STATE UNIVERSITY OF CAMPINAS

WORLD INTELLECTUAL
PROPERTY ORGANIZATION

STUDY ON THE ECONOMIC IMPORTANCE OF INDUSTRIES AND ACTIVITIES PROTECTED BY COPYRIGHT AND RELATED RIGHTS IN THE MERCOSUR COUNTRIES AND CHILE

HIGHLIGHTS

THIS STUDY[*] IS BASED ON THE RESEARCH CONDUCTED BY A TEAM OF ECONOMISTS COORDINATED BY PROFESSOR ANTÔNIO MÁRCIO BUAINAIN, STUDY GROUP ON THE ORGANIZATION OF RESEARCH AND INNOVATION (GEOPI), INSTITUTE OF ECONOMICS, STATE UNIVERSITY OF CAMPINAS (UNICAMP), CAMPINAS, BRAZIL

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[*] The opinions expressed in this paper are those of the authors and do not necessarily reflect the position of WIPO.

PREFACE

It is a great pleasure for me to introduce this study on the economic importance of industries and activities protected by copyright and related rights in terms of their impact on the Gross Domestic Product (GDP) of the MERCOSUR countries (Argentina, Brazil, Paraguay, Uruguay) and Chile.

The system of intellectual property rights constitutes an essential tool in the process of creation, technological innovation, economic development and wealth creation. Copyright and related rights in particular are closely linked to economic growth in several fields of activity concerned with the creation and production of literary and artistic works that are the focus of cultural activities.

In the XXI century, intellectual property is no longer seen as an autonomous and separate area and has become a significant tool for policy-making with socio-economic, technological and cultural repercussions. This has led to increased demand for up-to-date and specific information on a range of intellectual property-related activities in order to facilitate planning by governments.

The initiative that led to the conduct and publication of this study forms part of the economic context of the intellectual property system and the purpose is to ensure that the highly useful information contained in the study is available to those responsible for formulating policies and strategies related to copyright and related rights in developing countries.

I am certain that the findings of this study will lead to a better understanding of the economic importance of cultural industries in developing countries and of the need for a modern legislative framework for intellectual property that will help to foster wealth creation and development.

Kamil Idris
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INTRODUCTION

At the request of the *Pro Tempore* Chairman of Sub-Group 7 – Industrial and Technological Policy – of the Southern Common Market (MERCOSUR), the World Intellectual Property Organization (WIPO), in collaboration with the Brazilian Ministry of Industry, Trade and Tourism, convened a "Meeting of Government Experts on Copyright and Related Rights in the MERCOSUR Member Countries", which was held at Rio de Janeiro, Brazil, from October 19 to 21, 1998.

The meeting was attended by Government representatives from Argentina (National Copyright Directorate of the Ministry of Justice), Brazil (Ministry of Foreign Affairs, Ministry of Science and Technology, Ministry of Industry, Trade and Tourism, and the Copyright Coordination Department in the Ministry of Culture), Paraguay (Ministry of Industry and Trade), and Uruguay (Copyright Council, belonging to the Ministry of Education and Culture).

At the conclusion of the meeting, the Government experts drew up a number of recommendations, including a request to the International Bureau of WIPO that the International Bureau or international consultants prepare a study on the economic importance of industries and activities protected by copyright and related rights in the member countries of the MERCOSUR in terms of their impact on the Gross Domestic Product (GDP).

In response to this request, WIPO decided to undertake a research project, in which experts from the region would participate, in order to assess the economic importance of industries involved in copyright and related rights in the MERCOSUR countries and in Chile, as an associate country, focusing in particular on these industries' share of the Gross Domestic Product (GDP), employment figures and the foreign trade balance in the countries concerned. The study would also allow data to be collected on legislative and institutional aspects of copyright and related rights, including the collective management of such rights in the countries concerned.

WIPO entrusted the Study Group on the Organization of Research and Innovation (GEOPI) of the Institute of Economics (IE) of the State University of Campinas (UNICAMP), Campinas, São Paulo, Brazil, with the overall coordination of the research project. After the methodology for the overall project coordination had been defined, research teams from well-known institutions in the MERCOSUR member countries and Chile were responsible for carrying out the national studies.

When the national studies and an overall draft consolidated report had been completed, the researchers presented them to a Workshop on the Economic Importance of Copyright Industries in the MERCOSUR Countries, organized by WIPO in Montevideo on September 13 and 14, 2001, in cooperation with the Uruguayan Copyright Council. The purpose of the Workshop was to examine the preliminary conclusions of the studies conducted, in conjunction with the sectors responsible in the five countries involved, prior to the publication of the findings.

The Workshop was attended by national government representatives, including officials responsible for copyright in each of the countries taking part in the project, as well as representatives of the private sectors involved in cultural industries in these countries, including collective management societies and associations of authors, performers, phonogram producers and broadcasting organizations.

On the basis of the presentations and the exchange of ideas during the Workshop, the participants from the government and private sectors made recommendations and suggestions regarding the preliminary findings and conclusions submitted by the overall coordination of the project and requested the International Bureau of WIPO, because of its important relevance and interest, to publish the final consolidated report of the studies conducted so that it could be disseminated to interested sectors.

This document contains the consolidated report and it has been coordinated and published by the WIPO's Cooperation for Development Bureau for Latin America and the Caribbean.

SUMMARY

Institutional development, strongly influenced by the globalization process, is also affected by the creation, revision and adaptation of a number of legislative instruments designed to regulate economic activities in general, ranging from international trade to intellectual property. These rules and other instruments and mechanisms that regulate economic activities, including the protection of intellectual property, have given rise to an institutional framework and they determine relations between private agents and the State. This new institutional framework has meant a redefinition of the roles, rights, remuneration, objectives and responsibilities of various economic agents and social actors, as well as the creation of new institutions of national and international scope and new mechanisms and forums that bring together the public and private sectors.

Copyright protects authors' or artists' rights of ownership in original intellectual works in various fields of creative and artistic activity. This form of ownership has a significant impact on economic growth and the performance of various sectors of the modern economy. Copyright underpins the graphics, publishing and music industries, as well as creative activities in the services sector such as advertising and publicity, television, radio, films, entertainment (*inter alia* theatres, cinemas, venues for shows and performances), and computer programs (software). In fact, intellectual property rights form the basis of the modern information society. The legislation and rules that define, protect and give effect to intellectual rights at various levels (copyright, plant rights, patents, trademarks) play a pivotal role in determining the competitive advantages of different firms, countries and regional common markets, in the choice and development of technologies, and in decisions on investment *inter alia*.

The main objective of this Study is to outline and assess from an economic perspective the major copyright-related economic sectors and activities in the MERCOSUR countries (Argentina, Brazil, Paraguay, and Uruguay) and Chile. The sectors, subsectors and categories involved in activities related to copyright protection have also been identified. The share of such activities in the GDP of these countries has been determined, taking as a basis the estimated value added of the economic activities of certain selected industries, the number of persons involved (jobs created) and these industries' foreign trade. Aspects concerning the market structure have also been examined, showing the industries deemed to be key industries in the MERCOSUR and Chile. At the institutional level, the major institutions responsible for protecting and administering copyright regulations have been identified, together with the relevant legislation in the countries examined. This study is based on the methodology used by Siwek & Mosteller (1999) and adapted by Carvalho (2000) for the purposes of this study.

The approach divides copyright-related economic activities into four major groups: (i) principal (or core) activities, including those that create products or works primarily protected by copyright; (ii) industries partly covered by copyright, including a broad range of activities such as manufacturing, business practices, architecture and design; (iii) distribution, including the transport of goods, bookshops, record stores, telecommunications and other types of wholesale or retail distribution of products protected by copyright; and (iv) copyright-related industries, including production and technical assistance involving equipment used solely with copyright-protected material. This category includes, for example, computers, radio and television equipment, and listening or recording equipment.

The share of copyright-protected activities in the value added of Argentina, Brazil and Uruguay is similar. In Argentina, the figure was 6.6 per cent in 1993, in Brazil 6.7 per cent in 1998, and in Uruguay around 6 per cent in 1997. In Chile and Paraguay, the share of copyright-related industries was lower (2 per cent in Chile and 1 per cent in Paraguay).

In all the countries, a substantial number of jobs were generated by copyright-protected activities, ranging between 5 and 3 per cent. In 1993, in Argentina, around half a million people worked in an activity directly or indirectly linked to copyright. In Brazil, the number exceeded 1.3 million in 1998. In Chile, during the same year, the sector employed 150,000 people, and in Uruguay the figure was at least 60,000 in 1997.

One important factor concerning Paraguay is the size of the unofficial market. The reproduction and distribution of unauthorized material probably employs a large number of people, but it cannot be measured by official statistics.

All the MERCOSUR countries had foreign trade deficits in products of the copyright industries. The share of exports and imports of copyright-related goods and services in overall trade varies depending on the country. Close examination of the data confirms the importance of distribution and of the media used for the consumption of protected products.

1. METHODOLOGY USED TO IDENTIFY COPYRIGHT INDUSTRIES IN THE MERCOSUR COUNTRIES AND CHILE AND TO ASSESS THEIR ECONOMIC IMPORTANCE

Defining copyright industries and assessing their economic impact is a complex task. One way of verifying their economic importance is the method used by Kageyama *et al.* (1990) to estimate the share of different cultures and creations composing the agricultural sector and related industries in Brazil. Taking the concept of agroindustrial complexes as a starting point, the upstream and downstream links in the production chains established through such links are estimated. The data are checked in an Input-Output Table. One of the principal advantages is that the technological momentum in these chains can be related to the degree of interconnection between the sectors. Nevertheless, updating these technical relationships (not the data of which they are composed) in the Input-Output Table takes a long time and the dynamics selected may not correspond to the time at which the assessment was made. Another disadvantage is the time required to compile two sets of data, in addition to a certain rigidity (as is the case for national accounts, the comparisons require that there be consistency among all products and services).

In order to assess the economic importance of copyright industries in the MERCOSUR countries and Chile, the project coordination prepared a Technical Note (Carvalho, 2000) as guidance for the national studies required for the project. The option selected in the Technical Note was to assess copyright-related economic activities by using the typology defined by Siwek & Mosteller (1999). Of all the methodologies examined, that proposed by Siwek & Mosteller (1999) was the best adapted to the objectives of the work in hand. It should be recalled that the request made by government representatives to WIPO at the meeting of copyright experts held in Rio de Janeiro in 1998 was to assess the economic importance of copyright-related activities. In other words, the request was not limited solely to studies of the cultural or artistic sectors.

The salient feature of the Technical Methodology Note is that the sectors were be identified at the most disaggregated level (four-digits), providing opportunities for assessment based on the data available for each country and the way in which they were collected. Sources such as economic censuses, annual sectoral performance studies (industry, trade, services) and foreign trade databases for countries in the region could be used. On the one hand, this guaranteed a minimum level of consistency in the data and, on the other, allowed more flexibility as regards available sources of data.

The benefits of using the methodology for the study in the form proposed by Carvalho (2000) on the basis of Siwek & Mosteller (1999) are, firstly, a scope that goes beyond the artistic and cultural aspects that habitually guide copyright-related studies. This methodology also allows greater flexibility in terms of sources of data (annual sectoral performance studies or economic censuses). Secondly, it allows the categories making up copyright-related economic activities to be classified on the basis of more relevant factors in terms of generation of rights and complementary activities such as ancillary production and distribution activities. Economic assessment on the basis of value added for each category of activity belonging to each group makes it possible to compare the groups with other sectors of the economy. No less important is the fact that it allows the assessment to be made as rapidly as possible because the data used do not necessarily come from censuses and the database can be updated annually.

The disadvantages, in general terms, are the inability to reflect technological dynamics on the basis of this classification, although it is perhaps the most relevant factor. Another disadvantage of the methodology proposed is the classification of activities. There is little consistency so national accounts cannot be used. This disadvantage is at the same time an advantage, however, as shown above. Another disadvantage is that, in the absence of annual sectoral performance figures, there is a danger that economic censuses may be the only sources of information and their infrequency means much longer time lapses so projections and estimates of value added and people employed have to be made on the basis of a situation that may already be out of date.

The advantages and disadvantages of the methodology proposed by the project coordination were tested in the national studies. The identification of the categories of activities making up the copyright economy was fairly consistent. Nevertheless, some studies, such as those of Argentina and Uruguay, made use of censuses, leading to a certain lack of synchronization. It was therefore necessary to make estimates for a particular year so as to be able to compare the findings of the national studies. In the case of Brazil, it was decided to use sectoral performance statistics. As value added in four-digit figures was not available for the chosen categories in one of the (services) sectors, estimates based on the less detailed information available had to be used.

With regard to the "production structure" and the conditions of technological and business "convergence", the typology was that proposed by Siwek & Mosteller (1999), used in accordance with the Methodology Note of Carvalho (1999). This classifies copyright-related economic activities into four groups:

The first group is the basis (core) of copyright industries. These are activities that create products or works primarily protected by copyright. The major branches and products are: newspapers and magazines, publishing of books and related industries, radio and television, cable television, discs and tapes, plays, advertising, computer programs (software) and data processing. For each of the activities, the relationship may vary: some are more closely related to creation, production and dissemination of new protected material (e.g. phonographic and publishing industries), whereas others concern the creation of protected material and its application (e.g. production of software and industrial or commercial use).

The second group comprises industries partly covered by copyright. It encompasses a broad range of activities such as manufacturing, business practices, architecture and design, *inter alia*.

The third group of activities concerns distribution. This covers the transport of goods, bookshops, record stores and other forms of wholesale or retail distribution of products protected by copyright.

The fourth group can be called copyright-related industries. It comprises production and technical assistance involving equipment used solely with copyright-protected material. It includes, for example, computers, radio and television equipment, and other listening or recording equipment.

