The Economic Contribution of Copyright-Based Industries in Pakistan

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"The human mind is an undiscovered planet of vast space, bare deserts, rugged mountains and thick forests blessed with an innumerable number of the most beautiful oasis and fountains of creativity from where the rivers of imagination flow down. The sparkling waters from these streams of ingenuity light up the world of the human mind with intellect, vision and divinity."

From "Saint of the Spitting Cobras"

By Rauf Khalid

The views expressed in this publication reflect only the findings and positions of the authors.

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- f. State Bank of Pakistan
- g. Orient McCann Erickson Advertising (Private) Limited
- h. Ministry of Commerce
- i. Associated Press of Pakistan
- j. Pakistan Association of Printing and Graphic Arts Industry
- k. Pakistan Electronic Media Regulatory Authority
- I. Pakistan Film Producers Association
- m. Pakistan Advertising Association
- n. Photographic Society of Pakistan
- o. AVT Khyber
- p. Geo TV
- q. Aaj TV
- r. Netsole Pakistan Limited
- s. Daily Mashriq
- t. Mandviwala Entertainment (Private) Limited
- u. Pakistan Revenue Automation Limited
- v. WIPO (World Intellectual Property Organization)

¹ The usual disclaimer applies.

Preface

This study was undertaken to evaluate the contribution of the copyright and related rights industries to the national economy of Pakistan. It was initially assigned to the "Sitara-e-Imtiaz" winning Economist of Pakistan, Dr. A. R. Kamal but unfortunately Dr. Kamal could not complete the study because of his untimely demise in early 2008.

The World Intellectual Property Organization (WIPO) has commissioned this in October 2008 to a team of researchers including Mr. Rauf Khalid, President and Chairman of the National Institute of Cultural Studies in Islamabad, Pakistan, Dr. Vaqar Ahmed, Senior Economist at the Planning Commission, Government of Pakistan, Mr. Ghulam Samad, Research Economist at the Pakistan Institute of Development Economics (PIDE) in Islamabad, Ms. Maliha Elahi, a project designing and implementation expert and trainer at the National Institute of Cultural Studies (NICS), Mr. Mohammad Abid, an economic research coordinator working for the National Institute of Cultural Studies in Islamabad, Pakistan, Ms. Adeela Khan a researcher and trainer from RH-AID Pakistan, Dr. Ataul Mohsin, a faculty member of the National Institute of Cultural Studies and Mr. Saidullah Khan of IPO Pakistan.

Regular guidance and professional advice was provided by Professor Dr. Robert Picard, an International Consultant with WIPO and by Mr. Dimiter Gantchev Acting Director of the Creative Industries Division at WIPO.

For a correct understanding of the copyright regime, its correlation with economic growth and to bring homogeneity among the members, the team studied carefully and discussed the WIPO guidelines in this regard as well as similar studies conducted by other countries including the USA, Canada, Singapore and Hungary. The specific tasks assigned were:

- To quantify the economic contribution of copyright and related rights industries in the country by estimating their value-added to GDP, their share in national employment and the revenue generated from foreign trade;
- To analyze and elaborate the selected copyright-based industries of importance to the country, their national market structure, value chain, demand and supply patterns, labour market, policy framework, support from the public and non-governmental organizations (NGO) sectors, including the role of collective management organizations, the financing mechanism, the implication of the digital environment, etc.;
- To propose policy, strategy and institutional interventions to encourage the growth and development of copyright-based industries in the country.

In this study, the team has also tried to elucidate the issue of copyright in a manner which would allow laypersons to understand the principles and concerns involved in copyright. The team also sought to raise the awareness of policy makers to the real situation and educate those involved in copyright and related rights work, who may not be aware of the correct protocol involved in copyright or the relevant practical details. Finally, the team has tried to provide the public with information regarding intellectual property and copyright industries.

Special thanks go to the Government of Pakistan, especially the Federal Board of Revenue, the Planning Commission, the Federal Bureau of Statistics, Pakistan Television Corporation, Netsole (Pakistan) Limited, Mr. Kamran Raja, CEO, AVT Khyber, Mr. Imran Aslam, President, Geo Television, Shahab Zubairi, CEO, Aaj TV, Orient Advertising (Private) Limited, Mr. Nadeem Mandviwala, Chief Executive, Mandviwala Entertainment, Mr. Jamshed Zaffar, President, Pakistan Film Producers Association, Chief Executive, Cosmos Productions (Private) Limited, Mr. Ayaz Badshah, Chief Executive, daily Mashriq and daily Statesman and a large number of other newspaper owners and directors for the help they extended during this study. And finally, conviction and guidance of Mr. Yasin Tahir concerning this study is highly acknowledged.

A. Rauf Khalid President & Chairman National Institute of Cultural Studies Islamabad, Pakistan

Executive Summary

The creative industries which are deeply rooted in copyright protection contribute to the economic, social and cultural development of Pakistan. Having a lasting impact on cultural diversity and the enrichment of social values, these industries are significantly generating wealth, creating jobs and promoting trade. The purpose of this study was to assess the true value and potential of the copyright sector so that policy recommendations may be made with a view to improve creativity and copyright management that has often been overlooked, underestimated and inadequately considered in Pakistan.

This study aims to document the total economic contribution of copyright industries to GDP, in terms of value-added, share of employment and share of trade. The main core copyright sectors studied are: newspaper and printing, data processing and IT, social and cultural services, recreation services, and radio & TV broadcasts. This exercise is a combination of quantitative and qualitative research methodologies.

Pakistani literature could not go beyond its borders mostly for the reason of rampant piracy generally in the region and particularly in Pakistan. The publishing industry is now mostly focused on printing textbooks, religious publications, newspapers and periodicals. The film industry, which once used to produce over a hundred films every year, is at the brink of closure because of pervasive piracy of films and for lack of copyright awareness in the country.

Pakistani music industry is no exception: social attitudes towards music, disregard for intellectual property and high level of piracy are some of the reasons why our musicians and singers are financially debilitated.

Software creation has made progress with time both locally and outside the country. With the help of the Pakistan Software Export Board, over 120 Pakistani companies are now ISO certified. Pakistan Software Houses Association (PASHA) estimates that today Pakistan's IT industry is worth over 2 billion dollars. Foreign remittances of IT related services and products are now over 170 million dollars (as reported by the State Bank of Pakistan). By 2013, it is estimated to grow beyond 1 billion dollars. There are over 1,100 companies registered with the Pakistan Software Export Board (PSEB) and over 100,000 people are employed by the industry.

Radio & television has traditionally been the source of information and entertainment for the people of Pakistan for over seven decades now. The advertising and license fee earnings of all the radio and TV channels in Pakistan stand well over 10 billion rupees per annum. Pakistan has seen enormous growth in the number of FM radio stations and TV channels in the past fifteen years. Government licensed television channels have gone up from 3 to 82 during this period. The total (spend) advertising revenue stood at Rs 25.05 billion (US \$318 million) in 2008-2009. The industry however, is facing acute challenges of non-availability of educated and trained workforce, lopsided marketing and copyright piracy.

The core copyright industries represent 31% of the value-added copyright industries. The interdependent copyright industries stand for 3%, partial industries for 22% and non-dedicated support industries for 44% of the value-added. The overall copyright industries contribute around to 4.45% of the GDP.² The core industries contribute to 1.37% of the GDP, the interdependent industries contribute to 0.11%, the partial industries contribute to 0.98% and the non-dedicated industries contribute to 1.99% of the GDP respectively.

Similarly, the copyright-based industries contributed to 3.71% of the employment in 2006. The core copyright industries contributed to 0.70% of the employment, while the interdependent, partial and non-dedicated industries contribute to 0.04%, 1.37% and 1.60% of the employment respectively.

The employment in copyright-based sectors has noted an increase in recent years. The employment in electronic media has recently increased due to the opening up of media through deregulation that allowed government to offer licenses to the private sector. The largest growth was in the case of Cable TV followed by

²The estimates of value addition flow directly from the already available Supply and Use table for the year 1999-2000. Despite repeated request to the Federal Bureau of Statistics (FBS), from public and private institutes, the FBS failed to come up with the updated Supply and Use tables. At the start of this study we already highlighted to WIPO that we would use Supply and Use table of 1999-2000.

FM Radio. The recent developments in electronic media include multi-channel multi-point distribution system (MMDS) and direct-to-home technology (DTH).

The export trend in copyright-based industries is dependent on: a) global economic growth that gives rise to global demand for Pakistani products and b) competitiveness of local output which in turn depends upon cost of raw materials and inputs. Pakistan is a net importer of copyright-based industries in the range of \$787 million in 2007-2008. During the same year the core copyright-based industries were net importers in the range of \$1248 million. In 2007-2008 the core copyright-based industries contributed to 20% of total exports. The interdependent copyright-based industries contributed to 41%, the partial copyright-based industries to 34% and the non-dedicated copyright-based industries contributed to 5% of total exports. Similarly, the imports for the year 2007-2008 of core copyright-based industries are 68%, interdependent 25%, partial 1% and non-dedicated copyright-based industries 7%.

While giving specific analysis of some core copyright sectors the study provides policy recommendations including raising awareness amongst artists / intellectuals / law makers / media and government personnel / other stakeholders, launching advocacy campaigns for behavioural change, capacity building of IPO-Pakistan, appointing copyright policemen, assisting in establishing Collective Management Organizations, arranging public-private partnerships with institutions aimed at the development of copyright industries. The competitive environment in the copyright industries with enormous revenue potential needs to be supported by the government. The private sector may be a front line partner in searching and harnessing the potential of individuals / institutions to bring copyright works in the mainstream of the economy.

1. Introduction

1.1 The Need for this Study

With the dawn of the computer age and the birth of the Internet, the importance of copyright has increased considerably. It was therefore felt by the Intellectual Property Organization (IPO)-Pakistan that a study may be conducted to make the people, as well as the decision makers in Pakistan realize the enormous potential of copyright contribution to the country's economic growth and the role it could play in job creation both for educated and uneducated youth. Creativity is nothing new to the Pakistani people, as they have been producing art and music since the birth of the Indus Valley Civilizations.

Copyright industries have been representing the essence of all human development. Copyright work was legislated in the Renaissance, though no formal registration took place at that time. However, copyright certainly gave European people the opportunity to express their intellect, thoughts and feelings at a time when change was regarded with vehement suspicion. Those were the creative people who put Europe on the way to its present prominence. The writers and artists of the time provided radiance in the darkness of poverty, humour in the depths of grief, hope in the time of despair, beauty in the face of evil and reason at the point of disagreement.

Today we find authors, artists and performers in schools, colleges, universities, performance halls, libraries, museums, community centres, cinemas, advertising, media houses, software, 3D animation and video games development companies. They further enrich our culture with their creative expression in music, songs, drama, fiction, poetry, painting, design, photography, graphic designing, video games and films. The copyright works contribute in one way or another to almost every single industry.

One of the major challenges of the third world has been reducing dependency on the import of technology which always comes with a high price. This can be achieved by mustering their country's own creative genius to work towards innovation, invention and creation by strengthening their intellectual property institutions. Individual efforts in creating new economic drivers and improving the old ones play a major role in today's competitive economies for the reason that sustainable economic growth depends largely on hi-tech research and development (R&D) in science and engineering in addition to exploring new horizons in the fields of visual & performing arts and literature. Although the concept of respect of the intellectual property was there in all civilized regions of the world, its modern time legislation originated from the 'Statute of Queen Anne -1710' in Great Britain. Another example of the intent of copyright, as expressed in the United States Constitution, is "to promote the progress of science and useful arts, by securing for limited times to authors and Inventors the exclusive right to their respective writings and discoveries". To protect the creator's right of benefiting fully of his/her creation, the Universal Declaration of Human Rights in its article 27, paragraph 2, states that "Everyone has the right to the protection of moral and material interests resulting from any scientific, literary or artistic production of which he is the author".

Credit for conducting a study that quantified the economic contribution of copyright goes to a British born economist, Sir Arnold who carried out his study in 1934. His study was published as "the Economic Aspects of Copyright" in the books Economica.³

To inculcate a harmonized approach, the World Intellectual Property Organization (WIPO) published in 2003 the "Guide on Surveying the Economic Contribution of the Copyright-Based Industries". The Guide summarised existing experiences in assessing the economic contribution of the copyright-based industries to national economies and offered guidelines to those studying the creative outputs in economic terms.

For the reason that Pakistan could not take full advantage of its creative genius, the government has decided to establish a focal IP Organization headed by the Prime Minister of Pakistan, particularly aimed at effectively addressing the institutional concerns relating to copyright and intellectual property in the country.

Upon recommendation of the Government of Pakistan, this first national survey on economic contribution of copyright and related rights industries was conducted by the National Institute of Cultural Studies in

³New series of the books "Economica" 1(2): 167-195

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Islamabad, Pakistan. In addition to giving guidance and professional advice, financial support for this study was provided by the World Intellectual Property Organization (WIPO). Two days consultation meetings were also held in WIPO Headquarters in Geneva with WIPO officials and the international consultant to this study Professor Dr. Robert Picard.

In real terms, the economic contribution of some of our culturally rich artistic activities in crafts like embroidery and needle work (generally for common use and especially for bridal dresses), woodcarving and wood painting (in furniture and dwellings) and hand-woven fabrics like "Susi", "Namda" and "Salara" which involve designing in its own special colour combinations, could not be taken into account for the reason that crafts manufacturing is not formally part of the copyright protected sectors. Keeping its huge potential in view, efforts are required to be made to the policy and implementation levels to find ways and means of bringing crafts into copyright and into organized sectors. The contribution of copyright collecting societies could not be assessed for the reason that no such organization exists in Pakistan.

