

It has been designated by the IFPI⁸⁵ as the national agency in charge of controlling and verifying that the copying of records complies with the International Standard Recording Code (ISRC), which allows easy control over records and their information through four sub-codes that make up each ISRC code, designating the country of origin, primary owner, year recorded and sequence, thus developing an identification system.

Value Added and Employment Estimation

Knowing that these institutions are non-profit organizations, their value added is mainly the value of the employment they generate. Using the information provided by the Copyright Collecting Societies,

Table 5.7.1. Copyright Collecting Societies: Value Added and Employment, Collection and Distribution of Royalties, 2005 (thousands of dollars)

Copyright Collecting Societies	Value Added (US\$)	As a percentage of total V.A	Employment^{2/}	As a percentage of national employment
APDAYC	837,716	0.00117%	131 ^{3/}	0.00099%
UNIMPRO	95,922 ^{1/}	0.000134%	15	0.00011%
APSAV	7,280	0.000010%	3	0.00002%
Total	940,918	0.00132%	149	0.00113%

1/ Estimated assuming the same Value-Added-per-employee ratio as APDAYC.

2/ Figures provided by the Copyright Collecting Societies in the interviews (see Annex A).

3/ With contract 108 employees and by non personal services 23.

Prepared by the authors

⁸⁵ IFPI is an international organization that represents the recording industry worldwide with some 1,400 members in 73 countries and affiliated industry associations in 48 countries. Its mission is to promote the value of recorded music, safeguard the rights of record producers and expand the commercial uses of recorded music.

6. Conclusions and Recommendations

The copyright-based industries are an important component of Peru's economy. Their contribution to value added has been calculated at 2.6%, which represents a bigger percentage than finance and electricity-and-water. Considering its status as a developing nation, Peru's CBI contribution to value added may look small, but taking into account the context it is still significant.

The contribution to employment is 4.5% of total employment. While almost duplicating the contribution to value added, the employment share has a large component of dependent or non-dedicated CBIs. Peruvian CBIs account for a larger share of employment than Australian or Jamaican CBIs, with figures similar to Eastern European nations like Latvia and Croatia.

Regarding foreign trade, CBIs represent 0.8% of Peru's exports and 5.4% of its imports, making this country a net importer of intellectual property works, services and related goods and services. While the core industries are the most significant source of exports, with over 50% of the total, the predominance of interdependent industries' imports indicates a reliance on foreign-made finished goods and supplies.

We consider that the results of the estimation are a lower bound of the contribution of CBIs to Peru's economy. The rationale for this conclusion lies in the fact that some activities are underestimated and others are not estimated at all due to the lack of information. Indeed, there are some specific activities for which there is no information available, including data on micro enterprises, self-employment and outsourcing employment. From this perspective, it is possible to conclude that these estimations underrate the performance of CBIs with regard to value added, employment and foreign trade.

The study only provides a limited estimate of CBIs' contribution to Peru's economy as it based on available data on the concentration and distribution of the CBIs: while, as with most of Peru's economy, there is a heavy concentration of economic agents in Lima, the capital city, there are important activities and thus significant economic contributions that players outside of Lima manage to make; nevertheless, the information about them is scarce and unreliable.

While we are confident on the pertinence and strength of the methodology used for this report, there is insufficient information regarding the cost and earnings structures of the core industries, including press and literature, music, cinema and television. This is another reason why we consider that our measurement should be refined with better data collection and fine-tuning of the model used in Peru.

The recent legislative changes will be useful in obtaining adequate copyright and neighboring rights protection in Peru. Not only have penalties for cases of circumvention of technological protection measures and infringements related to the alteration of rights management information been established, but changes to the Criminal Code have been incorporated and provisions for the implementation of border measures have been issued. Similarly, INDECOPI has been institutionally strengthened and additional faculties have been granted to the judicial authorities. However, to obtain better results in combating piracy, the administrative and judicial authorities should have more resources and people should be educated about respecting intellectual property.

Recommendations

In this study we have not been able to present the evolution and trends of the contribution of CBI to Peru's economy, but just a picture of their size in a given year. Therefore, it is recommended as a first step to construct input-output tables whereby CBIs are specifically included. Also, to improve data collection, it is recommended that surveys of CBIs' micro enterprises are carried out, due to their significance to the Peruvian economy, with a focus on employment generation given that a number of CBI activities tend to be labor intensive.

All data collection efforts should pay particular attention to CBI economic activities which are located outside Lima. It is necessary to conduct studies on emerging regional economic agents, particularly in the media and printing activities, to ascertain whether the models based on Lima firms are reliable and relevant.