The economic variables or indicators used to measure economic importance were: (i) the share of GDP; (ii) employment; and (iii) foreign trade.

The share of GDP was calculated on the basis of estimates of value added for each category of activity identified under the headings proposed by Carvalho (2000). For the number of people employed, the sources of information might vary according to the availability of data in each country. Consequently, some studies used different sources such as censuses or sectoral performance studies. Nevertheless, the use of identical sources when estimating value added and numbers employed becomes an essential factor in avoiding inconsistencies caused by using different data collection methods. Foreign trade was assessed in terms of the share of each category, as selected and classified for the data on GDP and numbers employed.

2. IDENTIFICATION OF THE ACTIVITIES AND BRANCHES COMPOSING THE SO-CALLED COPYRIGHT INDUSTRIES

In the Technical Methodology Note (Carvalho 2000), a link was established between the proposal of Siwek & Mosteller (1999) and the National Classification of Economic Activities (CNAE) of the Brazilian Institute for Geography and Statistics (IBGE) (IBGE, 1997), which adopted all the United Nations recommendations and the classification in the "*International Standard Industrial Classification*" (ISIC), third revision (Rev.3), put forward by the United Nations as a tool for harmonizing the compilation and dissemination of economic statistics at the international level (IBGE, 1997:8). The advantage of this system is that it allows the previous classification system to be converted, using conversion tables. It should be noted, however, that this system approaches economic activity from the perspective of value added through the production of goods and services.

The persons responsible for conducting the studies on Argentina, Brazil, Chile, Paraguay and Uruguay were then asked to see whether these data were available in the statistics offices of the respective countries. The purpose was to achieve an approximation with the CNAE/ISIC inasmuch as national systems usually follow international models.

A table was drawn up to provide an example of how to use the Siwek & Mosteller (1999) typology in coordination with the CNAE/ISIC. The data used corresponded to the maximum breakdown (four digits), the Class. Each category was analyzed on the basis of the elements proposed by Carvalho (2000) in order to group them into the core, related and partly-related industries, and distribution. The types of product or service were then identified, together with the potential for over-estimating the data (where some types of activity not related to copyright have been included).

The analysis of foreign trade was based on the same criterion as that used to identify categories. The databases of the foreign trade departments in the countries studied were used, corresponding to the MERCOSUR Common Nomenclature (NCM), which is compatible with the nomenclature in other countries.

In order to analyze the number of persons employed, several sources of information had to be used: population censuses, sectoral studies and reports by institutions dealing with copyright protection.

REGIONAL SUMMARY

I. OVERALL VIEW OF COPYRIGHT INDUSTRIES IN THE MERCOSUR COUNTRIES AND CHILE

1. Introduction

As already mentioned, intellectual property rights are the basis of the modern information society, which covers a broad range of activities. Nevertheless, some important indirect indicators, especially those relating to cultural activities, are relevant in order to apprehend the sectoral dynamics. Some of these activities include the various sectors, subsectors and categories proposed by Carvalho (2000), which served as a guide for the study's economic estimation methodology.

These indicators will be shown by country, bearing in mind that each national study selected the indicators most representative of its particular situation. This quick glance shows that, despite the crises and uncertainties that were a feature of the MERCOSUR countries during the 1990s, there was vigorous expansion in demand for copyright-related activities.

There was an increase in per capita GDP in all the countries during the 1990s, together with a noticeable rise in demand for household goods, such as television and radio equipment, needed to consume the cultural products and services that reach the public via these media. This can be seen in the production figures for the respective industries, which may be taken as a proxy for consumption.

Growing dissemination of new information and communications technologies in the domestic economy can also be noted. The number of television and radio sets, telephone lines, mobile telephones and computers per capita rose sharply during the past decade, together with the number of households connected to pay-TV. The number of telephone lines increased in the region, but at varying speeds depending on the country. Radio and television sets can be found in virtually all urban households. The Internet was not very common at the outset of the 1990s, but has experienced striking growth in recent years.

Open and cable television are other expanding mass media through which authors' creations are channelled and, in almost all countries, it is gradually being recognized that these rights must be paid for.

MERCOSUR is now one of the world's major television and audio markets. The widespread penetration of television into Brazilian households gave Brazil the 6^{th} largest number of television sets in the world (Ministry of Culture, 1999). Consumption of television programmes has been detrimental to the cinema, particularly because they reach a public that finds it difficult to view cinema films that are not subtitled.

This has also been a common trend in other countries in the region, but it would be a mistake to conclude that television is destroying the cinema industry. On the contrary, although it affects the cinema, it does not actually replace it but stimulates changes that imply other concepts and more sophisticated technology as a result of the spectators' preference for multiplex cinema chains.

The number of books published in the region also rose sharply in the 1990s. Unlike Argentina, Uruguay and Chile, the level of book consumption in Brazil and Paraguay was low (even though data are lacking concerning the latter country). The paucity of readers in comparison with the population is not so much the result of an unfavourable economic climate but of a structural barrier caused by unequal distribution of income and low levels of school attendance.

The regional market in discs is one of the largest in the world. In 1998, Brazil alone occupied the 6th place in the global market, although it dropped to 7th place in 1999, essentially as a result of the devaluation of Brazilian currency in comparison with the United States dollar. The regional market is greatly affected by unauthorized copies, which accounted for between 25 to 35 per cent of the legal market (IFPI, 2000).

This is due to a number of factors, including technological progress that has meant that unauthorized copies can be produced in the same way as legal copies and at much lower cost, as well as an infrastructure for the production of CDs and audio tapes that only requires a low level of investment and allows considerable mobility and, a no less important reason, the high prices imposed by the phonographic industry itself (Salvio, 2000).

It was also noted that support for cinemas, theatres, recitals and concerts showed a gradual increase, although it varied according to the type of event. The increase in theatrical activities became more marked from the 1990s onwards and new forms of scenic expression emerged, together with new playwrights and the involvement of students from universities and colleges, as well as the organization of festivals, special summer seasons, competitions and projects supported by the public sector.

In the audiovisual sector, the rental and sale of video tapes also showed an annual increase throughout the region.

Before examining the involvement of copyright industries in each country, it is important to provide an overall view of the situation in the MERCOSUR as whole.[1] In this connection, the national teams attempted to estimate the figures for 1998, based on the data available, as this was the most recent year for which they could obtain official figures in some countries. Consequently, this overall picture will be subject to modifications as and when the authorities publish the relevant data.

In terms of value added, Table 7 shows that, in 1998, copyright industries in the MERCOSUR accounted for over US$61 billion, slightly less than 6 per cent of the region's GDP. The different countries have varying shares, reflecting the sizes of their economies and any differences in the estimation methods used by each national team, as mentioned above. Brazil's share was over 4/5 of the GDP of copyright industries at the regional level, whereas that of Paraguay was the lowest in this regard. Argentina came second, Chile was third, and Uruguay fourth.

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[1] The case studies showed variations in terms of the types of activity but, as indicated above, the methodological reference was that of Carvalho (2000).

Table 7
Value added of copyright industries in the MERCOSUR – 1998

Country	ValUE ADDED	
	US$ THOUSANDS	in TERMS of MERCOSUR
Argentina	6,440,000	0.59
Brazil	53,034,026	4.82
Chile	1,243,000	0.11
Paraguay	98,654	0.01
Uruguay	705,000	0.06
Copyright in MERCOSUR	61,520,680	5.59
MERCOSUR	**1,100,644,816**	**100.00**

Source: National studies

In terms of people employed, Table 8 shows that in 1998 almost two million people in the region were employed in copyright-related economic activities. At that time, the sector accounted for around 4 per cent of the total number of people employed in the MERCOSUR, for a share of regional GDP of just under 6 per cent. In 1998, Brazil had the largest number of people employed in copyright industries. The relative share of employment in this industry at the regional level, however, was less than 4/5. In other words, Brazil's contribution in terms of persons employed was lower than its share of GDP. The same situation occurred in Uruguay and Chile. Argentina's figures for both persons employed and contribution to GDP, on the other hand, were similar, whereas Paraguay, in relative terms, employed more people than it contributed to the GDP of copyright industries in the MERCOSUR.

Table 8
Persons employed in copyright industries in the MERCOSUR – 1998

Country	Persons employed	
	in 1,000	% in MERCOSUR terms
Argentina	267	0.6
Brazil	1,326	2.8
Chile	149	0.3
Paraguay	56	0.1
Uruguay	46	0.1
Copyright in the MERCOSUR	1,844	3.8
MERCOSUR	**48,112**	**100.00**

Source: National studies

As can be seen from Table 9, the foreign trade of copyright industries at the regional level showed a marked deficit. This is a reflection of the relatively low volume of exports of these economic activities at the regional level, less than 2 per cent. Brazil accounted for just under half of these exports, whereas the shares of Argentina and Chile were the same, namely, 24.5 per cent, a figure that is way above their respective contributions to the copyright GDP at the regional level. This means that exports are important components of copyright-related economic activities for the latter two countries. As far as exports are concerned, the shares of both Uruguay and Brazil were markedly lower than their respective contributions to the GDP of copyright industries.

Turning to imports, copyright-related activities were important elements in the regional economy, accounting for 6.7 per cent of imports, higher than their contribution to the regional GDP. Argentina had the highest share, representing around half of the copyright-related imports into the MERCOSUR. The situation was similar in Chile, with over ¼ of this industry's regional imports. The shares of both Argentina and Chile were higher than that for Brazil and, taking into account the size of their respective economies, this underlines the high level of economic openness in the Andean countries. The share of imports in Paraguay and Uruguay was modest in the MERCOSUR context and showed marked variations. Uruguay's share of imports of copyright-related goods was similar to its contribution to the GDP of copyright industries. Although Paraguay had the lowest share of imports, the figure was still 20 times higher than its contribution to the GDP of the copyright industry in the MERCOSUR.

As expected, the trade balance for these transactions was decidedly negative. From this point of view, the copyright industries are of great importance in the foreign trade of the countries studied. The deficit caused by the gap between the imports and exports of copyright industries accounted for over 1/3 of the overall trade deficit of the countries concerned. In absolute terms, this deficit amounted to over US$5 billion in 1998, with the highest figures in Argentina and Chile, followed by Brazil, Uruguay and Paraguay.

Table 9
Foreign trade in goods of the copyright industry - 1998

Country	Foreign trade					
	Exports (a)		Imports (b)		Balance – (b)	
	U$ millions	(%)	U$ millions	(%)	U$ millions	(%)
Argentina	214.4	0.26	2,828.0	3.00	- 2,613.6	18.30
Brazil	410.8	0.50	1,226.4	1.28	- 855.6	5.99
Chile	213.8	0.26	1,735.9	1.81	- 1,522.1	10.66
Paraguay	3.0	0.00	214.1	0.22	- 211.1	1.48
Uruguay	21.4	0.03	356.3	0.37	- 334.9	2.35
Copyright in the MERCOSUR	863.4	1.06	6,360.7	6.65	- 5,323.2	37.27
MERCOSUR	**81,433.0**	**100.00**	**95,714.0**	**100.00**	**- 14,281.0**	**100.00**

Source: National studies

The major sectors in each country, based on their importance in terms of value added and persons employed, are described below.

1.1 Argentina

The most important activities in the core copyright-protected industries were the publication of newspapers, reviews and periodicals; radio and television activities; advertising and the so-called data processing and related activities sector.

In the distribution subsector, the activities were telephone, telegraph and telefax communications services, which also transmit material that is not copyright-protected. The other important activities were retail sale of equipment, articles, furniture and appliances for domestic use and the activities of business, professional, trade union, religious, political and other organizations.

In related industries, the most important activities were the manufacture of radio and television sets, sound and video recording and reproduction equipment and related products. As far as partly-related industries are concerned, activities such as printing, followed by architecture, engineering and other technical activities represented an important part of the wealth and jobs generated.

1.2 Brazil

The principal or core group encompasses activities that create products or works primarily protected by copyright. The relevant activities were publishing and printing of protected material. Publishing was deemed to be a key activity in the editorial and phonographic branches. As far as services are concerned, data processing was particularly important in this group, together with advertising. Television also played a leading role. In addition to employing large numbers of people, this branch also showed a high level of concentration in certain enterprises, a typical feature of monopolies.

Among the related activities, printing and reproduction of recorded material and maintenance services for office and data processing equipment were particularly important. The production of audio, sound, image and cinematographic equipment employed large numbers.

The distribution group, as mentioned, includes the transport of goods, bookshops, record stores and others forms of wholesale or retail distribution. In other words, making the protected material available for consumption. From this perspective, trade was extremely important, accounting for almost all the firms (98 per cent) and persons employed. Wholesale trade includes two types of activity: electrical household appliances and equipment for personal or domestic use, including radio and television sets, film and photographic cameras, *inter alia*; and wholesale trade in office supplies and paper products (including books, newspapers and other publications).

The partly-related group includes engineering and architectural services.

In Brazil, the cultural industry showed a strong bias in favor of the audiovisual industry. This branch is fairly typical, and in 1997 its turnover exceeded US$5 billion. Brazilian television plays a major role in copyright-related activities in Brazil and over 80 per cent of the audiovisual industry’s profits come from advertising and subscriptions to television channels.

1.3 Chile

Among the core activities, the publication of newspapers, reviews and periodicals played a leading role, followed by complementary data processing services, although their relative share has fallen in recent years; advertising services also occupied an important place.

Among distribution activities, the sale of books, software and computer equipment stands out, even though the majority of the latter was imported. Retail sale of books was also highly important.

In the support or partly-related industries, paper manufacturing undoubtedly occupied the first position, followed by printing, equipment, and local manufacturing in the radio and television sectors, although many goods under these headings were imported.