1.2 Understanding the Intellectual Property and Copyright

1.2.1 Intellectual Property

Intellectual Property (IP) is a critical component of the present day competitive economy especially in the growing globalization, for the reason that sustainable economic growth depends largely on hi-tech Research & Development base of the country. The realization that IP is a powerful driver of innovation and creativity for wealth creation is gradually growing in Pakistan. The new concept of IP-based nations is internationally gaining ground because intellectual property management is a significant enabler of innovation, technology creation and technology transfer. Based on these considerations the intellectual property management has been mainstreamed in Pakistan both by (i) abolishing the age-old fragmented mode of IP management and (ii) establishing IPO-Pakistan for integrated management of intellectual property.

1.2.1.1 Defining Intellectual Property

"Intellectual property rights are a bundle of exclusive rights over creations of the mind, both artistic and commercial." Intellectual property is the recognition of creation by the human mind of goods that hold value i.e. books, music, computer programs, inventions, industrial designs, trade names, trade secrets, etc. Intellectual property enjoys similar protection to other tangible properties. The owner of intellectual property may grant their rights to buy, sell, license, and transfer it like other physical goods.

Any new or improved thought, observation, discovery, invention, experience or creation that has been communicated by spoken, written, sung, performed, pictured, photographed, drawn, painted, constructed, erected, assembled or sculpted has a value; it is the intellectual property for all kinds of uses by such a person or people and with such a person's or people's permission in whose mind it was first envisioned or if it has been legally acquired from such a person.

Under the copyright laws, owners are granted certain exclusive rights to a variety of intangible assets such as literary works, music, films, photographs, computer programs and other artistic works.

1.2.1.2 Types of Intellectual Property Rights

Intellectual property includes the following types:

- Copyrights
- Patents
- Trademarks
- Geographical Indications
- Industrial Designs
- Integrated Circuits and Layout Designs
- Plant Breeders Rights

Brief description of the above mentioned types of intellectual property is given below:

1.2.1.3 Copyright

"The right over a copy that is exclusively available to the creator of the work. It includes creation of literary and artistic works, music, film, painting, sculpture, computer program and database, etc."

Copyright simply means "the right to copy". Copyright is a form of intellectual property that gives the author, artist or performer of an original work, exclusive right for a certain time period in relation to that work, including its publication, distribution, photographing, photocopying and adaptation; after that time the work is said to enter the public domain. Copyright applies to any expressible form of a literary, research and artistic work like painting, drawing, photograph, lithographs, prints, music, film, sculpture, computer program, database or any information that is substantive, discrete and fixed in a medium. Most jurisdictions also recognize the "moral rights" of the creator of a work, such as the right to be credited for the work at all times.

The time period for enjoying copyright benefits has been internationally standardised, it lasts between fifty to a hundred years from the author's death or a shorter period for anonymous or corporate authorship. Some jurisdictions have required formalities to establish copyright but most recognize copyright in any completed work, without formal registration. Generally, copyright is enforced as a civil matter, though some jurisdictions do apply criminal sanctions.

1.2.1.4 *Patents*

The Patent "is a government grant to an inventor / innovator conferring the exclusive rights to make, use and sell an invention / innovation for financial and related gains for a stated period of time."

Patents are the exclusive rights of inventors, innovators and researchers to exclude others and to commercialize their inventions by fulfilling the criteria of novelty, inventive step and industrial application. Patents protect and promote Research & Development in a country's technological and scientific fields. Protection of patents encourages the discovery of new and improved products and processes, while ensuring public access to information regarding those new products and processes. This enables the inventor or the innovator to gain from his decades old knowledge seeking and struggling to invent something of value for humans or innovate or improve the functioning or acceptability of a product.

1.2.1.5 *Trademarks*

Trademark is "a distinctive sign or indicator used by an individual, business organization or other legal entity to identify to consumers that the products or services with which the trademark appears originate from a unique source, and to distinguish its products or services from those of other entities".

A trademark in the form of a symbol, mark or a design enables the owner (like a trader) to use his efforts towards achieving a reliable name in his trade. Similarly, it enables the people to understand who is selling, buying or exchanging with them. An example of a well known trademark is the picture of an old man with a white moustache and glasses on the KFC restaurants and advertisements. Even if the name of the restaurant is written in a language not understandable by a passer-by, he / she can easily make out from the old man's picture that the place is a KFC restaurant.

A trademark is designated by the following symbols:

- TM (for an unregistered trademark, that is, a mark used to promote or brand goods),
- SM (for an unregistered service mark, that is, a mark used to promote or brand services) and
- ® (for a registered trademark).

A trademark is a type of intellectual property and typically a name, symbol, figure, picture, letter, word, mark, phrase, logo, symbol, design, image or a combination of these elements used by a manufacturer or merchant in order to designate and distinguish his goods / services from any others. A trademark is normally registered with a government agency to legally assure its exclusive use by its owner. There is also a range of non-conventional trademarks comprising marks which do not fall into the standard categories.

The owner of a registered trademark may commence legal proceedings for trademark infringement to prevent unauthorized use of that trademark. However, registration is not required. The owner of a common law

trademark may also file suit but an unregistered mark may be protected only within the geographical area within which it has been used or in geographical areas into which it may be reasonably expected to expand.

The term trademark is also used informally to refer to any distinguishing attribute by which an individual is readily identified, such as the well known characteristics of celebrities. When a trademark is used in relation to services rather than products, it may sometimes be called a service mark.

Trademarks distinguish the goods and services of one business from those of the others and protect them against unfair competition through counterfeiting. Trademark laws encourage the development and maintenance of high-quality products and services, and help companies advance customer loyalty.

1.2.1.6 *Geographical Indications*

Geographical Indications protect a name or sign used for certain products or services which possesses peculiar qualities or characteristics, or enjoys a certain reputation essentially due to its geographical origin. For example, possible products in Pakistan which may be considered for protection under geographical indications include Peshawari Chapal, Kamalia Khadar, Qasuri Methi, Hala Ajrak, Balochi Sajji and certain regional crafts, etc.

1.2.1.7 Industrial Designs

Industrial Designs are the ornamental or aesthetic aspects of an article which make the article attractive and appealing. It may consist of three-dimensional features or two-dimensional features i.e. designs of vehicles, pottery, textile or any other industrial and handmade products.

1.2.1.8 Integrated Circuits and Layout Designs

Integrated circuits are microcircuits, microchips, silicon chips, etc. consisting mainly of semiconductor devices which are used in almost all electronic equipments in use today.

1.2.1.9 Plant Breeders Rights

Plant Breeders Rights protect rights of breeders (researchers, scientists and farmers) for the development of new plant varieties to get improved farm yield whether or not genetically engineered or improved plants, crops, fruits and vegetables.

1.3 Situation in Pakistan

1.3.1 Institutional Framework

Until 2005, IP issues were managed in a fragmented manner. The three key registries (i.e. the Copyright Office, the Patent Office and the Trademarks Registry) reported to three different Federal Ministries, while international aspects of the IP regime were handled by other Ministries (the Foreign Office, the Ministry of Commerce and Trade). The result was that it was difficult to formulate IP policies in a coherent manner. Also, critical cross-cutting issues such as effective enforcement of IP rights could not be adequately addressed.

The Government of Pakistan took the following steps to rectify the situation:

- Established the Intellectual Property Organization-Pakistan on April 8th, 2005 as a central organization for the integrated management and enforcement coordination of all forms of intellectual property;
- Empowered the Federal Investigation Agency (FIA) which is Pakistan's elite force for the control of white collar crime to eliminate piracy by including the copyright legislation in the FIA Act, 1974;
- Activated Pakistan Customs to institute effective border measures to control counterfeiting and piracy.

The establishment of an integrated IP organization led to significant improvements in IP policy making. At the same time, the enforcement related initiatives resulted in a discernible decrease in piracy, especially piracy of optical discs.

Nevertheless, the IP situation in Pakistan still needs to be improved and reinforced, especially with reference to the alteration of decades-old thoughts and beliefs which have become ingrained in the minds of the people. Right holders need to be persuaded to take cases of infringements of their rights to the courts, sign agreements with a clear understanding of their copyrights and speak about and report against copyright violations. At the same time, IPO-Pakistan, needs to strengthen itself through acquiring competent professionals following appropriate selection criteria.

1.3.2 Legislative and Enforcement Framework

Pakistan is a signatory to the Trade Related Intellectual Property Rights (TRIPS) Agreement of the World Trade Organization (WTO) and is therefore under obligation to update its intellectual property laws and to provide for a comprehensive mechanism for protection and enforcement of Intellectual Property Rights in Pakistan. A list of the IP laws that are currently in force or are under consideration may be seen in Table 1 below.

Table 1: List of IP Laws Implemented or in Process in Pakistan

| i. | IPO-Pakistan Ordinance 2007 |
|-------|--|
| ii. | The Patents Ordinance, 2000 |
| iii. | The Registered Designs Ordinance, 2000 |
| iv. | The Registered Layout-Designs of Integrated Circuits Ordinance, 2000 |
| V. | The Copyright Ordinance, 1962 (as amended in 2000) |
| vi. | The Trade Marks Ordinance, 2001 |
| vii. | Plant Breeders Rights (PBR) Legislation has been approved by the Federal Cabinet. It is now undergoing necessary processes prior to its submission to the Parliament. |
| viii. | A sui generis GI Law has been drafted. It is undergoing necessary scrutiny and cross-checks required before its presentation to the Federal Cabinet for approval and submission to the Parliament. |

1.4 Copyright Law in Pakistan

Pakistan is signatory to the Berne Convention (1886), Universal Copyright Convention (1952), Rome Convention (1961) and the TRIPS Agreement (1994). Initially the copyright legislation in Pakistan was based on British Copyrights Act (1911) which had been replaced by Copyright Ordinance (1962) followed by amendments in the year 2000 in compliance with TRIPS Agreement. Similarly, the Copyright Rules of 1967, the Copyright Board (Procedure) Regulations (1981) and the International Copyright Order of 1968 were amended in the year 2002.

Pakistan's copyright law protects the following work categories:

- Literary works
- Musical works including any accompanying words
- Dramatic works including any accompanying music
- Pictorial, graphic and sculptural works
- Motion pictures and other audiovisual works
- Sound recordings
- Architectural works

The copyright works that are not protected include:

- Works that have not been fixed in a tangible form
- Various ideas, procedures, methods, systems, processes, concepts, principles, discoveries, advices, explanation and illustration, etc.
- Common property and works containing no original authorship.

The duration (term) of protection of copyright works is the author's life plus an additional 50 years after the author's death. In case of a joint work the term lasts for 50 years after the last surviving author's death. The owner may assign / transfer / sell these rights to any person, wholly or partially, generally or subject to

limitations, for the whole term or any part, by assignment in writing for 10 years only, reverting back to the author / owner of copyright if not published within a periods of three years.

Registration of copyrights is available in four categories:

Category-I Literary, Dramatic & Musical Works

Category-II Artistic Works

Category-III Cinematographic Works

Category-IV Recorded Works

The prescribed application form along with Rs 500 as registration fee is submitted for processing to the Registrar Copyrights. Additionally, no objection certificate / affidavit for transfer, power of attorney if applying through attorney and advertisements of artistic work in any Urdu or English daily newspaper are required.

The application is legally filed by the author, the copyrights claimant, the owner of exclusive rights and duly authorised agent of such author, other copyrights claimant or owner of exclusive rights. Competent agencies are District Police, Federal Investigation Agency (FIA), Pakistan Customs and Private Detection Agencies. The fine for infringement of copyright is from Rs 100,000 (US \$1200) to Rs 200,000 (US \$2400) or three years of imprisonment, or both.

(Source: IPO Pakistan)

1.4.1 IPR Enforcement

The four key components of Pakistan's IPR enforcement model include:

- Awareness,
- Affordability,
- Police Raids and
- Court Convictions.

1.4.1.1 Agencies involved in the IPR's Enforcement Chain are:

- District Police (Overall Control by Enforcement Raids)
- FIA (Production Control by Dismantling the Strongholds)
- Pakistan Customs (Border Control for Eliminating Smuggling)
- Judiciary (Litigation Management by Changing the Mindset)
- Private Sector (Investigation Agencies for detection of IPR crimes)

1.4.1.2 Enforcement Achievements

Up till now the following enforcement achievements can be noted:

- Within the first month of IPO existence, FIA cracked down on the notorious piracy infrastructure in May 2005 to demonstrate the Government's administrative firmness behind its IP initiative.
- Pakistan Customs established Anti-Piracy Cells (APCs) at the country's major international airports to institutionalize the government's anti-piracy drive. This was the second time in the history of Pakistan Customs after Anti-Narcotics Cells (ANCs) that the anti-piracy drive was institutionalized in the form of APCs.
- As FIA and Pakistan Customs were busy controlling the supply side of piracy, IPO launched a number of demand control initiatives including IP awareness and enforcement coordination to curb local demand for pirated optical discs.
- Private Sector IP crime detection agencies have been effectively linked through the enforcement coordination initiatives of IPO-Pakistan.
- These activities are being firmly sustained and strengthened for the elimination of counterfeiting and piracy in the country. As a result vendors and business associations are increasingly assuring compliance.
- Pakistan CD/DVD Vendors Association has started self-regulating their vendor members in the far and
 wide of the country. They have also promised to establish trend setting zero-piracy vending facilities at
 different cities of the country. The Vendors Association is pursuing both these objectives in right, earnest
 and with full sincerity of purpose.
- Advisory Council in FIA HQs for countering IPR Violations has been established.

