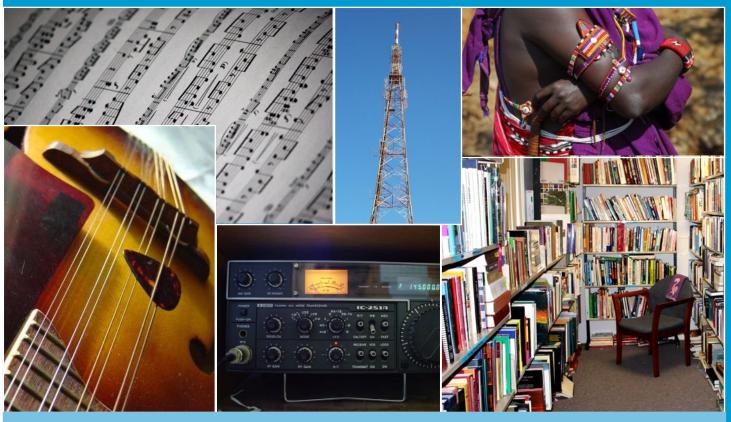
# The Economic Contribution of Copyright-Based Industries in the Hashemite Kingdom of Jordan



Creative Industries Series No. 7



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# Prepared by:

# The South-North Center for Dialogue and Development

Research team: Dr. Sabri Rbeihat Dr. Amer Bakeer

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## **Executive Summary**

The study aims to quantify the economic contribution of copyright and related rights-based industries in Jordan by estimating their value added, employment, exports and imports. In addition, the study highlights the policy framework of the industry and its characteristics in the national context. The study adopts the methodology of the WIPO Guidelines and relies heavily on both WIPO literature and surveys conducted by the Department of Statistics of Jordan, as well as several workshops, focus group discussions and in-depth interviews with different stakeholders.

The Jordanian Law No. 22 and its amendments ensure the protection of the rights of Jordanian authors and creators. Jordan has signed and ratified copyright agreements and treaties such as the Berne Convention, WIPO Copyright Treaty, Trade in Intellectual Property Rights (TRIPS) and the Arab Convention for the Protection of Copyright. The Department of the National Library is the competent authority to enforce Copyright Law in Jordan, through inspections and filing criminal charges.

The copyright industry contribution to GDP amounted to JD 258.4 million in 2006. The highest contribution is attributed to the core copyright industries with JD 162.9 million, followed by the non-dedicated support industries with JD 60.9 million, partial copyright industries JD 21.9 million and interdependent copyright industries JD 12.7 million.

The copyright industries produce outputs that need to be protected by law. These outputs normally centre on ideas and creative work or products which require protection. The Jordanian protection environment is not fully enforced, despite the fact that Jordan has signed and ratified the copyright agreements and treaties. The copyright sector contributes to the economy in terms of value added and employment. In 2006, it contributed 2.96% to GDP and absorbed 3.4% of the labour force. The contribution of the copyright industries to the economy exceeded mining (1.94%), surpassed electricity and water (2.12%) and was close to agriculture (3.5%). In terms of interaction with the rest of the economy, the study shows a significant impact of the copyright industries on the value added of other economic sectors. It shows a multiplier effect of 30 (one JD of copyright output directly generates 30 JD of output in the economy).

Growth in the core copyright industries during 2006-2009 averaged 12%, which appears high, but is relatively low compared with the growth rates of the economy as a whole (17.55%).

The sector as a whole is characterised by small-scale establishments not exceeding 20 workers per establishment, or even fewer when narrowing it down to the production of creative work such as writing, arts, and music and software development activities.

The sector has benefited from and capitalised on the characteristics of the Jordanian environment in terms of resources, investment climate and openness of the economy. In terms of resources, Jordan over the years has placed a high value on developing the talent of its people and nurturing creativity initiatives. The stress on education (schools, universities and colleges) has led to the creation of a knowledge-based economy and taking the lead in information technology. In addition, the investment climate in Jordan is well oriented towards the attraction of foreign investment, as well as the policy of free trade as exemplified by joining the WTO in 2000, and signing Free Trade agreements with the USA, Canada and the EU, among others.

Consequently, it is clear that the copyright industries in Jordan can capitalise on talented and well-educated human resources and a favourable investment environment in order to gain momentum for development and thus have a significant impact on creating job opportunities and income generation.

Although the establishment of a copyright industry is carried out at a small scale which does not require large investment, it has a significant impact on job creation and income generation. However, gaining momentum in that direction requires policy formulation, protection law enactment, incentives and training.

The policy environment needs to be considerably strengthened. The copyright industries are spread across the sectors of the economy and are impossible to group under a specific category like mining, manufacturing or agriculture, etc. They are similar to the tourism industry, where many of the activities depend on other sectors of the economy. For example, writers depend heavily on publishing, which relies heavily on printing, which in turn requires financing. A policy addressing writers thus cannot fulfil its objectives unless the other

stakeholders are taken into account. Perhaps for this reason, it has not yet been possible to formulate a strategy covering copyright activities or cultural activities.

The majority of writing and publishing activities are carried out by 'the media' (newspapers, magazines, journals, radio and television, the internet among others). Publishing, in the form of fiction and academic books, is carried out at a very insignificant scale, mainly because it is not rewarding for writers to publish and also the market for fiction is very narrow.

Hence, a potential area of expansion is the media, especially newspapers, TV and the internet, provided that copyright protection is implemented properly. The study shows that this part of the copyright industries contributed half of the value added of the core copyright industries to GDP.

Another sector which is promising in terms of expansion and significant contribution to the economy is software development and programming, although this economic activity is at present mainly undertaken on a small-scale basis with the majority of establishments employing fewer than ten workers.

The copyright sector can benefit to a great extent from steps targeting institutional development, awareness and training, especially in the areas of law enforcement and copyright protection. A clear direction in this endeavour is the establishment of collective management societies or, similar to other countries, expanding the role of existing NGOs towards carrying out activities along these lines.

#### 1. Introduction

#### 1.1 Definitions

Property rights are defined as the ability of individuals to own, buy, sell and use their property in a market economy. Copyright protects the form of expression of ideas only, not the ideas themselves. Copyright products and goods have important social and cultural functions, but they also make significant economic contributions by generating economic value. Copyright protects creative works such as a writer putting words on paper, a photographer taking a picture on film, or a software designer creating a code. Related rights include rights of performing artists, rights of television and radio broadcasters, rights of producers of phonograms and rights of producers of motion pictures.

Copyright protection is needed to ensure that the rightholder or the owner of a work is rewarded for the exploitation of the work and copyright industries can develop to become an important business that generates a significant value added to the economy and absorbs a considerable number of the labour force. The creation of protective laws and legal enactments and enforcement measures related to protective copyrights is necessary to reach this objective.

The recent rapid and substantial developments in the communications and information technology sectors have made it possible to distribute and disseminate copies at little or even negligible cost, especially via the internet and global websites.

Copyright-based industries are industries that are engaged in the creation, production, manufacturing, performance, broadcast, communication, exhibition, and distribution and selling of protected works and products (WIPO, Guide on Surveying the Economic Contribution of the Copyright-Based Industries). The WIPO Guide identifies four categories: core copyright-based industries, interdependent copyright-based industries, partial copyright-based industries and non-dedicated support industries.

#### 1.1.1 Core Copyright Industries

Core copyright industries are defined as those that are wholly engaged in the creation, production and manufacture, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter. Those industries can be classified under the following ten subgroups according to ISIC Rev. 3.1:

#### **Press and Literature**

#### Economic Activity

9214: Authors, writers, translators

2212: Newspapers

9220: News and feature agencies etc

2212: Magazines/periodicals

2211: Book publishing

2219: Cards, maps, directories and other published material

2221: Pre-press, printing, and post-press of books, magazines, newspapers,

2222: Advertising materials

5139: Wholesale and retail of press and literature (book stores, newsstands, etc.)

9231: Libraries

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#### Music, Theatrical Productions, Operas

#### Economic Activity

- 9214: Composers, lyricists, arrangers, choreographers, writers, directors, performers and other personnel
- 2213: Printing and publishing of music
- 2230: Production/manufacturing of recorded music
- 5233: Wholesale and retail of recorded music (sale and rental)
- 9214: Artistic and literary creation and interpretation
- 9214: Performances and allied agencies; (bookings, ticket agencies, etc.)

#### Motion Picture and Video

#### Economic Activity

- 9214: Writers, directors, actors
- 9211: Motion picture and video production and distribution
- 9212: Motion picture exhibition
- 7130: Video rentals and sales, Video on demand
- 2230: Allied services

#### Radio and Television

#### Economic Activity

- 9213: National radio and television broadcasting companies
- 9213: Other radio and television Broadcasters
- 7499: Independent producers
- 7420: Cable television (systems and channels)
- 6420: Satellite television
- 9213: Allied services

#### Photography

#### Economic Activity

- 7494: Studios and commercial photography
- 2222: Photo agencies
- 9231: Photo libraries

#### Software and Databases

#### Economic Activity

- 7221: Programming, development and Design, manufacturing
- 5151: Wholesale and retail prepackaged software (business programs, video games, educational programs etc.)
- 7240: Database processing and publishing

#### Visual and Graphic Arts

#### Economic Activity

- 9214: Artists
- 9214: Art galleries and other wholesale and retail
- 7494: Picture framing and other allied services
- 9214: Graphic design

#### **Advertising Services**

#### Economic Activity

7430: Agencies, purchasing services 7430: Copyright Collecting Societies

#### 1.1.2 Interdependent Copyright Industries

Interdependent copyright industries are engaged in the production, manufacture and sale of equipment whose function is wholly or primarily to facilitate the creation, production or use of works and other protected subject matter. Those industries can be sub-grouped under the following seven categories:

#### **Economic Activity**

3230: Manufacture, wholesale and retail (sales and rental) of: TV sets, radios, VCRs, CD players, DVD players, cassette players, electronic game equipment, and other similar equipment

3000: Computers and equipment

3692: Musical instruments

3320: Photographic and cinematographic instruments

3000: Photocopiers

2429: Blank recording material

2101: Paper

#### 1.1.3 Partial Copyright Industries

Partial copyright industries are industries in which a portion of their activity is related to works and other protected subject matter and may involve creation, production and manufacture, performance, broadcast, communication and exhibition or distribution and sales. These can be classified under the following ten activities:

#### **Economic Activity**

1810: Apparel

1721: Textiles

1920: Footwear

3691: Jewellery and coins

9199: Other crafts

3610: Furniture

2610: Household goods, china and glass

1722: Wall coverings and carpets

3694: Toys and games

7421: Architecture, engineering, surveying

7499: Interior design

9232: Museums

#### 1.1.4 Non dedicated support industries

Non-dedicated support industries are industries in which a portion of their activity is related to facilitating broadcast, communication, distribution or sales of works and other protected subject matter, and whose activities have not been included in the core copyright industries. Those activities include five categories as follows:

#### **Economic Activity**

51: General wholesale

52: Retailing

60: General transportation 6420: Telephony and internet

Following WIPO Guidelines, the ISIC codes for the above-mentioned economic activities are also presented in Annex 1.

#### 1.2 Objectives

The objectives of the study include the following:

- to quantify the economic contribution of copyright and related rights-based industry in Jordan by estimating their value added, employment, exports and imports;
- to analyze and elaborate on selected copyright and related rights-based industries of importance to Jordan, their national market structure, value chain, demand and supply patterns, labour market, policy framework, and support from public and civil sectors including the role of collective management organisations and other copyright-related organisations as well as the implications of the digital environment;
- to identify the comparative advantages of the copyright-based industries with regard to other industry sectors and with regard to major trade partners; and
- to propose policy, strategy and institutional interventions for encouraging the growth and development of copyright-based industries in Jordan.

#### 1.3 Methodology

The Team consisted of national researchers led by a national consultant and assisted by the department of the National Library, Ministry of Culture (MoC), international consultants and WIPO experts. MoC provided advice, mediated and facilitated cooperation with government offices and other representatives of the copyright-based industries. MoC also made available certain data from cultural institutions, as well as commissioning statistical data from the Department of Statistics. Other international expertise was provided by WIPO as appropriate and when needed. The national consultant supervised all the study activities, including data collection and collation, data analysis and presentation of results.

The study followed the following steps:

- Identification of the copyright and related copyright-based industries to be studied (ISIC and WIPO Guidelines)
- Data collection, collation, tabulation and processing
- Data analysis leading to the measurement of economic contribution (value added, employment, exports and imports)
- Write-up
- Presentation

Cooperation with the Statistics Department (DoS) was essential to generate the data required by the study. The data was available until the year 2009, based on the industrial survey which was conducted by DoS in the year 2006. This survey adopted a sample based on the general frame of existing economic activities. Accordingly, depending on the significance of the activity in the general frame, some activities were presented normally according to the sampling methodology while others were not present at all because they were not significant in the general frame. For example, museums did not figure in the survey because they was considered a minor economic activity. The data for 2009 were surveyed using the same sample as 2006. In order to acquire 2011 data, a new survey by DoS was needed. Hence, as recommended by DoS and to get a

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more accurate estimates on value added and employment figures, the year 2006 was chosen for this study and 2009 data were used to calculate growth rates. DoS provided the data required within its records in cooperation with the research team. Other relevant documents, books, studies, reports were collected from the concerned institutions with assistance from the Department of National Library and MoC. Focus group discussions/workshops/in-depth interviews were used as necessary in the process of collecting the data.

The team calculated the economic contribution according to the appropriate methodology adopted by the WIPO Guidelines.

The following domains of analysis provided the theme for the study:

- (a) Value of output/sales, value added, employment, exports and imports.
- (b) National policies and strategies
- (c) Productivity levels (value added divided by employees)
- (d) Efforts were made to establish different multipliers showing and comparing the indirect effects produced by the copyright-based industries with the effects produced by other industries. The study used the ISIC classification which is in compliance with the WIPO Guidelines. However, the trade statistics in Jordan use the tariff classification and thus the data related to exports and imports follow the tariff codes.

The team did not encounter any critical problems in conducting the study except for some delays in data availability caused by shortage of staff in DoS, and stand outs by related associations.

# 2. Current Status of Copyright Law in Jordan<sup>1</sup>

In the Arab culture and throughout the evolution of the Arab Islamic civilisation, property has enjoyed social and legal protection. Despite the fact that most of the early intellectual property appeared in the form of poems, speeches and oral history, the culture preserved the rights of authors through relating the creative work to its author and publicising this relation through highlighting the biography of the intellectuals themselves. The creative works of the great poets of the pre-Islamic epoch were hung on the Ka'aba walls with the aim of publicising these works and their authors.

With the rise of Islam, the narrators of the Hadith enjoyed a wide popularity in the Muslim world: the name of the narrator must be cited every time you mention the Hadith. However, with some exceptions, the ideas, beliefs and rituals shared by the follower of the Islamic faith gave very little room for creativity in literature and other forms of art; but the morality of Islam and the strict enforcement of the Sharia'a law deterred people from violating the intellectual property rights during the period of the Islamic rule.

In modern history, The Hashemite Kingdom of Jordan has recognized the importance of issuing legislation to ensure the protection of the rights of Jordanian authors and creators. For that purpose, the government adopted the Ottoman Copyright Law issued in 1910. This Law was in force until 1992, when Copyright Law No. 22 was approved by the Parliament and published in the Official Gazette. Five major amendments to the Law were added in order to fulfil Jordan's commitments in International Agreements and Treaties. These Amendments were:

Amended Law No. 14 for the Year 1998 Amended Law No. 29 for the Year 1999 Amended Law No. 88 for the Year 2003 Amended Law No. 8 for the Year 2005 Amended Law No. 9 for the Year 2005

For Copyright and Related Rights, Jordan signed and ratified the following agreements:

- Berne Convention for the Protection of Literary and Artistic Works, ratified on 28/7/ 1999
- WIPO Copyright Treaty (WCT), ratified on 42/4/ 2004
- WIPO Performances and Phonograms Treaty (WPPT), ratified on 24/5/ 2004; Jordan is considered the first Arab country to have signed and ratified (WCT and WPPT)
- Trade-Related Aspects of Intellectual Property Rights (TRIPS), ratified on 16/7/2001.
- Arab Convention for the Protection of Copyright and Related Rights since 2007.