1.4 Paraguay

Of the 68 activities composing the chain, it was only possible to record data for seven, although the aggregated headings covered 13 activities. The jobs generated in the activities as a whole were 3.3 per cent (1992). The most important activities were retail sale, radio and television broadcasting, and publishing (core activity). Retail sale is partly included in the informal sector.

1.5 Uruguay

In 1997, around 6,000 economic units belonged to the core sector of copyright industries. Over one quarter, however, equivalent to 1,570 units, corresponded to other business services and it is impossible to distinguish between activities that really form part of the ensemble of copyright industries and others that do not really belong there. Another 560 units belonged to the partly-related industries.

There were over 6,770 units in the distribution sector, although some forms of distribution such as telecommunications, particularly cable TV, were in fact “producers” in the ensemble of copyright industries.

Another 158 units were part of copyright-related industries, with the manufacture of optical, photographic and cinematographic equipment, etc., occupying the leading place. Uruguay has virtually no industry producing consumer equipment and cultural products or software.

2. Value added generated by the copyright industries in the MERCOSUR countries and Chile

As already mentioned, the marked differences in the data available for countries have made it impossible to establish a regional indicator for the value added produced by copyright industries in the MERCOSUR. On the one hand, the branches of activity in each of the four categories of the industry vary from country to country and, on the other, national statistics were available for different years. Consequently, the only valid methodological option is to present the information for each country and, on that basis, to draw conclusions for the region as a whole.

2.1 Argentina

In Argentina, the total value added generated by industries protected by copyright and related rights amounted to Arg$11,257 million in 1993. Distribution activities accounted for the largest share (62 per cent), followed by the core industries with a share of 25 per cent. Partly-related industries provided 9 per cent of the value added and, lastly, related industries represented 3 per cent of total value added.

In Argentina's case, the share of the distribution subsector has been over-estimated because the activities covered in the census were not broken down.[2] If telephone communications services, etc., and the activities of business, professional and other organizations are excluded from the distribution sector, its share of the GDP and employment would be 1.6 per cent. On that assumption, industries protected by copyright and related rights generated a gross value added of around Arg$7 billion and the core industries represented some 40 per cent of this gross value added, equal to the distribution subsector. Partly-related industries generated some 15 per cent and related industries around 5 per cent.

In other words, the overall share of industries protected by copyright and related rights would be 3.5 per cent and 4.1 per cent of employment and gross value added respectively. In any event, the most accurate estimate would be a figure situated between these limits, although more likely to be closer to the lower figure.

It is interesting to analyze the contribution to gross value added for the categories in each subsector. The most important activities in the core industries were the publication of newspapers, reviews and periodicals (24.8 per cent), followed by radio and television activities (18.3 per cent), advertising (13.5 per cent) and the so-called data processing and related activities sector (12.3 per cent). More traditional cultural activities made a much smaller contribution to the gross value added of this subsector, accounting for a total figure of less than 20 per cent[3] with a share in the economy's GDP of less than 0.3 per cent. These results are similar to the global trend towards an increase in the importance of modern communications media such as the television and radio, together with data processing and advertising. The latter plays a leading role in the financing of these industries, especially in the regular production of goods and services such as periodicals, audiovisual works, television, video and cinematographic works, web pages, and the radio.

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2 For certain branches of activity such as "telephone, telegraph and telex communications services" and "activities of business, professional, trade union, religious, political and other organizations", for example, it was not possible to distinguish the share of the headings corresponding to the distribution of copyright-protected material from other types of activity.

3 This subgroup includes, for example, activities such as the publishing of books, pamphlets, scores and other publications (3.7 per cent of the gross value added of the core industries), production and distribution of films and video tapes (3.3 per cent), musical and theatrical activities (2.1 per cent) and publication of recordings (1.5 per cent).

In the distribution subsector, almost 48 per cent of the value added came from telephone, telegraph and telex communications services, which, as noted above, obviously do not only transmit copyright-protected material. Retail sale of appliances, articles, furniture and household equipment provided 13.9 per cent of the gross value added, but the contribution under activities of business, professional, trade union, religious, political and other organizations has been over-estimated at a figure of 12.9 per cent. The retail or wholesale sale and marketing of books, newspapers, reviews, bookshop articles, etc. accounted for barely 7.5 per cent. In this subsector as well, the predominance of the telecommunications sector is consistent with the growing importance of this type of activity at the global level.

In related industries, around 70 per cent of the value added was provided by the manufacture of radio and television sets, sound and video recording and reproduction equipment, and related products. The manufacture of office, accounting and data processing equipment provided 20 per cent of the gross value added in this subsector and the manufacture of optical instruments and photographic equipment accounted for around 9 per cent.

Lastly, in the partly-related industries, printing accounted for over 50 per cent of the value added, followed by architecture, engineering and other technical activities, with 38 per cent.

2.2 Brazil

Estimates of the value added of copyright-related activities in Brazil in 1998 exceeded US$53 billion (Table 10).

The share of the groups highlights the importance of the core group and the distribution group, which together accounted for almost 90 per cent of the value added. The distribution group represented 43.5 per cent and the core group 43.4 per cent of the value added of copyright-related activities in Brazil. The share of partly-related activities was 7.6 per cent. The related activities group occupied the 4th place in terms of value added, with a figure of 5.4 per cent. Compared with the trend in the American economy in 1996 (11.4 per cent), the relative share of the related activities group in Brazil was much lower.

A comparison of the information on Brazil and on the United States of America (according to Siwek & Mosteller (1999)) shows that the core group and the distribution group are the two most important groups in both countries. In the United States of America, however, the core group's share exceeds 50 per cent, whereas in Brazil the distribution group and the core group have the same share. The main reason is that the various categories in the structures making up the cultural economy prefer to import products. One significant example is the cinema. As shown by the study on Brazil's cinema economy (Ministry of Culture, 1999), the key issue in audiovisual production is distribution. This applies to both the cinema and radio and television. The technical and financial resources are concentrated in the large radio and television broadcasting firms which operate in networks, distributing programmes through their subsidiaries. As noted above, in the CNAE categorization of activities, distribution is included under telecommunications (IBGE, 1997). The same applies to pay, cable and satellite television. Internet activities, which are growing rapidly in Brazil, are also classified under distribution.

Table 10
Distribution of groups according to value added – 1998

Description	Value added in 1998 values	
	US$ thousands	%
Total General Register of Businesses (IBGE)	787,349,398	100%
Total copyright industries (a+b+c+d)	53,034,276	6.74%
a – Core group	21,238,228	2.70%
b –Distribution group	21,588,529	2.74%
c – Related industries group	6,187,223	0.79%
d – Partly-related industries group	4,020,296	0.51%

Source: General Register of Businesses (IBGE)
Annual Industrial Survey IBGE
Annual Trade Survey IBGE
Estimates: GEOPI

In the core group, industry accounted for less than 1/5 of the value added and services took up the remaining 4/5. Data processing generated the highest value, representing almost 45 per cent of the value added in this group. In 1998, advertising's share of the core group amounted to 10 per cent. Radio and television activities in 1998 accounted for 6.3 per cent of this group's value added. Lastly, in the core group, other artistic and cultural activities showed a low figure, 2 per cent in terms of generating value, despite their absolute and relative predominance in terms of people employed. The vast potential of these activities as regards their ability to generate jobs should be underlined.

The analysis of the related activities group will not include services for the maintenance of office and data processing equipment because the four-digit figures are not available and, consequently, the group's contribution in terms of value added has been over-estimated. The printing and reproduction of recorded material have been distinguished from the publishing sector and provided just over 40 per cent of the value added of industrial activities in this group. Compared with industrial activities as a whole, which include publishing, they accounted for less than 20 per cent of the group's value added. The production of computers and peripherals provided value added of 17 per cent. Many firms set up in Brazil rather than import ready-made equipment. In the industry, the production of audio, sound, image and cinematographic equipment represented 40 per cent of the value added of related activities.

In the distribution group, telecommunications accounted for 79 per cent of the value added, while the figure for trade was 18.6 per cent and for rental of office equipment (including data processing equipment) just over 3 per cent. In trade, the wholesale branch had a modest share compared with the retail branch: 1.9 per cent and 16.8 per cent respectively. In the retail sector, household and personal equipment occupied an important place with around half of the value added for retail trade. This included the sale of audio, sound and image equipment, as well as musical instruments. The figure tends to be over-estimated because it also includes electrical household appliances for general use. Retail sale of books, reviews and stationery came next, accounting for just over 4 per cent of the distribution figure. Retail sale of data processing machinery and equipment accounted for slightly less than 4 per cent of the value added in this group.

2.3 Chile

Copyright-related activities' accounted for around 12 to 15 per cent of the industrial sector, 8 to 18 per cent of the trade sector, and one third of the services sector. In terms of relative importance, in copyright's total contribution to value added, core activities represented between 45 and 50 per cent depending on the year, related activities around 40 per cent, and distribution some 8 to 12 per cent.

Among the core activities, the publishing of newspapers, reviews and periodicals predominated with a relative share of around 40 per cent over the period, followed by complementary data processing services, accounting for around 20 per cent at the beginning of the period and a lesser share towards the end; advertising services also played an important role, with 15 to 17 per cent depending on the year.

The relative share of phonographic reproduction continued to increase slowly but surely, reaching 10 per cent at the end of the period, although cinematographic production fluctuated because it depends on financing by the State Promotion Fund and on projects that are financially attractive. It is nonetheless an expanding activity and it is hoped that it will provide a greater share of copyright value added over the next few years.

As far as distribution activities are concerned, the sale of books, software and computer equipment stood out, although the section on foreign trade will show that the majority of the latter was imported. Retail sale of books, with a share of around 40 per cent, was the most important. After the data processing sector, with around 22 to 30 per cent of the total, retail sale of discs contributed 16 per cent in recent years, followed by the showing of cinematographic films with a similar percentage.

Among the support or related activities, paper manufacture was certainly important, with a figure of some 65 per cent, followed by printing, with a share of 25 to 30 per cent; the remaining share was taken up by locally-manufactured equipment in the radio and television sectors, articles which are also imported to a large extent.

2.4 Paraguay

The value added of activities covered by copyright and associated activities amounted to 1 per cent of Paraguay's total value added, taking the average for the five-year period 1995-1999. The most important activity was publishing, with 80 per cent (core activity). Regarding the trend during this period, activities as a whole decreased by an average of –3.3 per cent annually; almost all activities in the chain showed negative rates, with the exception of artistic ceramics, whose share was modest. Expressed in terms of the figure 100 for 1995, from 1997 onwards there was a steady downward trend, reaching a figure of 90.1 in 1999.

2.5 Uruguay

A first estimate derived from the latest National Economic Census containing data for 1997 shows that industries directly or indirectly related to culture and information yielded a gross value of US$1,652.9 million and gross value added of US$887.2 million. The core copyright industries' share of this value added was 39.8 per cent, while distribution accounted for 56.9 per cent, and related industries and industries partly covered by cultural rights for 3.3 per cent.

As is the case in other countries, distribution activities combine activities that are properly part of the cultural and information sphere with others that are not, so there is a problem of over-valuation.

Adjusting the estimates[4] gives a more accurate figure for the Product and the impact of copyright industries on the country's GDP. Between 1997 and 1999, industries directly or indirectly involved in culture or information generated a gross value of something over US$2,500 to US$2,600 million and a gross value added of around US$1,700 million. If branches of trade and services that are only distantly involved in intellectual production are excluded, the figures for the gross value of the production of copyright industries at the end of the 1990s was between US$2,000 and US$2,100 million, while the corresponding gross value added amounted to between US$1,300 and US$1,400 million.

On the basis of this information, it can be asserted that in Uruguay copyright industries accounted for 6 per cent of GDP in 1997 and 6.5 per cent in 1998/99. This figure can be broken down as follows: cultural industries and services (2.3 per cent and 2.5 per cent in 1997 and 1998/99 respectively); software industry (0.5 per cent and 0.6 per cent respectively); distribution of equipment for cultural use and information (0.7 per cent); telecommunications (2.8 per cent and 3.2 per cent respectively); and related industries and industries partly covered by copyright (0.1 per cent).

3. The copyright industry and employment in the MERCOSUR countries and Chile

Activities directly or indirectly related to copyright as a whole are responsible for generating a high percentage of urban employment in the MERCOSUR countries, which exceeds their contribution to value added. Below are some of the principal features in each country.

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[4] To overcome this problem and in particular the limitations imposed by classification by branch, production chains and sectors such as books and discs that were dispersed have been reclassified to allow directly or indirectly cultural activities and information to be distinguished from others. The following activities were also taken into account: (a) an estimate of the "non-cultural" sale of firms with cultural activities, for example, video rental stores that also sell toys, electronic goods, etc., or organizers of shows and dances who also sell beverages, etc.; (b) wholesale and retail sale of equipment needed for the cultural consumption of information.

3.1 Argentina

The share of industries protected by copyright and related rights in employment has increased substantially, from 2.4 per cent in 1985 to 5.3 per cent in 1994.[5] This increase is mainly due to the distribution subsector, which increased its share of employment fivefold, whereas the core industries remained virtually at the same level, as did the other subsectors.[6]

If the two distribution subsectors responsible for the over-valuation of the share of copyright industries are excluded, the size of the increase in the share of industries protected by copyright and related rights in total employment between 1985 and 1994 is significantly modified, from 2.4 per cent to 3.5 per cent. It can therefore be stated that these industries contributed more than the average economic sector to the generation of jobs during the period under review.

In 1994, of the 508,000 jobs in industries protected by copyright and related rights, over 65 per cent were in the distribution subsector; the core industries, on the other hand, accounted for 23 per cent of jobs and partly-related industries for 10 per cent. Related industries barely reached the figure of 2 per cent. If telephone communications services, etc., and the activities of business and political organizations are excluded, the distribution sector's share was 45 per cent of the jobs generated by industries protected by copyright and related rights, and the figure for core industries was 35 per cent. The distribution subsector showed relatively higher growth than the core industries between 1985 and 1994.