Survey Methodology and Data 2.

Like many other developing countries, Pakistan lacks sufficient socioeconomic data mainly concerning the services sectors. It has been a fairly recent development that trade data on services has been separately identified in the national statistics. It is within this data that some of the core sectors of copyright-based industries can be found. However, there is still no distinguishable sub-sector representing these industries in the national income accounts which are compiled at a fairly aggregate level. There has been some efforts to initiate work towards an input-output table that is disaggregated enough to highlight the new sectors in national income accounts such as information technology and creative arts. Similarly, on the employment side, the representative household level surveys provide information on sectoral employment at aggregate level matched with approximately 17 broad industrial classifications.

In this report we aim to highlight these challenges and to explain how. Statistical issues were dealt with in order to work out reliable estimates regarding value-added, trade and employment contribution of copyrightbased industries.

A multi-pronged approach was adopted for data collection which included, but was not restricted to, the collection of available data from the national accounts though conducting focused interviews, field surveys, group discussions, literature review, and comparisons with other related studies. Planning, research and survey teams thoroughly reviewed and benefited from the previous studies conducted in this area for the USA, Canada, Singapore, Latvia, Lebanon and Hungary (see Appendix I).

First-hand information collected from individual and group interviews, and other sources was subjected to qualitative analysis. This section provides an overall methodological review followed by estimates of value addition in the copyright-based industries in Pakistan. Additionally, statistics concerning exports, imports and trade balance are also given in this section. This study also exhibits the employment statistics and related environmental indicators in the copyright-based industries.

2.1 Types of Copyright-Based Industries

2.1.1 Identification of Industries

The WIPO guide provides definitions on the copyright-based industries. Four groups have been identified, i.e. core, interdependent, partial and non-dedicated support industries.⁴ Different national studies have adopted definitions of the copyright-based industries (WIPO guide 2003, Canadian heritage study 2006, Ministry of culture of the Republic of Latvia 2000, Allen consulting group for Australia 2001, State University of Campinas and Jules Theeuwes for Netherlands 2004), which are in line with the WIPO guide but some of the components in each group may vary from country to country, depending on the scope of copyright protection.

2.1.2 Core Copyright Industries

Core copyright industries are industries that are entirely engaged in creation, production, manufacturing, performance, broadcast, communication and exhibition, or distribution and sale of works and other protected subject matter (Table 2).

⁴See WIPO guide 2003.

Table 2: Core Copyright Industries

| Type of Copyright Industry | Main Grouping of Industries | Subgroups |
|-------------------------------|---|--|
| Core Copyright | Press and Literature | Authors, writers, translators Newspapers |
| Industry | | News and feature agencies |
| | | Cards and maps, directories and other published material |
| | | Pre-press, printing and post-press of books, magazines, newspapers and advertising materials |
| | | Wholesale and retail of press and literature |
| | | Libraries |
| | Music, theatrical productions and opera | Composers, lyricists, arrangers, choreographers, directors, performers and other personnel |
| | | Printing and publishing of music |
| | | Production / manufacturing of recorded music |
| | | Wholesale and retail of recorded music |
| | | Artistic and literary creation and interpretation |
| | | Performances and allied agencies |
| | Motion picture and | Writers, directors, actors, etc. |
| | Video | and distribution |
| | | Motion picture, video production and distribution |
| | | Motion picture exhibition |
| | | Video rentals and sales, video on demand |
| | | Allied services |
| | Radio and Television | National radio and television broadcasting companies |
| | | Other radio and television broadcasters |
| | | Independent producers |
| | | Cable television (systems and channels) |
| | | Satellite television |
| | | Allied services |
| | Photography | Studios and commercial photography |
| | | Photo agencies and libraries |
| | Software and databases | Programming, development and design, manufacturing |
| | | Wholesale and retail of prepacked software |
| | | Database processing and publishing |
| | Visual and graphic arts | Art galleries, other wholesale and retail |
| | | Picture framing and other allied services |
| | Advertising Services | Agencies, buying services |

2.1.3 Interdependent Copyright Industries

Industries engaged in production, manufacture and sale of equipment related to copyrights are termed as interdependent copyright industries. Their primary function is to facilitate the creation, production or use of works and other protected subject matter (Table 3).

Table 3: Interdependent Copyright Industries

| Type of Copyright Industry | Equipment/materials involved | Subgroups |
|-------------------------------------|--|-------------------------------------|
| Interdependent copyright industries | TV sets, radios, VCRs, CD players, DVD players, cassette players, electronic game equipment, and other similar equipment | Manufacture Wholesale and retail |
| | Computers and equipments | Manufacture Wholesale and retail |
| | Musical instruments | Manufacture Wholesale and retail |

2.1.4 Partial Copyright Industries

The industries in which activities and production partially depend on the material protected by copyright or related rights are termed as partial copyright industries (Table 4).

Table 4: Partial Copyright Industries

| Type of Copyright Industry | Main Grouping of Industries | Subgroups |
|---------------------------------|-----------------------------|------------------------------------|
| Only that portion which is | Textile | – Art Silk |
| attributable to works and other | | – Made up textiles |
| protected subject matter is | | – Knitwear |
| included. | | – Carpets |
| | | – Garments |
| | | – Hand-woven Sussi |
| | | – Hand-woven Namda |
| | | – Hand-woven Khaddar |
| | | – Shawls & fabrics with embroidery |
| | | – Other textile products & crafts |
| | Leather & footwear | - Leather & footwear |
| | Wood | - Wooden furniture |
| | | - Handicrafts |
| | Metal Crafts | - Metal Crafts |
| | Sports | - Sports goods |
| | Jewellery | - Jewellery |

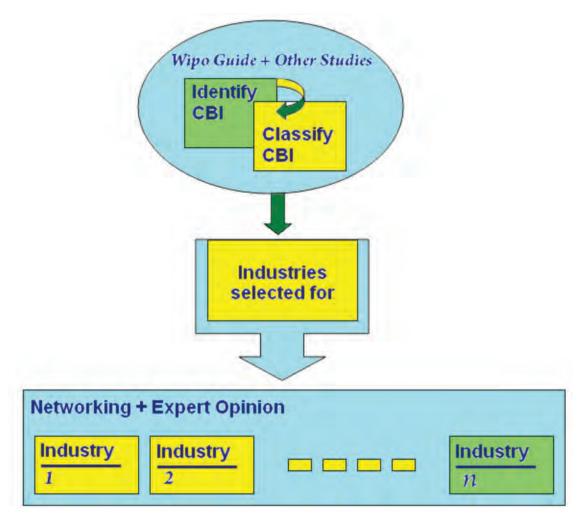
2.1.5 Non-Dedicated Copyright Industries

These industries measure secondary impacts and spillover effects. They are mostly responsible for delivery modes and reflect the contribution that copyright makes to generating value, jobs and trade in related sectors of economy such as transportation, internet, wholesale and others.

2.2 **Data sources**

As part of the data identification process (Figure 1), the research team identified and classified copyrightbased industries in line with the guidelines of WIPO. After the identification of industries, disaggregated data sources were used to identify the specific contribution of each creative industry group. In addition to individual interviews with industry leaders, focus group discussions with industry-specific experts were held and officials of the government statistics departments were also approached for their assistance in the identification and retrieval of data in the desired format.

Figure 1: Data Identification Process



Annual data in time series format was made available from the Federal Bureau of Statistics on: a) national income accounts, b) foreign trade statistics and c) national and provincial demographic estimates. In addition to the gathered information regarding these three categories, the study team also desired disaggregation of the data for further analysis and convenience which could later be mapped in line with the WIPO categories.

Table 5: Data Sources for Key Indicators

| Indicator | Data availability |
|--------------------------------|---|
| Value-added of core industries | FBS has provided information on Supply / Use for the year 2000 which provides detail on several core-industries. |
| Data on Export / Import | Information at a substantially disaggregated level has been made available through the statistics department at the State Bank of Pakistan. |
| Data on Employment | A questionnaire was prepared and sent to associations relevant to copyright-based industry. Some information has also been identified through the Census of Manufacturing Industries and the Labour Force Survey. |
| Data on Licenses / Royalties | Required information was made available through related government departments. |

Regarding the first objective, i.e. value-added, information acquired as Supply and Use tables for the year 1999-2000 was processed to obtain a consolidated estimate for the core and non-core sectors. The former includes: radio and television broadcasts, cultural services, recreation services, social services, information technology, communication services, newspapers and printing. Although previous data in the form of

input – output tables for the year 1990-1991 was available, it was difficult to find the core categories in the older aggregation routine. More recently, the Federal Bureau of Statistics has conducted sectoral studies for 37 production activities, yet it will take some time to finalize and disseminate these results publicly.

In the second case, i.e. information on trade, the statistics available on services trade with the Federal Bureau of Statistics were not disaggregated enough to fit the required level of this study. Hence, data concerning detailed export and import receipts were obtained from published reports of the State Bank of Pakistan. These reports cover several core categories such as: books, newspapers & printing, art works, computer & information services, royalties & license fees, advertisement / market research, research & development services, personal, cultural and recreational services, etc.

The estimation of employment statistics was made available from:

- Labor Force Survey (LFS)
- Household Income & Expenditure Survey (HIES)
- Pakistan Demographic Survey (PDS)
- Census of Manufacturing Industries (CMI)

Household level data sets are always useful tools for capturing skill, employment and consumption heterogeneities. The national survey questionnaires usually neglect narrowly focused industries and their mention is left either to the enumerator or to the person being self-assessed. Therefore, it is observed that most individuals after ticking the box of services sector end up writing nothing in the 'others' column or the 'remarks' section. This creates difficulty for researchers to allocate the free observations into specific categories.

In order to deal with this issue, a survey of copyright-based associations in the country was conducted and it was requested to access their records on the memberships and active people were involved in their concerned area of specialisation. This methodology was successfully examined in Islamabad prior to the start of the survey at Karachi where the head offices of more than 60 percent of the associations are situated. As this was a targeted rather than a representative survey at national level, a weighing mechanism was applied, derived from the cross-sectional data sets mentioned above. However, given the data limitation and low response rate of the survey, this may not be a feasible idea as weighing estimates have to be interpreted with caution.

In collaboration with the Federal Board of Revenue, another effort was made to consolidate the contribution of copyright-based industries in Pakistan towards overall tax revenues. It has been easier to get a one-point estimate for indirect taxes minus subsidies (i.e. net indirect taxes) from the 1999-2000 use table, however, for the years beyond 2000 and for detailed tax classification, the study team did get in touch with Pakistan Revenue Automation Ltd which is a research arm of the Federal Bureau of Revenue. Monthly statistics were available on sectoral and client-wise sales tax receipts, corporate and personal income tax. In Pakistan sales tax is a single levy tax on total sale (Consumer price) of goods or services and can be levied on copyright based industries. The data was very much up to date and a very close to correct percentage figure of the evaded tax can be estimated.

The data structured for this report preserves the industrial and trade classification followed by the Federal Bureau of Statistics for value addition and State Bank of Pakistan for trade. However, once our survey exercise ended, an important step was the mapping of WIPO categories with classifications currently followed by Pakistan (i.e. International Standard Industrial Classification ISIC Rev3.1).⁵

2.3 Estimation of "Copyright Factors"

It becomes difficult to eliminate the elements that can not be fully attributed to copyright.⁶ In copyright industries, literature and various formulas were found available where one could impute the value of copyright factors. The Singapore study derived the factors on the basis of the US study.⁷ The Latvian study used the average of the two countries, e.g. Singapore and the US to derive it. Similarly, the Hungarian study used the factors applied by the US study.

⁵Appendix III.

⁶WIPO Guide on Surveying the Economic Contribution of Copyright-Based Industries, Geneva 2003.

⁷ Richard Watt (2004), "A Comment: The Copyright Factors", Review of Economic Research on Copyright Issues, 2004, vol. 1(1), pp 71-78.

In this study, the setting of the "copyright factor" to be assigned to each industry has been based on the assessment of productivity provided by the industry or association experts during our consultative sessions. Studies such as Kemal (1993) and Kemal et al. (2003) provided some help in organizing the industries in terms of their relative creative content.⁸ Other methodologies include Kwan (2002) who proposed the estimation of a "sophistication index" for exported goods where the sophistication of product equals weighted average of exporting countries per capita GDP.⁹

The inclusion of some industries or sectors in our analysis requires specific explanation. For instance, it was deemed important to include some specific artists in Pakistan who perform in 3-star hotels or hotels of above rating. These performers are capable of multilingual singing and cross-continental performances. Furthermore, struggling artists or those who could not make it big in their specific entertainment niche are also found in these hotels giving singing, theatrical or related performances from the super hits of the past on a regular basis. Unfortunately, for the reason that Pakistan does not have a single 'Collective Management Organisation', the creators of the original music and songs have difficulties in collecting their royalties. Marriages and other functions also contribute to the creative sector. This is not just because of performances but also due to the artisan's work on wedding dresses, ornaments structured by specialised jewellers, stage setting, transport beautification, video making and photography, etc. This sector though very vital with respect to its contribution towards creating employment opportunities, culturally remains out of the copyright registration regime in Pakistan.