The most important articles of the Law are:

Article (3), paragraph (b), which in line with the Berne Convention identifies protected works as follows:

- 1. Books, booklets and other written material.
- 2. Works delivered orally such as lectures, speeches and sermons.
- 3. Theatrical works, lyrics and musical plays and pantomime acting.
- 4. Musical works whether expressed in notes or not and whether accompanied with words or not.
- 5. Cinematic and audio and visual broadcasting works.
- 6. Painting, photography, sculpting, architecture, applied arts and lithographical works.
- 7. Illustrations, maps, designs, blueprints and three-dimensional works related to geography and topography.
- 8. Computer software whether in the origin language or machine language.

On the other hand, Article 7 introduces works that are excluded from protection such as laws, regulations, judicial decisions, administrative committee's decisions, and international agreements and other official documents and translations of these works, news published, broadcasted or delivered publicly and works which are considered as public domain.

<sup>&</sup>lt;sup>1</sup>Prepared by: Ena'am Yousef Mutawe, Head of Research Section Department of the National Library.

The Law also addresses the financial and moral rights of the author through granting him the right to attribute his work, and to decide the publication of his work and make amendments to it and to challenge any infringement or distortion on his work, as well as the right to withdraw his work from circulation if there are serious and legitimate reasons to do so, in addition to the right to exploit his work financially in any way he chooses. The term of protection is the lifetime of the author plus fifty years after his death, twenty-five years for applied arts.

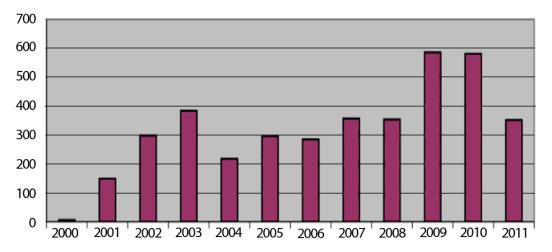
The criminal penalties for breach of the Law are imprisonment for a period not less than three months and not exceeding three years, or a fine of not less than one thousand dinars and not more than six thousand dinars, or both for those who offer for sale a counterfeited work or copies of that work knowing that it is counterfeited.

The Law in its last amendment, and in its application of its commitments in WPPT, introduced Articles concerning Rights Management (RM) and Technological Protection Measures (TPM). Article 54 of the Law addressed the RM of authors and considered as a violation of the Law any deletion or alteration of any electronic RM information without the permission of the right holder and distribution or importing for distribution or broadcasting or making available to the public copies of the works or fixed performances or audio recordings while knowing or having an adequate reason or evidence to know that the information has been removed or altered without permission from the right holder. It also introduced a definition of the information that guarantees RM as the information provided by the right holder that identifies the work, audio recording or performance, the author or performer or producer of an audio recording, the right holder of the work or performance or audio recording, the conditions that must be present to make use of and benefit from a work or performance or audio recording and any numbers or encoding that define this information.

Article 55 of the Law considered as violations the acts of circumvention, counteraction or disablement of effective technological measures, in addition to the production or importing or selling or displaying for the purpose of selling or leasing or possessing for a commercial purpose or distribution or marketing any piece or appliance or service or method that was designed or produced or used for the purposes of circumventing any effective technological measures or counteracting or disabling them. It also provides a definition of the term 'technological measures', to mean any technology or measure or method used such as encoding or controlling the extraction of copies that are used to prohibit or limit carrying out any work unlicensed by the right holder.

The Copyright Office was established in the Department of the National Library in the Year 2000, to be the competent authority to enforce Copyright Law in Jordan. According to Article 36 of the Law, copyright officers are granted the authority of Judicial Police in their implementation and enforcement of the Law. Their responsibilities cover the whole Kingdom and they handle it through two major roles: *ex-officio* inspection tours or as response to complaints from the right holders.

Figure 2.1: Copyright Cases



(Source: Department of the National Library, Ministry of Culture, HK of Jordan)

Despite the existence of the legal framework and empowering the staff in charge of monitoring and inspection both technically and legally; the enforcement of the law is still below expectations. This is due partly to the insufficient awareness on the part of the sector, and the inadequate training of other agents in the Jordanian justice system (police officers, prosecutors and judges). In addition to the above-mentioned factors, the discretion of the politicians and administrators are important elements in the enforcement schemes. The table below demonstrates the variation in the number of infringement cases.

Table 2.1: Progress of Copyright Office work since the Year 2000

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
No. of cases	6	149	298	384	218	296	285	357	354	586	581	352

(Source: Department of the National Library, Ministry of Culture, HK of Jordan)

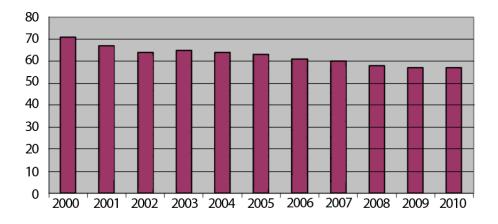
The office referred nearly 4,000 cases to the competent court. Most of the seized materials were CDs and DVDs, books, Play Station games and computer programs. It is clear from the above table that the enforcement level is higher when the issue is given political attention, as occurred in 2009 and 2010: the number of cases dropped by close to 40% in the following year. Consequently, the piracy rate becomes lower as enforcement improves; as shown in Chart 2.2 (below).

According to the Eighth Annual BSA Report, Jordan has managed to reduce software piracy rates in 2010 to 57%. The progress in software piracy reduction can be seen in the following table (Table 2.2):

Table 2.2: Software piracy rates

Year	1994	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Piracy Rate %	87	71	67	64	65	64	63	61	60	58	57	57

Figure 2.2: Piracy Rate %



(Source: Department of the National Library, Ministry of Culture, HK of Jordan)

In order to ensure best practices and enforcement of Copyright Law, a permanent Enforcement Committee was formed in 2006, and was re-formed twice in 2008 and 2010 to include all the government partners in the enforcement process such as: the Department of the National Library; the Judicial Council; the Ministry of Telecommunication and Information Technology; the Ministry of Municipalities Affairs; the Public Security Department, Intellectual Property Section; the Audiovisual Commission; the Customs Department; the Telecommunications Regulatory Commission; the National Information Technology Centre, and Amman Great Municipality. The Committee convened periodically to discuss the developments in enforcement status as well as enhancing cooperation and coordination of the parties in this process.

## 3. Copyright-based Industries in the National Context

#### 3.1 General Overview

Jordan is located in the south-west of Asia; it is a relatively small state with an area of 89 thousand square kilometres and a population of about 6.7 million people. The country has very few natural resources and is considered one of the poorest countries in the region with a GDP of JD 20.5 billion and per capita GDP of JD 3,277 in 2011 (Central Bank of Jordan, Monthly Statistical Bulletin, March 2012).

The scarcity of natural resources has forced the policy-makers of Jordan to invest heavily in human resources. Today, Jordan has more than one-third of its population in its educational system. Around 2 million students are receiving their education through 6172 schools, 29 universities and 52 colleges.

Despite the fact that Jordan constitutes only 3% of the Arab population, it has more than 10% of all universities in the Arab world, which gives Jordan a competitive advantage among its neighbouring Arab states. Over the past six decades, hundreds of thousands of Jordanians have been the driving force behind many development schemes in the oil-rich Arab states.

Since the inception of the state, Jordan has placed a high value on developing the talents and nurturing the creativity of its people. It was the late King Hussein who coined the phrase 'Al ensan aghla ma namluk' meaning: 'the human is our most precious property'. This motto is a true expression of the Jordanian policies regarding human resources.

Following the path of his late father, King Abdullah the Second has instructed his governments to adopt an educational philosophy leading to the implementation of a knowledge-based economy, hoping to enable Jordan to take the lead in the information technology field and to become a regional hub for information technology and other creative arts industries.

Toward this goal, computer science and technology have become integral parts of the Jordanian educational system at all levels, and the use of this technology has gained momentum in all provinces and among all age groups and socioeconomic classes in the kingdom. As a result of this, today more than 3.5 million Jordanians use computer technology and one form or another of social media: Jordan is responsible for creating more than 75% of the Arabic content of the internet.

Despite all these achievements, the country is still facing major challenges in implementing its ambitious plan to develop its human resources and to create the opportunities for Jordanians to realise their full potential. One of the major challenges lies in the inability of the economy to create enough jobs for the stream of graduates; today the 29 universities push around 50 thousand graduates out into the already congested job market each year. The surplus graduates join the tens of thousands of unemployed young people, increasing the pressure on the economy and exerting further pressure on families and communities.

Due to its limited natural resources and the shrinking opportunities for employment in the neighbouring states, Jordan today faces one of the most serious unemployment problems in the region. According to the official figures, the overall unemployment rate is around 11.6%, although other estimates put the figure at 24%. Most of the unemployed are college graduates. The high unemployment rate has an enormous effect on all spheres of life and the quality of education as well, since students see no hope at the end of the tunnel.

It is deeply frustrating for Jordanian youth, who have joined universities to achieve their dream of education, job, money, house, family and stability, to see this dream shattered by the growing unemployment. The immediate expression of this frustration can be observed through the frequent incidents of campus violence. In recent years all the universities have registered several cases of tribal fights and non-campus-related conflicts. The increased incidents and prevalence of campus violence have caught the attention of policy-makers at all levels and raised some serious questions about the adequacy of the Jordanian higher educational system to develop the talent of Jordanian youth and to meet the needs of the local and regional job markets.

Faced with these economic and social challenges, Jordan needs to redefine its priorities and to maximise the return of its best resources: human talent; therefore, the development of the cultural-based industries and the copyright-related industries are Jordanian priorities par excellence.

In order to embark on this important endeavour, a thorough assessment of this field is a necessity; for this reason, the current study is an attempt to address the issues related to these industries in terms of definition, composition, contribution to the GDP, employment and their added value.

This section will present an overview of the industries falling under the Copyright Law in Jordan.

#### 3.2 Copyright-based industries

#### 3.2.1 Press and Literature

Jordan is classified as one of the top four countries in the Arab world in terms of publishing and distribution of literature, along with Egypt, Lebanon and Syria; Jordan publishes and distributes more than 15% of the textbooks in Arabic.

In 2011, the number of publications registered with the National Library exceeded 2,000 publications; this number does not include publications which did not seek protection through the National Library. According to the Jordanian Publishers Association, there are more than 140 publishing houses in Jordan, 40 of which are responsible for the publication of 70% of all published literature in Jordan.

Most published materials are textbooks in the fields of humanities: education, religion, special education, research methods and literature. While the authors are mostly Jordanians, publishers find it easier to print their materials in Beirut or Cairo. This phenomenon is due to the lower cost of materials and the incentives offered in Lebanon and Egypt and denied by the Jordanian financial system.

The markets for Jordanian published materials can be found in the Gulf States, Algeria, Tunisia, Libya and Morocco. The sector employs around 2,000 people directly. Its contribution to the economy is quite small and might be even smaller if we consider the fact that printing is mostly done outside Jordan.

The case of the press is slightly different. The Jordanian press enjoys a high level of freedom, and this atmosphere has encouraged journalists from all political backgrounds to publish daily and weekly journals. While this phenomenon reached its peak in the mid 90's of the past century, it is declining today as the electronic and social media are gaining more popularity.

Today there are 7 daily newspapers with a moderate level of circulation, that is, not more than 200,000 copies a day: Al-Dusters, Al-Rai, Al-Ghad, Al Arab al yaum, Al-Deyar, Al-Sabeel and the Jordan Times. In addition, there are more than 20 weekly and monthly journals with a very low level of distribution; some of them have appeared a few times in the market and disappeared, others do not follow a regular schedule of publication. This sector employs more than 2,000 people, half of whom are journalists.

In general terms, this sector is declining due to many internal and external factors. Many readers find the newspaper an old source of news compared with the electronic news websites and the news satellite channels which are constantly updated. The decline has left its impact on the value of newspaper stocks. For example, the price of Al-Rai securities in the stock market has dropped from 20 JDs two years ago to less than 4 JDs today.

#### 3.2.2 Music, Theatrical Production and Operas

Traditionally, music, theatre and operas are not popular in Arab cultures. For so many centuries, Arab Muslims paid very little attention, if any, to this type of art; in many cases performing these arts was prohibited and condemned.

In recent years, Arab attitudes toward music and theatre have changed slightly. Today there are hundreds of young talented Jordanians aspiring to become musicians and actors, yet very few have found their way to fame and popularity. As a response to the change in the public sentiment towards music, many universities

and institutes have begun teaching music and acting. Thousand of Jordanians are developing their talents and pursuing careers in music, theatre and singing.

Music festivals have become part of the Jordanian culture and are now tourist attractions, drawing audiences from neighbouring Arab countries. As well as the Jerash festival, musicians are engaged in more than 20 music festivals a year. In the past decade, many music groups and bands have emerged and made their mark in the Arab and world arenas. Among these, Tareq Al-Nasser, Hitham Sukkaryeh and the Khoury Trio have composed music which has gained world-wide popularity, inspiring many young Jordanians to follow their path.

Like sports, many young people in the Arab world see music as a ladder for their aspiration to break out of poverty, a means of upward mobility to fame and wealth. This has led to the emergence of a new industry which brings together singers, musicians, instructors, recording studios, events management, recording agencies, producers, and so on. In Jordan today there are: seven official colleges and institutes teaching music, 25 recording studios, five companies for producing CDs and cassettes, two individual recording companies and 110 singers and musicians running their own production.

Theatrical production started as early as the beginning of the twentieth century, yet it has not left a significant mark on the Jordanian way of life. Despite the presence of four huge outdoor Roman theatres, 26 relatively modern theatres and more than 200 professional actors, few Jordanians have the habit of going to the theatre: thus, theatre production has remained limited in quantity and poor in quality. With the exception of a few plays focusing on domestic issues and satirising politicians, Jordanians can hardly highlight a play that has left a mark on their memories.

Jordan has no opera house; in fact, the Amman municipality launched a project to build an opera house five years ago, but until today this project has not seen the light.

#### 3.2.3 Radio and Television

In Jordan, radio broadcasting started as early as 1958, followed by the first Jordan television channel in 1968. Today, there are more than 30 radio and 40 television channels. In addition, Jordan is a base for 260 satellite and 65 radio channels which operate their broadcasting through the Media City in Amman.

This sector provides job opportunities for more than 5,000 Jordanians. Jordan's universities and the Media Institute offer a set of training and academic programmes to students from Jordan and neighbouring Arab states.

For many decades, Jordan has been the main supplier of human resources to this sector in the Arab states: Jordanian journalists and technicians are found in almost every satellite channel and radio station in the neighbouring Arab states.

#### 3.2.4 Visual and graphic arts

In addition to their artistic value, visual and graphic arts are instrumental in advertisement, decoration, urban planning and architectural design.

Jordanian visual and graphic artists are involved with developments taking place in Jordan and neighbouring countries. Modern communication tools and technology have been extremely useful in the development of this art and enabling the artists to exhibit their creations to potential clients beyond their local communities.

Due to frequently held annual exhibitions and specialised conferences, visual and graphic arts are gaining popularity in Jordan and the region. The Jordan Artists Association represents 135 accomplished artists; this number does not include other artists who function independently.