In the distribution subsector, in 1994 over 70 per cent of the jobs were generated by three categories: activities of business, professional, trade union, religious, political and other organizations (42 per cent), telephone, telegraph and telex communications services (11.1 per cent), retail sale of equipment, articles, furniture and household appliances (17.4 per cent). The drop in retail trade in books, reviews, newspapers, bookshop articles, paper and paperboard is significant. In 1985, this trade generated 50 per cent of the jobs in the distribution subsector, whereas in 1994 it barely reached 11 per cent (retail sales 8.9 per cent and sales outlets 2.1 per cent). Even if the categories that led to an over-estimation of these industries' share of the economy are excluded, the relative share of retail sale of books, reviews, newspapers, etc. still showed a noticeable decrease, from 50 to 27 per cent.

In related industries, the manufacture of radio and television sets, sound and video recording and reproduction equipment and related products accounted for over 61 per cent of the jobs in this subsector in 1994.

Lastly, in 1985 and 1994, in the partly-related industries, around 90 per cent of the jobs in this subsector were in printing and binding activities, technical and architectural services.

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5 For employment, information is also available for 1985, although it concerns the total number of persons employed.

6 There are two reasons for the increase in the distribution subsector's share: firstly, the 1985 census did not include telecommunications services. Secondly, there is no breakdown of the figures in the category "activities of business, professional, trade union, religious, political and other organizations".

Some basic conclusions can be drawn from these data. Firstly, the core industries' share of employment and gross value added is relatively low, but is similar to the trend in other developing countries. If all the industries protected by copyright and related rights are included, their relative share of Argentina's economy is larger than is the case in the United States of America. It should nonetheless be emphasized that, within the distribution subsector, the majority of activities are not related to the distribution of material protected by intellectual property rights so, at least in the case of Argentina, this subsector's share has been over-estimated.

Taking into account the minimum estimate for the share of cultural industries in GDP (4.1 per cent) and employment (3.5 per cent), it can be seen that the importance of these activities exceeds that of other industries such as "food and beverages" (3.6 per cent of GDP and 2.9 per cent of jobs), "chemical substances and products" (1.3 per cent of GDP and 0.7 per cent of jobs), electricity, gas and water services (2.3 per cent of GDP and 0.8 per cent of jobs) and "extraction of petroleum and gas" (2.3 per cent of GDP and 0.3 per cent of jobs). Consequently, the copyright and related rights industries generated a relatively larger share of employment than other sectors of activity between 1985 and 1994.

Another important fact is that among the core industries radio and television, advertising and data processing clearly stand out compared with "traditional" cultural industries (books, theatre, etc.). This trend is not particularly striking in terms of the current international scene or of an economy such as Argentina's in which the services sector has increased its relative share and where there has been substantial progress in new information and communications technologies.

3.2 Brazil

In 1998, copyright-related economic activities accounted for 5 per cent of people employed. This is not only significant in relative terms, but in absolute numbers as well. In 1998, more than 1 million people worked in these activities in around ¼ million firms.

The two most important groups in terms of job generation were the core and distribution groups, accounting for over 80 per cent of jobs in copyright-related activities. Core activities absorbed around one half of jobs and distribution just over 1/3. Related and partly-related industries each accounted for less than 1/10 of persons employed in copyright-related economic activities.

The supply of services and trade accounted for ¾ of the persons employed. Retail trade was particularly important, especially the sale of periodicals, reviews and stationery, in the form of small units employing less than three people per outlet. In trade, the ratio of persons employed/firms was the lowest, with just under 1/3 of the total. Services, on the other hand, cover a broad range of activities.

Industry[7] accounted for ¼ of the persons employed. As mentioned above, the major communications groups in Brazil, which own the periodicals and reviews with the widest circulation, have their own printing facilities. In addition, publishing is a sector that necessarily requires labour.

Services accounted for ¾ of the persons employed. In this category, computer-related activities were particularly important and this is reflected in the core group. Around 1/3 of the persons employed in this group worked in such activities. Within this branch, data processing was the most important activity. In the advertising and photographic categories, advertising had the major share, employing around ¾ of the total. Cultural and information activities accounted for ¼ of the persons employed in the core group.

Cinematographic and video activities[8] accounted for less than 5 per cent of the persons employed in the core group. The figure for those employed in radio and television was below 10 per cent.

This industry had a large share in the related industries group, over 80 per cent of the persons employed, however, it includes a wide variety of jobs.

In the distribution sector, trade was very important, accounting for the majority (81 per cent) of the persons employed. The share of wholesale trade was somewhat low in terms of persons employed (6 per cent), only providing a few more jobs than the typewriter rental sector.

Telecommunications accounted for 1/5 of the jobs in large firms that transmit sound, images, data and other types of information by cable and broadcasting by relay or satellite. This type of activity has increasingly become the basis for distribution of copyright-protected activities.

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7 The core group includes activities that create products or jobs primarily protected by copyright. Consequently, the relevant activities concern publishing and printing of protected material. Publishing is considered to be a key activity in the editorial and phonographic branches. In the course of interviews with representatives of the phonographic and books branches, it was noted that the practice is to employ third parties to reproduce discs and books. In the newspapers and reviews branch, the largest firms have their own printing facilities. Printing and reproduction were therefore excluded and were classified under the related industries group.

8 Cinematographic and video activities include the production of films and video tapes (including independent production for television), the distribution and projection of films and videos. These categories of activity do not include the rental of video tapes to the public in general (IBGE, 1997:197). The latter is to be found in the category of rental of personal and household objects, which covers a broad range such as clothing and fashion accessories, furniture and household appliances, electrical household equipment, medical and paramedical articles, sports articles and equipment. This category has not been taken into account because of the risk of over-estimation. A study by the Ministry of Culture (1999), however, estimated that in 1998 there were 5,000 video clubs (shops, not firms) in Brazil. According to this source, they represent a market that is extremely susceptible to trends in demand, with firms opening and closing depending on the expansion or decrease in demand for this type of service. In this study, it is mentioned that the National Survey of Sample Households (PNAD) encountered the same problem when estimating the persons employed in this sector.

3.3 Chile

Between 1990 and 1998, copyright-related economic activities employed 120,000 to 130,000 people and provided 2.7 per cent of employment at the national level. The rate of growth of these activities over the period amounted to an annual cumulative figure of 2.4 per cent, slightly higher than the increase in the employment rate in Chile of 2.1 per cent and 1.5 per cent in Greater Santiago.

The expansion in jobs in copyright-related activities was higher than that in the industrial and services sectors (cumulative annual figures of 1.3 per cent and almost 2 per cent respectively), and was only exceeded by the trade sector, where employment rose by 2.7 per cent in the years under review.

For core activities, where employment rose by just over 1 per cent annually, two sectors accounted for 70 per cent of the jobs: data processing services, with 35 per cent of the total, and books, pamphlets, scores and advertising services with 36 per cent, followed by radio broadcasts with 13 per cent and book publishing with 7 per cent.

Jobs in the distribution sector increased by 4.2 per cent annually, with retail sale accounting for the lion's share at 80 per cent. Retail sale of discs and videos represented 8 and 6 per cent respectively, somewhat below the share of film projection with 4 per cent.

Employment in the related industries rose by 3.2 per cent annually during the period and over 98 per cent of the jobs in this sector were in the paper and printing industries, amounting to close to 40 per cent and 60 per cent respectively.

3.4 Paraguay

The only employment figures are for the census year 1992 so they are not too far removed from the period under review and can be used to a certain degree because in general the country has not experienced any major changes up until now.[9]

The jobs generated by these activities as a whole represented 3.3 per cent (1992). The largest numbers of jobs were in retail sales, radio and television broadcasting (core activity). Retail trade was, however, partly included in the informal sector.

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[9] The census information covered 30 activities, but with aggregations 51 of the 68 activities selected were covered . A number of estimates had to be made for some figures in the census because they had been combined. In trade, retail sale and other types of sale, legal and accounting services, and business consulting, only 5 per cent concerned the copyright-related production chain.

3.5 Uruguay

In 1997, according to the Economic Census, 23,342 people worked in core activities in copyright-related industries – equivalent to 39.4 per cent of those involved in intellectual production. Strictly speaking, if telecommunications (telephones, cable television, data transmission, etc.) are included, this figure rises to 31,680 people (or 53.8 per cent).

Industries partly covered by copyright and related industries employed 2,539 people (or 4.2 per cent of the total). Distribution activities were, relatively speaking, the largest employers, with 33,368 employees (56.3 per cent) – figures which drop to 24,850 and 41.9 per cent if telecommunications are excluded.

Copyright industries, with almost 60,000 direct and indirect jobs, represented 4.9 per cent of the persons employed in Uruguay. The activities of the core group, including telecommunications, accounted for 2.6 per cent.

These figures do not include the thousands of people who practise the arts and culture in an amateur fashion, for example, three-dimensional arts or music, nor family members who work without pay in some activities such as making handicrafts, whose numbers are estimated to be between 1 and 2 family members per craftsman.

4. Foreign trade of the copyright and related rights industries in the MERCOSUR countries and Chile

The purpose of this part of the study is, on the one hand, to analyze the import and export performance of products which, by their nature, are protected by copyright, for example, books, periodicals, music scores, albums, recorded phonographic discs, recorded magnetic tapes, cinematographic films, architectural plans and designs, advertising material, etc., which are termed the core group in the study; and, on the other, products that are used exclusively with copyright-protected material such as radio and television sets, computers, printing machines, record players, tape recorders, projectors, cameras, musical instruments, etc., which are called related industries in the study.

4.1 General overview

MERCOSUR's foreign trade in 1999, although significant, shows that its members had a small share of trade compared with the rest of the world. Total imports by member countries amounted to US$80 billion, but goods originating in MERCOSUR countries only accounted for 20 per cent of this total, i.e. US$16 billion. The European Union was the major source of imports, with US$22.9 billion while the United States of America exported goods worth US$17.3 billion to the MERCOSUR countries. MERCOSUR is the third largest source of imports in the region. Table 11 shows the trend in imports. It is worth noting that, at the close of the past decade, regional imports fell by a greater amount than imports in general.

Table 11
MERCOSUR imports (in US$ millions) 1990-1999

Origin	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	% Var. 1998-1999
Total intra-common market	4,103	5,097	7,282	9,059	11,708	13,972	17,151	20,699	20,905	16,015	-23.4
Andean Community	933	1,129,	963	903	1,219	1,649	2,006	2,096	1,667	1,863	11.8
Bolivia	271	272	155	130	159	170	200	167	139	67	-51.9
Colombia	105	89	138	106	126	166	163	224	235	235	0.1
Ecuador	24	34	62	95	106	168	186	156	177	156	-116
Peru	149	171	248	156	214	249	303	347	255	223	-12.7
Venezuela	385	562	360	415	614	896	1,154	1,201	861	1,182	37.3
Chile	629	791	942	989	1,259	1,731	1,596	1,801	1,629	1,430	-12.2
Mexico	353	424	605	596	641	1,248	1,554	1,872	1,648	1,157	-29.8
United States	5,528	6,818	7,831	9,495	11,550	15,128	17,106	20,985	20,555	17,337	-15.7
European Union	5,848	7,181	8,664	10,546	15,703	19,595	21,928	25,778	26,479	22,870	-13.6
China	186	124	544	780	1,219	1,682	1,876	2,258	2,280	1,948	-14.6
Asia	116	182	284	419	774	1,116	1,210	1,742	1,866	1,507	-19.3
Japan	1,687	2,045	2,487	2,854	3,671	4,299	3,731	5,080	5,021	3,784	24.6
Rest of the world	7,983	8,537	9,259	10,541	12,057	15,288	15,322	16,682	13,664	12,126	-11.3
Total extra-common market	23,263	27,231	31,575	37,119	48,092	61,736	66,329	78,293	74,808	64,024	-14.4
Overall total	27,367	32,328	38,858	46,178	59,800	75,708	83,481	98,992	95,714	80,039	-16.4

Source: Latin American Integration Association (LAIA)

In 1999, exports amounted to US$74.3 billion, of which just under 20 per cent went to MERCOSUR countries, the second largest destination for exports, equivalent to US$15.5 billion. The European Union received the largest share of MERCOSUR exports, amounting to US$19 billion. Exports to the United States occupied third place, with a figure of US$13.6 billion.

Table 12 shows the trend in MERCOSUR exports and the main destinations.

Table 12
MERCOSUR exports (in US$ millions) 1990-1999

Origin	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	% Var. 1998-1999
Total intra-common market	4,127	5,103	7,214	10,065	12,049	14,441	17,033	20,767	20,500	15,379	-25.00
Andean Community	1,438	1,908	2,287	2,507	2,704	3,440	3,134	3,959	3,979	2,796	-29.70
Bolivia	254	376	499	613	667	790	828	1,185	1,115	758	-32.10
Colombia	249	243	461	506	537	716	630	697	677	403	40.40
Ecuador	169	200	210	223	340	297	255	265	343	165	-51.90
Peru	346	443	459	538	661	754	597	707	737	652	11.50
Venezuela	420	647	659	626	497	883	824	1,108	1,107	816	26.20
Chile	993	1,235	1,600	1,796	2,072	2,757	2,888	3,202	2,984	2,807	-5.90
Mexico	860	1,023	1,392	1,258	1,374	656	962	1,078	1,291	1,408	9.10
United States	9,618	7,801	8,615	9,501	10,876	10,768	11,461	11,830	12,288	13,650	11.20
European Union	14,450	14,790	15,310	14,447	16,743	17,975	18,090	19,340	20,076	19,021	-5.30
China	690	575	679	1,030	1,154	1,614	1,837	2,082	1,663	1,246	-25.00
Asia	1,419	1,322	1,347	1,493	1,699	2,360	2,360	2,203	1,357	1,429	5.30
Japan	2,768	3,035	2,708	2,795	3,053	3,579	3,586	3,661	2,875	2,762	-3.90
Rest of the world	10,069	9,120	9,333	9,153	10,403	12,906	13,595	15,359	14,435	13,817	-4.30
Total extra-common market	42,306	40,808	43,272	43,981	50,078	56,054	57,913	62,706	60,933	58,936	-3.30
Overall total	46,433	45,911	50,487	54,046	62,127	70,494	74,947	83,473	81,433	74,315	-8.70

Source: CEI

The structure of exports shows the considerable importance of foods and beverages and goods not manufactured from natural resources. These two groups together accounted for over ¾ of MERCOSUR's exports. There is a clear division between products manufactured from natural resources and those not so manufactured (which include the majority of copyright-related products). Table 13 shows the main headings in this structure.