The *dwellings* sector that explains the contribution of architectural services was included on the basis of culture-specific (or traditional) crafts used in the construction of residential and non-residential buildings in Pakistan. Most of the conventional iron and stone work is also carried out manually as automated machine routines are rarely available in rural and parts of urban areas. Such processes include "grilling", carpentry, ceiling and mirror works. As part of our rural culture, intricate decorative work is also carried out on walls, windows and ceilings.¹⁰

Table 6A: Copyright Factor

| Sector ID | Activity | Copyright Factor (%) |
|--------------|---|----------------------|
| Core Copyrig | ht Industries | |
| 70 | Newspaper & printing | 100 |
| 149 | Data processing & IT | 100 |
| 151 | Social & cultural services | 100 |
| 154 | Recreation services | 100 |
| 155 | Radio & TV broadcasts | 100 |
| | Interdependent Copyright Industries | |
| 69 | Manufacturing of paper & paper products | 100 |
| 112 | Manufacturing of musical instrument | 100 |
| Partial Copy | right Industries | |
| 59 | Art silk | 5 |
| 61 | Made up textiles | 5 |
| 62 | Knitwear | 3 |
| 63 | Carpets | 3.5 |
| 64 | Garments | 3 |
| | | |

⁸Kemal, A. R. (1993) "Industrial Sector Review in Pakistan", Asian Development Bank, Manila 1993. Kemal, A. R., Musleh-ud-Din and Usman Qadir (2003) "Global Research Project: Pakistan Country Report" Pakistan Institute of Development Economics.

⁹Kwan, Chi Hung (2002), "The Strength of 'Made in China' Viewed from American Market", *International Economic Review*, volume 7-8, 2002.

¹⁰There is also a medium-sized industry for painters who specialise in painting of public transport buses and cargo trucks. These buses and trucks then exhibit on their body the traditional pictures from their provinces or districts.

Table 6A: Copyright Factor (continued)

| Leather & footwear | 25 |
|--------------------------|--|
| Wood and wood products | 10 |
| Wooden furniture | 20 |
| Handicrafts | 70 |
| Sports goods | 10 |
| Jewellery | 25 |
| ed Copyright Industries | |
| Wholesale & retail trade | 3.80 |
| Transport | 4.10 |
| Communication services | 4.10 |
| | Wood and wood products Wooden furniture Handicrafts Sports goods Jewellery ed Copyright Industries Wholesale & retail trade Transport |

Economic Contribution of Copyright-Based Industries to the 3. Pakistan Economy

3.1 Value-Added of Copyright-Based Industries

Our main source of data and reference was the Supply and Use tables for the year 1999-2000. We are taking a ten years old data for the reason that 1999-2000 is the last year for which a Supply and Use table is available; although the Federal Bureau of Statistics are working on a more recent year. Based on the purchasers' prices, these tables provide inter-industry data, gross value-added, household consumption and gross fixed capital formation in 157 production sectors of the economy. Meanwhile, a new release of input-output statistics in Pakistan following the studies conducted by the Federal Bureau of Statistics for the rebasing of the GDP and its benchmarking is also expected. Social and Cultural Services represents a bouquet of cinema, dance music and other performing arts including but not restricted to folk dances like Athanr, Khattak, Luddi, Gidda, Shedi, Baluchi, Shadola, Folk Music and recreation services include Folk theatre like Naotanki, Folk Puppet shows, Cultural Tropes, etc.

One important core sector "Advertising" could not be included in this or in the subsequent tables for the reason that the Federal Bureau of Statistics did not have any statistics on the business of the advertising industries for any year or for the year 1999-2000. The Pakistan Advertising Association has been closed down for a variety of reasons. The estimated value-added of advertising in the year 1999-2000 was in the range of US \$ 250 million but the same stands already taken in the heading of Newspaper & printing and Radio & TV broadcast. While outdoor advertising took a sizeable chunk of business by 2007-2008, it was introduced in the year 2002 in Pakistan.

Another core copyright sector "music" stands included in Recreation services and Radio & TV broadcasts. Music tapes and CDs have always been in the unorganised sector where piracy goes unchecked. So much so that when the government officials conducted raids on the manufacturers of pirated CDs, all the large and medium size businesses had closed down completely. CDs are now burnt in small quantities by local suppliers or music shopkeepers individually.

Table 6B: Value-Added from Supply and Use Tables for 1999-2000

(Million Rupees)

| Sector ID | Activity | Value-Added | Indirect Taxes (net) |
|------------------------------|------------------------------|-------------|----------------------|
| Core Copyriç | ht Industries | | |
| 70 | Newspaper & printing | 3408 | 165 |
| 149 | Data processing & IT | 20225 | 55 |
| 151 | Social & cultural services** | 17381 | |
| 154 | Recreation services** | 3366 | |
| 155 | Radio & TV broadcasts | 4255 | |
| Total | | 48635 | 220 |
| Interdepend | ent Copyright Industries | | |
| 69 | Paper & paper products | 14560 | 2632 |
| 112 | Musical instrument | 3507 | -19 |
| Total | 1 | 18067 | 2613 |
| Partial Copyright Industries | | | |
| 59 | Art silk | 17891 | 3693 |
| 61 | Made up textiles | 7032 | -42 |

Table 6B: Value-Added from Supply and Use Tables for 1999-2000 (continued)

| 62 | Knitwear | 12080 | -884 |
|-------------|---------------------------|---------|-------|
| 63 | Carpets | 2706 | 61 |
| 64 | Garments | 27084 | -1057 |
| 65 | Leather & footwear | 19885 | -561 |
| 67 | Wood and wood products | 9858 | 111 |
| 68 | Wooden furniture | 1874 | 11 |
| 109 | Handicrafts | 285 | |
| 110 | Sports goods | 33184 | -91 |
| 111 | Jewellery | 1885 | -19 |
| | Total | 133764 | -110 |
| Non-Dedica | ated Copyright Industries | | |
| 131 | Wholesale & retail trade | 638235 | 25752 |
| 133 – 37 | Transport | 721946 | 11428 |
| 138 | Communication services | 61657 | 7311 |
| | | 1421838 | 44491 |
| Sum of Core | e + Non-Core Sectors | 1622304 | 48546 |

Source: Federal Bureau of Statistics

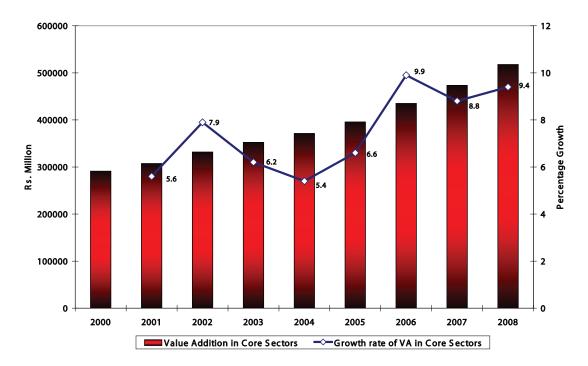
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^{*} Represents core copyright sectors.

** Social and Cultural Services represents a bouquet of cinema, dance music and other performing arts including but not restricted to folk dances like Athanr, Khattak, Luddi, Gidda, Shedi, Baluchi, Shadola, Folk Music and recreation services include Folk theatre, Folk Puppet shows, Cultural Tropes, etc.

An estimated value-added for the period 2001 to 2008 is depicted in Figure 2. Taking 1999-2000 as the benchmark year, the real growth rate of social services was used as a proxy for the overall growth of copyright-based industry in Pakistan. The national accounts data for social services is available with the Federal Bureau of Statistics and is annually reported in the Economic Survey. The reason for choosing the growth rate of social services as a proxy may be justified from the Labour Force Survey of Pakistan which indicates that the average labour (wage) returns in the copyright sector are closer to the average returns of skilled workers in the Education and Health (social) sectors of Pakistan.

Figure 2: Value-Added & Corresponding Growth Rate in Core Sectors during 2000-2008



In the case of non-core sectors, information concerning sub-sectoral real growth rates was gathered from various issues / numbers of Economic Survey published by the Ministry of Finance. It was observed that the growth rate in value addition of core sectors is showing promising increase over time (Figure 2). From a real growth of 5.6 percent in 2001, the core sector has steadily grown to a level of 9.4 percent growth in 2008. There is, however, greater volatility in the case of non-core sectors. After recovery from a low growth of 0.8 percent in 2001, the curve peaks at 9.5 percent in 2005, afterwards there is a sharp decline bringing the growth rate down to 3.2 percent by 2008. This decline may be attributed to the fall in growth rate that came about due to rising oil prices and reduced energy availability. The oil prices shocks were later followed by declining exports and official inflows on account of global financial crisis. The global rise in oil and food prices not only increased the import bill (by putting a downward pressure on Pakistan Rupee) but also increased the size of subsidies allowed in order to protect the poor and vulnerable segment of the society from the full effect of rising prices. However, the unsustainable level of subsidies led to rising fiscal deficit which ultimately created a prolonged inflationary pressure. Consequently, the low levels of reserves forced the Government to negotiate Stand-by-Arrangement with IMF in order to obtain the necessary liquidity.

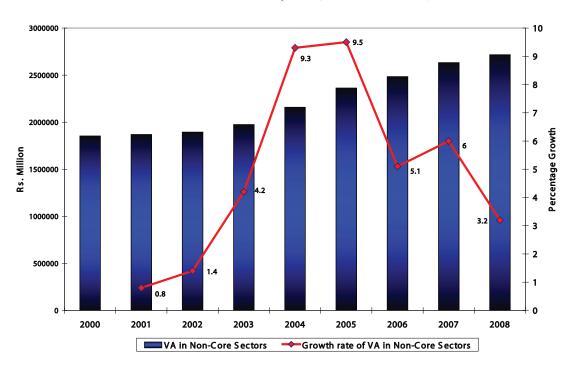


Figure 3: Value-Added in Non-Core Sectors and Corresponding Growth Rate during 2000-2008

The survey exercise ended in a somewhat low response rate of around 10%. This made the task of evaluation of the growth rate for copyright-based industries very difficult. One may observe that value-added in core sector declined during 2002-2004 but it increased for non-core sectors in the same time period. The reason might be the underlying (increasing) trend of private sector investment in non-core sectors particularly manufacturing of equipment, textile and services sectors. The main sectors that attracted foreign investment were telecom and IT services.

In 2002, Pakistan faced severe drought conditions in two out of four provinces. Following 2002, the recovery of the agriculture sector has been slow (until 2005) due to the displacement of farmers. There seems to exist a positive correlation between crop output and artisan's work. The first example is of cotton crop output in Pakistan. The cotton-based textiles constitute around 55 percent of Pakistan's exports.¹¹ The poverty and overall welfare levels of the rural population are greatly impacted by the health of the cotton sector. A good cotton crop increases rural incomes and there is an increase in the number of marriages which in turn gives rise to artisan work that includes bride and bridegroom related clothing, accessories and handmade jewellery, etc. Similarly, in the food sector, a major share of creative work takes place in the production of sweets and traditional bakery items. The welfare of workers associated with sweets production is dependent on the output of sugar cane crop. Similarly, the socio-political situation in Pakistan influenced the artisans' work, music and theatrical production, motion picture videos, etc., in war prone zones or in conflict areas. All these factors affected the value addition in core sector.

As per the methodology used the total value of the partial and non-dedicated groups of industries can not be fully included in the overall contribution of the creative sector as not all of their value is copyright-related. The calculation presented in Table 7 uses copyright factors based on the survey of associations and meetings with sectoral professionals. A detailed account on the content of copyright factors is given in the succeeding section. These factors represent the proportion of copyright-related value-added in the overall sector. It can be noted that for partial and support industries, there is a substantial difference between the overall and creative value addition.

¹¹This sector faces substantial piracy issues. One of the leading exporters of high quality Pakistan ready made garments informed our survey unit that the prints designed by his R&D section are copied in the informal sector within hours of their first launch.

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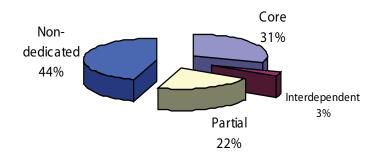
| Sector ID | Activity | Value- Added | Copyright Factor (%) | Creative Value Addition |
|--------------|----------------------------|--------------|-------------------------|----------------------------|
| Core Copyrig | ht Industries | | | |
| 70 | Newspaper & printing | 3408 | 100 | 3408 |
| 149 | Data processing & IT | 20225 | 100 | 20225 |
| 151 | Social & cultural services | 17381 | 100 | 17381 |
| 154 | Recreation services | 3366 | 100 | 3366 |
| 155 | Radio & TV broadcasts | 4255 | 100 | 4255 |
| Total | | 48635 | 100 | 48635 |
| Interdepende | ent Copyright Industries | | | |
| 69 | Paper & paper products | 14560 | 100 | 14560 |
| 112 | Musical instrument | 3507 | 100 | 3507 |
| Total | | 18067 | 100 | 18067 |
| Partial Copy | right Industries | | | |
| 59 | Art silk | 17891 | 5 | 894.55 |
| 61 | Made up textiles | 7032 | 5 | 351.60 |
| 62 | Knitwear | 12080 | 3 | 362.40 |
| 63 | Carpets | 2706 | 3.5 | 94.71 |
| 64 | Garments | 27084 | 3 | 812.5 |
| 65 | Leather & footwear | 19885 | 25 | 4971.25 |
| 67 | Wood and wood products | 9858 | 10 | 986 |
| 68 | Wooden furniture | 1874 | 20 | 375 |
| 109 | Handicrafts | 285 | 70 | 200 |
| 110 | Sports goods | 33184 | 10 | 3318 |
| 111 | Jewellery | 1885 | 25 | 471.25 |
| Total | | 133764 | 180 | 12837 |
| Non-Dedicat | ed Copyright Industries | | | |
| 131 | Wholesale & retail trade | 638235 | 3.80 | 24253 |
| 133 – 37 | Transport | 721946 | 4.10 | 29599.79 |
| 138 | Communication services | 61657 | 4.10 | 2527.93 |
| Total | | 1421838 | 12 | 56380.65 |
| Sum of Core | + Non-Core Sectors | 1622304 | | 135919 |

Source: Federal Bureau of Statistics, own calculation.