We consider that it is crucial to estimate the economic contribution of CBIs for the years to come, in order to have a clearer picture of the development of these activities. International evidence suggests that the average trend is increasing. What is the expected evolution of the economic contribution of the CBIs in developing countries, specifically in Peru, in terms of value added, employment, exports and imports? As has been mentioned, Peru is a growing, emerging economy, with a growth rate of 9% for 2007. In this context it is logical to suggest that CBIs will have an increasing importance in the generation of value added for the economy, given their role not only in producing final goods and services but also in being a critical factor of production, namely knowledge. With this information we may be able to establish the effects of public policies like enforcement of IPRs on the economic contribution of CBIs.

Along these lines, it may be necessary to estimate the copyright factors for the Peruvian economy in order to obtain more accurate estimations of the contribution of partial and non-dedicated CBIs. In order to achieve these results, direct cooperation, coordination and the exploitation of synergies among the different stakeholders and official institutions in charge of promotion and protection of CBIs and intellectual property is crucial importance. Also, the role of an international institution such as the World Intellectual Property Organization (WIPO) of the United Nations, which has the expertise in working out these kinds of processes, is a key issue.

Notwithstanding its limitations, the dissemination of this report, especially among stakeholders, opinion leaders, officials and policymakers, will stimulate discussion and help foster the understanding of the role that copyright-based industries are playing in the economic development. It would be advisable to design dissemination events for specific industries, to discuss sector-specific conclusions and policy recommendations.

Further research is required on the contribution of emerging markets, including independent music production, performance and recording of Andean music, tropical-Andean and tropical music, and "youth rock", as well as independent publishing, short-form movies, documentaries and similar productions in digital formats, the garment industry, photography and illustration, theatrical productions, cartoonists and other less-well-known activities.

Finally, it is important to underscore the promotion and protection of intellectual rights as a key avenue for developing each specific industry and stimulating the investments by the many agents involved in these activities.

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Acronyms List

AAP:	Association of American Publishers
ACDP:	Asociación de Cineastas del Perú, Peruvian Society of Film Directors
ANAIE:	Asociación Nacional de Artistas, Intérpretes y Ejecutantes, National Association of Interpretive Artists and Performers
ANDA:	Asociación Nacional de Anunciantes, National Advertisers Association
ANR:	Comité Nacional de Radio, National Radio Committee
APAP:	Asociación Peruana de Agencias de Publicidad, Peruvian Association of Advertising Agencies
APCP:	Asociación de Productores Cinematográficos del Perú, Association of Cinematographic Producers
APDAYC:	Asociación Peruana de Autores y Compositores, Peruvian Association of Authors and Composers
APDIF:	Asociación Protectora de los Derechos Intelectuales Fonográficos, Phonographic Copyright Protecting Association
APSAV:	Asociación Peruana de Artistas Visuales, Peruvian Association of Visual Artists
APESOFT:	Asociación Peruana de Productores de Software, Peruvian Software Producers Association
BCRP:	Banco Central de Reserva del Perú, Peruvian Central Bank of Reserves
BNP:	Biblioteca Nacional del Perú, National Library of Peru
BSA:	Business Software Alliance
CAPEM:	Cámara Peruana de Editores de Música, Peruvian Chamber of Musical Editors
CAPERIAL:	Cámara Peruana de la Industria de la Industria Editorial, Peruvian Publishing Industry Chamber
CAPEX:	Capital Expenditure
CATV:	Community Antenna Television
CBIs:	Copyright-Based Industries
CCL:	Cámara de Comercio de Lima, Lima Chamber of Commerce
CCS:	Copyright Collecting Societies
CD:	Compact Disc
CEO:	Chief Executive Officer
CERLALC:	Centro Regional para el Fomento del Libro en América Latina y el Caribe, Regional Center for Book Encouragement in Latin America and the Caribbean
CI:	Cost, insurance and freight
CISAC:	Confederación Internacional de Sociedades de Autores y Compositores, International Confederation of Societies of Authors and Composers
CNR:	Coordinadora Nacional de Radio, National Radio Coordinator
CONACINE:	Consejo Nacional de Cine, National Movie Commission
CONAPU:	Consejo Nacional de Supervisión de la Publicidad, National Advertising Supervision Council
CONASEV:	Comisión Nacional Supervisora de Empresas y Valores, National Commission for the Supervision of Companies and Securities
CONCORTV:	Consejo Consultivo de Radio y Televisión, Radio and Television Consulting Council
CONFIEP:	Confederación Nacional de Instituciones Empresariales Privadas, National Confederation of Private Business Associations
COPERF:	Comité de Productores de Fonogramas y Videogramas, Peruvian Committee of Phonogram and Videogram Producers