Six Jordanian universities provide a bachelor degree course in graphic design. Artists exhibit their productions in galleries, art festivals and through social media technology. The National Museum for Art has played an important role in raising the awareness of visual and graphic arts in Jordan among Jordanians and tourists alike. The museum has exhibited more than 2,000 artworks by 520 artists from 43 countries. In addition,

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there are 11 cultural centres with one hall or more for different artistic exhibitions, such as The Royal Cultural Center.

#### 3.2.5 Photography

Photography is becoming more popular among large sectors of the Jordanian population, yet it is not a well-developed art. In fact, many photographers have never received any formal training nor joined a professional association.

In the last two decades, some efforts have been made to develop this art. The Jordanian Society for Filming was established in 1994 with the aim of developing the profession. As a result, competent photographers were employed and encouraged to use their talent in capturing the beauty of the historical and tourist attraction sites in Jordan, such as Petra and the Dead Sea. Some of their works were published and distributed across the world.

Today, the members of the Jordanian Photographers Association exceed 200 photographers and their work is exhibited in many local, regional and international exhibitions.

Despite the wide spread of photo capturing tools and their accessibility to all age groups and segments of society, the business of professional photography is growing rapidly. This growth can be attributed to the increase in social events and formal meetings and conferences. Weddings, engagements, graduations and birthday parties are among the events requiring photographers: in Jordan, families' frequent gatherings and celebrations demand the presence of photographers to commemorate their event. There are more than 140,000 engagements and weddings, thousands of graduations and birthday parties annually. These events generate a huge amount of work opportunities for hundreds of photographers.

#### 3.2.6 Information and Communication Technology (ICT)

It should be mentioned here that this combined category of ICT incorporates several of the WIPO categories. The ICT sector consists of around 531 companies in Telecoms, Information Technology (IT), Online and Mobile Content, Outsourcing and Games Development. In 2010, ICT total revenue reached US\$ 2 billion compared to US\$ 560 million in 2000. Revenue growth over that period was around 13.6%. ICT's contribution to the national economy amounted to 14.1% of GDP and directly accounted for 1.23% of total employment. The sector exports to more than 45 countries, including Saudi Arabia (34%), Iraq (13%), UAE (13%), USA (7%), Oman (5%) and others (28%).

The segments of the ICT sector include the following:

Telecom : Operators; ISPs/ASPs IT Infrastructure : Hardware; Networking

IT Software : Enterprise Solutions; Emerging Applications

Online and Mobile : Content; Applications

Outsourcing : IT; Business and Knowledge Process

Games : Online and Mobile; Console

In 2010, a comprehensive survey was conducted by the ICT Association, generating the most reliable data on the sector.

Clearly, not all the ICT sector can be considered as copyright industries, rather, a portion of most of the activities in this sector enter into the calculation and can be accounted for. However, the companies that are closely identified as copyright-related totalled 251 in 2010, with revenues amounting to US\$ 250 million distributed as follows:

Table 3.1: ICT revenues in 2010

ISIC	Description	Number of companies	Revenue (\$ million)
5820	Software Publishing	24.0	15.5
6201	Computer Programming Activities	180.0	81.6
6202	Computer Consultancy and Computer Facilities Management Activities	33.0	77.4
6311	Data Processing, Hosting and related Activities	14.0	75.4
Total		251.0	249.9

Source: ICT Association, ICT and ITES Statistics Yearbook 2010

In 2010, ICT total revenues exceeded US\$ 731.8 million, cumulative FDI was more than US\$ 142.5 million and IT and Information Technology Enabled Services (ITES) employment was 9,858 employees. Revenues from the telecom activities exceeded US\$ 1,186.6 million, with mobile and internet subscribers surpassing 6.6 million and 2.3 million respectively. Employment in ICT reached 4,739 employees.

#### 3.2.7 Advertising Services

Advertising is a crucial element of any economy. With free trade and growing competition, advertisement is becoming an integral part of every business in Jordan: this sector has witnessed an enormous growth in the last decade. It is operated by more than 1,000 advertising agencies.

In the last five years, Jordanian businesses, firms and corporations have spent more than 200 million USD annually on advertising. Due to legal and procedural constraints, newspapers and outdoors advertisement are preferred by clients and small businesses especially advertise their production and services in this way.

The television share of the whole advertising market in Jordan is less than 10%.

#### 3.2.8 Motion Picture and Video

Over the last 40 years, Jordan has played a pivotal role in advancing Arabic drama production in the form of TV and radio series. During the '70s and '80s of the past century, Jordanian productions were very popular in many Arabic-speaking countries. The popularity of Jordanian TV drama in the Arab world during that time was a testament to the success of Jordan in creating the right environment for their cultural industries to flourish.

Unfortunately, due to the Gulf War, many Arab countries boycotted Jordanian drama productions. Consequently Jordan lost all the major markets for its drama production and competitors, Egypt and Syria, took its place; since then, the industry has been suffering the consequences of that major setback.

Today, there are 24 audiovisual production companies. Their productions include: television drama, television variety programmes, children's programmes, documentaries, dubbing cardboard kids, translation and dubbing of foreign movies and serials, publicity and advertising and feature films. The nature of this work depends on the technical competencies of writers, actors and directors, photographers, technicians for editing, decor, sound and lighting, and production managers and broadcasters. This sector employs an estimated 3,000 people.

In Jordan, feature film production is very limited, but TV drama series are abundant and popular. One of the major factors responsible for the popularity of Jordanian TV production is the unique talent of the scriptwriters. Dr.Waleed Waif and Jamal Abu Hamdan are among the best Arab scriptwriters and the most popular TV drama series and Arab films have been based on their work – *Salah al-deen, Al-Hajjaj, Saqer Quraish, Al-Taghreebeh,* etc.

Jordan hosts one of the most reputable production centres in the region. The Arab Centre for Media and Production is one of the major driving forces behind the success of Jordanian drama. In the last five years the

centre has been able to produce some productions which were noted at the Arab and international level. The recent drama series *Al liteyah* was able to compete and win the Amy award at the global level.

Next to scriptwriters, actors and technicians are the backbone of Jordanian production; they have earned a very high reputation and esteem for their ability to preserve the Arab tradition and history through the roles they have played in Arabic drama. However, in recent years, many artists have expressed dissatisfaction with their work and living conditions, blaming government lack of interest and support for the state they are in.

The growing frustration led the artists' associations to organise a general strike for more than six weeks in 2012; their list of demands evolved around job opportunities, health insurance, social security and the adoption of a national strategy aiming at the development of the sector.

#### 3.2.9 Collective Management Societies (CMS)

A Collective Management Society (CMS) is defined as a legal not-for-profit or a non government organisation (NGO) with the task of protecting authors and rights owners and collecting and delivering the amounts that would be obtained in their favour as a result of copyright or any related rights. It is well recognised that collecting societies are an important element of the copyright infrastructure. The efficient functioning of such societies can substantially increase the direct income to creators generated by their copyright. In Jordan, although there are several NGOs operating in the copyright sector, such as the writers' union, artists' union and journalists' union, but these NGOs do not exercise any functions regarding the collection of rights-related revenues. Nevertheless, those organisations have a substantial number of members and they collectively undertake activities to protect their professional rights. It is believed that those organisations can be encouraged and directed towards collection activity through awareness, training and empowerment.

# 4. Contribution of the Copyright-based Industries to GDP

Chapter Four is divided into six sections covering value added and growth in the economy of Jordan, followed by value added and employment in the copyright industries. It goes on to estimate the effects of the copyright industries on the economy.

#### 4.1 GDP and Personal Services<sup>2</sup>

In 2006 and 2009, GDP at market prices amounted to JD 10,675.4 million and JD 16,912.2 million respectively and average annual percentage change was 17.6% during this period. On average, the share of the services sector was 65.5% of GDP while the share of GDP of the social and personal services sector was 4%.

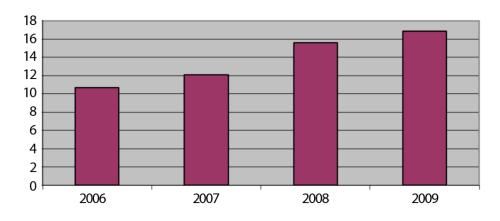
It is clear that the Jordanian economy is services-oriented and the latter contributes 65.5% of value added (on average). Personal services, which include many of the cultural activities such as literature activities, creativity, video recording, photography, music, publishing, composing, writing, etc., comprise 4% of GDP.

Table 4.1: Services Share in GDP and Annual Change 2006-2009

Year	2006	2007	2008	2009
GDP(million JD)	10,675.4	12,131.2	15,593.4	16,912.2
Annual Change (%)	19.6	13.6	28.5	8.5
Share of Services Sector (%)	68.1	65.5	63.5	64.9
Share of Personal Services Sector (%)	4.2	4.4	3.8	3.7

Source: Central Bank of Jordan, Monthly Statistical Bulletin, vol. 47, No.8, August 2011.

Figure 4.1: GDP: 2006-2009



Source: Central Bank of Jordan, Monthly Statistical Bulletin, vol. 47, No.8, August 2011.

#### 4.2 Growth

During the period 2006-2009, growth rate of GDP at constant prices was 6.9 on average, while that of social and personal services was higher at 10.1. Also, growth in this sector was the highest across all the sectors of the economy.

<sup>&</sup>lt;sup>2</sup>Personal services include education, health, security, photography, motion picture and video production, radio and TV, drama and music, arts, entertainment and others. Hence, most cultural activities (writers, creators, artists, etc.) are classified under personal services.

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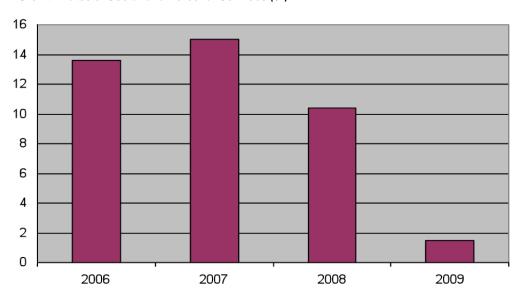
Notwithstanding the importance of the other sectors, much attention was addressed to the services sector due to its large share in GDP, its higher levels of growth and the high absorption rate of the labour force. However, the economy of Jordan is relatively small and small-scale enterprises play a significant role in driving growth and creating job opportunities, which is a main characteristic of the services sector. In this regard, cultural activities are undertaken by small enterprises having relatively little capital compared to labour input.

In comparison with the other sectors of the economy, average growth in constant prices during the same period (2006-2009) amounted to 6.9% in agriculture, 10.2% in electricity and water and 9.2% in construction. The mining industry showed a negative growth of -5.5% due to the collapse in world markets following the global financial crisis (Strategy Consulting, 2010).

Table 4.2: Growth Rates of GDP and Social and Personal Services during 2006-2009 (at constant prices)

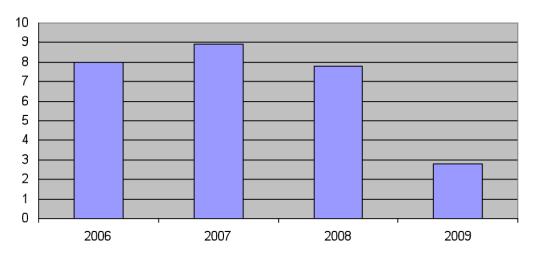
Year	2006	2007	2008	2009
GDP	8.0	8.9	7.8	2.8
Social and Personal Services	13.6	15.0	10.4	1.5

Figure 4.2: Growth Rates of Social and Personal Services (%)



Source: Central Bank of Jordan, Monthly Statistical Bulletin, vol. 47, No. 8, August 2011.

Figure 4.3: Rate of GDP (2006-2009 (%)



#### 4.3 Value- Added

#### 4.3.1 *Core Copyright Industries*

Press and Literature activities comprised half of the total value-added of the core copyright industries, followed by the software and database industries with 20.5%, radio and television activities' share was 10%, motion picture and video industries constituted 6.4%, advertising services contributed 5.6%, photography comprised 4% and music, theatrical and opera's contribution was 2.7%.

Publishing and printing is dominated by printing establishments (476) compared to publishing of books (54) and newspapers (64). The majority (540) are small-scale, employing fewer than ten workers and only nine establishments employed more than 100workers. Annual revenues of 379 establishments did not exceed JD 10,000; 84 establishments' revenues ranged between JD 10-20,000 and 58 establishments reached revenues of more than JD 100,000. The publishing industry is rather weak, due to the fact that most writers find it unproductive and of little benefit to produce books or publications. Writing and publishing activities are rather unrewarding and create few incentives to get engaged in publications.

The same situation is mirrored in the programming industry (software and database). 45 establishments were engaged in software development and programming, 35 of which employed fewer than ten workers, and 21 establishments realised revenues of less than JD 10,000, while seven establishments achieved annual revenues of more than JD 100,000.

Radio and television numbered 11 establishments and all of them were located in Amman. Only one firm employed more than 500 employees, while the remaining ten employed fewer than 20 workers. The revenues of only three establishments exceeded JD 100,000 annually.

Motion picture and video industries numbered 72 establishments; all but two of them employed fewer than 100 workers. Most of them generated revenues of less than JD 60,000 and 15 establishments generated revenues of more than JD 60,000.

Photography activities were undertaken by 584 establishments, half of which were located in Amman. The majority, (580 establishments) were small-scale, employing fewer than ten workers, and generated revenues of less than JD 20,000 thousand.

There were 14 establishments engaged in music and theatrical activities, ten of which were located in Amman. All but one employed fewer than ten workers, with revenues exceeding JD 20,000.

Similar to the other sectors of the economy, the CRI are small-scale enterprises employing fewer than ten workers and generating revenues of less than JD 20,000 annually. Most of those establishments target the domestic market and operate in Amman to a large extent.

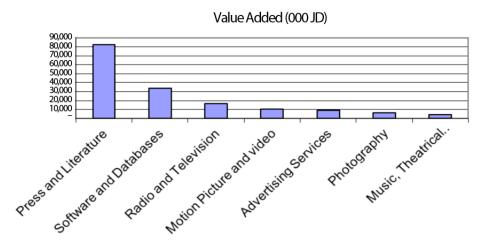
Table 4.3: Contribution of Individual Core Industries Subgroups in Value Added, 2006

(Contribution in 000JD)

	Value Added	As % of Total Category
Core Copyright Industries	162,878	100.00%
Press and Literature	82,739	50.80%
Music, Theatrical Productions, Operas	4,366	2.70%
Motion Picture and Video	10,452	6.40%
Radio and Television	16,275	10.00%
Photography	6,546	4.00%
Software and Databases	33,403	20.50%
Visual and Graphic Arts	-	-
Advertising Services	9,097	5.60%
Copyright Collecting Societies	-	-

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Figure 4.4: Core Copyright Industries



Source: Department of Statistics, Amman, HK of Jordan

#### 4.3.2 Interdependent Copyright Industries

The survey of 2006 did not report any activities related to the manufacturing of apparatus or equipment such as televisions, radios, videos, recording devices, computers, musical instruments, photography and photocopiers (ISIC codes: 3230, 5000, 3692, 3320, and 3600). Nevertheless, trade activities in those items (both wholesale and retail) generate substantial amount of value added and job opportunities which need to be accounted for. The study relied on consultations and in-depth interviews with professionals and practitioners, in addition to data published by the Department of Statistics to estimate the relevant amounts of value added. The estimated amounts are presented in Table 4.4 below.

The survey highlighted activities related to the manufacturing of paper products (pulp, paper and paperboard – 2101; corrugated paper and paperboard and containers of paper and paperboard – 2102; other articles of paper and paperboard – 2109). However, not all the value added of the paper activities reported by the survey can be considered as part of the copyright component – paper board, for example, clearly needs to be excluded from the accounts.

The table below shows that trade activities in TV sets, radios, VCRs, CD-DVD players and recorders constituted 40.4% of the value added of the interdependent copyright industries, which was followed by trade activities in computers and equipment (35.6%). Paper activities consisted of 11.3% of the total value added of interdependent copyright industries; 7.5% was contributed by blank recording material; photocopiers' share was 3.7% and the remaining 1.4% was the contribution of photographic, cinematographic and musical instruments.