Table 13
Structure of exports – 1999

Heading	Share of exports
Fuels	5%
Goods manufactured from natural resources	8%
Manufactured goods	37%
Foods and beverages	39%
Agricultural raw materials	5%
Minerals and metals	7%

As can be seen, MERCOSUR's trade balance shows a deficit. One important source of financing this deficit has been foreign direct investment in the region. In 1999, foreign direct investment (FDI) reached a figure of over US$55 billion, which fell by 38 per cent in 2000 to reach a figure of US$34 billion. This was due to a generalized decrease in FDI, with the exception of Brazil. Chile, on the other hand, showed a net outflow of investment. Table 14 provides a breakdown of this trend.

Table 14
Foreign direct investment in MERCOSUR
in US$ millions, 1999 – 2000

Country	YEAR	
	1999	2000
Argentina	21,958	5,000
Brazil	28,612	30,000
Chile	4,366	(1,130)
Paraguay	66	95
Uruguay	225	180
MERCOSUR	55,227	34,145

Source: LAIA
Estimates: GEOPI

Information for each country is given below.

4.2 Argentina

The analysis of the trend in foreign trade for industries protected by copyright and related rights during the period 1995-1999 covers goods produced by the core industries and related industries.[10]

Firstly, industries protected by copyright and related rights had a negative impact on the trade balance in both goods and real services, with the latter's trade deficit doubling between 1995 and 1999. It is surprising to note that the average annual trade balance (goods and services) for these industries represented around 50 per cent of the average negative balance generated by Argentina during the period under review.

In the services account, a large part of the deficit was due to personal, cultural and leisure services. The negative balance in royalties doubled during this period, due to a large extent to payments abroad, which rose from US$25 million in 1995 to US$52 million in 1999.

[10] See the country report for details of these estimates.

Secondly, Argentina had a marked deficit in all categories of the royalties account. The majority of the royalties debit was due to technical assistance licenses. Throughout the 1990s, the payment of royalties abroad for music rights and licenses for audiovisual works rose sharply, whereas payments for other licenses remained relatively stable. In the case of copyright, the majority of the deficit was caused by payment for foreign music, which largely exceeded the amount of royalties received by local musicians. Royalties for music were responsible for a larger number of transactions than those for books and publications, which showed a more stable balance. The amount received for video and film licenses was minimal compared to the increasing outflow of royalties under this heading.

Concerning foreign trade in goods, industries protected by copyright and related rights generated a trade deficit during the period under review, amounting to an average of almost US$2 billion per year. Although the Argentine economy also showed a deficit, it was much smaller, an average of around US$390 million per year[11], one fifth of the average deficit generated annually by the cultural industries. These industries are therefore responsible for a greater share of Argentina's trade deficit than other sectors.

The core industries accounted for around 66 per cent of the total exports of industries protected by copyright and related rights, and approximately 14 per cent of imports, but in any case they recorded a deficit. Related industries, however, showed a much larger deficit – over US$1,800 million against US$175 million for the core industries. The share of these industries in Argentina's total exports was 1 per cent, but their share of imports on average amounted to 9 per cent during the period under review.

Concerning the geographical trend in these industries' foreign trade, a distinction has to be drawn between the core industries and related industries, as well as between imports and exports. If the cumulative volume of trade for the period 1995-1999 is taken, it can be seen that the United States of America provided the largest share of these industries' imports, with around 35 per cent. It occupied first place for both the core industries and related industries, although its share of the latter was less. Spain generated the second largest share of imports by the core industries, with a slightly lower volume than the United States of America. Chile's share was 9 per cent, while Germany and Brazil accounted for 4 per cent each. In all, these five countries covered 73 per cent of imports by the core industries. Imports by related industries, on the other hand, showed the strong position of South-East Asian countries in the following order of importance: Japan (9 per cent), China (7 per cent), and Malaysia (5 per cent). Brazil provided 8 per cent of the related industries' imports, although its share increased throughout the period, rising from less than 2 per cent in 1995 to 14 per cent in 1999. These figures are logical bearing in mind that Spanish-speaking countries such as Spain or Chile export books, reviews, etc. to Argentina, whereas South-East Asia provides computers and electronic equipment.

With regard to exports, Brazil and Uruguay were Argentina's main trading partners in the MERCOSUR and their markets were the most important for these industries, with a volume of almost 50 per cent of sales abroad, a trend that can be found in Argentina's other industrial sectors. The United States of America came in third place, mainly due to its importance for the related industries. Lastly, Chile and Paraguay were also large markets. For the core industries, there was a similar breakdown among the various countries, although Chile occupied a more important place and Mexico replaced the United States of America.

[11] The value of imports at FOB prices was used in making these calculations.

In conclusion, it can be stated that the geographical trend in imports is slightly more diversified than the trend in exports; five countries covered 60 per cent of imports, whereas the same number of countries accounted for 74 per cent of exports. The destination for exports shows a strong bias in favour of the MERCOSUR member countries and Chile, together with the United States of America.

As to trade by category of goods, in the core industries, publishing (Chapter 49 of the customs tariff nomenclature, with the exception of advertising material, etc.) had the largest share both of exports (74 per cent) and imports (52 per cent), with books, pamphlets and printed matter predominating in the industry. In second place, media recorded with various types of intangible material – mainly computer programs – provided a large share of imports (almost 34 per cent). In third place came articles for the advertising sector (posters, signs and similar articles and advertising material, commercial catalogues and similar articles), which accounted for 8 per cent of imports and 6 per cent of exports.

When analyzing the figures for music products and cinematographic films, it is important to remember that a large proportion of the trade with the rest of the world is through the assignment of copyright and the granting of licenses for audiovisual works respectively, which generated around US$51 million of payments abroad in 1999. These sectors' small share of the core industries' imports and exports should not, therefore, be taken as a reliable indicator of the flows they really generate.

The foregoing leads to some conclusions. Firstly, the industries protected by copyright and related rights are in deficit, accounting as a whole for almost 50 per cent of the economy's deficit in the balance of goods and services. Trade in goods generated almost 96 per cent of this average annual deficit and the rest was due to services. The deficit generated by the royalties account doubled between 1995 and 1999.

The core industries provided the major share of exports, while related industries accounted for an average of more than 85 per cent of the annual imports of industries protected by copyright and related rights. This is not particularly striking because Argentina has comparative advantages in the first type of activities, whereas it has shown that it is not particularly competitive in related industries and has become a large-scale importer of such goods.

The geographical trend in trade is different for imports and exports. Sales abroad – both by core and related industries – were mainly to markets in the MERCOSUR member countries, 50 per cent alone went to Brazil and Uruguay, and to Chile, a trend that is common to the economy as a whole excluding commodities and other low value added goods. The origin of imports, on the other hand, was slightly more diversified and differed for related industries and core industries. The United States of America played a leading role for both industries, but in the case of related industries three South-East Asian countries and Brazil were also major sources of imports. For the core industries, Spain was almost at the same level as the United States, and the two together accounted for almost 60 per cent of imports by the core industries. Lastly, a high proportion of imports came from Brazil and Chile.

Regarding the types of goods marketed, the publishing industry accounted for the largest share of the core industries' exports and over half of their imports. For related industries, radio and television sets and data processing goods represented almost 80 per cent of imports. For exports, sound reproduction and recording equipment played a leading role, followed by radio and television sets and computer equipment.

4.3 Brazil

Exports of copyright-protected products were below US$450 million at the end of the 1990s, while total imports stagnated at US$1.3 to US$1.4 billion. The deficit ranged from US$1.321 billion in 1997 to US$200 million in 2000, reflecting the stagnation in imports rather than an increase in exports, even though the rise in the latter was significant.

Like imports, the high figures for total exports were generated by products in the related industries group, with over 80 per cent each year. Exports of copyright-protected products remained fairly stable at the close of the 1990s, around US$42 million for the core group and US$375 million for the related industries group, with a slight increase in exports by the core group. This growth was possibly related to the creation of the MERCOSUR, which has become a steadily growing market for Brazilian exports in many sectors of the economy.

The outcome of this virtual stagnation in exports compared with the high figures for imports was reflected in the deterioration in the trade balance of these products. The trade deficit started to decline in relative terms, but in absolute terms it remained high.

At the end of the 1990s, total imports of copyright-protected products up to 1998 ranged from US$1.3 billion to US$1.4 billion (the figure of US$1.7 billion for 1997 was an exception and the following year the figure returned to the previous level). As of 1999, there was a noticeable decrease of over 40 per cent in comparison with 1996.

When the two groups are examined separately, it can be seen that the core group accounted for less than 40 per cent of total imports of copyright-protected products, whereas products of the related industries group represented the major share, with over 60 per cent, in all these years.

The figures for exports by destination show a very different trend. On the one hand, the largest proportion of copyright-protected products was exported to developed countries. The United States of America took the major share of these exports and Europe only absorbed 3 per cent of Brazilian exports of copyright-protected products.

It is interesting to note that exports to the MERCOSUR region and Chile have steadily increased. This confirms the above hypothesis that the growth trend in global exports was directly due to the creation of the MERCOSUR in the mid-1990s. Unlike imports, the majority of which came from Argentina and Chile, the highest volume of exports by the MERCOSUR region and Chile went to Argentina, which absorbed over 70 per cent of the total exports to the region.

Concerning imports, as expected, on average 70 per cent of Brazilian imports of copyright-protected products came from developed countries. There was, however, a balance between imports from the United States of America and Europe.

There was a large volume of imports originating in the region (MERCOSUR and Chile), the majority of which came from Chile and Argentina, representing an average of over 95 per cent. Imports originating in the region (MERCOSUR and Chile) showed a marked upward trend. Although the analysis for the year 2000 only goes up to the month of September, at that date figures similar to those for the best previous years (1998 and 1999) had already been recorded.

In conclusion, total imports of copyright-protected products remained at a high level, in the area of US$1.3 billion. Nevertheless, a downward trend can be perceived. The related industries group accounted for over 60 per cent of imports and over 80 per cent of total exports.

Total exports of copyright-protected products remained at a reasonable level of around US$400 to US$500 million. A slight increase in exports of products by the core group was noted.

Products of the publishing sector had the largest share of both imports and exports of copyright-protected products, while products in the music recording category played an important role in Brazilian exports of such products.

Developed countries accounted for the majority of imports of products of the copyright industries. It is interesting to note that there was a balance, in value terms, between imports from the United States of America and Europe. The former took the majority of Brazilian exports of products of the copyright industries. The MERCOSUR region and Chile played an important role in both imports and exports of products of the copyright industries and exports of products to the MERCOSUR increased steadily.

4.4 Chile

Exports of goods produced by the copyright industries have played an increasingly important role in Chile's total volume of exports, rising from 1.1 to 1.35 per cent and reaching 1.5 per cent in certain years. With an annual growth rate of 9.1 per cent, they exceeded the country's growth rate, which was 6.2 per cent over the period.

Although the volume is modest, they increased from US$78 to US$172 million a year in real terms over the years considered and the annual rates of growth for the core and related activities were 8.8 per cent and 12.9 per cent respectively. Core activities accounted for over 90 per cent of the total, with particular emphasis on periodicals, books and newspapers.

It is interesting to note the growth rates for the majority of headings in this group: books 30.2 per cent, newspapers 17 per cent, recorded magnetic tapes 22 per cent, recorded magnetic media for computers 31 per cent.

In the related industries, although the figures are somewhat lower, some headings showed vigorous growth: a rate of 34 per cent for data processing equipment and 54 per cent for advertising material.

Imports accounted for 8 to 9 per cent of the total, the majority for related activities, corresponding to over 95 per cent. As a whole, they rose at a rate comparable to the national cumulative total of around 11 per cent a year. Although core activities increased at a rate of 14.5 per cent, their relatively minor importance meant that they did not have a significant impact on the whole.

Books and software absorbed 73 per cent of the imports of the core group and grew at a rate of 11 and 20 per cent respectively. In related activities, computer programs and equipment represented 30 per cent of the total.

4.5 Paraguay

Exports of copyright-related industries as a whole are relatively unimportant compared to Paraguay's total exports. Over the period 1995-1999, they barely reached 0.3 per cent of total exports, which in absolute terms means figures of below US$3 million.

Regarding export performance over the period under review, growth occurred in the first two years, followed by a decline in the last two years of the period.

The major products exported by this industry, accounting for 77 per cent of the group's exports, were: publishing (48 per cent), core activity, and appliances, radios, recording equipment (28 per cent). Curiously, in the data provided by the Central Bank of Paraguay the last item does not show any value added.

It should be emphasized that piracy of copyright-protected products may be generating an informal export trade that greatly exceeds the formal level, perhaps even close to the figures for Paraguay's total volume of exports.[12]

The value of imports of products protected by copyright and related rights over the period 1995-1999 represented 16.8 per cent and 9.0 per cent of total imports respectively. This low relative share can be explained by the negative growth rates of -20.3 per cent and -30.2 per cent in 1998 and 1999 respectively, so taking the basis 100 for 1995, the figure for 1999 would fall to 69.