CPI:	Compañía Peruana de Investigación de Mercados
CPL:	Cámara Peruana del Libro, Peruvian Book Chamber
CUSEA:	Consejo de Usuarios de estudios de Audiometría, Audiometric Studies Users Council
DVD:	Digital Versatile Disc or Digital Video Disc ⁸⁶
EBITDA:	Earnings before interest, taxes, depreciation and amortization
EEA:	Encuesta Económica Anual, Annual Economic Survey
EGEDA:	Entidad de Gestión de Derechos de los Productores, Audio-visual Producers' Rights Management Association
ENAHO:	Encuesta Nacional de Hogares, National Household Survey
ESA:	Entertainment Software Association
FEDESOF:	Federación Colombiana de la Industria del Software, Colombian Federation of the Software Industry
FENVENDREL:	Federación Nacional de Vendedores de Diarios, Revistas y Loterías del Perú, Federation of Newspaper, Magazines and Lotteries Salespersons of Peru
FOB:	Free on Board
GDP:	Gross Domestic Product
GRADE:	Grupo de Análisis para el Desarrollo, Group for the Analysis of Development
ICACS:	Confederation of Authors and Composers Societies
IDI-EPTH-USMP:	Instituto de Investigación de la Escuela Profesional de Turismo y Hotelería de la Facultad de Ciencias de la Comunicación, Turismo y Psicología de la Universidad de San Martín de Porres; Tourism and Hospitality School of the Communications Science, Tourism and Psychology Department at San Martin de Porres University
IFTA:	Independent Film & Television Alliance
IGV:	Impuesto General a las Ventas, Value Added Tax
IIPA:	International Intellectual Property Alliance
IMPI:	Instituto Mexicano de la Propiedad Intelectual, Mexican Institute of Industrial Property
INDAUTOR:	Instituto Nacional del Derecho de Autor, National Copyright Institute
INEI:	Instituto Nacional de Estadística e Informática, Statistics and Informatics National Institute
INDECOPI:	Instituto Nacional de la Competencia y Propiedad Intelectual, National Institute for the Defense of Competition and the Protection of Intellectual Property
ISBN:	International Standard Book Number
ISIC:	International Standard Industry Code
ISRC:	International Standard Recording Code
IT:	Information Technology
MMDS:	Multichannel Multipoint Distribution System
MPAA:	Motion Picture Association of America
MTC:	Ministerio de Transportes y Comunicaciones, Ministry of Transportation and Communication
NANDINA:	Nomenclatura Común de los Países Miembros del Acuerdo de Cartagena, Common Nomenclature of the Andean Community Members
n.a.:	Not Applicable
n.e.c.:	Not Elsewhere Classified
NMPA:	National Music Publishers' Association
OCDE:	Organización para la Cooperación y Desarrollo Económico; Organization for Cooperation of Economic Development
ODA:	Oficina de Derechos de Autor – INDECOPI, Copyright Office – INDECOPI

⁸⁶ The press realize announcing the specification finalization only refers to the technology as DVD, making no mention of what the letters stand for www.toshiba.co.jp/about/press/1995_12/pr0802.htm

OMD:	Optimum Media Direction
OSIPTEL:	Organismo Supervisor de Inversión Privada en Telecomunicaciones, Supervisory Agency for Private Investment in Telecommunications
POP:	Peruana de Opinión Pública
PRODUCE:	Ministerio de Producción, Ministry of Production
PUCP:	Pontificia Universidad Católica del Perú, Pontifical Catholic University of Peru
PYME:	Pequeña y Micro empresa, Small and micro enterprises
RIAA:	Recording Industry Association of America
SIN:	Sociedad Nacional de Industrias, Industrial National Association
SOCINE:	Sociedad Peruana de Directores y Productores Cinematográficos, Peruvian Society of Film Directors and Producers
SPIA:	Sociedad Peruana de la Industria Audiovisual, Peruvian Society of the Audiovisual Industry
SUNAD:	Superintendencia Nacional de Aduanas, National Customs Administration Superintendence
SUNAT:	Superintendencia Nacional de Administración Tributaria, National Superintendency of Tax Administration
TPA:	Trade Promotion Agreement
TDV:	Tecnología Digital Victoria
TRIPS:	Aspectos relacionados con el comercio de los Derechos de Propiedad Intelectual, Trade Related Aspects of Intellectual Property Rights
UIP:	United International Pictures
UIT:	Unidad Impositiva Tributaria, Tax Unit
UN:	United Nations
UNIMPRO:	Unión Peruana de Productores Fonográficos, Peruvian Union of Phonographic Producers
USMP:	Universidad San Martín de Porres, San Martín de Porres University
VHS:	Video Home System
WCT:	Tratado de la OMPI sobre Derecho de Autor, WIPO Copyright Treaty
WIPO:	World Intellectual Property Organization
WPPT:	Tratado de la OMPI sobre Interpretación o Ejecución y Fonogramas, WIPO Performance and Phonograms Treaty