The survey reported 106 firms working in the manufacturing of paper, 71% of which were located in Amman. 81 establishments (76%) were small-scale, employing fewer than 20 workers, 17% were medium-sized firms employing between 20-99, and the remaining 7% employed more than 100 workers. In terms of annual revenues, 37% generated revenues of more than JD 60,000.

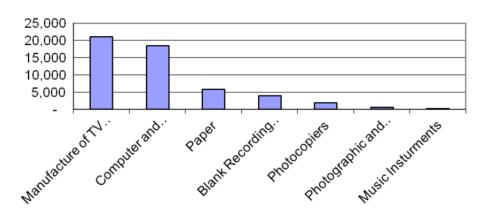
The survey reported 11 firms engaged in the manufacturing of other chemical products (ISIC code 2429). All of them were located in Amman and employed fewer than 20 workers; however, five firms generated revenues of more than JD 100,000 and four generated less than JD 10,000.

Table 4.4: Contribution of Interdependent Copyright Industries Subgroups in Value Added, 2006 (000JD)

	Value Added	Copyright factor in %	Copyright Value-added	As % of Total Category
Interdependent Copyright Industries	51,929		51,929	100.00%
Manufacture of TV sets, Radio, VCRs, CD-DVD players	21,000	100%	21,000	40.40%
Photocopiers	1,900	100%	1,900	3.70%
Photographic and Cinematographic instruments	700	100%	700	1.30%
Music Instruments	65	100%	65	0.10%
Computer and Equipment	18,500	100%	18,500	35.60%
Blank Recording Material	3,894	100%	3,894	7.50%
Paper	9,783	60%	5,870	11.30%

Figure 4.5: Interdependent Copyright Industries

#### Value Added (000 JD)



Source: Department of Statistics, Amman, HK of Jordan

#### 4.3.3 Partial Copyright Industries

Architecture, engineering and surveying contributed the highest value added to the economy among partial copyright industries (34.3%), followed by apparel, textiles and footwear (30.5%), and interior design (15.6%). Furniture contributed 7.6%, while wall coverings and carpets as well as other crafts' contribution were 4.6% each. Jewellery and coins' share was 0.9%, which was similar to toys and games, household goods, china and glass (0.8%), but higher than museums (0.3%).

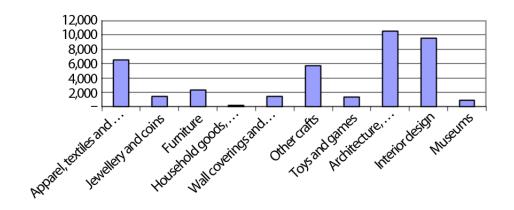
It is worth reiterating here that only some of the activities of the partial copyright industries are related to copyright, which necessitates calculations of factor contributions. The study calculated those factors, presented in Table 4.5 below, by relying on the input-output tables supplied by the Department of Statistics, and on consultations and in-depth interviews with professionals and practitioners in the relevant field, as well as thorough investigations and calculations undertaken by the research team. Museums and galleries are very few in Jordan and their contribution to value added and employment is insignificant; also, a large part of their orientation is to engagements in copyright related activities. A factor of 50% was adopted, following similar cases in other countries.

Table 4.5: Contribution of Individual Partial Copyright Subgroups in Value Added, 2006 (000JD)

	Value Added	Copyright factor in %	Copyright Value Added	As % of Total Category
Partial Copyright Industries	612,159		39,702	100.00%
Apparel, textiles and footwear	186,446	3.50%	6,526	30.50%
Jewellery and coins	5,724	25.00%	1,431	0.90%
Furniture	46,465	5.00%	2,323	7.60%
Household goods, china and glass	4,816	3.00%	144	0.80%
Wall coverings and carpets	27,858	5.00%	1,393	4.60%
Other crafts	28,450	20.00%	5,690	4.60%
Toys and games	5,250	25.00%	1,313	0.90%
Architecture, engineering, surveying	210,250	5.00%	10,513	34.30%
Interior design	95,200	10.00%	9,520	15.60%
Museums	1,700	50.00%	850	0.30%

Figure 4.6: Partial Copyright Industries Value





Source: Department of Statistics, Amman, HK of Jordan

#### 4.3.4 Non-dedicated Support Industries

The contribution of the wholesale and retail sector to GDP was JD 1026.8 million, while transport and communications value added was JD 1181.9 million. However, those figures relate to the sector as a whole, while only part of it can be included in copyright activity.

Wholesale and retail activities within the copyright-related activities as mentioned above were not available from the survey. For this reason, figures related to wholesale and retail were grouped under this item, which were then redistributed using the factors that were calculated from the input-output tables.

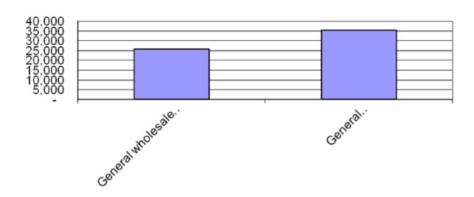
Consequently, according to the factors presented in Table 4.6 below, the contribution of wholesale and retail to copyright activities amounted to JD 25.7 million, while the contribution of transport and communications registered JD 35.5 million.

Table 4.6: Contribution of Non-dedicated Support Industries in Value Added, 2006 (000JD)

	Value Added	Copyright factor in %	Copyright Value- added	As % of Total Category
Non-dedicated Support Industries	2,208,744		61,128	100.00%
General Wholesale and Retailing	1,026,844	2.50%	25,671	42.00%
General Transportation, Telephony and Internet	1,181,900	3.00%	35,457	58.00%

Figure 4.7: Non-Dedicated Support Industries Value Added

(000 JD)



Source: Department of Statistics, Amman, HK of Jordan

#### 4.3.5 Total Copyright Industries Value-Added

Core copyright industries' value added reached JD 162.9 million (52%) in 2006, which was the highest among the other copyright and copyright-based industries, and interdependent copyright industries contributed JD 51.9 million or 16%. Partial copyright industries' value added was JD 39.7 million or 13%, while non-dedicated support industries' value added reached JD 61.1 million or 19%.

Hence, the total contribution of the copyright industries reached 2.96% of GDP in 2006; the relative importance of agriculture in GDP amounted to 3.5%, mining was 1.94%, manufacturing 17.7%, electricity and water 2.12% and construction 4.77%.

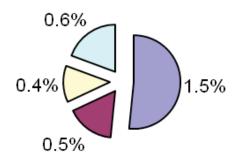
Table 4.7: Core Copyright, Interdependent Copyright, Partial and Non-dedicated Support Industries' Contribution to GDP in 2006

(000 JD)

	Percent	Value Added
Core Copyright Industries	52%	162,878
Interdependent Copyright Industries	16%	51,929
Partial Copyright Industries	13%	39,702
Non-dedicated Support Industries	19%	61,128
Total Copyright	100%	315,637
GDP		10,675,400
Per cent of GDP	2.96%	

29

Figure 4.8: Contribution of Copyright Industrise to GDP



- ■Core Copyright Industries
- Partial Copyright Industries
- Non-dedicated Suuport Industries

■ Interdependent Copyright industries

Source: Department of Statistics, Amman – Jordan; CBJ, ibid.

#### 4.4 **Employment by Category**

The sector is characterized by small scale since only six establishments and thirty three establishments employ more than five hundred workers and between (100-499) workers respectively. The largest industries include paper manufacturing (1), radio and television (4), publishing and printing (1). The majority of establishments employ less than (10) workers. The employment estimates by the statistics department are reliable. However, it is worth mentioning here that copyright activities based on individual effort or created as a secondary activity which is not usually captured by the statistics since it is not registered were estimated by the research team-WIPO experts using methodologies adopted by other studies.

#### 4.4.1 *Core Copyright Industries*

Press and literature industries employed 44.5% of total employment in the core copyright industries followed by radio and television (21.4%). Software and database industries employed 10.6%; advertising industries employed 11.4%. Photography employed 5.9%, music, theatrical and opera employed 3.5% and motion picture and video industries employed 2.8%.

**Table 4.8:** Employment in Core Copyright Industries

	Copyright Employment	As % of Total
Core Copyright Industries	19,288	100.00%
Press and Literature	8,584	44.50%
Music, Theatrical Productions, Operas	675	3.50%
Motion Picture and Video	532	2.80%
Radio and Television	4,118	21.40%
Photography	1,138	5.90%
Software and Databases	2,042	10.60%
Visual and Graphic Arts		-
Advertising Services	2,199	11.40%
Copyright Collecting Societies		

10,000 9,000 000,8 7,000 6,000 5,000 4,000 3,000 2,000 1,000 Picture and video Visual and Graphic Arts Press and Literature Photography

Figure 4.9: Employment in Core Copyright Industries by Category

Source: Department of Statistics, Amman – Jordan.

#### 4.4.2 Interdependent Copyright Industries

Following the same methodology that was adopted for value added estimation, here the study showed that trade (both wholesale and retail) in items related to TV sets, radio, VCRs, CD-DVD players engaged 44.9% of the workers in the interdependent copyright industries, followed by computers and equipment. Next to them, paper industries employed 8.2% of total employment in the interdependent copyright industries, followed by photocopiers (4.2%) and blank recording material (3.8%). Lastly, photographic, cinematographic and music instruments employed 1.5%.

**Table 4.9: Employment in the Interdependent Copyright Industries** 

	Total Employment	Copyright Employment	As % of Total
Interdependent Copyright Industries	6,943	6,943	100.0%
Manufacture of TV sets, Radios, VCRs, CD-DVD players	3,120	3,120	44.9%
Photocopiers	290	290	4.2%
Photographic and Cinematographic Instruments	90	90	1.3%
Musical Instruments	11	11	0.2%
Computers and Equipment	2,600	2,600	37.4%
Blank Recording Material	264	264	3.8%
Paper	568	568	8.2%

3500 3000 2500 2000 1500 1000 500 0 Manufacture of TV sets, Radio, VCRs, CD-DVD Computer and Equipment **Photocopiers** Insturments Blank Recording Paper Photographic and Cinematographic insturments players Material

Figure 4.10: Employment of Interdependent Copyright Industries by Category

Source: Department of Statistics, Amman – Jordan.

#### 4.4.3 Partial Copyright Industries

Apparel, textiles and footwear employed 49.1% of total employment in the partial copyright industries, followed by architecture and engineering (16.9%), interior design (10.1%), furniture industries (11.4%), and other crafts (7.5%). Household goods, china and glass employed 0.7%, similar to jewellery and coins, while wall coverings and carpets employed 2.5%.

**Table 4.10: Employment in the Partial Copyright Industries** 

	Total Employment	Copyright factor in %	Copyright Employment	As % of Total
Partial Copyright Industries	91,962		5,822	100.00%
Apparel, textiles and footwear	45,126	3.50%	1,579	49.10%
Jewellery and coins	649	25.00%	162	0.70%
Furniture	10,456	5.00%	523	11.40%
Household goods, china and glass	672	3.00%	20	0.70%
Wall coverings and carpets	2,344	5.00%	117	2.50%
Other crafts	6,886	20.00%	1,377	7.50%
Toys and games	770	25.00%	192	0.80%
Architecture, engineering, surveying	15,500	5.00%	775	16.90%
Interior design	9,261	10.00%	926	10.10%
Museums	298	50.00%	149	0.30%

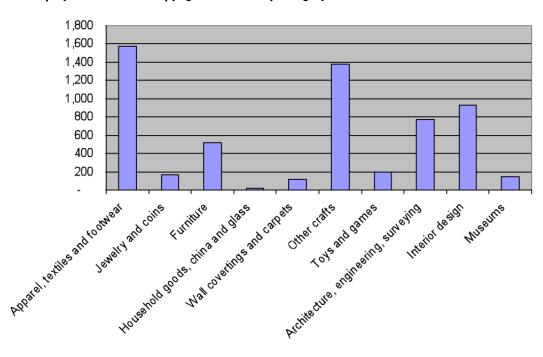


Figure 4.11: Employment of Partial Copyright Industries by Category

Source: Department of Statistics, Amman – Jordan.

#### 4.4.4 Non-dedicated Support Industries

The general wholesale and retailing sector employed 2,863 or 80% of total employment in the non-dedicated support sector, while general transport, telephony and internet employed only 886.

Table 4.11: Employment in the Non-Dedicated Support Industries

	Copyright factor in %	Total Employment	Copyright Employment	As % of Total
Non-dedicated Support Industries		144,041	3,749	100%
General wholesale and retailing	2.50%	114,520	2,863	80%
General transportation, telephony and internet	3.00%	29,521	886	20%

Source: Department of Statistics, Amman – Jordan.

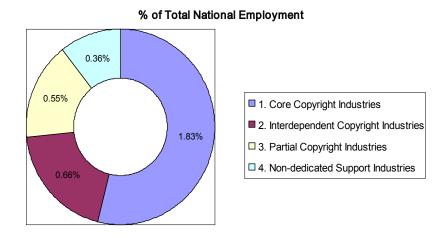
#### 4.4.5 Employment in Copyright Industries

The total number of Jordanians employed in 2006 amounted to 1,055,847 (DOS, Labour statistics, Analytical Report 2005-2009). Core copyright industries employed 19,228 or 1.83% of the total; interdependent copyright industries employed 6,943 or 0.66%; partial copyright industries' contribution to employment reached 0.55%; and non-dedicated support industries' contribution was 0.36%. On the whole, 3.4% of the labour force is engaged in activities falling within the copyright sector.

Table 4.12: Employment in the Copyright Industries in 2006

Industries	Per cent of National Employment	Number of Workers
1. Core Copyright Industries	1.83%	19,288
2. Interdependent Copyright Industries	0.66%	6,943
3. Partial Copyright Industries	0.55%	5,822
4. Non-dedicated Support Industries	0.36%	3,749
Total	3.39%	35,801
Total Jordanian Workers	100.00%	1,055,847

Figure 4.12: Employment in Copyright Industries



Source: Department Of Statistics, Labour statistics, Analytical report 2005-2009.

It is to be noted that specific copyright industries, such as education and personal services, are genderoriented. In education, the number of female workers was 58,640, close to the number of males. However, 40.9% of working females were engaged in education activities compared to 7.2% of male workers.

Table 4.13: Employment by gender

Employment by Gender					
Activity	Male Female				
Education	65,433 7.2%		58,640	40.9%	
Services, social and personal	51,840	5.7%	8,069	5.6%	
Total in the economy	912,065	86.4%	143,782	13.6%	

#### 4.5 Production

The value of output in the core copyright industries amounted to JD 400.5 million and value of output in the interdependent copyright industries reached JD 52.3 million in 2006.

#### 4.6 Growth in Value Added

Growth rate in the value added at market prices of the core industries, during the period 2006-2009, was 12%. Clearly, this growth rate is among the highest growth rates in all the sectors of the economy.

Table 4.14: Growth Rates in Value Added 2006-2009 (000 JD)

Industry	2006	2009	Growth (%)
Core Copyright	162,878	228,784	12

Source, Department of Statistics, ibid.

#### 4.7 **Productivity**

Productivity, measured by value added per employee in the core copyright industries ranged between JD 4,000 in radio and television to JD 19,600 in the motion picture and video industries. Productivity in the software and database industries was relatively high at JD 16,400 followed by press and literature at JD 8,500 and music, theatrical and operas at JD 6,500, photography at JD 5,800 and advertising services at JD 4,100.

Productivity in the interdependent copyright industries was JD 10,300 for paper and JD 14,800 for blank recording material. Photographic and cinematographic activities recorded a value of JD 7,800 and computers registered JD 7,100. Musical instruments reached JD 6,000, while TV sets, videos, VCRs and CD-DVD apparatus recorded JD 7,500. Finally, productivity in photocopiers registered a value of JD 6,600.