*Value-added of advertising stands already taken in the heading of Newspaper & printing and Radio & TV broadcast. While outdoor advertising that took a sizeable chunk of business by 2007-2008, it was introduced in the year 2002 in Pakistan.

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Figure 4: Total Value-Added of Copyright-Based Industries, 1999-2000



Paper and paper products stand for a significant amount of the value-added. This sector has a strong forward linkage with most services sectors in Pakistan which contribute considerably to Pakistan's GDP. The items under mass production include: cinema posters, product design leaflets, newspaper advertisements, billboard design, fliers, flags, bags, printed plastic bags, streamers, etc.

The handicraft category though having a very high income potential at the moment has to show little in its contribution to the GDP. This is primarily due to the fact that it does not enjoy full copyright protection. Most of the activity in handicraft sector is still informal and undocumented. The income from most of the handicrafts is lesser than the daily labour rate in the country and therefore a very large majority of crafts are meant for personal and family use only. It is evident that on an average there are less than 10 shops per city, offering good quality labelled handicrafts with full information about supplier and the ingredients of the product. With export enablement of crafts through skill training and product designing can become one major copyright industry in Pakistan.

The contribution of copyright-based and related industries in GDP has grown steadily showing growth from 8.2 percent in the year 2000 to 9.4 percent in 2008 (Figure 4). There is a list of multifarious factors that explain this rising share. Among them, first would be the deregulation of media in Pakistan that allowed the private sector to increase its participation in areas such as radio and television broadcasting. Second was the establishment of formal academies and institutions in Pakistan providing skills-based education and preparing a trained workforce for creative industries.

Figure 5: Contribution of Copyright-Based Industries to GDP over time

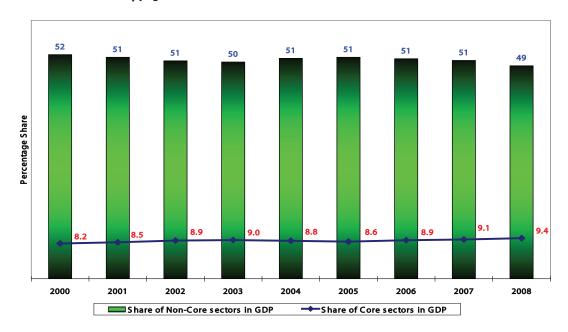


Table 8 below provides the sectoral GDP growth rates during the period 2004 to 2009. Almost all sectors show a declining trend, however, it was i) industry that was worst hit due to high energy / input costs and ii) the global financial crisis. Agriculture sector saved the overall growth rate (from going into negative) owing to good climatic conditions and timely rains. For the year 2008-2009, the overall GDP grew by 2.0 percent, which was contributed by agriculture (4.7 percent) and services (3.6 percent). Due to the infrastructure shortages¹² faced during 2008-2009 and the diminishing global demand, the industrial sector contracted by 3.6 percent. The copyright-based industries are estimated to have grown by 0.8 percent.

Table 8: Sector-wise Real Contribution to GDP (Billion rupees & Growth %)

| Sectors | GDP Contribution | | | | | |
|---------------------------|------------------|----------|--------|--|--|--|
| | 2004 | 2007 | 2009** | | | |
| Agriculture | 964* | 1137 | 1203 | | | |
| Industry | 1076 | 1367 | 1341 | | | |
| Large Scale Manufacturing | 493 | 696 | 668 | | | |
| Services | 2174 | 2687 | 2968 | | | |
| Wholesale & Retail Trade | 767 | 887 | 964 | | | |
| GDP (fc) | 4214 | 5191 | 5512 | | | |
| | | % Growth | | | | |
| Agriculture | 2.40 | 4.10 | 4.70 | | | |
| Industry | 16.30 | 8.80 | -3.60 | | | |
| Large Scale Manufacturing | 18.10 | 8.70 | -7.70 | | | |
| Services | 3.50 | 7.00 | 3.60 | | | |
| Wholesale & Retail Trade | 8.30 | 5.80 | 3.10 | | | |
| GDP (fc) | 7.50 | 6.80 | 2.00 | | | |

Source: Planning Commission, Federal Bureau of Statistics Own calculation.

^{*} At constant factor cost of 1999-2000.

^{**} Provisional estimates.

 $^{^{\}rm 12}\mbox{Particularly}$ the lack of energy / electricity shortage for the industrial sector.

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3.1.1 Revenue (tax) Contribution of Copyright-Based Industries

In this section the break-up of indirect tax contributions accruing from core and non-core sectors would be elucidated. The Federal Board of Revenue was also requested to provide details on contribution towards direct taxes, however, that could not be made possible until the completion of this study. Information concerning indirect tax revenues for the year 2007-2008 is presented in Table 9. The total customs duty collected on the import of copyright-based industries amounted to Rs 10876 million while the amount of sales tax stood at Rs 9484 million. Thus the total tax revenue of over Rs 2 billion from copyright-based industries shows its sizeable contribution in the development of the country.

Table 9: Contribution of Copyright-Based Industries in Indirect Tax (2007-2008)

(Rs in million)

| Items | Customs Duty | Sales Tax | Excise Duty |
|--|--------------|-----------|-------------|
| A- Core Copyright Industries | · | | |
| Printed Materials (Books, News paper, Magazines, etc.) | 78.381 | 131.649 | |
| Arts and antiques | 0.419 | 1.173 | |
| Total A | 78.8 | 132.822 | |
| B- Interdependent Copyright Industries | | | |
| Photographic Goods | 104.307 | 223.897 | |
| Paper & Paperboard | 4390.093 | 4835.249 | |
| Musical Instruments | 1.263 | 2.089 | |
| Optical, Photographic Instruments | 893.27 | 728.219 | |
| Miscellaneous Manufactured Articles | 420.155 | 210.387 | |
| Total B | 5809.087 | 5999.841 | |
| C- Partial Copyright Industries | | | |
| Silk | 104.639 | 0.068 | |
| Wool & Fabrics | 15.757 | 0.119 | |
| Carpets | 187.609 | 5.376 | |
| Made up Textile Articles | 482.19 | 11.036 | |
| Articles of Stone, Plaster, Cement | 252.588 | 248.522 | |
| Ceramic Products | 1432.989 | 1117.958 | |
| Glass and Glassware | 836.492 | 730.543 | |
| Precious Stones / Metals | 32.881 | 64.5 | |
| Toys and Games | 324.175 | 219.186 | |
| Total C | 3669.32 | 2397.308 | |
| D- Non-Dedicated Copyright Industries | I | | |
| Advertisement TV Cable | | | 0.306 |
| Total D | | | 0.306 |
| Total Indirect Tax Contribution (2007-2008) (A+B+C+D) | 9557 | 8530.2 | 0.612 |

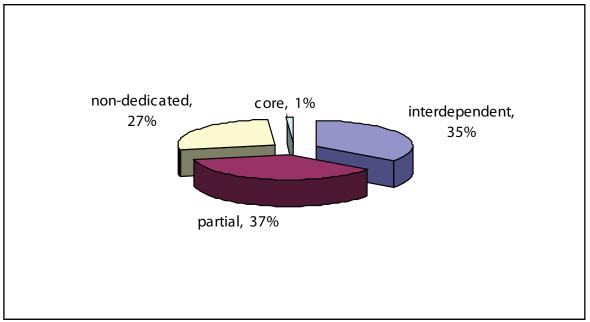
Source: Federal Board of Revenue

Table 10: Sector-wise Share in Tax Revenue Contribution during 2007-2008

| Items | Sectoral Tax Total (Rs Million) | Sectoral Share (Percentage) |
|--|------------------------------------|--------------------------------|
| Core Copyright Industries | | |
| Printed Materials (Books, News paper, Magazines, etc.) | 210.03 | 1.16 |
| Arts and antiques | 1.592 | 0.009 |
| Interdependent Copyright Industries | | |
| Photographic Goods | 328.204 | 1.8 |
| Paper & Paperboard | 9225.342 | 51 |
| Musical Instruments | 3.352 | 0.019 |
| Optical, Photographic Instruments | 1621.489 | 8.96 |
| Miscellaneous Manufactured Articles | 630.542 | 3.49 |
| Partial Copyright Industries | | |
| Silk | 104.707 | 0.89 |
| Wool & Fabrics | 15.876 | 0.09 |
| Carpets | 192.985 | 1.67 |
| Made up Textile Articles | 493.226 | 2.7 |
| Articles of Stone, Plaster, Cement | 501.11 | 2.76 |
| Ceramic Products | 2550.947 | 14.1 |
| Glass and Glassware | 1567.035 | 8.66 |
| Precious Stones / Metals | 97.381 | 0.54 |
| Toys and Games | 543.361 | 3 |
| Non-Dedicated Copyright Industries | | |
| Advertisement TV Cable | 0.306 | 0.001 |
| Total Indirect Tax Contribution (2007-2008) | 18088 | 100.0 |

Source: Federal Bureau of Revenue

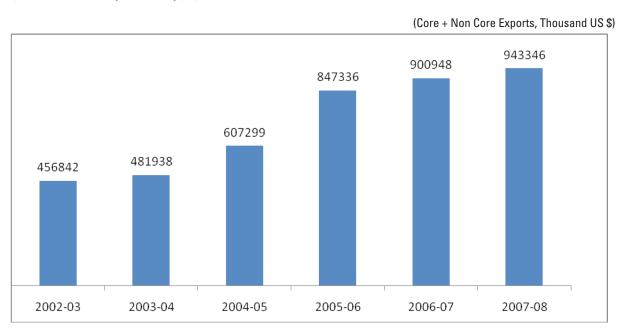
Figure 6: Sector-wise Share in Tax Revenue Contribution 2007-2008



3.2 **Trade in Copyright-Based Industries**

The export trend in copyright-based industries is dependent on a) the global economic growth that gives rise to global demand for Pakistani products and b) the competitiveness of local output which in turn depends upon the cost of raw materials and inputs. Figure 7 shows that the export trend seems to be on the rise and between 2003 and 2008 there is an increase of 52 percent. Between 2003 and 2008, the highest growth rate was 28.3 in 2006, while the lowest was in 2008 at around 4.5 percent. A careful percentage of copyright factors to each of the partial industries has been applied so as to reach a more precise indicator of calculating the copyright portion in trade.

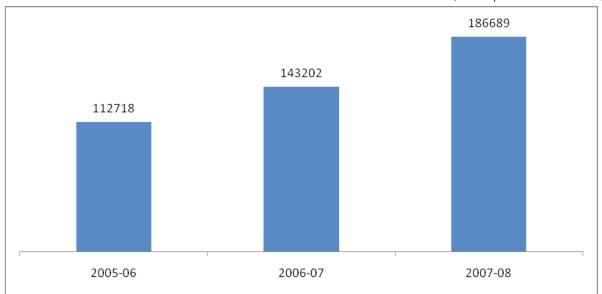
Figure 7: Overall Exports of Copyright-Based Industries (2003-2008)



Information concerning the core sector exports during 2002-2008 was acquired from the State Bank of Pakistan (figure 7). During this period, was observed a growth of 1.5 percent contributed mainly by research & development, information technology and royalties & licenses. The export trends at disaggregated commodity level are given in table 11.

Figure 8: Core Copyright-Based Industries Exports during 2005-2008

(Core Exports in Thousand US \$)



Pakistan's export sector still has a long way to attain a reasonable level of indigenisation and diversification. For now, it seems that exports are heavily dependent on imported raw materials and machinery which includes: photographic or cinematographic goods, electrical machinery and parts, optical and precision apparatus, computer and information services.

Figure 9A: Overall and Core Copyright-Based Industries Imports

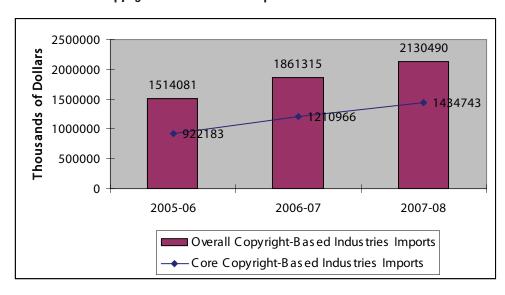


Figure 9A shows a growth of 22 percent in the copyright-based sector's imports between 2006 and 2008. The core sector's import growth during the same period was around 35 percent. The imports at a disaggregated commodity level may be seen in Table 11. Due to the higher relative share of imports in the overall external transactions, Pakistan has an overall trade deficit as well as deficit in core sectors (figure 10). The disaggregated values of exports and imports in thousands of dollars are given in Table 12 and Table 13 respectively. The only two sectors that feature on the core side are a) books, newspapers, printing, and b) works of art. Most noticeable is the high value of Apparel and Textile exports.