Annex A: Conducted Interviews

Press and Literature Industry

- 1) **Date:** December 13th, 2006
Institution: Cámara peruana del libro (CPL)
Name: Liliana Minaya Cáceda
Position: Manager
- 2) **Date:** February 16th, 2007
Institution: Fondo Editorial de la Pontificia Universidad Católica del Perú (PUCP)
Name: Patricia Arévalo
Position: General Director
- 3) **Date:** June 28th, 2007
Institution: Diario La República
Name: Daniela Bibolini
Position: Commercial Projects Boss
- 4) **Date:** June 28th, 2007
Institution: Diario La República
Name: María Eugenia Mohme
Position: Corporate Services Manager
- 5) **Date:** July 9th, 2007
Institution: Federación Nacional de Vendedores de Diarios, Revistas y Loterías del Perú (FENVENDRELP)
Name: Rufino Quilca
Position: General Subsecretary

Music Industry

- 6) **Date:** February 16th, 2007
Institution: Productora Rock en el Parque
Name: Julio César Vásquez
Position: General Producer
- 7) **Date:** April 2nd, 2007
Institution: Tecnología Digital Victoria (TDV)
Name: Francisco Samillán
Position: Sales Manager
- 8) **Date:** April 2nd, 2007
Institution: Tecnología Digital Victoria (TDV)
Name: Fernando Peña
Position: Marketing Manager

9) **Date:** August 3rd, 2007
Institution: Phantom Music
Name: Eduardo Ponce
Position: Marketing Manager

10) **Date:** November 23rd, 2007
Institution: QC Entertainment S.A.C.
Name: Ana María Carbonell
Position: General Manager

Motion Picture Industry

11) **Date:** January 26th, 2007
Institution: Consejo Nacional de Cinematografía (CONACINE)
Name: Emilio Moscoso Manrique
Position: Executive Secretary

12) **Date:** March 23rd, 2007
Institution: Sociedad Peruana de la Industria Audiovisual (SPIA)
Name: Jorge Delgado
Position: President

13) **Date:** March 26th, 2007
Institution: Cinedatos del Perú
Name: Percy Valladares
Position: Owner

14) **Date:** March 29th, 2007
Institution: United International Pictures (UIP)
Name: Luis Dager Alva
Position: Sales Manager

15) **Date:** July 20th, 2007
Institution: Argos Productions, CONACINE, Peruvian Association of Cinematographic Producers (APCP)
Name: Nathalie Hendrickx
Position: Executive Producer, Executive Board Member, Member

16) **Date:** August 7th, 2007
Institution: Cineplanet
Name: Christian Alva
Position: Marketing Manager

17) **Date:** August 7th, 2007
Institution: Cineplanet
Name: Alicia Cruzate
Position: General Accountant

- 18) **Date:** August 28th, 2007
Institution: Warner Bros – Twentieth Century Fox – Perú
Name: Hernán Viviano
Position: General Manager

Radio and Television Industry

- 19) **Date:** January 17th, 2007; July 12th, 2007
Institution: Comité Nacional de Radio (ANR)
Name: Daniel Chapell
Position: Executive Director
- 20) **Date:** January 17th, 2007
Institution: Comité Nacional de Radio (ANR)
Name: Natalia Calderón
Position: Functionary
- 21) **Date:** February 27th, 2007
Institution: Asociación Protectora de los Derechos Intelectuales Fonográficos (APDIF)
Name: José Anderson Tuesta López
Position: Legal advisor
- 22) **Date:** November 28th, 2007
Institution: Consejo Consultivo de Radio y Televisión (CONCORTV)
Name: Carlos Rivadeneyra
Position: Member of the Board