In the partial copyright industries, productivity was highest for architecture and engineering at JD 13,600, followed by interior design at JD 10,300 and wall coverings and carpets at JD 11,900, household goods, china and glass at JD 7,200 and apparel, textiles and footwear at JD 6,700. In the lower range came jewellery and coins at JD 4,100, other crafts at JD 4,100 and furniture at JD 4,400.

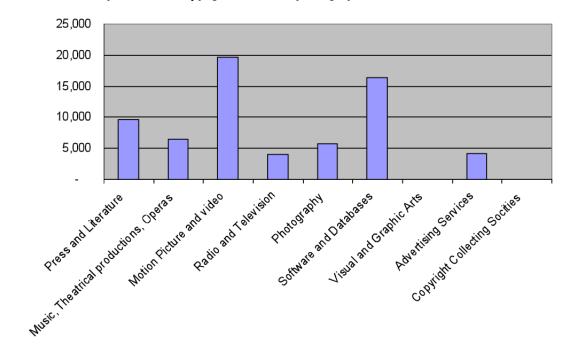
In the non-dedicated support industries, productivity was relatively high in general transportation and communication at JD 40,000 and moderate for wholesale and retail at JD 9,000.

Table 4.15: Productivity in the Copyright Industries (JD)

	Value Added per Worker
1. Core Copyright Industries	8,445
Press and literature	9,639
Music, theatrical productions, operas	6,468
Motion picture and video	19,647
Radio and television	3,952
Photography	5,752
Software and databases	16,358
Visual and graphic arts	
Advertising services	4,137
Copyright collecting societies	
2. Interdependent Copyright Industries	7,479
Manufacture of TV sets, radios, VCRs, CD-DVD players	6,731
Photocopiers	6,552
Photographic and cinematographic instruments	7,778
Musical instruments	5,909
Computer and equipment	7,115
Blank recording material	14,750
Paper	10,335
3. Partial Copyright Industries	6,657
Apparel, textiles and footwear	4,132
Jewellery and coins	8,820
Furniture	4,444
Household goods, china and glass	7,167

Wall coverings and carpets	11,885
Other crafts	4,132
Toys and games	6,820
Architecture, engineering, surveying	13,565
Interior design	10,280
Museums	5,700
4. Non-dedicated Support Industries	15,334
General wholesale and retailing	8,967
General transportation, telephony and internet	40,036

Figure 4.13: Productivity in the Core Copyright Industries by Category (JD)





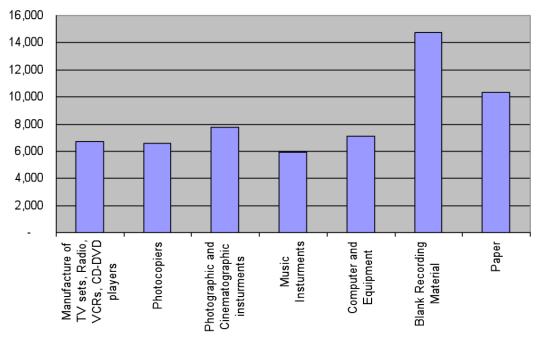


Figure 4.15: Productivity in the Partial Copyright Industries by Category (JD)

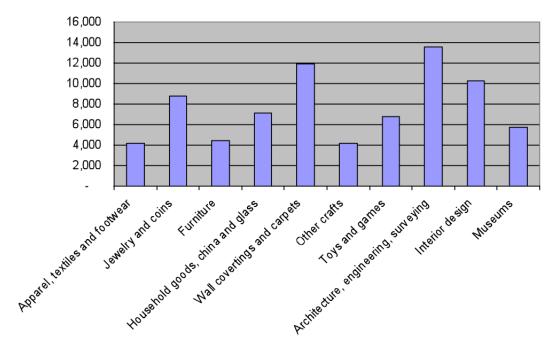
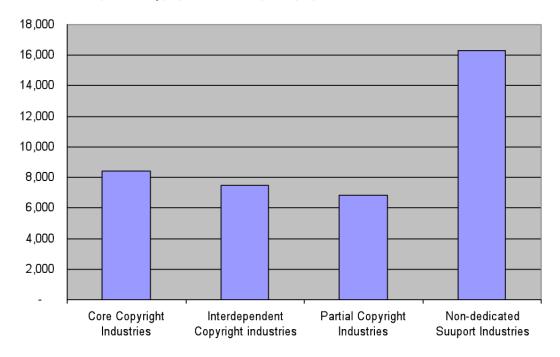


Figure 4.16: Productivity in the Copyright Industries by Category (JD)



Productivity, as defined in this study, depends to a large extent on the size of the establishment, the copyright factor that is related to the specific activities and the value of the output in the market. Another important factor is the nature of the establishment in terms of being a public or private entity, an ordinary or public shareholding company.

In this context, productivity is high in motion picture and video at JD 19,600 and software and databases at JD 16,400, because the copyright factor is high in those activities and the products under question are highly protected by the copyright law. Also, the value of output is high and the activities are undertaken by private establishments.

Productivity in the paper industry is high, because a substantial number of the establishments undertaking those activities are relatively medium-size or large.

Productivity in radio and television is low because the establishments carrying out those activities are public or public shareholding companies.

Productivity in music and theatrical production (JD 6,500) and advertising services (JD 4,100) is low because the establishments are mostly small-scale (fewer than 20 workers).

#### 4.8 Trade

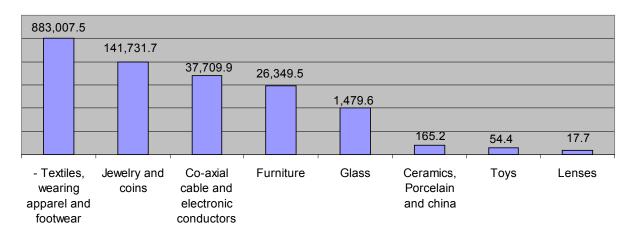
#### 4.8.1 *Exports*

- 1. In 2006, exports of newspapers, journals and periodicals reached JD 888,000, exports of printed books, brochures and leaflets amounted to JD 6.2 million, and exports of paintings, drawings, and pastels were at JD 832,000. The exports of the core copyright items were around JD 7.88 million.
- 2. In 2006, exports of television receivers, aerials and parts reached JD 9.7 million. Exports of compact discs and magnetic tapes amounted to JD 4.4 million.
- 3. Exports of interdependent copyright items amounted to JD 14.1 million.
- 4. In 2006, exports of partial copyright items amounted to JD 1,090.5 million, distributed as follows:

Table 4.16: Exports of partial copyright items (please align left the numbers in the table)

ltem	000 JD
- Textiles, wearing apparel and footwear	883,007.5
- Ceramics, porcelain and china	165.2
- Glass	1,479.6
- Jewellery and coins	141,731.7
- Co-axial cable and electronic conductors	37,709.9
- Lenses	17.7

Figure 4.17: Distribution of the Partial Copyright Items



Furniture 26,349.5Toys 54.4

Source: Department of Statistics, External trade statistics, 2006.

#### 4.8.2 Imports

1. In 2006, imports of printed books, brochures and leaflets amounted to JD 12,7 million. Imports of newspaper, journals and periodicals reached JD 4.6 million, and imports of paintings, drawings and pastels approached JD 314,7000.

Total imports of core copyright items reached JD 17.6 million.

- 2. In 2006, imports of jewellery, gold and beauty accessories amounted to JD 107.4million. Imports of electrical apparatus, microphones, radio cassettes, video recording, cartridges, magnetic tapes, disks, caesuras, aerials, receivers, transistors, circuits, fibre cables and lenses reached JD 543.4 million. Imports of parts and accessories for photography and projectors touched JD 4.1 million. Imports of musical instruments hit JD 4.4million.
- 3. Imports of textiles, wearing apparel and footwear amounted to JD 211.3 million. Imports of ceramics, porcelain and china amounted to JD 14.7 million. Imports of glass amounted to JD 35.4 million. Imports of furniture amounted to JD 69.2 million, and imports of toys amounted to JD 10.8 million.

#### 4.8.3 Trade Balance

The balance of trade is defined as exports less imports. In the core copyright items there was a trade deficit of around JD 10 million as shown below:

Table 4.17: Trade deficit in core copyright items

ltem	Exports	Imports	Balance
– Books, Brochure, Leaflets	6.2	12.7	- 6.5
– Newspapers, Journals, Periodicals	0.888	4.6	- 3.7
– Paintings, Drawings, Pastels	0.832	0.315	- 0.5
TOTAL	7.88	17.6	- 9.7

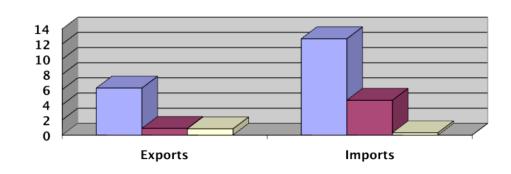
Source: Department of Statistics, External trade statistics, 2006.

The partial copyright items showed a trade deficit of around JD 641 million, as follows:

Table 4.18: Trade deficit in partial copyright items

ltem	Exports	Imports	Net Exports
– Jewellery, Gold, etc	_	107.4	- 107.4
– Electrical, etc	14.1	543.4	- 529.3
– Photography, etc		4.1	- 4.1
TOTAL	14.1	654.9	- 640.8

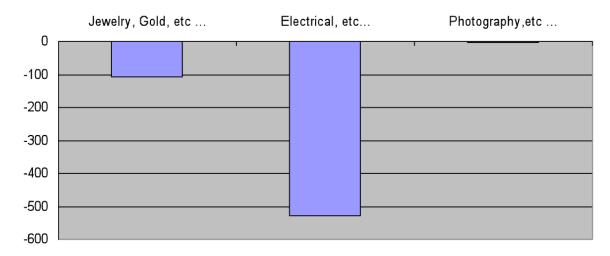
Figure 4.18: Trade Deficit of the Core Copyright Items



□- Books, Brochure, Leaflets □- News papers, Journals, Periodicals □- Paintings, Drawings, Pastels

#### 4.9 Multipliers

Figure 4.19: Partial Copyright Items Net Export



This section makes an effort to establish different multipliers, showing the indirect effects produced by the copyright-based industries and comparing them with the effects produced by other industries. For this purpose the input-output tables were utilised to identify the inputs of the copyright based industries into the other economic activities of the economy. The multiplier is then calculated through dividing the value of inputs contribution of the copyright industries by the value of the output of the selected economic activity. For example, publishing of newspapers, journals and periodicals (ISIC 2212) provides inputs to printing (ISIC 2221) and other economic activities as follows:

Table 4.19: Inputs of publishing into other activities

ISIC Code	Item Description			
2221	Printing	140		
5149	Wholesale of other intermediate products, waste and scrap	64		
7010	Real-estate activities with owned or leased property	44		
7129	Renting of other machinery and equipment	174		
Total		422		

Total inputs of 2212 into 2221, 5149, 7010 and 7129 sum up to JD 422,000 while outputs of 2221, 5149, 7010 and 7129 add up to JD 96,213,000 and by dividing the later by the former yields an amount of JD 228. This means that one JD worth of 2212 directly generates JD 228 worth of output in the related sectors or the economy. Repeating this process for all the CRI, as shown in Table 4.20, yields a multiplier of JD 30.

Analysis of the input-output tables revealed the following observations:

It was clear that most of the inputs of the copyright-based industries relate to each other. For example, publishing of newspapers, journals and periodicals provides most of its inputs to printing activities and vice versa. Also, printing activities relate substantially to publishing of books, brochures, newspapers, journals, periodicals, and other publications.

It was also evident that substantial inputs of all the copyright based industries, such as book publishing, newspaper printing, software publishing, advertising and photography, relate to general wholesale and retail of other intermediate products.

The activities that are related to motion picture projection provide substantial inputs to restaurants, bars and canteens.

The interaction of the copyright based industries with the rest of the economy was rather weak. There were few interactions with the industrial sector and entertainment activities such as those operated in theatres, operas and cultural venues.

Table 4.20 below shows that the activities of printing and professional organisations as well as manufacturing of related products have the highest multiplier effects on the economy. Next, with intermediate multiplier effects, come the publishing activities of software, newspapers, journals and periodicals. Few multiplier effects are generated by motion picture projections and advertising. The remaining activities have no multiplier effects of any significance.

In total, the inputs of the copyright-based industries into the economic activities as a whole add up to JD 53.3 million. The total output of the economic activities, excluding the copyright based industries' output, adds up to JD 17452.1 million. Hence, dividing the two figures gives a ratio of 327. In other words, it can be generally concluded that one JD worth of inputs results in JD 327 of output in the rest of the economy. However, this ratio is exaggerated, because it includes the direct and all the other indirect effects. It is more appropriate to include only the direct effects by considering the economic activities that directly take inputs from the copyright industries.

Table 4.20 shows the activities that directly take inputs from the copyright sector: the sum of their output adds up to JD 1593.4 million. Dividing this total by the sum of inputs yields a ratio of 30. In other words, one JD of input by the copyright sector generates JD 30 of output in the other sectors of the economy. In comparison, the corresponding calculations for agriculture and education are JD 646 and JD 93 respectively.

Table 4.20: Inputs of Copyright Based Industries Into Other Economic Activities and Output of Those Other Activities

ISIC Code	<b>Description</b>	Input JD(000)	Output JD(000)	Related Activity
2101	Manufacture of pulp, paper and paperboard	9525	56283	2102;9309
2211	Publishing of books, brochures and other publications		0	none
2212	Publishing of newspapers, journals and periodicals	422	96213	2221;5149;7010; 7129
2219	Other publishing	0	0	none
2221	Printing	19623	48605.5	2101;2102;2211; 2219;2222;5149
2222	Service activities related to printing	2467	4223	2029;2211
2429	Manufacture of other chemical products n.e.c.	6637	108004	2411
3230	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	5022	35920	2930
7221	Software Publishing	1328		5149
7229	Other software consultancy and supply	168		5149
7430	Advertising	57	1119	5149;7422
7499	Other business activities n.e.c.	768	28909	5149;7010
7494	Photographic activities	217		5149
9112	Activities of professional organizations	6836	966135	5149;6420;7010
9211	Motion picture and video production and distribution	0	0	none
9212	Motion picture projection	90	247939	5520
9213	Radio and television activities	0	0	none
9214	Dramatic arts, music and other arts activities	0	0	none
9219	Other entertainment activities n.e.c.	3		5149
9249	Other recreational activities	150		5149;9309
	Total	53313	1593351	

Source: Department of Statistics, Input-output tables, 2006.

#### 4.10 Financing

The financial sector in Jordan is relatively developed and access to funding is not difficult. Establishments and individuals alike have easy access to funding resources, which include private banks and specialised lending institutions such as the Employment and Development Fund. In general, lending institutions require a guarantor, including for micro loans, which limits the financing opportunities facing copyright activities. Those opportunities even diminish further in the case of any activity related to writing, composing, acting and fine arts. Those categories in particular rely on sponsoring by relatively large companies or institutions, which mainly cover part of the cost involved in undertaking the concerned activity.

In this context, a financial scheme targeting creative work in the copyright field is much needed. The scheme could be initiated under the umbrella and partnership of both the public and private sectors, with assistance from international partners and donor agencies.

### 5. International Comparisons

This chapter presents an international comparison of the contribution of CRI to GDP.

The contribution of CRI to GDP was highest in the USA and Australia, exceeding 12%, followed by Korea with more than 8%. The majority of the countries studied had a contribution of CRI to GDP ranging between 4-8%. Only in six countries, including Jordan, was CRI contribution to GDP less than 4%.

Employment absorption by CRI was the highest, exceeding 10%, in the Philippines and Korea, followed by Bhutan, Netherlands and the USA. The majority of the countries investigated absorbed between 4-8%, while seven countries, including Jordan, absorbed less than 4% of total employment.