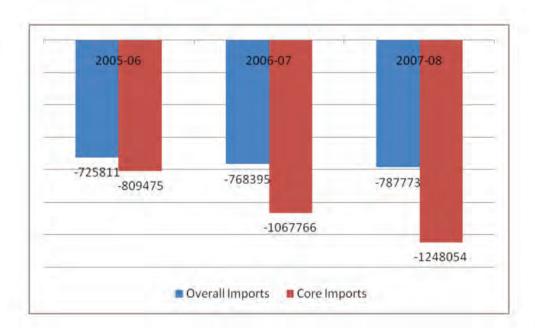


Figure 9B: Copyright-Based Industries Trade Balance

Table 11: Copyright-Based Industries Exports (2003–2008) Thousand US \$

| Categories | 2002-2003 | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| Core Copyright Industries | | | | | | | | |
| Books, Newspapers & Printing Industry | 3,622 | 6,086 | 4,616 | 3,909 | 4,365 | 3,577 | | |
| Works of Arts | 17,260 | 6,653 | 23,233 | 15,432 | 6,797 | 2,125 | | |
| Computer and Information Services | | | | 72,000 | 106,000 | 154,000 | | |
| Advertisement market research & public opinion poll | | | | 20,071 | 24,040 | 23,987 | | |
| Personal, Cultural and Recreation Services | | | | 1,315 | 2,000 | 3,000 | | |
| Total | 20882 | 12739 | 27849 | 112,718 | 143,202 | 186689 | | |
| Interdependent Copyright Industr | ies | | | | | | | |
| Photographic goods | 919 | 852 | 779 | 110 | 85 | 44 | | |
| Paper and Paperboard | 10,019 | 13,613 | 26,296 | 43,976 | 21,833 | 37,304 | | |
| Sound Recorders and Reproducers, Television accessories | 36,522 | 44,940 | 101,892 | 134,605 | 145,330 | 74,128 | | |
| Cinematography | 172,094 | 178,287 | 192,640 | 222,013 | 236,621 | 275,505 | | |
| Total | 219554 | 237692 | 321507 | 400704 | 403869 | 386981 | | |
| Partial Copyright Industries | | | | | | | | |
| Wood and articles of wood | 13,47 | 11,16 | 15,73 | 10,26 | 10,72 | 16,90 | | |
| Apparel and Textile | 211278 | 226038 | 250700 | 273757 | 297027 | 314069 | | |
| Carpets and other textile Floor coverings | 8160 | 8111 | 9759 | 9503 | 9088 | 8422 | | |
| Special Woven Fabrics, Tufted Textiles Fabrics, Lace | 11171 | 19326 | 23338 | 26313 | 26554 | 16593 | | |
| Knitted or Crocheted Fabrics | 1408 | 2453 | 1820 | 1398 | 1977 | 2693 | | |
| Articles of Apparel & Clothing Accessorised Knit | 71356 | 85267 | 95680 | 97693 | 106060 | 107344 | | |

The Economic Contribution of Copyright-Based Industries in Pakistan

Table 11: Copyright-Based Industries Exports (2003–2008) Thousand US \$ (continued)

| Copyright-Based Industries Exports (Core + Non-Core) | 456842 | 481938 | 607299 | 847336 | 900948 | 943246 |
|---|--------|--------|--------|--------|--------|--------|
| Total | | | | 52400 | 49739 | 47847 |
| Communication Services | | | | 8118 | 4961 | 4797 |
| Transportation | | | | 44282 | 44778 | 43050 |
| Non-Dedicated Support Industrie | es | | | | | |
| Total | 216406 | 231507 | 257943 | 281514 | 304138 | 321729 |
| Articles of Stone, Plaster, Cement, | 825 | 1339 | 1156 | 1340 | 1339 | 1832 |
| Footwear, Headgear | 4303 | 4130 | 6087 | 6417 | 5772 | 5828 |
| Other Man-Made Textile Articles, Sets, Worm Clothing | 68610 | 77000 | 83156 | 92416 | 99278 | 119403 |
| Articles of Apparel / Clothing Access not Knitted | 50573 | 33881 | 36947 | 46434 | 54070 | 59614 |

Source: SBP Statistics on Export of Goods and Services (various issues).

Table 12: Consolidated Export of CBI, 2002-2003 to 2007-2008, Thousand US \$

| Categories | 2002- 2003 | 2003- 2004 | 2004- 2005 | 2005- 2006 | 2006- 2007 | 2007-2008 |
|---|---------------|---------------|---------------|---------------|---------------|-----------|
| Core Copyright Industries | 5 % | 3% | 5% | 13% | 16% | 20% |
| Interdependent Copyright Industries | 48% | 49% | 53% | 47% | 45% | 41% |
| Partial Copyright Industries | 47% | 48% | 42% | 33% | 16% | 34% |
| Non-Dedicated Support Industries | | | | 6% | 6% | 5% |
| Copyright-Based Industries Exports (Core + Non-Core) | 100 | 100 | 100 | 100 | 100 | 100 |

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Figure 10: Relative Share of CBI Export in 2007-2008

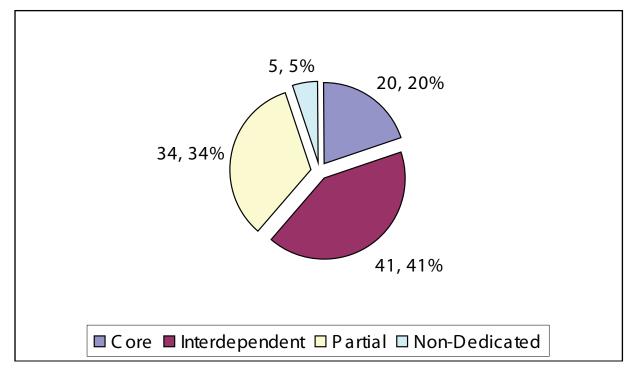


Table 13: Copyright-Based Industries Imports (2006–2008) Thousand US \$

| Categories | 2005-2006 | 2006-2007 | 2007-2008 |
|---|-----------|-----------|-----------|
| Core Copyright Industries | | | • |
| Books, Newspapers & Printing Industry | 31,584 | 33,693 | 23,404 |
| Works of Arts | 825,982 | 1,074,809 | 1,266,535 |
| Computer and Information Services | 44,034 | 90,000 | 129,000 |
| Advertisement market research & public opinion poll | 14,593 | 11,396 | 14,804 |
| Personal, Cultural and Recreation Services | 6,000 | 1,070 | 1000 |
| Total | 922193 | 1210968 | 1434743 |
| Interdependent Copyright Industries | | | |
| Paper and Paperboard, Articles of Paper Pulp | 275,944 | 333,769 | 410,277 |
| Sound Recorders and Reproducers, Television accessories | 43,976 | 21,833 | 37,304 |
| Cinematographer (Inter Copyright) | 134,605 | 145,330 | 74,128 |
| Total | 454525 | 500932 | 521709 |
| Partial Copyright Industries | | | |
| Wood and articles of wood | 61,59 | 6568 | 7053 |
| Apparel and Textile | 1855 | 1867 | 2186 |
| Carpets and other textile Floor coverings | 258 | 245 | 284 |
| Special Woven Fabrics, Tufted Textiles Fabrics, Lace | 411 | 377 | 462 |
| Knitted or Crocheted Fabrics | 152 | 166 | 181 |
| Articles of Apparel & Clothing Accessorised Knit | 195 | 285 | 217 |
| Articles of Apparel/Clothing Access not Knitted | 112 | 147 | 280 |
| Other Man-Made Textile Articles, Sets, Worm Clothing | 727 | 647 | 762 |
| Footwear, Headgear | 509 | 656 | 719 |
| Articles of Stone, Plaster, Cement | 2582 | 2591 | 2769 |
| Total | 6801 | 13549 | 14913 |

Table 13: Copyright-Based Industries Imports (2006–2008) Thousand US \$ (continued)

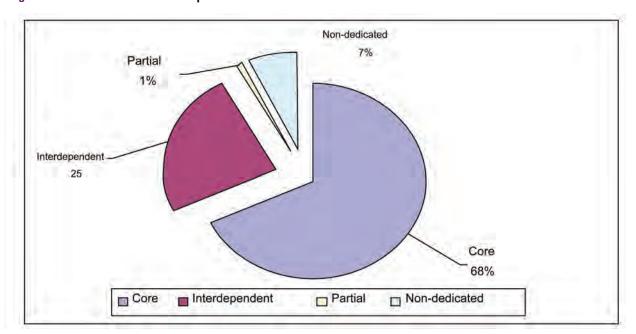
| Non-Dedicated Support Industries | | | |
|--|---------|---------|---------|
| Transportation | 117384 | 128535 | 151085 |
| Communication Services | 4141 | 4018 | 4387 |
| Total | 121525 | 132553 | 155472 |
| Copyright-Based Industries Imports (Core + Non-Core) | 1505044 | 1858002 | 2126837 |

Source: SBP Statistics on Import of Goods and Services (various issues).

Table 14: Consolidated Imports of CBI, 2005-2006 to 2007-2008, Thousand US \$

| Categories | 2005-2006 | 2006-2007 | 2007-2008 |
|--|-----------|-----------|-----------|
| Core Copyright Industries | 61% | 65% | 68% |
| Interdependent Copyright Industries | 30% | 27% | 24% |
| Partial Copyright Industries | 1% | 1% | 1% |
| Non-Dedicated Support Industries | 8% | 7% | 7% |
| Copyright-Based Industries Imports (Core + Non-Core) | 100 | 100 | 100 |

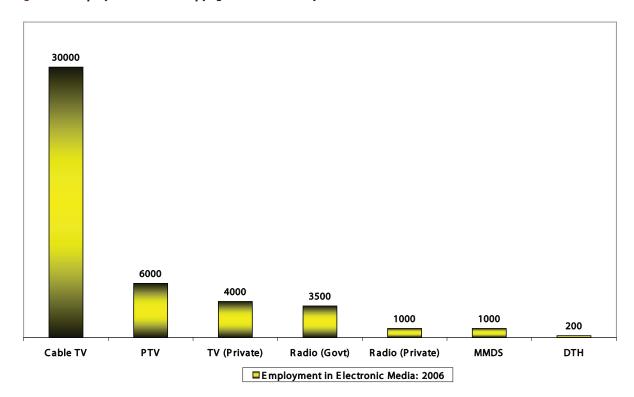
Figure 11: Relative Share of CBI Imports in 2007-2008



3.3 Employment in Copyright-Based Industries

Employment estimates provided by Pakistan Electronic Media Regulatory Authority are depicted as Figure 14. The cable TV sector, now predominantly established in the private sector, remained the largest employer in 2006 followed by the state-run Pakistan Television, private television channels and Pakistan Broadcasting Corporation.

Figure 12: Employment in Core Copyright-Based Industry 2006: Electronic Media



The employment in electronic media has recently been increased due to the opening up of media through perpetual deregulation that allowed government to offer licenses to the private sector. The numbers of licenses issued with the corresponding percent share of the media segments for the year 2006 are given in Table 15. The largest growth is in case of Cable TV followed by FM Radio. The recent additions to electronic media include multi-channel multi-point distribution system (MMDS) and direct-to-home technology (DTH).

Table 15: Operational Licenses during 2006

| Segment | No. of Licenses | Percentage Share |
|--------------|-----------------|------------------|
| Cable TV | 1301 | 92.14 |
| FM Radio | 86 | 6.09 |
| Satellite TV | 16 | 1.13 |
| MMDS | 5 | 0.36 |
| DTH | 2 | 0.14 |
| Teleport | 2 | 0.14 |
| Total | 1412 | 100 |

Source: Pakistan Electronic Media Regulatory Authority (PEMRA).

The television sector owing to the mushroom growth of private TV channels at regional, provincial and national level, remained on top with an investment of 43 million dollars. As the majority of Pakistani population lives in the rural areas, television sector still has attractive prospects of growth in untapped districts. Many television channels have also specified their scope by focusing on one of the key niches like current affairs, education, fashion, drama, sports, etc.

Apart from newspapers and periodicals, TV channels, a large number of graphic designers are working in the printing presses designing wedding cards, promotional leaflets, posters, banners and hoardings.

Photographers though not members of the Photographic Society of Pakistan and unaware of copyright concepts are traditionally available in almost every town and city. In big cities one finds a photo studio around every corner. These photographers had been mostly making portraits and passport photos for all kinds of forms, applications including National ID cards and events. An estimation of employment provided by core copyright sectors is given in table 13.

Table 16: Employment Contribution by Core Copyright Sectors – 1999 & 2007

| | | Number of Enterprises | | Estimated Employment | |
|----|--------------------------------|-----------------------|-------|----------------------|--------|
| No | No Sector | 1999 | 2007 | 1999 | 2007 |
| 1. | Newspaper & printing | 1344 | 1820 | 26160 | 38780 |
| 2. | Data processing & IT | 50 | 1101 | 990 | 24222 |
| 3. | Cultural & Recreation services | - | - | 175000 | 205000 |
| 4. | Radio & TV broadcasts | 20 | 1422 | 6500 | 44700 |
| 5. | Graphic Designing | 30000 | 67000 | 90000 | 268000 |
| 6. | Photography | 15000 | 18000 | 45000 | 54000 |
| | Total | 46414 | 89343 | 343650 | 634702 |

Source: Information received from Pakistan Media Regulating Authority-PEMRA, Pakistan Film Producers Association-PFPA, Pakistan Software Houses Association-PASHA, Pakistan Association of Printing and Graphic Industry-PAPGAI, Audit Bureau of Circulation-ABC, Photographers Society of Pakistan-PSP, Associated Press of Pakistan-APP, face to face Interviews with professional leaders, internet search and provisional estimation.