Software Industry

- 23) **Date:** November 30th, 2006
Institution: Asociación Peruana de Productores de Software (APESOFT)
Name: Rafael Romero Mina
Position: General Manager
- 24) **Date:** January 24th, 2007
Institution: Lolimsa
Name: Rolando Liendo Chicata
Position: Manager of Lolimsa, Directive Committee President of Asociación Peruana de Productores de Software (APESOFT)

Advertising Services Industry

- 25) **Date:** November 30th, 2006
Institution: Asociación Nacional de Anunciantes (ANDA)
Name: Martha De Weck
Position: Administrator
- 26) **Date:** February 12th, 2007
Institution: Dixit
Name: Manuel Echegaray
Position: General Manager

- 27) **Date:** March 27th, 2007
Institution: Asociación Peruana de Agencias de Publicidad (APAP)
Name: Alvaro Florez Estrada
Position: President of APAP, President of Publicis
- 28) **Date:** April 2nd, 2007
Institution1: Mindshare, and Media Agencies Association.
Institution2: Media Agencies Association.
Name: Lone Strobach
Position1: General Manager, Head
Position2: President
- 29) **Date:** June 27th, 2007
Institution: Mayo FCB
Name: Carlos Trujillo
Position: New Business Director

Copyright Collecting Societies

- 30) **Date:** November 21st, 2006
Institution: Entidad de Gestión de Derechos de los Productores Audiovisuales (EGEDA)
Name: Juan Pablo Grau Quinteros
Position: General Director
- 31) **Date:** November 27th, 2006; November 14th, 2007
Institution: Asociación Peruana de Autores y Compositores (APDAYC)
Name: Armando Masse Fernández
Position: President of Executive Board
- 32) **Date:** January 11th, 2007; April 2nd, 2007
Institution: Unión Peruana de Productores Fonográficos (UNIMPRO)
Name: Guillermo Bracamonte Ortiz
Position: General Director
- 33) **Date:** February 18th, 2007; December 5th, 2007
Institution: Asociación Peruana de Artistas Visuales (APSAV)
Name: Ylva Villavicencio
Position: General Director
- 34) **Date:** April 2nd, 2007; April 11th, 2007
Institution: Unión Peruana de Productores Fonográficos (UNIMPRO)
Name: Miriam Astudillo
Position: General Accountant
- 35) **Date:** April 16th, 2007
Institution: Asociación Nacional de Artistas Intérpretes y Ejecutantes (ANAIE)
Position: Administrative worker

- 36) **Date:** November 14th, 2007
Institution: Asociación Peruana de Autores y Compositores (APDAYC)
Name: Tatiana Quintana
Position: Director of Broadcasting and Cable
- 37) **Date:** November 14th, 2007
Institution: Asociación Peruana de Autores y Compositores (APDAYC)
Name: José Ramírez
Position: Operations Manager

Methodology

- 38) **Date:** February 9th, 2007
Institution: Pontificia Universidad Católica del Perú (PUCP), Grossman Capital Markets
Name: Carlos Palomino Selem
Position: PUCP Financial Analysis Professor, International Broker
- 39) **Date:** January 15th, 2007
Institution: Pontificia Universidad Católica del Perú (PUCP),
Banco de Crédito del Perú (BCP)
Name: Marco Aiquipa
Position: PUCP Financial Analysis Professor, Functionary of BCP

Other Institutions

- 40) **Date:** November 27th, 2006; January 9th, 2007
Institution: Instituto Nacional de Estadística e Informática (INEI)
Name: Teresa Gaspar
Position: Technical Diffusion Office Assistant
- 41) **Date:** November 7th, 2006; January 9th, 2007; January 10th, 2007; August 7th, 2007
Institution: Instituto Nacional de Defensa de la Competencia y de la Propiedad
Intelectual (INDECOP)
Name: Martín Moscoso
Position: Copyright Office Boss (ODA)
- 42) **Date:** January 9th, 2007
Institution: Instituto Nacional de Defensa de la Competencia y de la Propiedad
Intelectual (INDECOP)
Name: Carlos Baldoceca
Position: Intellectual Property Hall Archive Assistant
- 43) **Date:** January 15th, 2007
Institution: Pontificia Universidad Católica del Perú (PUCP)
Name: Carla Colona
Position: Institutional Communication Direction