Jordan comes at the bottom of the comparisons table in terms of percentage contributions to GDP and employment. The copyright-based industries' contribution to GDP amounts to 2.96%, while percentage contribution to employment is estimated at 3.4%. The reason why this contribution is low can be attributed to several factors, including: i) cultural factors judging activities related to fine arts, music and entertainment as inappropriate careers; ii) the industrial base being rather weak, hence activities in the manufacturing of copyright related items are almost inexistent; iii) copyright law enforcement activities are not strong enough to protect property rights and collective management societies are inexistent.

The table below shows detailed percentage contributions to GDP and employment by sector component.

Table 5.1: Contribution of copyright industries to Jordan's economy

VALUE ADDED				
1. Core Copyright Industries	1.53%			
2. Interdependent Copyright industries	0.49%			
3. Partial Copyright Industries	0.37%			
4. Non-dedicated Support Industries	0.57%			
Total	2.96%			
EMPLOYMENT				
1. Core Copyright Industries	1.83%			
2. Interdependent Copyright industries	0.66%			
3. Partial Copyright Industries	0.55%			
4. Non-dedicated Support Industries	0.36%			
Total	3.39%			

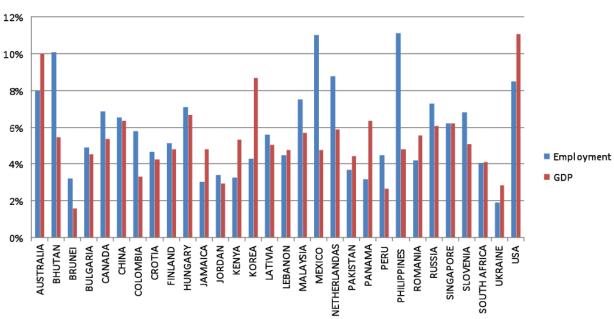
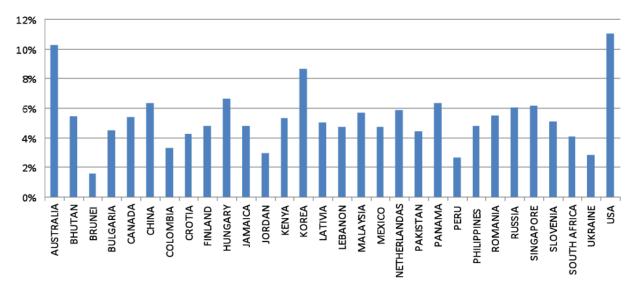


Figure 5.1: Copyright Contribution to the Economy, Worldwide

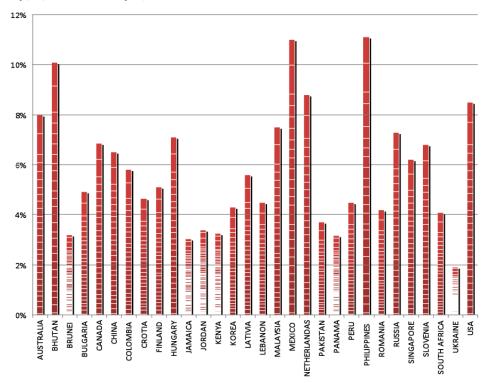
Figure 5.2: Copyright Share in GDP, Worldwide



Source: WIPO publications.



Figure 5.3: Copyright Share in Employment, Worldwide



Source: WIPO publications.

### 6. Conclusions and Recommendations

#### 6.1 Towards the Development of the Copyright-Based Industries in Jordan

It is imperative that cultural-based industries represent the contribution of the groups and nations to the wider global economy; their development depends heavily on the specificity and uniqueness of the culture. Jordan joined The World Trade Organisation (WTO) hoping to take advantage of the opportunities provided by the free exchange of goods and services and relying on the country's ability to compete and make headway in spheres where talent and creativity were required.

This notion was popular among policy-makers and individuals alike; it was supported by the fact that Jordan is a country which depends heavily on its human resources. The country prided itself on being the first in the region to adopt the knowledge-based economy approach and on having created more universities than any other Arab state.

Despite these hopes and the associated rhetoric, Jordan is not reaping the fruits of its knowledge-based economy, since that economy has been unable to create enough jobs to absorb the tens of thousands of graduates from its colleges and universities. This is due partly to the contradictions between policies in various sectors and sometimes within the same sector. Furthermore, very little has been accomplished in terms of taking full advantage of the new opportunities.

Today, it is obvious that the Jordanian economy is not in its best shape: it has debt of around 20 billion USD, a budget deficit of 3 billion USD and an unemployment rate reaching 11.6% according to the lowest estimate.

With all these facts in mind and with the continual search for solutions to the economy's chronic crisis, unfortunately the development of the cultural industries in general, and the copyright-based industries in particular, is not on the agenda of the policy-makers. In fact, the total spending of the Jordanian government on culture and cultural activities is less than 1% of the government budget. When it comes to the copyright-based industries, the deeds do not match the rhetoric. A recent artists' strike is only one example of the stakeholders' dissatisfaction with the government's lack of support and interest in a sector whose contribution to GDP (3%) exceeds mining and is close to that of agriculture. The sector is composed of the following economic activities:

Press and literature consisted of half of the total value added of the Core Copyright industries, followed by the software and database industries with 20.5%.

Paper activities contributed 11.3% of the total value added of the interdependent copyright industries; the contribution of blank recording material was 7.5%. Most value added contribution was accounted for by trade activities in equipment related to copyright, such as TV sets, radios, CD-DVD players, photocopiers, photography, cinematography and music.

Architecture, engineering and surveying contributed the highest value added to the economy among partial copyright industries (34.3%), followed by apparel, textiles and footwear (30.5%), and interior design (15.6%).

The core copyright industries employed 19,228 persons or 1.83% of total employment, while interdependent copyright industries' employment was 6,943 persons or 0.66% only.

In the core copyright industries, press and literature absorbed the majority of workers (44.5%), followed by radio and television (21.4%), advertising (11.4%), and software and data base (10.6%).

In the interdependent copyright industries, paper employed 8.2%, while blank recording material absorbed 3.8%. The majority of workers were engaged in trade activities related to copyright equipment and instruments.

In the partial copyright industries, around half of the labour force were engaged in apparel, textiles and footwear compared to 17% in engineering and architecture, 11.4% in furniture and 10.1% in interior design.

Productivity in the core copyright industries ranged between JD 4,000 in radio and television to JD 19,600 in motion picture and video. In the interdependent copyright industries the corresponding figures were JD 10,300 for paper and JD 14,800 for blank recording material. In the partial copyright industries, productivity was highest in architecture and engineering with JD 13,600, followed by wall coverings and carpets with JD 11,900 and interior design with JD 10,300.

Exports and imports of core copyright items amounted to JD 7.88 million and JD 17.6 million respectively. Also, exports and imports of interdependent copyright items reached JD 14.1 million and JD 659 million respectively. As a result, the trade in copyright items revealed a huge deficit.

It is estimated that copyright and related industries have a multiplier effect of JD 30: one JD worth of output in the copyright and related industries generates JD 30 of output in the economy.

In the national context, the contribution of the copyright-based industries to the economy is not significant. The sector as a whole, excluding ICT and advertising, is rather weak and has suffered from substantial setbacks.

Press and literature, although advanced in terms of publishing and writing, suffer from severe competition from Cairo and Beirut.

Activities in music, theatrical production and opera are underdeveloped and most festivals rely on foreign performers. However, this sector is gaining momentum especially in the areas of education, recording and production.

Radio and television have witnessed progressive developments in recent years, with more than 30 radio and 40 television channels.

Visual and graphic arts used to be unnoticed, until very recently this sector started to gain some popularity through annual exhibitions, conferences, national museum art displays and awareness activities.

Photography activities are mostly engaged in covering social events such as weddings, graduations, birthdays, conferences and national celebrations.

The ICT sector in Jordan is highly developed and very popular, due to its potential for income generation and absorbing more of the labour force. In 2006, ICT revenues reached US\$ 2 billion and absorbed 1.23% of the labour force.

Advertising services are performed by more than 1000 agencies and generate revenue of more than JD 200 million annually.

Motion picture and video were very popular in the past century and many Jordanians pinned a lot of hope on this sector to generate substantial income and absorb a significant amount of employment. However, despite several distinguished drama productions, the sector suffered from substantial setbacks following the political upheavals in the region. In 2006, there were 24 audiovisual production companies employing around 5000 people.

Based on the findings of the study, we propose the following recommendations:

- 1. **Data and Information:** the field of cultural industries in general, and the copyright-based industries in particular, is in need of a broad database on the nature, size, compositions, distribution, revenues, needs, challenges, aspirations, development, culture and training of all actors in the field. In addition, research must be initiated to assess and evaluate the policies and programmes in the field on a regular basis. The proposed database is the first step in a series of measures necessary to establish a national copyright strategy to develop the sector.
- 2. **Policies:** the government of Jordan needs to have a comprehensive policy related to copyright based industries. Most measures undertaken by the various stakeholders are based on official reactions to existing problems, rather than a well articulated policy. The policy must take into consideration both the reality and the potential of the copyright-based industries, and should be formulated with the participation of all stakeholders, including the creators and producers of ideas and intellectual discoveries.

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- 3. **Legislation:** the legal framework is a necessary condition for the creation of an environment conducive to the growth of creative activity, and to protect the rights of the creators. Public awareness of the existing laws is a crucial element to the success of its enforcement. Unfortunately, despite the existence of the laws since 1910 and the continuous amendments of these laws, enforcement of these laws and response to the law-breaking incidents are still subject to the discretion of many law enforcement agents. The discrepancy between law-making and law enforcement justifies the need for rigorous training and capacity-building programmes targeting the agents responsible for enforcing the copyright laws at all levels. Furthermore, this cannot be achieved without raising public awareness.
- 4. **Training:** both the government and the private sector are involved in the higher education system. Almost two-thirds of universities are established and managed by the private sector in Jordan; however, these institutions focus on the standard programmes provided by the various departments and very little attention is given to specialised training leading to creativity in research and practice. This condition has deprived Jordanian university graduates of the chance to compete on a regional and global level, as they hope to do. In the last 10 years, none of the 29 Jordanian universities has appeared in the list of the top 500 universities in the world. Neither the government nor the private sector are paying attention to the talent development schemes that are necessary in order to compete in a world that thrives on competition.
- 5. **Funding:** many copyright-based industries lack the necessary funds to grow. Lending institutions find it difficult to finance non-tangible products; the nature of copyright-based industries requires the existence of financing mechanisms sensitive to the nature of creative projects and their financial and cultural value. Therefore, governments ought to establish a funding agency specialising in copyright-based industries and should encourage the private sector to take part in supporting this very important provision.
- 6. Incentives: unlike other industries, creative art and copyright-based industries have great potential, but this potential cannot be fully realised without receiving the necessary support and protection. Many of the magnificent companies and corporations on the global scene today were the products of the ideas and thoughts of their founding fathers (for example, the Ford Corporation, Microsoft and facebook). Such ideas would have not seen the light if had not found a nurturing and supporting environment. Jordanian creators, authors, musicians, actors and artists are in urgent need of incentives in the form of recognition, protection, financial and moral support.
- 7. **Institutional Development:** the study realised that an important institution, namely a collective management association, did not exist. The existing associations for writers, publishing, journalists and artists do not function in a manner that can articulate an impact on the development of copyright-based economic activities. It is imperative in this regard to establish a collective management association and provide a mechanism to enhance the role of the existing associations in the development of the sector.
- 8. **Partial copyright industries:** the study found that the partial copyright industries are almost non-existent and, where available, they are very weak. Support and encouragement for establishing those industries will enhance the growth of copyright economic activities and increase their contribution to GDP and employment.
- 9. **Statistics and Data:** many copyright economic activities are carried out 'underground' and are not captured in the official statistics. Since those activities are carried out individually and not within a formal institutional framework, the study concluded that the contribution of the copyright industries is highly under-estimated. It is recommended here that the statistical framework should be developed to capture those activities so that they can be officially registered. In addition, a monitoring system should be developed which can identify and track improvements to the sector of copyright as a whole.

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### Annex I: Description of ISIC Codes

#### ISIC Rev.3.1.code and Description

Clacci	021/	Dramatic	artc	mucic	and	othor	artc	activition
Class.	9214-	Diamatic	arts.	music	anu	omer	arts	activities

Class: 7499 – Other business activities n.e.c. (for translation and interpretation)

Class: 2212 – Publishing of newspapers, journals and periodicals

Class: 9220 – News agency activities

Class: 2212 – Publishing of newspapers, journals and periodicals Class: 2211 – Publishing of books, brochures and other publications

Class: 2219 - Other publishing

Class: 2221 – Printing

Class: 2222 – Service activities related to printing

Class: 5139 – Wholesale of other household goods

Class: 5239 – Other retail sale in specialized stores

Class: 9231 – Library and archives activities

Class: 9214 - Dramatic arts, music and other arts activities

Class: 9219 – Other entertainment activities n.e.c.

Class: 9249 - Other recreational activities

Class: 2213 – Publishing of music

Class: 2230 - Reproduction of recorded media

Class: 5233 – Retail sale of household appliances, articles and equipment

Class: 7130 – Renting of personal and household goods n.e.c.

Class: 5139 – Wholesale of other household goods (incl. wholesale of recorded video tapes)

Class: 9214 – Dramatic arts, music and other arts activities

Class: 9214 – Dramatic arts, music and other arts activities

Class: 9214 – Dramatic arts, music and other arts activities

Class: 9211 – Motion picture and video production and distribution

Class: 9212 – Motion picture projection

Class: 7130 – Renting of personal and household goods n.e.c.

Class: 9211 – Motion picture and video production and distribution

Class: 2230 - Reproduction of recorded media

Class: 9213 – Radio and television activities

Class: 9213 – Radio and television activities

Class: 7499 – Other business activities n.e.c.

Class: 6420 – Telecommunications

Class: 6420 – Telecommunications

Class: 9213 - Radio and television activities

Class: 7494 – Photographic activities

Class: 2222 – Service activities related to printing

Class: 7499 – Other business activities n.e.c.

Class: 9231 – Library and archives activities

Class: 7221 – Software publishing

Class: 7229 – Other software consultancy and supply

Class: 5151 – Wholesale of computers, computer peripheral equipment and software

Class: 7240 – Database activities and on-line distribution of electronic content

Class: 7230 - Data processing

#### Activities by authors, music composers, and other independent artists n.e.c.

Class: 9214 – Dramatic arts, music and other arts activities

Class: 7494 - Photographic activities

Class: 9214 - Dramatic arts, music and other arts activities

Class: 7499 – Other business activities n.e.c.