Data-processing equipment (46.4 per cent) and processors, radio and recording equipment (29.8 per cent) accounted for the largest share of imports in 1999, over 76 per cent of total imports for copyright-related production and associated products. Copyright goods as such played a modest role.

4.6 Uruguay

The only sector that showed a clear surplus was the software industry. Although the purchase of services and software licenses steadily increased – as the use of information technology expanded in Uruguay – the activities of the local software industry not only offset these purchases but also comfortably exceeded the inward flow. Imports of software grew at a cumulative annual rate of 20 per cent, whereas exports increased at a rate of 48 per cent.

Noticeable among the exports were inputs such as paper and advertising material. Articles for fiestas and carnivals, handicrafts and other such products were less significant. Other important exports were records, recorded tapes and other media, which is due to a special feature of the Uruguayan phonographic industry: there are no plants manufacturing compact discs, so music recorded in Uruguay has to be "exported" to other countries for reproduction and is then imported back into Uruguay as though it were a foreign product.

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[12] It is assumed that the losses represent a proportion of the value of sales, which means that sales (products or sales mainly intended for the foreign market) are much higher than the estimated losses.

Uruguay's cultural sector is a large-scale importer. In 1999, goods amounting to US$349.4 million were purchased abroad, while exports amounted to US$25.4 million, resulting in a trade deficit of US$324 million.

Imports of goods, inputs and equipment for cultural activities increased more rapidly than exports. Between 1995 and 1999, imports rose by almost 35 per cent. Over the period 1996-1999, exports fell by 13.8 per cent.

The largest share of imports is taken up by some finished consumer goods (books, periodicals), computers, television and audio transmission and receiving equipment, and some key inputs (paper).

According to 1999 figures, 34.7 per cent of imports corresponded to finished goods for cultural consumption. The majority of these were books and reviews (8.1 per cent of the total of cultural imports in 1999), and equipment for cultural consumption (12.6 per cent). Intermediate goods represented 12 per cent of imports in the form of inputs needed for cultural production. The largest share in terms of volume was for the periodicals and graphics industry (6.3 per cent of the total of cultural imports) and photography (4 per cent). In 1999, 53.3 per cent of imports were for production media intended for investment in production. The following represented the largest volume of imports in this category in 1999: computers (22.4 per cent of the total of cultural imports), television and radio sets (14.5 per cent) and photocopiers (1.7 per cent), which strictly speaking belong to the publishing sector.

In 1999, imports by the copyright industries accounted for 10.4 per cent of Uruguay's total imports of goods. Exports by these industries, on the other hand, represented a lower share of total exports, namely, 1.1 per cent.

Uruguay's cultural balance of payments was even more negative than the trade balance due the impact of transfers abroad to pay for services, copyright and reproduction and broadcasting rights. The balance-of-payments deficit in the copyright industries in recent years has been around US$30 million.

The music and theatre sector showed a chronic deficit of around US$5-6 million annually. Payments from abroad in this sector barely accounted for 3 to 4 per cent of copyright revenue.[13] Uruguay also had a deficit in phonographic rights – payable to international labels – and royalties to foreign artists, whose recorded discs are sold in Uruguay or who perform in shows in Uruguay.

The cinema and video sector also showed a chronic deficit of around US$3 million annually. The growth in revenue from performance venues partly offset the reduction in video rentals, with its corresponding impact on revenue generation.

Fees for rights of access to foreign television broadcasts are increasing as the subscription television sector expands. In 1995, payments abroad for rights were estimated to be US$16.4 million, but in 1999 this figure had risen to US$37.4 million.

Although cultural industries as a whole had a balance-of-payments deficit of US$46 million in 1999, the software industry recorded a surplus of US$16.3 million.

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[13] Source: AGADU.

CONCLUSION

As can be seen from the above, it did not prove possible to obtain consistent data for all the countries concerned. Nonetheless, the national studies followed the proposed methodology as closely as possible so as to make a preliminary estimation of the economic importance of copyright and related rights industries in the MERCOSUR countries.

1. Value added

The share of copyright-protected activities in value added is similar in Argentina, Brazil and Uruguay. For Argentina, the figure was 6.6 per cent in 1993, for Brazil 6.7 per cent in 1998, and for Uruguay around 6 per cent in 1997. It should be noted that in Argentina there is a tendency to over-value the importance of the distribution subsector because it is impossible to separate certain relevant activities such as communications services, which in fact do not belong to the group of copyright-protected activities. As a result, the estimated importance of cultural industries decreases, amounting to 4.1 per cent of gross value added. In Chile and Paraguay, the share of copyright industries is lower (2 per cent in Chile and 1 per cent in Paraguay). It is possible that this difference can to a certain extent be explained by the difficulty of obtaining data.

Value added shows marked fluctuations among countries whose economies are very different. The GDP of the copyright-protected sector in Argentina and Brazil is higher than that in Uruguay, Paraguay and Chile.

With regard to the share of the various subsectors, it can be noted that in Argentina, Brazil, Chile and Uruguay, the core group represented approximately 40 per cent of the value added. The share of the distribution sector lay between 40 per cent (Argentina) and 57 per cent (Uruguay). The distribution group's share of the total underlines the relative weakness of domestic production of copyright-protected products, a factor that is reflected in the countries' trade balances.

Another salient feature is the strategic role played by distribution in audiovisual production, whether the cinema, television or radio. The massive concentration of technical and financial resources in the major communications networks allows impressive promotion of creative activities, but there is no appropriate institutional framework to protect and foster national production so this might jeopardize the potential for developing activities based on local factors, whether national music, cinema or literature.

2. Employment

The jobs generated by copyright-protected activities played an important role in all the countries, ranging from 5 to 3 per cent. In Argentina, in 1993, around half a million people were employed in some activity directly or indirectly related to copyright. In Brazil, the figure exceeded one million in 1998. In the same year, in Chile, the sector employed 150,000 people and in Uruguay at least 60,000 in 1997.

One relevant point concerning Paraguay is the importance of the informal market. Reproduction and distribution of unofficial material possibly employ a large number of people, but this does not appear from the official statistics.

3. Foreign trade

All the MERCOSUR countries showed deficits in foreign trade in products of the copyright industries. The share of exports and imports of copyright industry goods and services in overall trade varied according to the country. Examination of the data confirms the importance of distribution and of the media used to consume protected products.

In Argentina, the deficit was large in absolute terms (US$2 billion during the period 1995-1999). It was also large in Brazil (around US$800 million). In Chile, copyright-related products increased their share of exports from 1.1 to 1.4 per cent, reaching 1.5 per cent of the total in some years. With an annual growth rate of 9.1 per cent, they exceeded the country's growth rate, which was 6.2 per cent over the period. The figures rose from US$78 to US$182 million a year in real terms. The potential is noteworthy when it is considered that over the past decade in MERCOSUR countries imports of cultural goods rose from US$600 to US$1,900 million annually and for music, books and films the figure exceeded US$1,200 million.

Uruguay's cultural sector is a large-scale importer. In 1999, goods amounting to US$349.4 million were imported, while exports amounted to US$25.4 million, resulting in a trade deficit of US$324 million. A large proportion of imports were finished consumer goods (books, publications, periodicals), computers, television and audio transmission and receiving equipment, and some key inputs (paper), as well as typewriters and writing materials.

Noticeable among the exports were inputs such as paper and advertising material. Articles for fiestas and carnivals, handicrafts and other such products were less significant. Other important exports were records, recorded tapes and other media, which is due to the special feature of the Uruguayan phonographic industry: there are no plants manufacturing compact discs, so music recorded in Uruguay has to be "exported" to other countries for reproduction and is then imported back into Uruguay as though it were a foreign product.

Paraguay is also a large-scale importer. In 1998, goods were purchased abroad for an amount of US$214.1 million, while exports amounted to US$3 million, resulting in a trade deficit of US$211.1 million.

4. Institutional structure

In general terms, in the 1990s the countries under review introduced legislation in conformity with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). This legislation tends to reflect Latin law, which emphasizes moral rights in a work, and at the same time it includes rules or special laws regarding software.

The legislation has not sufficed, however, to guarantee effective protection of copyright. There is a contradiction between the quality of the legislation and its enforcement. This can be seen in the growing "piracy" phenomenon. On the one hand, the police and judicial systems are not sufficient to guarantee enforcement of the current legislation. On the other, it is necessary to consider the effectiveness of a legal regime under which enforcement is increasingly based on force and police and judicial vigilance. In view of the technological innovations that are making unauthorized reproduction of protected material easier, it is time to discuss the viability of new mechanisms for the protection and distribution of this material.

The management of collective rights differs widely in the MERCOSUR countries. The institutional structure of copyright is multifarious: organizations that have functioned for over a decade co-exist with others recently set up, with differing objectives, but with operational structures and efficiency that help them to achieve their objectives. A first group is composed of collective management societies, whose main task is to collect copyright fees and distribute them among their members. Another group of organizations is more interested in combating illegal trade in addition to other tasks inherent in the industry.

In Argentina, a number of societies are involved in this activity. They are well organized and fulfil their tasks, although there are apparently some problems in relation to fund management, election of officers and the transparency of their management, depending on the case. The societies all play an important role in their sector and some are recognized at the global level.

In Brazil, the Central Office for the Collection and Distribution of Royalties (ECAD) was established under the former Copyright Law (Law No.5.998/73), and has been maintained under the new Law No.9.610/98. It is composed of collective copyright management societies and its purpose is to administer and defend the rights of the authors they represent, whether Brazilian or foreign, in terms of public performance of musical and literary-musical works and phonograms. According to the current Copyright Law (as well as the former one), copyright societies delegate to the ECAD the exclusive right to represent them as far as collecting fees is concerned. This makes it a body that is unique in the world. In other countries as well societies for the management of copyright and related rights are not only responsible for the affiliation of their members but also for distribution and collection.

In Chile, the institutional framework of copyright is diverse: organizations that have functioned for over a decade co-exist with others recently set up, with differing objectives, but with operational structures and efficiency that help them to achieve their objectives. A first group is composed of collective management societies, whose main task is to collect royalties and distribute them among their members. These include the Chilean Copyright Society (SCD), which was a pioneer and supported the establishment of other collective management societies; it is mainly involved in the sphere of music.

In Uruguay, the institutional context of intellectual rights is composed of collective management societies and trade union bodies representing specific sectors. Collective management societies usually deal with musical and theatrical productions. There is an institution dealing with copyright (the Uruguayan General Authors' Association (AGADU)), and an institution managing related music rights (the Uruguayan Performers' Society (SUDEI)). The Uruguayan Disc Chamber (CUD) also takes part in distributing copyright fees, in its case for phonograms. AGADU's registers contain 6,263 member authors, of which only 1,299 are active, and it collects a fee for the public use of works by playwrights, authors and music composers. The main intellectual property issues in Uruguay are: the low remuneration of cultural creators, which is indicative of the lack of capacity to recover the value generated; piracy; and unequal payment of rights by sectors using the products of intellectual creation.

Illegal reproduction of books, discs, cassette tapes, videos and software and their subsequent sale directly affect both the industry and copyright revenue and, consequently, the income of creators. Piracy continues to be a widespread practice with various estimates of the injury and loss caused to the industry, the State and authors. It is difficult to ascertain the figures for illegal trade, but each country's experience shows that these activities are growing.

The MERCOSUR is sufficiently large, attractive and profitable to appeal to organizations that counterfeit copyright-protected products (phonograms and videos, software, etc.). Part of the counterfeiting and piracy chain is situated in Paraguay (but not only there), where it benefits from facilities that allow it to pursue its strategy of supplying the Brazilian market in particular.

Isolated (but not systematic) efforts to combat the informal trade, particularly as a result of outside pressures, do not appear to have modified the global levels of piracy and, in some instances, inadequate efforts have weakened the meagre local repressive capacity even further (for example, failure to coordinate repression).

Greater protection and promotion of the chain of transactions in copyright-protected goods involves and implies action, commitment and coordination by State authorities i.e. by the Executive, as the country's administrator (promoter and protector of copyright), by the Legislative so as to provide ongoing support for the promotion and protection of copyright in the form of laws, and by the Judiciary to ensure compliance with the laws. There are inadequacies in all the spheres mentioned and in the coordination among them.

It must be emphasized that the countries' economic policies do not give priority to the promotion and protection of copyright and related activities and its links with the digital economy, as a development strategy.

5. Some elements for the debate on the importance of copyright industries in the MERCOSUR countries and Chile

The economic authorities should start to see the ensemble of copyright-related activities as an important economic sector that generates value added and jobs and has substantial export potential, taking into account the growth in global and regional trade in such products. In other words, the vision for the future should be to establish an effective link between culture and economic development.

The characteristics of copyright-related economic activities are based on detailed knowledge, with multiple links upstream and downstream, but they also have an intrinsic cultural value. These are important elements for developing countries inasmuch as they place value on the work involved in creation rather than on capital invested. In this context, enhancing the value of cultural production should be given increasing emphasis, both from the perspective of strategy (preservation of cultural identities and values – including assets) and the generation of employment. This perspective appears to be much more important in developed countries, as can be seen from the data on MERCOSUR imports.

Another important point is the need to create an institutional structure that encourages the distribution of cultural products because in all the MERCOSUR countries distribution is an important common element in generating value added. In addition, it plays a key role in competition in markets for copyright-related economic activities. Policies to promote cultural production frequently encounter obstacles in terms of efficiency and effectiveness because they do not take account of these aspects.

It is important to coordinate copyright-related activities in developing countries: special links have to be created to give effect to such coordination, for example, cultural industries and tourism (use of tourism and cultural sites for films). For this purpose, it is essential to make policymakers aware of the cultural industry.