- 44) **Date:** February 28th, 2007
 Institution: Analistas y Consultores
 Name: Bernando Verjovski
 Position: General Manager
- 45) **Date:** March 9th, 2007
 Institution: Cruzada Antipiratería – Hugo Bravo de Rueda Law Firm
 Name: Hugo Bravo de Rueda
 Position: Head
- 46) **Date:** March 15th, 2007
 Institution: Comisión de Lucha contra los Delitos Aduaneros y la Piratería
 Name: Paul Vera Regalado
 Position: Secretario Técnico
- 47) **Date:** March 30th, 2007
 Institution: Sociedad Nacional de Industrias (SNI)
 Name: Raúl Saldías
 Position: SNI Voting Member

Annex B:

Methodological Estimation of Value Added Contribution of Copyright-Based Industries for the Year 2005 Based on Sectoral Data of the Year 2000 (Ministry of Production)

This Annex presents the methodology used to calculate the data for the different copyright-based industries, mainly for interdependent and partial⁸⁷. The methodology is based on many sources, such as on the Technology of Information and Statistics General Office of the Ministry of Production (PRODUCE), the National Institute for Statistics and Informatics (INEI) and the Peruvian Central Bank of Reserves (BCRP)⁸⁸. In all cases, in order to get the most precise estimates possible, a number of assumptions were made and will be explained below.

As mentioned in chapter 2, data on manufacturing activities is available for the period 1998-2000 in PRODUCE. The database has information on value added, wages, salaries, remunerations paid to eventual personnel, other expenses of eventual and permanent personnel, depreciation value realized at the end of the year, tributes, net amount of taxes to goods and services, amount of specific taxes and exploitation surplus.

The information in this database, ordered by the different level of involvement with copyright, and with a four-digit ISIC code, is:

- Core industries:
 - o 2212: Publishing of newspapers, journals and periodicals,
 - o 2219: Other publishing,
 - o 2221: Printing,
 - o 2222: Service activities related to printing,
 - o 2230: Reproduction of recorded media.

- Interdependent industries:
 - o 2101: Manufacture of pulp, paper and paperboard,
 - o 2429: Manufacture of other chemical products n.e.c.,
 - o 3000: Manufacture of office, accounting and computing machinery,
 - o 3230: Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associate goods,
 - o 3320: Manufacture of optical instruments and photographic equipment,
 - o 3692: Manufacture of musical instruments.

- Partial industries:
 - o 1730: Manufacture of knitted and crocheted fabrics and articles,
 - o 1810: Manufacture of wearing apparel,
 - o 1920: Manufacture of footwear,
 - o 2109: Manufacture of other articles of paper and paperboard,
 - o 2610: Manufacture of glass and glass products,
 - o 3610: Manufacture of furniture,
 - o 3691: Manufacture of jewelry and related articles,
 - o 3694: Manufacture of games and toys.

⁸⁷For a few activities of core copyright industries the methodology has been applied.

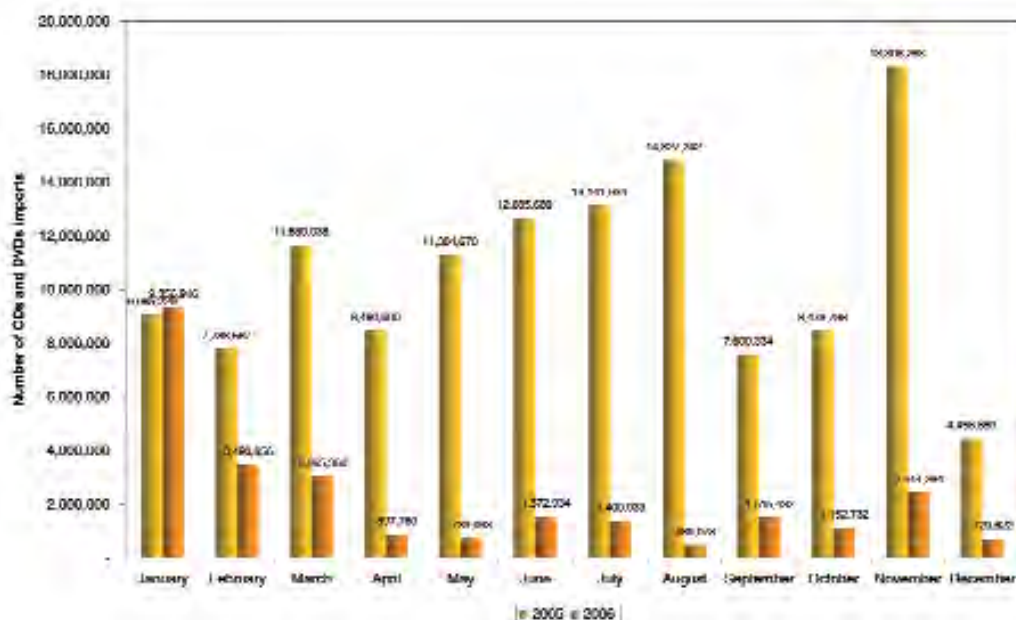
⁸⁸For the exchange rate.