Employment in cultural and recreation performance is estimated keeping in mind the large number of families who have traditionally been involved in music, dance, street singing and comedy for centuries. Over 50,000 performers from these families are living in the city of Lahore alone with about 25,000 concentrating in Shahi Mohalla. Amongst these performers some like Alam Lohar, Allan Faqir, Faiz Baloch, Zarsanga have created world popular music but could not get a reward for being unaware of their rights as creators.

Efforts were also made to gather information regarding value and contribution of performance like music, dance, theater, etc. in hotels and restaurants. Though data regarding registered hotels (4 or 5-star hotels) is available in national statistics, it becomes very difficult to account for lower rated hotels which amount to a substantial share of business in this sector. The local guest houses have become a preferred choice of the spectators / guests in the prevailing set of security conditions, especially with high level risk at big hotels and restaurants. According to a cautious estimate, the total number of 3-star or lower level of hotels is roughly exceeding 1000 in the country. Furthermore, the numbers have also been estimated for restaurants, clubs, shrines, cinemas, standing theaters, marriage halls and other function places. This number is based on information available in census of industries, data from associations and reports of some previous studies conducted by the Federal Bureau of Statistics.¹³

The employment per entity is an average estimate obtained from Desh (1995).¹⁴

Simply by multiplying the number of hotels by category with their respective employment levels, an estimate of total employment can be calculated. Then using a *copyright factor*, the contribution of copyright sector in the overall employment in hotels and restaurants is determined. The total employment comes to around 1.73 million and the creative employment¹⁵ comes to around 0.259 million. Thus, the share of creative

¹³The employment numbers are raw in their present form. It is hard to obtain full-time equivalents (FTE) in the absence of a nationally representative labour market survey. The Labour Force Survey conducted by the Federal Bureau of Statistics covers only selected districts in the four provinces.

¹⁴Desh, Bandhu (1995): Jammu, Kashmir, and Ladakh: Tourist Guide.

¹⁵These estimates were made after a thorough survey / interview of small hotels with no star value to big start hotel status. Interestingly, in similar hotels and restaurants music is played through their audio system or lives with musician.

employment in the overall employment of hotels and restaurants stands around 15 percent. This is represented by the persons working in hotel industry linked with music either live or by playing prerecorded CDs / DVDs, etc., theatre or showing TV dramas & other shows in the hotel rooms, lobbies or restaurants.

From the above estimation we can say that the employment contribution of core copyright sector is around 0.8 million.

4. Analysis of Certain Sub-sectors in the Core Copyright Industries

Data regarding growth of core industries was acquired from the Federal Bureau of Statistics and will be analysed and presented individually (category-wise) in this chapter. This will help to understand not only the supply aspect of copyright industries but also the possible changes in the social preference over time.

4.1 Newspapers & Periodicals

At the time of independence (1947), there were very few newspaper publishers in Pakistan. Three newspapers *Khayber Mail*, *Alfalah* and *Aljameeat* were published from Peshawar while only one newspaper *Millat* was published from Karachi. Other newspapers like *Nawa-e-waqt*, *Inqilaab*, *Shahbaz* and *Zamindar* were regular publications. In 2007 the number of dailies, weeklies and other periodicals stood at 1820 in Pakistan (Table 15). Almost all Pakistani magazines are exported to the Middle East while some of the newspapers like *The News*, *Dawn*, *Nawa-e-waqt* and *Jang* have their regular readers abroad. *The News* and *Jang* are published from London as well. Circulation of these publications is well over 1.3 million according to the Audit Bureau of Circulation-ABC (Table 17).

Table 17: Circulation of Newspapers and Periodicals

| Category | 1998 | 2003 | 2007 | % Growth 1998 – 2007 |
|---------------|---------|---------|---------|-------------------------|
| Dailies | 5114743 | 6245775 | 9934951 | 94 |
| Weeklies | 380628 | 588058 | 1099628 | 189 |
| Fortnightlies | 82639 | 96562 | 119217 | 44 |
| Monthlies | 936989 | 1312635 | 2546641 | 172 |
| Quarterlies | 10993 | 6875 | 31494 | 186 |
| Bi-Annual | 125 | _ | _ | _ |
| Annual | 522 | 730 | 855 | 64 |

Source: Audit Bureau of Circulation, Ministry of Information and Broadcasting.

The circulation of all the categories of newspapers and periodicals shows an increase with time except for bi-annual publications (Table 17). The highest increase is seen in the circulation of weeklies with a growth rate of 189 percent during the period 1998-2007, followed by quarterlies which grew by 186 percent in the same time period. The data regarding circulation of bi-annual publications is not available after 1998 from which we infer that the number of bi-annual publication had decreased overtime to a negligible amount. The circulation of quarterlies shows a decline from 1998 to 2003 (decreasing from 10993 to 6875) however recovered by 2007 with a rise to 31494.

Table 18: Total Number of Newspapers and Periodicals by Category

| Category | 1998 | 2003 | 2007 | % Growth 1998/2007 |
|---------------|------|------|------|--------------------|
| Dailies | 277 | 204 | 437 | 58 |
| Weeklies | 365 | 219 | 463 | 27 |
| Fortnightlies | 92 | 89 | 92 | 0 |
| Monthlies | 492 | 393 | 686 | 39 |
| Quarterlies | 84 | 34 | 71 | -15 |
| Rest | 34 | 6 | 71 | 109 |
| Total | 1344 | 945 | 1820 | 35 |

Source: Audit Bureau of Circulation, Ministry of Information and Broadcasting.

The total number of newspapers and periodicals available in the country increased by 35 percent (Table 18) between the period 1998 to 2007, while the growth rate increased for dailies, weeklies and monthlies. It was nil in case of fortnightlies and in fact decreased for quarterlies. The highest increase was observed in the case of dailies which increased by 58 percent, followed by monthlies (39 percent) and weeklies (27 percent). The increase, both in the number of newspapers and periodicals has not been on a smooth trajectory. It was observed that this number decreased from 1344 to 945, however recovered by 2007 rising up to 1820. Almost all categories of newspapers and periodicals declined from 1998 to 2003. The highest decrease during this period is seen in the case of weeklies followed by monthlies and dailies.

4.2 Cinema

Pakistan inherited its cinema with major studios situated in the city of Lahore. These studios started producing films in 1930s and Lahore became known as "Lollywood". Until 1965, a number of films that were produced in both Pakistan and India were displayed in either country depending upon their worth and popularity. After 1965 the import of Indian films was banned. This was the first jolt for the cinema business in Pakistan.

In the late seventies VHS format of video cassette recorders were introduced for home viewing of films. Although banned in cinemas, Indian films VHS tapes became common household phenomena in Pakistan. Thousands of shops opened throughout the country, in many cases renting out all kinds of pirated films on VHS tapes. While cinema was subjected to a host of regulations, permissions, licenses and a very strict censorship; VCRs were showing uncensored films in every house without any heed of rules and regulations. This had a very negative impact on the cinema industry. In the 1980s more restrictive regulations came into effect for the film industry. That was the time, Pakistan film industry took a sharp nose-dive. Films dropped from a total output of 98 films in 1979 (including 42 in Urdu) to only 58 films (26 in Urdu) in 1980.

Table 19: Films Released during 1998-2007

| Language | 1998 | 2003 | 2007 | % Growth 1998 – 2007 |
|----------|------|------|------|----------------------|
| Urdu | 29 | 15 | 10 | -66 |
| Sindhi | 0 | 0 | 0 | - |
| Punjabi | 5 | 17 | 15 | 200 |
| Pushto | 17 | 11 | 14 | -18 |
| Total | 51 | 43 | 39 | -24 |

Source: Pakistan Film Producer's Association.

Table 19 shows the number of films released during the years 1998 to 2007. The total number of films declined by 24 percent. This was accompanied by a decline in the number of cinemas in the country from 493 in 1998 to 106 in 2007 (-78 percent). The films produced in the Urdu language declined by 66 percent followed by Pushto language's films which declined by 18 percent. The number of Punjabi films, however, increased by 200 percent. This is partially due to the underlying demographic structure of the Punjab province. More than 50 percent of the population resides in Punjab which also contributes the major proportion of youth in the country.

Table 20: Documentary Films Produced and Released during 1998-2007

| Region | 1998 | 2003 | 2007 |
|----------|------|------|------|
| Federal | | | |
| Produced | 8 | 2 | - |
| Released | 4 | 2 | - |
| Punjab | | | |
| Produced | 3 | 7 | 7 |
| Released | 3 | 6 | 5 |
| Sindhi | | | |
| Produced | 1 | _ | 4 |
| Released | 1 | _ | 4 |

Source: i) Ministry of Information & Broadcasting (Central), Karachi, ii) Provincial Public Relation Departments.

The Punjab province also stands out in terms of the documentaries produced and released (Table 20). In terms of public outreach, television and radio are the most widely used communication media.

4.3 Radio & Television

The first ever radio station of the present day Pakistan was established in Peshawar in 1936; within a year's time the second radio station was established in Lahore in 1937. Today the state owned Pakistan Broadcasting Corporation (PBC) has 24 radio stations all over the country while there are 116 private FM channels. In 1949 PBC started its external service primarily to cater to listeners in India, China, Afghanistan, Russia, Iran and its World Service for Southeast Asia, Europe and the Middle East in 1973.

Television has traditionally been the source of information and entertainment for the people of Pakistan for over seven decades now. The advertising and licensing earnings of all the radio and TV channels in Pakistan stand well over Rs 10 billion per annum. There has been enormous growth in the number of FM radio stations and TV channels in the past fifteen years. Government licensed television channels have gone up from 3 to 82 during this period. The total (spend) advertising revenue stood at Rs 25.05 billion (US \$318 million) in 2009.

TV ads spend (revenue) stands at Rs 11.91 billion, around 47% of the total ads spend in the last fiscal year 2007-2008. This is also lower than the 88% increase in 2005-2006 and the 55% increase in 2006-2007. The latest data (June 2009) reports a notable rise in TV audience attributable to higher levels of electrification in rural areas. The industry however, is facing acute challenges of non-availability of educated and trained workforce, lopsided marketing and copyright piracy.

Table 21 indicates a decline in the number of TV dramas produced and telecast. From 1998 to 2006 the number of TV dramas telecast declined from 695 to 345 (-50 percent) but recently the drama production and telecasting took a sharp U-turn from 2007 and the decline for the same period was from 695 to 595 (hence coming down to -14 percent).

Table 21: TV/Radio Dramas Telecast / Broadcast

| Frequency | 1998 | 2003 | 2006 | 2007 | % Growth 1998-2006 | % Growth 1998-2007 |
|----------------------|------|------|------|------|-----------------------|-----------------------|
| TV Dramas Produced | 708 | 561 | 433 | 629 | -39 | -11 |
| Dramas Telecast | 695 | 521 | 345 | 595 | -50 | -14 |
| Dramas Broadcast | 554 | 826 | 1148 | 2438 | 107 | 340 |
| Radio Drama Produced | 127 | 666 | 214 | 704 | 69 | 454 |

Source: i) Pakistan Television Corporation Limited, ii) Pakistan Broadcasting Corporation Limited.

With the liberalisation of the media and its regulatory policy, the rise in the number of private radio channels was seen across all provinces. Due to this we see an increase in the number of radio dramas broadcast from 554 in 1998 to 2438 in 2007, indicating a growth of 340 percent. The number of radio dramas produced also increased from 127 in 1998 to 454 in 2007 indicating a growth of 454 percent.

4.4 Advertising

TV viewership has undergone an amazing transformation since the arrival of satellite TV which is currently available in about 45% of all TV homes (Table 22). Channels are accessed mainly via cable operators at a relatively low cost. In the past five years, TV viewing has risen considerably and varies dramatically by region. Increased availability at a relatively low cost has also led to higher consumption of satellite channels of both local and international origin. Satellite TV is now available to 38 million people across the country with STAR Plus and PTV leading the pack.

Table 22: Television Viewer-ship, TV Channels and Internet Users

| Parameters | Actual (Number) | Percentage |
|--------------------|-----------------|------------|
| Population | 164,223,500 | |
| Total Homes | 24,150,515 | |
| Household Size | 6.8 | |
| TV Homes | 16,422,350 | 68 |
| Multichannel Homes | 7,390,058 | 45 |
| Internet Users | 18,500,000 | 11 |

In a recent survey conducted by Gallup Pakistan, 35% of respondents claimed to have watched STAR Plus in the previous week vs a 57% reach for subscription TV in all TV homes. In subscription TV homes, channels such as STAR Plus and Geo News regularly reach 60%. According to Gallup Pakistan, total advertising expenditure revenue has increased by 10% in the last fiscal year from Rs 22.76 billion (US \$289 million) to Rs 25.05 billion (US \$318 million). This is significantly lower than the 62% increase in 2005-2006 and the 32% increase in 2006-2007.

TV ads spend (revenue) has increased by 13% (from Rs 10.55 billion to Rs 11.91 billion), around 47% of the total ads spend in the last fiscal year. This is also lower than the 88% increase in 2005-2006 and the 55% increase in 2006-2007. In terms of share of spending, however, TV's share has increased by just 1%. Gallup Pakistan offers advertising expenditure services in Pakistan as well as national television viewing statistics. The latest data (June 2009) reports a notable rise in TV audience attributed to higher levels of electrification in rural areas. Medialogic has installed a metro panel of approximately 600 meters across Karachi, Lahore, Rawalpindi and Islamabad to gauge second-to-second viewer ship data for more than 4,000 individuals residing in metropolitan Pakistan. Source: CASBAA, Gallup Pakistan, Internet World Statistics (as of September 2009).