There needs to be a new information system with more detailed data so as to identify precisely the shares of the various sectors and subsectors, determine the relative importance of small and medium enterprises and thus, ultimately, reach valid decisions on promotion policies. In view of the wide range of subsectors involved, there needs to be a subheading in the national accounts.

As to combating illegal trade, policies should aim to establish an intellectual property system that effectively protects creative expression. This must involve action on several fronts simultaneously. In the medium term, education at all levels will play a decisive role. To summarize, in terms of ownership, copyright should be considered property in the same way as any other good.

Government policies should also devote greater attention to market regulation, ensuring that action by the monopolies that control part of cultural production (particularly multinationals) does not lead to promotion of their own productions or to illegal trade. Some examples of such regulation concern the high prices imposed by the phonographic industry, which end up by creating incentives for low-cost distribution (of the same quality) of compact discs or the abandonment of the legal cassette tapes market because legal companies derive little profit.

Combating illegal production and trade should not be considered a phenomenon exclusive to developing countries. It also occurs in the United States of America for example. One point that needs to be tackled is the contradiction between the efforts to protect certain authors (not always originating in MERCOSUR countries) when traditional creators are not protected as a priority. The cost of combating piracy (from a strictly police perspective) is extremely high with results that are irrelevant in the majority of cases. Consequently, one approach to be considered is how much an illegal copy represents in terms of the legal market. Expanding the legal market may be as relevant as restricting the illegal market. In this connection, it is essential to review the strategies of enterprises that fix very high prices for their products.

In the same context, policies and lines of action need to be developed to bring about changes in the training programs for lawyers and judges, in customs procedures and in the regulation of trade. The inclusion of intellectual property aspects in various university courses would undoubtedly be a help in this respect. In the shorter term, interinstitutional initiatives should be supported and strengthened, involving all the agents concerned, so as to exert greater control over illegal trade.

One other point is the need to formulate appropriate policies to confront the challenge of new communications technologies and the rapid growth in electronic commerce. Here again, it is necessary to be aware of the relative importance of access to products derived from these new technologies; rather than restricting the illegal sector, policymakers should seek to expand access (and the legal market).

ANNEX – EXECUTIVE SUMMARY. INDUSTRIES PROTECTED BY COPYRIGHT AND RELATED RIGHTS

1. Argentina

This study constitutes a first step in analyzing the economic importance of industries protected by copyright and related rights in Argentina, the structure of some of the sectors composing this group of activities, the current state of domestic legislation, and the relevant institutional structure.

Argentina has comparative advantages in these industries because it has a medium to high per capita income and, by the standards of developing countries, it has abundant human resources and potential creativeness in various cultural spheres (music, books, cinema, etc.). In the past, Argentina did indeed occupy a privileged position in the Spanish-American publishing and cinematographic industries and exported talent throughout the world, and it continues to do so. Currently, one of Argentina's foremost cultural products is the tango, which has been highly successful in foreign markets and is apparently generating an increasing volume of foreign exchange. There is also a potential local market of around 40 million literate people with a relatively high per capita income – although it is poorly distributed among the members of society – and a capacity to consume cultural products of all types – audiovisual, literary, musical, etc.

This study does not only examine the industries directly linked to copyright, but also related activities (both upstream – supply of inputs, capital goods, etc., and downstream – distribution, marketing, etc.). Taking this broad definition, in 1993 – the most recent year for which data are available – it can be estimated that this sector employed, at a minimum, 2.3 per cent of the total number of persons employed and generated 3 per cent of domestic GDP.[14] These figures exceeded those for sectors such as "foods", "chemical substances and products", "electricity, gas and water services", "extraction of petroleum and gas", which gives an idea of their importance in this category.

Taking only industries directly related to copyright (periodicals, reviews, books, music, advertising, cinema, video, radio and television, theatrical and musical performances; data processing and related activities, etc.) – and also as a minimum estimate – the figures are 1.5 per cent of GDP and 1.2 per cent of total employment (figures that are similar to those for other developing countries but lower than those for South Africa, for example, where they represent 3 per cent of GDP).

Some sectors in this group showed vigorous growth in the 1990s. For example, the book industry grew strongly in this decade compared with the decline it had undergone since the mid-1970s. In volume of books published and titles registered, it doubled in comparison with the 1980s. The publishing industry – especially publication of books – was the sector with the greatest share of exports among the industries protected by copyright and related rights.

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14 As this study is based on official statistics for the years 1985 and 1993 and data up to 1999 provided by private companies, some headings are out of date, as is the overall view of the socio-economic situation.

The sale of recorded music increased in the 1990s, from an average of 9 million units annually during the period 1981-1990 to over 18 million during the period 1993-2000. The main reasons for this were the rapid growth in the sale of compact discs to the detriment of cassette tapes, the increase in per capita income, access to the necessary reproduction equipment at lower cost, and the introduction of the technology needed to copy compact discs at the local level, together with better promotion of sales either through live performances or the radio and television *inter alia.*

These industries' have a marked and decidedly negative impact on the balance of payments, both in the goods account and in the real services account. To a large extent this is because some important categories have been left out (for example, in the publishing industry), and Argentina is essentially an importer of data processing equipment and consumer electronics, which are deemed to be industries related to those protected by copyright.

This group of activities became more concentrated and multinational, as also occurred in the rest of the economy. The process could not only be seen at the production stages (publishing industry, for example), but also in distribution and marketing. In the future, it needs to be determined what impact these changes have had on the industries analyzed. For example, the concentration of distribution channels could lead to a decrease in the cover price of certain books – the most popular ones – but also have an effect on the price of other books. This situation might have a negative impact on readers on the one hand because it could mean less variety in the books on offer, and on traditional publishing companies and channels of distribution – small bookshops – on the other.

Regarding legislation on the protection of intellectual property, even though Law No.11723 dates from 1933, the protection of computer programs and databases has been included and the terms of protection have been extended for all works. As to related rights, performers of audiovisual and musical works and producers of phonograms were protected under the original text of Law No.11723. Due to the enforcement of the most relevant international agreements and their accompanying regulations at the national level, in the main, copyright and related rights are protected in Argentina.

In any event, the levels of piracy in Argentina are high compared with other countries. In 1999, the level of piracy in the software market in entertainment was estimated at 92 per cent, in computer programs for business at 57 per cent, in recorded music 33 per cent, and in videos 45 per cent. There are no data for the book industry, but the increase in reprography in recent years, to the detriment of books, is being regulated through agreements with learning institutions. These figures are estimates by the business associations themselves, so they should be viewed with caution. It can be stated that the levels of piracy have fallen as a result of the large number of anti-piracy proceedings brought and the Government's action in favour of the use of legal software on its computer networks. Lastly, private institutions have recently been set up to combat piracy.

The major problem in protecting copyright and related rights is the enforcement of the legal texts in force. Judicial proceedings are extremely bureaucratic and the judges do not always have the necessary training (the same is true for Customs personnel, the local police and the Federal Police). In order to improve the training of judges, police forces and customs officials, training courses are being given regularly with the support of the private and public sectors. The main public authority dealing with this subject – the National Copyright Directorate – appears to function properly as regards registration, despite its meagre budget.

Lastly, the collective management societies for copyright and related rights are reasonably well organized and fulfil their tasks, although there are apparently some problems – fund management, election of officers and transparency. They are nevertheless playing an important role in their respective spheres of action and some of them are even recognized at the global level in their particular fields.

2. Brazil

Copyright protects ownership rights in the original intellectual works of an author or artist in various fields of creative activity and the arts. This form of property has a decisive impact on economic dynamism and the performance of different sectors of the modern economy. Authors' rights are the basis of the graphics, publishing and music industries and of creative activities in the services sector, such as advertising and publicity, television, radio, films, entertainment (in theatres, cinemas, venues for shows and performances, *inter alia.*) Intellectual property rights are in fact the basis of the modern information society.

Because of the multisectoral nature of copyright-related activities, it is reasonable to assume that there are differences in the characteristics of their components. It is therefore necessary to identify the sectors, subsectors and categories related to activities protected by such rights. The mechanisms that guarantee copyright, the effect of legislation and its effectiveness in economic dynamics also need to be identified.

This study should be seen as a preliminary attempt to assess the economic importance of copyright-related activities in Brazil and also as a first attempt to identify the major copyright problems that confront the key industries in these countries.

The main objective of this study is to outline and assess from an economic perspective the major copyright-related economic sectors and activities in Brazil. The sectors, subsectors and categories involved in activities related to copyright protection have also been identified. The activities were classified into four groups: *principal* or *core activities*; *distribution*; *related industries*; and *partly-related industries*.

The share of these activities in Brazil's GDP exceeded US$53 billion in 1998, around 6.7 per cent of total GDP, taking into account telecommunications activities. If the latter are excluded, the share was US$36 billion, corresponding to 4.59 per cent in that year.

The share of value added in Brazil, including telecommunications activities, was approximately the level verified by Siwek & Mosteller (1999) in the United States of America in 1996. The shares of the various groups show that the *core* and *distribution* groups had the largest share and together accounted for 87 per cent of the value of copyright-related economic activities in Brazil. In the United States of America, however, the *core* group's share exceeded 50 per cent, whereas in Brazil the *distribution* and *core* groups had the same share. The main reason is that the various categories in the structures that make up the cultural economy prefer to give priority to distribution of production.

The share of the *partly-related industries* group was 7.6 per cent. Compared with the 1996 data by Siwek & Mosteller (1999) for the United States of America, in Brazil the percentage was somewhat higher for this group at 6.1 per cent.

The *related industries* group occupied the 4th place in terms of value added, with a figure of 5.4 per cent. Compared with the trend in the American economy in 1996 (11.4 per cent), the relative share of the *related industries* group in Brazil was much lower.

Regarding the types of activity, this industry had the smallest relative share, less than 4 per cent of value added, while services accounted for half and telecommunications for over 30 per cent. The figure for trade was just over 10 per cent of value added. Cultural activities such as the theatre, circuses, music, museums, although they provide little value added, have a potential and effective capacity to generate jobs and this should not be discounted.

Regarding employment, in 1998 copyright-related economic activities accounted for 5 per cent of people employed in Brazil. This is not only significant in relative terms, but in absolute numbers as well. In 1998, 1.3 million people worked in these activities in around 250,000 firms.

The two most important groups in terms of job generation were the *core* and *distribution* groups, which represented over 80 per cent of jobs in copyright-related industries in 1998, although the number of people employed in *distribution* activities was higher than in the *core* group; the latter represented almost one half of jobs, while *distribution* accounted for just over 1/3. The larger share of the *core* group in generating jobs is due to the nature of its activities, particularly industrial activities (with greater capacity for concentrating labour in manufacturing units, especially in the graphics sector) and cultural activities (basically due to the human element).

Related and *partly-related industries* each accounted for less than 10 per cent of firms and persons employed in copyright-related economic activities.

A comparison of the trend in copyright-related economic activities in Brazil in terms of persons employed shows that between 1994 and 1998 there was an increase of around 233,000 persons in the *core*, *related* and *partly-related industries* groups. Nonetheless, the rate of growth was lower than that in Brazil as a whole.

In the *core* group (which mainly produces copyright-related material), the most vigorous growth was in the services sector, particularly in activities related to data processing, computer systems consulting and the development of computer programs. In this case, Government sectoral policies (such as support for the production and export of computer programs) and changes in the institutional framework such as the Law on Software should be seen as catalysts. The policy of incentives for the audiovisual sector, dating back to 1994, seems to have had important results, leading to higher figures in terms of persons employed compared with the rest of the group to which it belongs – the *core* group – and in relation to the national average.

Foreign trade plays an important role and is a factor in the development of strategies by companies involved in copyright-related economic activities. Its relative importance in Brazil, however, is modest, less than 2 per cent of the overall figure. Between 1996 and 2000, total exports of copyright-related products ranged from US$327 million to US$450 million, and the increase in exports of products of the *core* group was particularly marked. Products of the publishing sector had the largest share of both imports and exports and those of the music recording category played an important role in exports. During the period 1996-2000, total imports of copyright-related products ranged from US$600 million to US$1.7 million, with a downward trend overall. The *related industries* group accounted for over 60 per cent of imports and over 80 per cent of exports. Between 1996 and 2000, the trade balance of copyright-related products in Brazil was negative each year, ranging from US$300 million to US$1.3 billion, with a sharp downward trend as of 1997.

In terms of origin of imported products, the United States of America and Europe provided the largest share and were equally balanced. The United States of America was the most important destination for exports. The MERCOSUR region and Chile played an important role in both imports and exports, and their share steadily increased.

In 1998, the copyright distribution sector in Brazil amounted to US$366 million. Although this is a large amount, it only represented 0.6 per cent of value added generated by copyright-related economic activities and 1.5 per cent of the value added of the *core* group.

The publishing sector accounted for over half of all the copyright products distributed. Sales of discs represented around 20 per cent and public performance of musical and literary-musical works and phonograms accounted for the remaining 25 per cent.

3. Chile

This study emphasizes that an author's original work, in the various spheres of artistic creativeness, constitutes an intellectual capital to be developed and promoted because of its important role in the economic activities generated around it. It is shown that the copyright industry in Chile had a marked impact. Between 1990 and 1998, its share of national GDP was between 2.1 and 2.8 per cent as a whole, which corresponded to 12 to 16 per cent of the industrial sector, 8 to 18 per cent of the trade sector, and around 33 per cent of the services sector. The cumulative annual rate of growth of around 3.4 per cent up until 1996 was equivalent to half of the growth in the national GDP (7 per cent), close to that of the industrial sector (5.5 per cent) and similar to that of the services sector (3.8 per cent).