In order to obtain the estimations for the year 2005, some assumptions had to be made and some complementary information had to be used. First, we assumed that in real terms the value added of these activities follows the rate of growth of the real GDP of the same activities. Nevertheless, this data was not available at this level of disaggregation. It was therefore necessary to use another variable. The only real variable available for the period 2000-2005 with a four-digit ISIC code was the production volume index, although it is only available for some ISIC activities . Thus, the assumption is that the real value added for this set of activities follows the rate of growth of the production volume index. For the rest of the ISIC codes the assumption is that the activities follow the rate of growth of the manufacturing GDP.

⁸⁹ The activities, at a four-digit level, for which this index is available, are: 2101, 2212, 2221, 2429, 1730, 1810, 1920, 2109, 2610, 3610, and 3691.

Annex C: Annex to Chapter 3

Figure C1 Peru: CD and DVD Imports by Month (number and percentage), 2005-2007



1/ Information for year 2007 just considers the first semester of that year
Source: Antipiracy Crusade Peru's head, Hugo Bravo de Rueda.

Table C1 Peru: CD and DVD Imports by Brand (number and percentage), 2005-2007

	2005		2006		2007 1/	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
PRINCO	110,452,200	86.4%	11,170,800	41.6%	916,800	8.6%
SM	12,116,090	9.5%	1,617,000	6.0%	1,244,002	11.7%
SONY	1,024,734	0.8%	3,420,980	12.7%	2,151,444	20.2%
SMART	977,900	0.8%	57,400	0.2%	16,000	0.2%
IMATION	916,234	0.7%	7,123,022	26.5%	5,601,504	52.6%
ESN	716,400	0.6%	80,000	0.3%	-	-
IESAC	650,000	0.5%	100,200	0.4%	-	-
MAXELL	336,160	0.3%	545,012	2.0%	257,238	2.4%
XEROX	286,320	0.2%	-	-	-	-
SAMSUNG	121,500	0.1%	-	-	-	-
HP	89,420	0.1%	220,044	0.8%	-	-
MASTER G	80,796	0.1%	1,368,240	5.1%	-	-
BENQ	41,550	0.0%	55,010	0.2%	-	-
PANASONIC	854	0.0%	12,822	0.0%	457,270	4.3%
UNISIA	-	-	750,000	2.8%	-	-
SPACE	-	-	90,000	0.3%	-	-
RIDATA	-	-	127,200	0.5%	-	-
CURSOR	-	-	50,000	0.2%	-	-
HYUNDAY	-	-	30,000	0.1%	-	-
OTROS	20,852	0.0%	27,320	0.1%	-	-
Total	127,831,010	100%	26,845,050	100%	10,644,258	100%

1/ Information for year 2007 just considers the first semester of that year
Source: Antipiracy Crusade Peru's head, Hugo Bravo de Rueda.

Table C2 Peru: CD and DVD Imports by Country (number and percentage), 2005-2007

	2005		2006		2007 1/	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
Taiwan	111,429,137	87.2%	14,751,382	55.0%	2,383,924	22.40%
China	12,908,567	10.1%	2,404,499	9.0%	1,245,586	11.70%
India	1,146,732	0.9%	4,979,643	18.5%	5,428,566	51.00%
Malaysia	1,266,274	1.0%	8,500	0.0%	268,660	2.52%
Japan	648,607	0.5%	3,588,274	13.4%	1,314,522	12.35%
Korea	392,403	0.3%	-	-	-	-
Germany	39,200	0.0%	-	-	-	-
Spain	90	0.0%	-	-	-	-
Hong Kong	-	-	678,600	2.5%	3,000	0.03%
Austria	-	-	274,150	1.0%	-	-
Philippines	-	-	122,402	0.5%	-	-
Mexico	-	-	31,000	0.1%	-	-
Chile	-	-	6,600	0.0%	-	-
Total	127,831,010	100%	26,845,050	100%	10,644,258	100%