Class: 7430 – Advertising

Class: 9112 – Activities of professional organizations

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- Class: 3230 Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods
- Class: 5139 Wholesale of other household goods
- Class: 5233 Retail sale of household appliances, articles and equipment
- Class: 7130 Renting of personal and household goods n.e.c.
- Class: 3000 Manufacture of office, accounting and computing machinery
- Class: 5151 Wholesale of computers, computer peripheral equipment and software
- Class: 7123 Renting of office machinery and equipment(including computers)
- Class: 3692 Manufacture of musical instruments
- Class: 5139 Wholesale of other household goods
- Class: 5233 Retail sale of household appliances, articles and equipment
- Class: 3320 Manufacture of optical instruments and photographic equipment
- Class: 5139 Wholesale of other household goods
- Class: 5239 Other retail sale in specialized stores
- Class: 7129 Renting of other machinery and equipment n.e.c.
- Class: 3000 Manufacture of office, accounting and computing machinery
- Class: 5159 Wholesale of other machinery, equipment and supplies
- Class: 2429 Manufacture of other chemical products n.e.c.
- Class: 5152 Wholesale of electronic and telecommunications parts and equipment
- Class: 5233 Retail sale of household appliances, articles and equipment
- Class: 2101 Manufacture of pulp, paper and paperboard
- Class: 5149 Wholesale of other intermediate products, waste and scrap
- Class: 5239 Other retail sale in specialized stores
- Class: 1810 Manufacture of wearing apparel
- Class: 1721 Manufacture of made-up textile articles
- Class: 1920 Manufacture of footwear
- Class: 5131 Wholesale of textiles, clothing and footwear
- Class: 5232 Retail sale of textiles, clothing, footwear and leather goods
- Class: 3691 Manufacture of jewellery and related articles
- Class: 5139 Wholesale of other household goods
- Class: 5239 Other retail sale in specialized stores
- Class: 9199 Activities of other membership organizations n.e.c.
- Class: 5239 Other retail sale in specialized stores
- Class: 3610 Manufacture of furniture
- Class: 5139 Wholesale of other household goods
- Class: 7130 Renting of personal and household goods n.e.c.
- Class: 2610 Manufacture of glass and glass products
- Class: 173 Manufacture of knitted and crocheted fabrics and articles
- Class: 2029 Manufacture of other products of wood
- Class: 2899 Manufacture of other fabricated metal products n.e.c.
- Class: 5139 Wholesale of other household goods
- Class: 5233 Retail sale of household appliances, articles and equipment
- Class: 1722 Manufacture of carpets and rugs
- Class: 2109 Manufacture of other articles of paper and paperboard
- Class: 5239 Other retail sale in specialized stores
- Class: 3694 Manufacture of games and toys
- Class: 5139 Wholesale of other household goods
- Class: 5239 Other retail sale in specialized stores
- Class: 7421 Architectural and engineering activities and related technical consultancy
- Class: 7499 Other business activities n.e.c.
- Class: 9232 Museums activities and preservation of historical sites and buildings

#### Division: 51 – Wholesale trade and commission trade, except of Motor vehicles and motorcycles

- 511 Wholesale on a fee or contract basis...
- 513 Wholesale of household goods
- 515 Wholesale of machinery, equipment and supplies...
- 519 Other wholesale

#### Division: 52 – Retail trade, except of motor vehicles and motorcycles;

#### Repair of personal and household goods

- 521 Non-specialized retail trade in stores
- 523 Other retail trade of new goods in specialized stores
- 525 Retail trade not in stores...

#### Division: 60 – Land transport; transport via pipelines

This Division is divided into the following Groups:

Group 601 – Transport via railways

Group 602 – Other land transport

Division: 61 – Water transport

Division: 62 – Air transport

Class 630 – Supporting and auxiliary transport activities

6301 – Cargo handling

6302 – Storage and warehousing

6303 – Other supporting transport activities

6304 – Activities of travel agencies and tour operators; tourist assistance activities n.e.c.

6309 – Activities of other transport agencies

#### Group: 641 – Post and courier activities

This Group is divided into the following Classes:

6411 – National post activities

6412 - Courier activities other than national post activities

Class: 6420 - Telecommunications

Class: 7240 – Database activities and on-line distribution of Electronic content

## Annex 2: Employment, Value Added and Production in 2006-2009

(Values in Thousand JDs)

ISIC	Number of employees Existing Production		Value Added	Existing Production	Value Added	
1010	2006	2006	2006	2009	2009	
1721	902	8,923	3,973	11,268	4,765	
1722	607	33,830	12,983	31,634	15,471	
1730	731	6,179	2,685	8,457	3,441	
1810	43,723	325,712	175,191	530,251	298,930	
1920	501	19,550	7,282	23,364	9,661	
2029	209	4,233	2,244	7,441	2,769	
2101	568	29,293	8,780	33,512	8,298	
2109	1,737	49,099	14,875	112,549	42,612	
2212	2,638	87,629	49,935	102,787	61,279	
2221	3,217	53,841	18,903	90,393	33,311	
2222	109	2,579	1,652	3,622	1,429	
2429	264	13,455	3,894	18,803	5,733	
2610	672	11,495	4,816	14,346	6,285	
2899	2,063	137,734	53,195	149,060	54,521	
3130	1,015	210,930	45,534	214,496	40,649	
3311	909	16,519	6,563	22,081	12,935	
3610	10,456	110,672	46,465	171,108	72,859	
3691	649	13,088	5,724	39,550	7,623	
3699	377	16,174	4,057	13,360	4,581	
9214	25	394	281	225	162	
7499	2,704	20,595	13,620	25,401	17,726	
9219	675	7,931	4,366	9,434	5,132	
7130	1,293	4,838	3,301	8,984	5,609	
9211	391	12,333	8,349	17,603	12,963	
9212	141	4,884	2,103	4,266	2,281	
9213	1,414	10,558	2,655	14,782	2,272	
7494	1,029	8,595	4,894	9,726	5,709	
7221	1,152	31,884	26,775	44,748	34,719	
7229	980	9,477	6,628	22,948	15,170	
7430	2,199	18,282	9,097	29,141	16,705	
9112	697	8,485	5,102	19,633	8,337	
7129	65	360	209	489	279	
5139	3,008	146,244	114,298	210,258	157,681	
5239	11,008	82,349	56,137	79,901	50,788	
5233	8,680	74,919	54,834	95,199	61,412	
5151	213	39,404	33,395	53,118	44,980	

ISIC	Number of employees	Existing Production	Value Added	Existing Production	Value Added
	2006	2006	2006	2009	2009
5159	1,823	59,365	48,574	77,491	59,208
5149	1,284	21,282	16,913	26,522	19,814
5152	174	71,112	65,239	54,238	39,395
5131	116	23,349	17,248	35,804	28,626
5232	14,003	79,602	53,858	121,116	78,073
51	15,602	708,530	560,111	878,232	670,164
52	98,918	650,409	466,733	847,833	571,487

ISIC	Number of employees	Existing Production	Value Added	Existing Production	Value Added
1010	2006	2009	2009	2006	2006
1721	902	11268	4765	8923	3973
1722	607	31634	15471	33830	12983
1730	731	8457	3441	6179	2685
1810	43,723	530251	298930	325712	175191
1920	501	23364	9661	19550	7282
2029	209	7441	2769	4233	2244
2101	568	33512	8298	29293	8780
2109	1737	112549	42612	49099	14875
2212	2638	102787	61279	87629	49935
2221	3217	90393	33311	53841	18903
2222	109	3622	1429	2579	1652
2429	264	18803	5733	13455	3894
2610	672	14346	6285	11495	4816
2899	2063	149060	54521	137734	53195
3130	1015	214496	40649	210930	45534
3311	909	22081	12935	16519	6563
3610	10456	171108	72859	110672	46465
3691	649	39550	7623	13088	5724
		13360	4581	16174	4057
3699	377				
9214	25	225	162	394	281
7499	2704	25401	17726	20595	13620
9219	675	9434	5132	7931	4366
7130	1293	8984	5609	4838	3301
9211	391	17603	12963	12333	8349
9212	141	4266	2281	4884	2103
9213	1414	14782	2272	10558	2655
7494	1029	9726	5709	8595	4894
7221	1152	44748	34719	31884	26775
7229	980	22948	15170	9477	6628
7430	2199	29141	16705	18282	9097
9112	697	19633	8337	8485	5102
7129	65	489	279	360	209
5139	3008	210258	157681	146244	114298
5239	11008	79901	50788	82349	56137
5233	8680	95199	61412	74919	54834
5151	213	53118	44980	39404	33395
5159	1823	77491	59208	59365	48574
5149	1284	26522	19814	21282	16913
5152	174	54238	39395	71112	65239
5131	116	35804	28626	23349	17248
5232	14003	121116	78073	79602	53858
51	15602	878232	670164	708530	560111
52	98918	847833	571487	650409	466733

	% CONTRIBUTION OF COPYRIGHT INDUSTRIES TO GDP						
COUNTRY	YEAR OF PUBLICATION	Total SHARE	CORE	INTERDEPENDENT	PARTIAL	NON- DEDICATED	
AUSTRALIA	2009	10.30	7.30	2.00	0.40	0.60	
BHUTAN	2011	5.46	1.90	0.60	2.20	0.76	
BRUNEI	2011	1.58	0.70	0.10	0.70	0.08	
BULGARIA	2011	4.54	2.74	1.08	0.29	0.43	
CANADA	2004	5.38	3.99	0.90	0.11	0.38	
CHINA	2009	6.37	3.06	1.92	0.48	0.91	
COLOMBIA	2008	3.30	1.90	0.80	0.30	0.30	
CROATIA	2007	4.27	2.99	0.88	0.32	0.08	
FINLAND	2010	4.83	3.70	0.47	0.20	0.46	
HUNGARY	2010	6.66	3.96	1.24	0.45	1.01	
JAMAICA	2007	4.81	1.70	0.74	0.47	1.90	
JORDAN	2006	2.96	1.53	0.49	0.37	0.57	
KENYA	2009	5.32	2.30	2.17	0.41	0.44	
KOREA	2005	8.67	4.03	2.79	0.36	1.49	
LATIVIA	2004	5.05	2.90	1.10	0.28	0.77	
LEBANON	2007	4.75	2.53	0.71	0.62	0.89	
MALAYSIA	2008	5.70	2.90	2.10	0.60	0.10	
MEXICO	2006	4.77	1.55	1.69	0.85	0.68	
NETHERLANDS	2009	5.90	4.00	0.40	0.90	0.60	
PAKISTAN	2010	4.45	1.37	0.11	0.98	1.99	
PANAMA	2009	6.35	5.40	0.06	0.05	0.84	
PERU	2009	2.67	1.23	0.28	0.02	1.14	
PHILIPPINES	2006	4.82	3.53	0.96	0.04	0.29	
ROMANIA	2008	5.55	3.55	1.08	0.53	0.39	
RUSSIA	2007	6.06	2.39	0.76	0.27	2.64	
SINGAPORE	2007	6.19	3.46	1.56	0.09	1.08	
SLOVENIA	2010	5.10	3.30	0.60	0.50	0.70	
SOUTH AFRICA	2011	4.11	2.05	0.56	0.21	1.29	
UKRAINE	2008	2.85	1.54	0.68	0.10	0.53	
USA	2009	11.05	6.44	2.13	0.40	2.08	

## Annex 4: Contribution to Employment

	% CONTRIBUTION OF COPYRIGHT INDUSTRIES TO EMPLOYMENT					
COUNTRY	YEAR OF PUBLICATION	Total SHARE	CORE	INTERDEPENDENT	PARTIAL	NON- DEDICATED
AUSTRALIA	2009	8.00	4.97	1.81	0.57	0.65
BHUTAN	2011	10.09	1.03	0.29	7.16	1.61
BRUNEI	2011	3.20	1.50	0.40	1.10	0.20
BULGARIA	2011	4.92	2.78	1.34	0.31	0.49
CANADA	2004	6.87	4.00	0.91	0.16	0.33
CHINA	2009	6.52	3.14	1.90	0.85	0.63
COLOMBIA	2008	5.80	1.70	0.70	1.90	1.50
CROATIA	2007	4.65	3.22	0.93	0.41	0.08
FINLAND	2010	5.12	4.06	0.43	0.25	0.38
HUNGARY	2010	7.10	4.15	1.25	0.61	1.07
JAMAICA	2007	3.03	1.79	0.31	0.23	0.68
JORDAN	2006	3.39	1.83	0.66	0.55	0.36
KENYA	2009	3.26	1.20	0.75	1.04	0.27
KOREA	2005	4.31	2.15	1.06	0.31	0.79
LATIVIA	2004	5.59	3.70	0.07	0.44	0.75
LEBANON	2007	4.49	2.11	0.73	0.70	0.95
MALAYSIA	2008	7.50	4.70	1.60	0.90	0.20
MEXICO	2006	11.01	3.41	3.65	2.53	1.41
NETHERLANDS	2009	8.80	6.20	0.60	1.10	1.00
PAKISTAN	2010	3.71	0.70	0.04	1.37	1.60
PANAMA	2009	3.17	1.52	1.20	0.31	0.13
PERU	2009	4.50	2.09	0.14	0.07	2.20
PHILIPPINES	2006	11.10	8.81	1.40	0.20	0.60
ROMANIA	2008	4.19	2.36	0.58	0.82	0.43
RUSSIA	2007	7.30	4.29	0.75	0.56	1.69
SINGAPORE	2007	6.21	4.04	1.15	0.20	0.82
SLOVENIA	2010	6.80	4.60	0.80	0.70	0.07
SOUTH AFRICA	2011	4.08	2.31	0.51	0.23	1.03
UKRAINE	2008	1.90	1.16	0.46	0.08	0.20
USA	2009	8.51	4.05	2.17	0.26	2.03

HS.CODE	COMMODITY EXPORTS 2006	JDs
490110000	Printed books, brochures, leaflets and similar printed matter, in single sheets, whether or not folded.	551,288
490199000	Other printed books and similar printed matter, whether or not in single sheets, other than those heading in no $-49.01$	5,607,308
4901	Sum	6,158,596
490290000	Newspapers, journals and periodicals, whether or not illustrated or containing advertising material other than those appearing at least four times a week.	552,411
490700900	Unused postage, revenue or similar stamps of current or new issue in the country to which they are destined; stamp-impressed paper; banknotes, stock, share or bond certificates and similar documents of title	29,661
490900000	Printed or illustrated postcards, printed cards bearing personal greetings, massages or announcements, whether or not illustrated, with or without envelopes.	2,528
491000000	Calendars of any kind, printed, including calendar blocks.	60,200
491110900	Trade advertising material, commercial catalogues and the like other than the advertising materials related to tourism in jordan	88,717
491199900	Other printed matter, other than those falling within heading no 49.11	799,338
4911	Sum	888,055
610-640	Textiles, wearing apparel and footwear	883,007,500
691	Ceramics, porcelain and china	165,189
700-702	Glass	1,479,602
710812000	Non – monetary gold in unwrought forms.	5,910,260
711291000	Waste and scrap of gold, including metal clad with gold but excluding sweepings containing other precious metals.	280,738
HS.CODE	Commodity exports 2006	JDs
711319100	Articles of jewellery and parts, of gold	135,156,240
711719000	Other articles of imitation jewellery, of base metal, weather or not plated with precious metal	384,456
710-711	Sum	141,731,694
852311000	Other unrecorded magnetic tapes, of a width not exceeding (4) mm, for sound recording or similar recording of other phenomena, other than those heading no – 85.23.11	29,689
852320000	Magnetized discs, unrecorded, ready for recording sounds and other phenomena.	17,319
8523	Sum	47,008
852431000	Compact disks, recorded, for reproducing phenomena except for the sound or pictures.	4,298,855
852439000	Other discs for laser reading systems, for reproducing image only, recorded.	27,557
852453000	Other recorded magnetized tapes for recording sound and other phenomena, of a width exceeding (6.5) Mm.	10,006