With 120,000 to 130,000 persons employed during the years under review, copyright-related economic activities provided 2.7 per cent of jobs at the national level and had a cumulative annual rate of growth of 2.4 per cent over the period, which is slightly higher than the increase in the employment rate in Chile of 2.1 per cent and 1.5 per cent in Greater Santiago.

The share of exports of copyright-related industries steadily increased from 1.1 per cent to 1.4 per cent of total exports, reaching 1.5 per cent in certain years. With an annual growth rate of 9.1 per cent, they exceeded the growth rate in exports for the country as a whole, which was 6.2 per cent over the period. Exports rose from US$78 to US$172 million a year in real terms. . The potential is noteworthy when it is considered that over the past decade in MERCOSUR countries imports of cultural goods rose from US$600 to US$1,900 million annually, and for music, books and films the figure exceeded US$1,200 million.

Despite their importance, Chile does not have a strategy to develop this asset, which is considered to be highly valuable in developed countries. In general, cultural activities appear to be a relatively marginal sector and somewhat far removed from the economy's priority concerns.

4. Paraguay

The economic importance of activities covered by copyright and associated activities[15] is extremely modest in Paraguay's economy. The value added generated by these activities amounted to 1 per cent of the country's total value added and has fallen systematically over the past five years at an average rate of –3.7 per cent[16] with amounts ranging from US$60 to US$100 million annually. The publishing industry (principal or *core* group) accounted for the largest share, corresponding to 80 per cent of the total for the sector. The figures cited do not represent the real economic scale of the sector due to inadequate statistics.

The inadequacy of the data can be seen in: (a) the low level of collection of data on copyright and related activities[17]; and (b) under-valuation in the data collected.[18]

Figures for employment generated by copyright and related activities were only available for 1992.[19] They are acceptable as regards coverage and estimation, but they do not cover all copyright and related activities.[20] This sector[21] generated 3.3 per cent of copyright-related employment, a modest level in terms of the global economy. The activities most represented in this sector were: (a) retail trade; (b) radio and television broadcasting; (c) publishing (core activity); and (d) architectural and engineering services. It should be noted that trade activities included part of the informal sales on the domestic market.

Exports[22] did not rise above US$3 million annually during the period 1995-1999, a modest level that did not even represent 0.3 per cent of total exports recorded. The major products exported by this sector were: publishing (core industry), computer equipment, radios, recording and reproduction equipment, etc. The figures for exports of counterfeit goods are astronomical.

This sector's imports[23] over the past five years (1995-1999) ranged from US$154.5 million to US$468.8 million, representing 16 per cent and 9 per cent of total imports respectively. There has been a steady downward trend in imports at an average annual rate of –23.3 per cent (calculated on the basis of current dollars). The major imports were: data processing equipment, processors and recording equipment.

Including and/or taking into account informal or illegal intellectual property activities (copyright and industrial property), it can be seen that their economic scale is substantial and way above that of the formal copyright and related activities sector. It is estimated that, solely for United States companies, the losses incurred through illegal or informal activities in

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15 Including core activities, related, distribution and partly-related activities.
16 In current dollar terms.
17 Of the 68 activities that make up the sector, data were only obtained for 7 aggregated headings (or 14 disaggregated).
18 Under-valuation of value added was verified *inter alia* by comparing the data with foreign trade figures.
19 Data in the census (1992 Census).
20 They cover 30 aggregated activities (or 52 activities disaggregated) of the 68 selected.
21 Including core, related, distribution and partly-related activities.
22 Exports and imports have been calculated in terms of current United States dollars.
23 Imports and exports have been calculated in terms of current United States dollars.

Paraguay amount to around US$400 million, of which phonograms account for the largest share. This volume of losses is but part of the volume of sales and trade and provides an indicator of the scale of the value added and trade in the informal production sector.

Economic activities covered by copyright are conducted in a general context that is not very favourable to their development and competitiveness. The virtually ubiquitous presence of informal and illegal activities without restrictions, due to the general situation in the country, is a factor that hinders copyright and other economic activities to differing degrees.

5. Uruguay

In Uruguay, copyright industries are directly or indirectly responsible for generating large sums because of the economic activities involved. These figures are rising, which reveals a trend in Uruguay similar to that taking place today in other societies, especially in the world's most developed economies. The production, dissemination and marketing of cultural products and services and software generate jobs both directly and through related activities on a scale that exceeds that in many other economic sectors in Uruguay.

Product

In Uruguay, copyright industries, including telecommunications, accounted for 5.9 per cent of GDP in 1997 and 6.5 per cent in 1998/99. If "non-cultural telecommunications" are excluded, the figure was 3.1 per cent in 1997 and 3.3 per cent in 1999. Relative shares can be broken down as follows:

- cultural industries and services (1.8 per cent and 1.9 per cent respectively in 1997 and 1998/99);
- software industry (0.5 per cent and 0.6 per cent respectively);
- distribution of equipment for cultural and information use (0.7 per cent);
- telecommunications (2.8 per cent and 3.2 per cent respectively);
- related and partly-related industries covered by authors' rights (0.1 per cent).

The major cultural industries and services were radio and television activities, periodicals, advertising, the publishing and record industries.

Employment

Copyright industries are an important source of employment for creators, performers, impresarios, employees and free-lance workers in production companies, industries, the media, retail and wholesale trade, advertising agencies, cultural institutions etc., and for those working in ancillary activities linked to intellectual production, for example, technical and support services, etc.

The figures in the latest Economic Census show that almost 60,000 people were directly or indirectly employed in branches related to intellectual production, in around 14,000 economic units. If "non-cultural telecommunications" are excluded, the figure is 46,300. This means that 4.9 per cent of the total number employed worked in these industries, including telecommunications, and 3.8 per cent if "non-cultural telecommunications" are excluded.

These figures do not include the thousands of people who practise the arts and culture in an amateur fashion, for example, three-dimensional arts or music, nor family members who work without pay in some activities such as making handicrafts, whose numbers are estimated to be between 1 and 2 family members per craftsman.

Employment in the copyright industries is composed of different categories of jobs that call for different qualifications. The first category includes creators, performers, artists, software engineers, etc., and constitutes the key nucleus of cultural production. The value of intellectual production is to a large extent determined by the work of this category, characterized by creativeness and originality. The second category, which is close to the first one, includes journalists, radio and television presenters, technicians, etc., who are also highly trained but whose work is not strictly speaking creative.

In Uruguay, these two categories employ between 12,000 to 15,000 persons. This is the labour force that defines and promotes Uruguay's cultural production. It is the "key nucleus".

Around these categories there are other workers who are not so highly trained: employees, service and administrative staff, salespersons, etc., who constitute the majority of workers in the cultural sphere.

In the "key nucleus" categories, movement among the various forms of employment frequently occurs - salaried, free-lance, impresario – so several jobs may be held at once ("multiemployment").

"Multiemployment" is widespread in this "nucleus", whether in the same type of activity or in different cultural activities, sometimes by combining a cultural activity with a non-cultural activity.

A large number of cultural workers, particularly performers, work in the cultural sphere as an ancillary activity. Their permanent jobs are in other sectors (government, the professions, various private activities), and they practise artistic activities by vocation and also to earn supplementary income.[24]

Economic units

Regarding the size of units involved in intellectual production, these are mainly micro and small enterprises, including many that consist of one person.

According to the 1998 Economic Census, which provided data for 1997, there were 13,824 people employed in economic units directly or indirectly part of the copyright industries, representing 11 per cent of the total units recorded. Of these, 13,458 were small units, with less than 20 employees, which accounted for 53.2 per cent of workers in copyright industries as a whole. Medium-sized economic units, with 20 to 49 employees, only numbered 272 and employed 14 per cent of the workers in this sphere. There were 94 large

24 This means that, in a census or a household survey, they declare their permanent jobs and their ancillary activities in the cultural sphere are not mentioned. Consequently, the official employment figures tend to under-estimate the number of persons who in some way or another are involved in culture as an economic activity.

units, employing 50 or more people, and these were mainly in the graphics industry, the press, telecommunications, television, symphonic orchestras and some clubs, especially sports clubs, or in distribution, and they accounted for 32.8 per cent of the workers directly or indirectly involved in intellectual production.

Agents in the copyright industries work in markets whose competitive characteristics differ.

Some markets are openly competitive; others function with a small number of enterprises, for example, open television and subscriber television in Montevideo. The press and recording industry are highly concentrated in Montevideo. In the cinema and video sector, distribution is concentrated and this leads to conflicts between retail outlets and those which screen films and videos.

The direct presence of firms with foreign capital, especially multinationals, is very limited in the Uruguayan copyright industries sector. The largest presence and the leadership belong to the advertising sector. There are some foreign firms in the newspaper sector, in press agencies, the software industry and, more recently, in the publishing sector (publishing companies and bookshops), the phonographic, cinematographic (cinemas), video and television (cable) industries and in telecommunications (Internet access, broadband, data transmission).

Recently, in these sectors, subsidiaries of multinationals have been set up to operate directly in the Uruguayan market, not only as centers for the distribution of imported cultural goods but also to manage Uruguayan creators and artists, competing openly with local publishers and labels. This trend is starting to introduce new problems and contradictions that were not previously present in the functioning of Uruguay’s cultural markets.

The presence of foreign – especially multinational – capital is indirect, although it is predominant in some sectors of the cultural sphere such as cinemas, videos, discs, open television, subscriber television. Local cultural agents are often only representatives, distributors or relays for the multinational or foreign firms that control global or regional circuits of cultural production and communications.

Foreign trade

Uruguay’s cultural sector is a large-scale importer. In 1999, goods amounting to US$349.4 million were purchased abroad, while exports amounted to US$25.4 million, resulting in a trade deficit of US$324 million.

Imports of goods, inputs and equipment for cultural activities increased more rapidly than exports. Between 1995 and 1999, imports rose by almost 35 per cent, while over the period 1996-1999, exports fell by 13.8 per cent.

The largest share of imports is taken up by some finished consumer goods (books, periodicals), computers, television and audio transmission and receiving equipment, and some key inputs (paper). as well as typewriters and writing materials.

Noticeable among the exports were inputs such as paper and advertising material. Articles for fiestas and carnivals, handicrafts and other such products were less significant. Other important exports were records, recorded tapes and other media, which is due to a special feature of the Uruguayan phonographic industry: there are no plants manufacturing compact discs, so music recorded in Uruguay has to be "exported" to other countries for reproduction and is then imported back into Uruguay as though it were a foreign product.

According to 1999 figures, 34.7 per cent of imports corresponded to finished goods for cultural consumption (books and reviews, equipment for cultural consumption, etc.), 12 per cent were intermediate goods (inputs for the periodicals and graphics industry, photography, etc.) and 53.3 per cent of imports were for production media intended for investment in production (computers, television and radio sets, photocopiers, etc.).

In 1999, imports by the copyright industries accounted for 10.4 per cent of Uruguay's total imports of goods. Exports by these industries, on the other hand, absorbed a lesser share of total sales abroad, namely, 1.1 per cent.

Balance of payments

Uruguay's cultural balance of payments is even more negative than the trade balance due to the impact of transfers abroad to pay for services, copyright and reproduction and broadcasting rights. The balance-of-payments deficit in the copyright industries in recent years has been around US$30 million.

The music, theatre, cinema and video, and television sectors showed a chronic deficit.

The only sector that recorded a clear surplus was the software industry. Although the purchase of software and licenses steadily increased – as the use of information technology expanded in Uruguay – the activities of the local software industry not only offset these purchases but also comfortably exceeded the inward flow. Imports of software grew at a cumulative annual rate of 20 per cent, whereas exports increased at a rate of 48 per cent.

Although cultural industries as a whole had a balance-of-payments deficit of US$46 million in 1999, the software industry recorded a surplus of US$16.3 million.

The trend underlined by the trade and payments balances in the cultural sphere shows that the Uruguayans consume more culture than they produce. Cultural production is imported more than it is produced and consumed in Uruguay. The cultural products exported, with some such exceptions such as software, remain marginal.

This alone would not necessarily be a problem because a relatively small and open society such as Uruguay's cannot hope to achieve cultural self-sufficiency, but it does show the existence of potential waste and, if it continues, indicates a trend that could in the long term be prejudicial to Uruguayan society. The problem is why Uruguay does not export – or only does so to an insufficient extent – and why in some cultural sectors domestic cultural production is not present or simply cannot compete with foreign products.

Different issues arise in this connection: the small scale of cultural industries, inadequate dissemination of national creations – to a large extent as a result of the strategies of mass communications media – international distribution monopolies (discs, films, videos), protectionist regulations in other markets, such as those in the MERCOSUR region, lack of special financing for production projects and, a permanent feature, inadequate protection of intellectual property, absence of entrepreneurial capacity and management of cultural agents, absence of genuinely cultural policies on the part of the State, etc.

In addition to these factors, Uruguay's population has a contradictory attitude towards its own cultural products. On the one hand, over the past five years, there has been a real trend towards underlining the national character of many products and activities as a factor of identity. On the other, there is a widespread perception that national production is under-valued, which makes it difficult to promote the creativeness of Uruguayan artists and intellectuals.

TECHNICAL DETAILS OF THE RESEARCH

STUDY ON THE ECONOMIC IMPORTANCE OF INDUSTRIES AND ACTIVITIES PROTECTED BY COPYRIGHT AND RELATED RIGHTS IN THE MERCOSUR COUNTRIES AND CHILE

This report is the outcome of the research carried out under the coordination of the Study Group on the Organization of Research and Innovation (GEOPI) and the Institute of Economics (IE) of the State University of Campinas (UNICAMP) and conducted by a network of researchers from the MERCOSUR countries and Chile, financed by the World Intellectual Property Organization (WIPO). The main objective of the research was to assess the economic importance of the copyright industry in these countries in terms of its share of GDP, employment and foreign trade, and also to analyze some institutional aspects of the question of copyright.

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