1/ Information for year 2007 just considers the first semester of that year

Source: Antipiracy Crusade Peru – Hugo Bravo de Rueda Law Office

Annex D: Newspapers in Peru, 2005

Daily	City	Web page
El Comercio	Lima	www.elcomercioperu.com.pe
Expreso	Lima	www.expreso.com.pe
La Republica	Lima	www.larepublica.com.pe
Correo	Lima	www.correoperu.com.pe
El Peruano	Lima	www.elperuano.com.pe
La Razón	Lima	www.larazon.com.pe
Peru 21	Lima	www.peru21.com
Tu Diario	Lima	www.tudiario.com.pe
La Primera	Lima	www.laprimera.com.pe
Liberación	Lima	www.dialiberacion.com
Diario Del Pais	Lima	www.delpais.com.pe
La Tribuna	Lima	www.la-tribuna.org
La Olla	Lima	www.laolla.org
El Vocero	Lima	www.elvoceroperu.com
Pura Verdad	Lima	-----
El Bocón	Lima	www.elbocon.com.pe
Todo Sport	Lima	www.todosport.com.pe
Libero	Lima	www.libero.com.pe
Aja	Lima	www.aja.com.pe
Ojo	Lima	www.ojo.com.pe
El Chino	Lima	www.elchino.com.pe
Trome	Lima	www.trome.com
El Popular	Lima	www.elpopular.com.pe
El Sol De Oro	Lima	www.noticiaselsol.com
Extra	Lima	-----
El Mañanero	Lima	-----
El Tio	Lima	-----
Hoy	Lima	-----
El Chato	Lima	-----
Diario Mas	Lima	-----
La Yuca	Lima	-----
Men	Lima	-----
Gestión	Lima	www.gestion.com.pe
Síntesis	Lima	www.sintesis.com.pe
La Industria	Trujillo	www.laindustria.com
Satélite	Trujillo	www.laindustria.com/...
Nuevo Norte	Trujillo	-----
Arequipa Al Día	Arequipa	www.arequipaaldia.com
El Pueblo	Arequipa	www.elpueblo.com.pe
Noticias	Arequipa	-----
La Industria	Chiclayo	www.laindustria.com.pe
El Norteño	Chiclayo	-----
El Ciclón	Chiclayo	-----
El Tiempo	Piura	www.eltiempo.com.pe
La Hora	Piura	-----
El Matutino	Iquitos	-----
La Región	Iquitos	www.diariolaregion.com
El Oriente	Iquitos	-----
Diario De Chimbote	Chimbote	www.diariodechimbote.com
La Industria	Chimbote	www.laindustria.com/chimbote

Source: <http://www.prensaescrita.com/america/peru.php>

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Daily	City	Web page
Primicia	Huancayo	-----
La Voz De Huancayo	Huancayo	-----
El Diario De Cusco	Cusco	www.diariodelcusco.com
El Sol	Cusco	www.diarioelsoldelcusco.com
El Comercio	Cusco	www.elcomerciocusco.com
El Compatriota	Cusco	www.elcompatriota.com
Panorama Cajamarquino	Cajamarca	www.panoramacajamarquino.com
El Clarín	Cajamarca	www.elclarincajamarca.com
Prensa Libre	Cajamarca	-----
El Sol	Cajamarca	-----
Diario Regional	Pucallpa	www.diarioregional.com/ucayali
Ahora	Pucallpa	www.diario-ahora.com
Impetu	Pucallpa	www.diario-impetu.com
Diario	Ciudad	Página web
El Callao	Callao	www.diarioelcallao.com
La Voz Del Callao	Callao	www.lavozdelcallao.com
Pro & Contra	Loreto	www.proycontra.com.pe
Caplina	Tacna	-----
Al Día	Tarapoto	www.aldiaperu.net
Ahora	Tarapoto	www.ahora.com.pe
Voces	Tarapoto	www.diariovocesperu.com
El Puerto	Ilo	-----
La Verdad	Ilo	-----
La Voz De Ica	Ica	-----
La Opinión	Ica	-----
Los Andes	Puno	www.losandes.com.pe
Diario De Puno	Puno	-----
Ultimas Noticias	Pacasmayo	www.pacasmayo.net/ultimasnoticias
Diario Regional	Huánuco	www.diarioregional.com
Ahora	Huánuco	www.ahora.com.pe
Prensa Regional	Huaraz	-----
Ya	Huaraz	-----
La Calle	Ayacucho	www.lacalle.com.pe
Jornada	Ayacucho	www.ayacuchodigital.com
Chaski	Abancay	www.diariochaski.com.pe
Opinión	Andahuaylas	www.opinionchanka.com
Ecos	Huacho	www.ecoshuacho.com
Ecos	Moyobamba	-----
Don Jaque	Puerto Maldonado	-----

Source: <http://www.prensaescrita.com/america/peru.php>

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