HS.CODE	COMMODITY EXPORTS 2006	JDs
852499000	Other disks and holders for recording sound or other phenomena, recorded, not mentioned or found elsewhere.	21,316
8524	Sum	4,357,734
852812900	Television receivers whether or not incorporating radio-broadcast receivers or sound or video recording apparatus, colour-number	9,708,822
852910100	Aerials and aerial reflectors of all kinds; parts suitable for use therewith, for satellite reception or transmission	12,840
852990100	Parts suitable for use with the transmision apparatus for radio-broadcasting or television	2,021
852990900	Parts suitable for use solely or principally with the apparatus of headings no.85.25 To 85.28 Other than those falling within heading no.85.29	14,900
8529	Sum	9,738,583
854270000	Electronic microassemblies.	210,686
854411000	Insulated electrical winding wire of copper.	2,998,183
854419000	Other insulated electrical winding wire, other than of copper.	3,861,758
854420000	Co-axial cable and other co-axial electric conductors	30,320,570
854430000	Ignition wiring sets and other wiring sets of a kind used in vehicles, aircraft or ships	50,789
854441900	Other insulated electric conductors, for a voltage not exceeding (80) v, fitted with connectors, and not of a kind used for telecommunication	404,512
854451900	Other insulated electric condactors, for avoltage exceeding (80) v, but not exceeding (1000) v, fitted with connectors, other than of a kind for telecommunications.	74,071
8544	Sum	37,709,883
900130000	Contact lenses of any material.	3,603
900140000	Spectacle lenses of glass	14,060
9001	Sum	17,663
901060000	Projector screens.	60,660
940	Furniture	26,349,500
950	Toys	54,381
970110000	Paintings, drawings and pastels, executed entirely by hand other than hand-painted or hand-decorated manufactured articles.	21,749
970190000	Collages and similar decorative plaques, other than hand-painted or hand-decorated manufactured articles.	810,198
9701	Sum	831,947
	TOTAL	1,314,934,644

HS.CODE	COMMODITY IMPORTS	JDs
490110000	Printed books, brochures, leaflets and similar printed matter, in single sheets, whether or not folded.	1,934,435
490199000	Other printed books and similar printed matter, whether or not in single sheets, other than those heading in no $-49.01$	10,728,466
4901	Sum	12,662,901
490290000	Newspapers, journals and periodicals, whether or not illustrated or containing advertising material other than those appearing at least four times a week.	161,017
490300000	Children's picture, drawing, or colouring books.	230,677
490400000	Music, printed or in manuscript, whether or not bound or illustrated.	500
490599000	Maps and hydrographic or similar charts of all kinds including atlases, wall maps and topographical plans, printed, other than those inbooks form	3,685
490600000	Plans and drawings for architectural, engineering, industrial, commercial, topographical or similar purposes, being originals drawn by hand; hand- written texts, photographic reproductions on sensitised paper and carbon copies of the foregoin.	150
490700900	Unused postage, revenue or similar stamps of current or new issue in the country to which they are destined; stamp-impressed paper; banknotes, stock, share or bond certificates and similar documents of title	77,546
490900000	Printed or illustrated postcards, printed cards bearing personal greetings, massages or announcements, whether or not illustrated, with or without envelopes.	142,560
491000000	Calendars of any kind, printed, including calendar blocks.	570,570
491199900	Other printed matter, other than those falling within heading no 49.11	3,104,337
4911	Sum	4,574,564
610-640	Textiles, wearing apparel and footwear	211,277,225
691	Ceramics, porcelain and china	14,683,821
700-702	Glass	35,354,215
710229000	Industrial worked diamonds.	171,947
710399000	Semi – precious stones, ungraded, temporarily strung for convenience of transport, otherwise worked.	34,107
710420000	Synthetic precious, unworked or simply sawn or roughly shaped.	860
710510000	Dust and powder of diamonds.	27,831
710692000	Silver semi – manufactured forms.	1,250,491
710813000	Non – monetary gold in semi – manufactured forms.	25,895,697
711039000	Rhodium in semi – manufactured forms.	770
711320000	Articles of jewellery and parts thereof, of base metal clad with precious metal	78,144,032
711420000	Articles of goldsmiths' or silversmiths' wares, of base metal, clad with precious metal, parts thereof	70,410
711590000	Other articles of precious metal or of metal clad with precious metal, other than catalysts	146,792

HS.CODE	COMMODITY IMPORTS	JDs
711620000	Articles of precious or semi – precious stones ( natural, synthetic or reconstructed )	3,450
711790000	Beauty accessories categories except of the ones made of base metals.	1,686,671
710-711	Sum	107,433,058
851790000	Parts of a kind used for electrical apparatus for line telephony or line telegraphy, including such apparatus for carrier – current line systems.	53,253,936
8517	Sum	53,253,936
851890000	Parts for microphones, loudspeakers, headphones, earphones and audio-frequency electric amplifiers	4,280,294
8518	Sum	4,280,294
851999000	Other sound reproducing apparatus, not incorporating a sound recording device, other than those of heading no. 85.19 — Number.	375,766
8519	Sum	375,766
852010000	Dictating machines not capable of operating without an external source of power – number.	370
852032000	Other radio-cassette of magnetic tapes, of digital types-number	33,112
852033000	Other radio-cassette of magnetic tapes, of casset types-number	66,043
852039000	Other magnetic tape recorders incorporating sound reproducing apparatus, other than cassette type- number.	35,871
852090000	Other magnetic tapes recorders and other sound recording apparatus, whether or not incorporating a sound reproducing device, other than those of heading no. 85.20 – Number.	308,476
8520	Sum	443,872
852110000	Video recording or reproducing apparatus, of magnetic tape-type, whether or not incorporating a video tuner – number.	67,712
852190100	Digital video disks reading machines ( dvd ) — number	2,828,311
852190900	Other video recording or reproducing apparatus, whether or not incorporating a video tuner, other than magnetic tape-type other than (dvd) – number	298,074
8521	Sum	3,194,097
852210000	Pick-up cartridges	646
852290000	Parts and accessories for specail or main use with the machines included in items (85.19 To 85.21), Other than the pick — up cartridges.	3,239,768
8522	Sum	3,240,414
852311000	Other unrecorded magnetic tapes, of a width not exceeding (4) mm, for sound recording or similar recording of other phenomena, other than those heading no $-85.23.11$	304,117
852312000	Other unrecorded magnetic tapes of a width exceeding (4) mm, but not exceeding (6.5) Mm, for sound recording or similar recording of other phenomena.	26,675
852313000	Unrecorded magnetic tapes of a width exceeding (6.5) Mm, for sound recording or similar recording of other phenomena.	430,927
852320000	Magnetized discs, unrecorded, ready for recording sounds and other phenomena.	730,978
852330000	Empty cards with magnetized lines, ready to record sound or other phenomena.	84,071
852390000	Other disks and magnetized tapes, empty ready for recording sounds or other phonomena, not mentiond or found eleswhere.	281,971

HS.CODE	COMMODITY IMPORTS	JDs
	Sum	1,858,739
852499000	Other disks and holders for recording sound or other phenomena, recorded, not mentioned or found elsewhere.	2,276,878
852540900	Still image video cameras and other video camera recorders other than the digital- number	282,684,056
852692000	Radio remote control apparatus – number.	860,079
852790900	Other radio-broadcast receivers, including apparatus capable of receiving also radio-telephony or radio-telegraphy, not elsewhere specified or included-number.	1,648,965
852830900	Other projectores, not mentioned or found elsewhere – number.	20,278,908
852910100	Aerials and aerial reflectors of all kinds; parts suitable for use therewith, for satellite reception or transmission	954,341
852910200	Aerials or antennae of kind used with apparatus for radio – telephony and radio- telegraphy	696,729
852910900	Other aerials and aerial reflectors of all kinds; parts suitable for use therewith, other than those for satellite reception or transmission	827,190
852990100	Parts suitable for use with the transmission apparatus for radio-broadcasting or television	11,609,836
852990200	Parts of transmission apparatus other than apparatus for radio-broad casting or television, trans mission apparatus incorporating reception apparatus, digital still image video cameras and portable receivers for calling alerting or paging.	1,442,284
852990900	Parts suitable for use solely or principally with the apparatus of headings no.85.25 To 85.28 Other than those falling within heading no.85.29	10,381,921
	Sum	25,912,301
854110000	Diodes, other than photosensitive or light emitting diodes	16,638
854121000	Transistors, other than photosensitive transistors with a dissipation rate of less than 1 w	6,781
854129000	Transistors, other than photosensitive transistors, with a dissipation rate of more than 1 w.	52,880
854130000	Thyristors, diacs and triacs, other than photosensitive devices, electrical.	77,612
854140000	Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes.	123,623
854150000	Other semiconductor devices.	1,123
854190000	Parts of principally or solely of a kind used for diodes, transistors and similar semiconductor devices.	722
	Sum	279,379
854210000	Full electronic circuits cards, intelligent cards.	2,515,179
854221000	Monolithic digital integrated circuits.	342,308
854229000	Other monolithic integrated circuits, other than digital ones.	129,503
854260000	Hybrid integrated circuits.	69,980
854270000	Electronic microassemblies.	32,715
854290000	Parts of a kind principally or solely used for electronic integrated circuits and microassemblies	12,128
	Sum	3,101,813

HS.CODE	COMMODITY IMPORTS	JDs
854470000	Optical fibre cables, made up of individually sheathed fibres, whether or not assembled with conductors or fitted with connectors	31,011,188
	Sum	31,011,188
900110000	Optical fibres, optical fibre bundles and cables.	15,503
900120000	Sheets and plates of polarising material, of optical elements.	446
900130000	Contact lenses of any material.	838,591
900140000	Spectacle lenses of glass	99,276
900150000	Spectacle lenses of other materials	279,351
	Sum	1,233,167
900211000	Objective lenses, for cameras, projectors or photographic enlargers or reducers, of any material	30,549
900219000	Other objective lenses of any material, not else where specified or included.	4,534
900220000	Filters of optical elements, of any material.	10,178
900290000	Prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked, not else where specified or included.	18,201
	Sum	63,462
900311000	Frames and mountings, of plastics.	76,220
900319000	Frames and mountings, of other materials other than plastics	201,659
900390100	Parts and accessories of frames and mountings for spectacles goggles or the like, imported by the opticuls factories as industrial inputs.	93,927
900390900	Parts and accessories fo frames and mountings for spectacles goggles or the like, other than imported by the opticuls factories, as industrial inputs.	3,228
	Sum	375,034
900490000	Spectacles, goggles and the like, corrective, protective other than sun glasses.	78,125
	Sum	378,625
900510000	Binoculars.	2,818
900580000	Astronomical instruments monoculars and mountings therefor, but not including instruments for radio-astronomy	2,091
	Sum	4,909
900699000	Parts and accessories for photographic flashlight apparatus and flashbulbs.	372,397
	Sum	372,397
900792000	Parts and accessories, for projectors.	45,775
	Sum	45,775
900810000	Slide projectors – number.	427,720
900820000	Microfilm, microfiche or other microform readers, whether or not capable of producing copies Number	9,408
900830000	Other image projectors – number.	4,113

HS.CODE	COMMODITY IMPORTS	JDs
900890000	Parts and accessories of a kind used for image projectors, photographic (other than cinematographic) enlargers or reducers	1,376
	Sum	442,617
900999000	Parts and accessories for photo — copying apparatus incorporating an optical system or the contact type and thermo — copying apparatus.	1,457,143
	Sum	1,457,143
901050000	Other type of machinaries for photographic, or cinematogrophic laboratories, lighted screens for negative x-rays not mentioned or found elsewhere.	271,537
901060000	Projector screens.	206,730
901090100	Parts and accessories of the aparatus of heading 901041 or 901049.	11,720
901090900	Parts and accessories of apparatus and equipment for photographic or cinematographic.	105,236
	Sum	1,759,760
920110000	Upright pianos – number.	38,787
920120000	Grand pianos – number.	300
920190000	Pianos, including automatic pianos; harpsichords and other keyboard stringed instruments, other than those upright and grand pianos — number.	38,967
	Sum	78,054
920210000	Other string musical instruments (for example, guitars, violins, harps), played with a bow.	13,376
920290000	Other string musical instruments (for example, guitars, violins, harps) other than those played with a bow.	90,984
	Sum	104,360
920300000	Keyboard pipe organs; harmoniums and similar keyboard instruments with free metal reeds.	23,892
920410000	Accordions and similar instruments.	1,509
920590000	Other wind musical instruments unbrass,(for example clarinets, trumpets, bagpipes).	820
	Sum	4,057
920600000	Percussion musical instruments (for example, drums, xylophones, cymbals, castanets, and maraccas).	29,282
920710000	Keyboard musical instruments, other than accordions.	18,159
920790000	Musical instruments, the sound of wich is produced, or must be amplified, electrically, not specified or included elsewhere in this chapter.	35,651
	Sum	53,810
920930000	Musical instruments strings.	3,631
920992000	Parts and accessories for the musical instruments of strings.	5,653
920999000	Other parts and accessories of a kind used for musical instruments, not specified or included elsewhere.	26,438
	Sum	35,722
940	Furniture	69,230,201
950	Toys	10,830,952

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The Economic Contribution of Copyright-Base	Industries in the Hashemite
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HS.CODE	COMMODITY IMPORTS	JDs
970110000	Paintings, drawings and pastels, executed entirely by hand other than hand-painted or hand-decorated manufactured articles.	
970190000	Collages and similar decorative plaques, other than hand-painted or hand-decorated manufactured articles.	102,400
9701	Sum	314,665
970500100	Collections and collectors pieces of zoological, botanical, mineralogical, anatomical, historical, archaeological, palaeontological, ethnographic or numismatic interest, imported for scientfic, and anatomical or museums archaeological purposes.	142,557

The Economic Contribution of Copyright-Based Industries in the Hashemite Kingdom of Jordan

## Annex 7: Number of Establishments, Employment and Revenues in 2006

Number of Establishments					
ISIC	Kingdom	Amman			
22	632	467			
2211	54	49			
2212	64	53			
2219	3	3			
2221	476	331			
2222	35	31			
9211	57	55			
9212	15	11			
9213	11	10			
9214	14	10			
9219	170	90			
7499	1557	766			
6420	13	13			
7494	584	290			
7221	45	44			
7229	135	127			
7430	586	394			
9112	35	30			
3230	2	2			
3320	2	2			
21	106	75			
2429	11	11			
Total	4607	2864			

	Number of Establishments by Workers Categories						
ISIC/Workers	1 – 4	5 – 9	10 – 19	20 – 99	100 – 499	500 +	
2211	41	7	2	4	0	0	
22	443	97	40	43	8	1	
2212	30	17	2	13	1	1	
2219	1	1	1	0	0	0	
2221	339	70	35	25	7	0	
2222	32	2	0	1	0	0	
9211	37	9	5	4	2	0	
9212	10	2	1	2	0	0	
9213	3	4	3	0	0	1	
9214	11	2	0	1	0	0	
9219	129	27	12	2	0	0	
7499	1487	42	18	8	1	1	
6420	2	1	1	5	2	2	
7494	570	10	2	2	0	0	
7221	22	13	5	5	0	0	
7229	67	24	20	19	5	0	
7430	491	58	22	15	0	0	
9112	19	6	2	7	1	0	
3230	0	0	0	2	0	0	
21	37	26	18	18	6	1	
2429	3	2	0	6	0	0	

Number of Establishments by Revenue Categories ( in Thousand JDs)							
ISIC	-5	5 – 10	10.1 – 20	20.1 – 40	40.1 – 60	60.1 – 100	100 +
22	230	149	84	57	30	24	58
2211	20	17	6	4	1	0	6
2212	19	9	12	7	4	3	10
2219	0	0	1	0	0	1	1
2221	166	120	62	44	24	19	41
2222	25	3	3	2	1	1	0
9211	13	12	9	5	5	8	5
9212	4	3	2	4	0	0	2
9213	2	1	1	0	3	1	3
9214	5	4	4	0	0	0	1
9219	50	45	43	13	10	9	0
7499	1139	225	104	34	15	23	17
6420	3	0	1	0	0	2	7
7494	343	136	78	18	6	2	1
7221	13	9	8	3	1	4	7
7229	38	23	30	6	9	9	20
7430	330	131	57	18	14	13	23
9112	14	6	2	1	2	5	5
3230	0	0	0	0	0	0	2
21	15	10	14	11	6	13	37
2429	3	1	-	-	1	1	5

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For more information contact WIPO at www.wipo.int

#### **World Intellectual Property Organization**

34, chemin des Colombettes P.O. Box 18 CH-1211 Geneva 20 Switzerland

Telephone:

+41 22 338 91 11

Fax:

+41 22 733 54 28