Larger firms in Pakistan had a restricted variety of advertising choices for a considerable number of years and appealing fresh media generally obtainable all over the planet were virtually unheard of. However, all that became the past in the late nineties as the requirement for creative kinds of ads rose as a bigger number of firms competed for a portion of the budding market. One such form was digital printing that could be utilised for several indoor and outdoor purposes.

Hoarding ads and store signs in Pakistan were mainly manually painted and were subject to a considerable number of problems such as the fading of colours and average composition, with most hoardings and shop frames being manufactured with low gauge metal sheets or plastic. A number of suppliers gave superior quality structures with life-like painted pictures, but the time it required to churn out these signs were massive because of the labour-intensive process.

Screen-printing for posters was also widespread in Pakistan. While automated procedures were utilised everywhere throughout the world, Pakistan's sector was still primarily a labour-intensive process. Screen-

printing was fast and easily available the country. However, the quality was gravely poor and similar to the other widespread media faced issues like colour fading and frequent theft.

The original digitally printed hoardings or skins, as often alluded to in the business, were brought in from international firms in countries like Singapore. The impression produced by these splendid quality displays was the beginning of a quick and much desired revolution in the advertising business in Pakistan. Firms thronged to confirm orders for printed billboards and the shape of outdoor media in Pakistan was altered from then on. In a couple of years, Pakistan had some of its own limited print shops and with low-cost technologies obtainable from China, the printing business turned into a widespread and lucrative industry.

4.5 Computer Software

Pakistan's IT Industry was almost non-functional until 2000. A meagre sum of US \$ 22 million was being brought in as export earnings. However, since 2004 software creation and IT industry have made progress with time both locally and outside the country witnessing a high annual growth rate (averaging 50%) in Pakistan.

With the help of the Pakistan Software Export Board, over 120 Pakistani companies are now ISO certified. The Pakistan Software Houses Association (PASHA) estimates that today Pakistan's IT industry is worth over 2 billion dollars. Foreign remittances of IT related services and products are now over 170 million dollars (as reported by the State Bank of Pakistan). By 2013 it is estimated to grow beyond 1 billion dollars. There are over 1,100 companies registered with the Pakistan Software Export Board (PSEB) and over 100,000 people are employed by the industry.

With regards to sectoral data collection and understanding, information was also gathered from sectoral associations which could be interpreted in terms of their outreach in the formal sector. These associations filled a questionnaire (Appendix II), after which meetings were held in order to refine the gathered information. The required statistics was made available by: Pakistan Handicrafts, Associated Press of Pakistan (APP), Pakistan Association of Printing and Graphic Arts Industry (PAPGAI), Pakistan Electronic Media Regulatory Authority (PEMRA), Pakistan Film Producers Association (PFPA), Pakistan Advertising Association (PAA) and Photographic Society of Pakistan (PSP). The number of registered firms with each of these associations and their main responses are summarised in Table 23.

Table 23: Summarised Information Regarding Different Sectoral Associations

| Associations | Registered Firms | Annual rate of growth | Importance of factors shaping future* | Challenges | Type of Govt. Support Required |
|---|---------------------|-----------------------------|---------------------------------------|------------|--------------------------------------|
| Handicraft | 25 | 20 | 4 | Technology | Technological Assistance |
| APP Associated Press of Pakistan | 243 | 70 | 1 | Technology | Copyright protection |
| PAPGAI Pakistan Association of Printing and Graphic Arts Industry | 594 | 15 | 1 | Financial | Relaxation in Duties & Taxes |
| PEMRA Pakistan Electronic Media Regulating Authority | 2400 | 12 | 1 | Technology | Check monopolies / abuse of power |

Table 23: Summarised Information Regarding Different Sectoral Associations (continued)

| PFPA | 376 | 5 | 1 | Copyright | Enforce Copyright Laws |
|---|-----|---|---|-----------------------|------------------------|
| Pakistan Film Producers Association | | | | infringement | / Tax holidays |
| PSP Photographic Society of Pakistan | 70 | 5 | 1 | Copyright protection | Financial support |
| PAA Professional Advertisers Association. | 90 | 7 | 1 | Global competition | Copyright protection |

*where 1 = technology, 2 = global competition, 3 = financing, 4 = government regulations, 5 = access to skilled manpower, 6 = others

Source: Own calculation.

The information regarding wages of different personnel varied across sectors. In the case of Pakistan handicrafts, the monthly average wages were Rs 5,000 for unskilled and Rs 17,000 for skilled labour. For APP, the monthly average wages were Rs 30,000 for unskilled and Rs 70,000 for skilled professionals. In the case of PAPGAI, unskilled labour is earning Rs 7,000 and skilled labour is earning Rs 13,000 which is low compared to workers associated with this sector in developing countries. The main reasons seem to be, the lack of funding, branding and marketing infrastructure available with these firms. No data on wages was provided by the PFPA as the film producers hire all employees on contract basis and the contract is specific to the film under production.

Most of the associations give high importance to the protection of copyrights and have demanded an increased public sector support for adopting modern technological methods in order to bring their firms in line with the international best practices. In some areas such as electronic media there is also a need to check regional monopolies and related activities.

5. International Comparisons

It is usually hard to compare a developing country's performance in any specific sector with that of developed economies. However, such economies are insightful in the lessons they render for the developing countries as to how and what sectoral development path to adopt. A comparison of various concerned parameters / indicators with various countries is given in table 21.

Table 24: International Comparison regarding Contribution of Copyright Industries towards GDP and Employment

| Country | Reference Year for Study | | | | | | % Contribution of Copyright Industries in Employment | | | | |
|-------------|-----------------------------|-------------|------|---------------------|---------|-------------------|--|------|---------------------|---------|-------------------|
| | | Total Share | Core | Inter- dependent | Partial | Non- dedicated | Total Share | Core | Inter- dependent | Partial | Non- dedicated |
| Bulgaria | 2005 | 2.81 | 1.57 | 0.62 | 0.09 | 0.52 | 4.3 | 2.29 | 0.73 | 0.27 | 1 |
| Jamaica | 2005 | 4.81 | 1.7 | 0.74 | 0.47 | 1.9 | 3.03 | 1.79 | 0.31 | 0.23 | 0.68 |
| Lebanon | 2005 | 4.75 | 2.53 | 0.71 | 0.62 | 0.89 | 4.49 | 2.11 | 0.73 | 0.7 | 0.95 |
| Mexico | 2003 | 4.77 | 1.55 | 1.69 | 0.85 | 0.68 | 11.01 | 3.41 | 3.65 | 2.53 | 1.41 |
| Philippines | 1999 | 4.82 | 3.5 | 0.96 | 0.04 | 0.29 | 11.1 | 8.81 | 1.4 | 0.2 | 0.6 |
| Canada | 2004 | 4.7 | 3.5 | 0.81 | 0.08 | 0.31 | 5.4 | 4 | 0.91 | 0.16 | 0.33 |
| Hungary | 2002 | 6.66 | 3.96 | 1.24 | 0.45 | 1 | 7.1 | 4.15 | 1.25 | 0.61 | 1.07 |
| Latvia | 2000 | 5.05 | 2.9 | 1.1 | 0.28 | 0.77 | 5.59 | 3.7 | 0.7 | 0.44 | 0.75 |
| Pakistan | 2000 | 4.45 | 1.37 | 0.11 | 0.98 | 1.99 | 3.71* | 0.7 | 0.04 | 1.37 | 1.6 |
| Singapore | 2001 | 5.67 | 2.85 | 1.76 | 0.09 | 0.97 | 5.8 | 3.64 | 1.24 | 0.18 | 0.74 |
| USA | 2004 | 11.09 | 6.48 | 2.13 | 0.4 | 2.08 | 8.53 | 4.07 | 2.17 | 0.26 | 2.03 |
| Australia | 2007 | 10.3 | 7.3 | 2 | 0.4 | 0.7 | 8 | 4.97 | 1.81 | 0.57 | 0.65 |
| Croatia | 2004 | 4.27 | 2.99 | 0.88 | 0.32 | 0.07 | 4.64 | 3.22 | 0.93 | 0.41 | 0.08 |
| Romania | 2005 | 5.55 | 3.55 | 1.08 | 0.53 | 0.39 | 4.19 | 2.36 | 0.58 | 0.82 | 0.43 |
| Colombia | 2005 | 3.3 | 1.9 | 0.8 | 0.3 | 0.4 | 5.8 | 1.7 | 0.7 | 1.9 | 1.5 |
| Russia | 2004 | 6.06 | 2.39 | 0.76 | 0.27 | 2.64 | 7.3 | 4.29 | 0.75 | 0.56 | 1.69 |
| Ukraine | 2005 | 2.85 | 1.54 | 0.68 | 0.1 | 0.54 | 1.9 | 1.16 | 0.46 | 0.08 | 0.2 |
| Netherlands | 2005 | 5.9 | 4 | 0.4 | 0.9 | 0.6 | 8.8 | 6.2 | 0.6 | 1.1 | 1 |

^{*} The employment estimation is for 2006.

Source: Various WIPO Studies.

Table 24 exhibits the comparative position on the contribution of copyright-based industries towards value addition and employment. The reference years for most of the studies range between 2000 and 2005 except for The Philippines. The copyright sector of the US seems to have the highest contribution in value addition (in the sample of countries selected). This is followed by Australia, Hungary and Russia. Pakistan's copyright sector contributes to 4.45 percent of the overall GDP. The core sector on its own contributes to 1.37 percent supplemented by the interdependent (0.11%), partial (0.98%) and non-dedicated (1.99%) sectors.

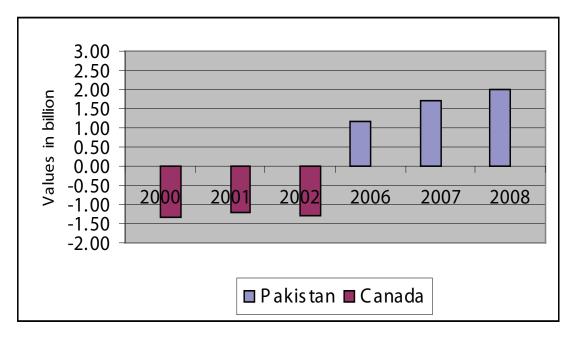
The contribution towards employment is highest in the Philippines (11.1%) followed by Mexico (11,01%), The Netherlands (8.8%) and The USA (8.53%). In the case of Pakistan the contribution of the copyright sector towards employment generation stands at 3.71 percent, supplemented by the core (0.7%), interdependent (0.04%), partial (1.37%) and non-dedicated (1.6%) sectors.

Accordingly in the context of GDP, the USA and Australia stand at a high percentage of 11% and 10% respectively, while Pakistan is comparable to Jamaica, Lebanon, Mexico, The Philippines, Canada and Croatia. On the employment side it can be seen that Pakistan stands third lowest after Ukraine and Jamaica.

No such study has been conducted in this region so far (South Asia) and it is becoming difficult to make comparison with the developed countries. The full similarity of these studies are not possible although, the related comparable studies are of Hungary¹⁶ and Colombia.

In order to make a comparison of the contribution of copyright based industries in developing and developed countries, data regarding Pakistan and Canada's trade balance is depicted as figure 13.





Direct comparison of the trade balance between two countries with uneven economies is not possible. The Canadian study discussed the data on imports up to 2002 and this study takes it onward from 2005-2006 up to 2007-2008. Moreover, Canada was a net importer of trade with \$1.35 billion in 2000 and \$1.30 billion in 2002. It almost shows a slight decline in trade balance. While in the case of Pakistan, it remained a net exporter of trade¹⁷, in 2005-2006 and its value was \$1.17 billion and reached US \$ 2 billion in 2007-2008.

The comparison of contribution of copyright-based industries towards employment generation is trivial given the contrast between the workers absorption in these industries found in developed and developing countries.

¹⁶See. Penygey and Munkácsi (2005).

¹⁷Includes apparel and textile sector exports.

Conclusions and Policy Recommendations

The results that emerge from the analysis of data gathered from direct or indirect sources have significant policy relevance. Based upon the analysis of all the core and sub-sectors of copyright and their economic contribution, the following conclusions and policy recommendations can be made:

- Despite of having a lot of potential, the copyright-based industries are largely underestimated both in terms of government support and general appreciation.
- The copyright industries still do not benefit from the full scope of protection that is offered in other countries and their adequate protection should be considered by the relevant authorities.
- The existing Copyrights Laws must be enforced effectively by the concerned authorities to protect the rights of the individuals / organisations concerned.
- The sectors / disciplines of competitive nature with enormous potential of earnings / revenues should be supported more actively by the government.
- Private sector must be facilitated to come forward as a front line partner in searching and harnessing the potential of individuals / institutions to bring them in mainstream economy.
- All stakeholders involved in different interdependent copyright industries like: paper & paper board, wood & wood products, textile, ceramic and glass products, etc. should be sponsored through an harmonised and integrated program partially sponsored by the government and the concerned industry.
- Available local and acquired skill, wisdom and techniques should be integrated through a well coordinated mechanism across the country and institutionalisation in this regard may be done as first priority.
- Inland and foreign study visits of the artisans and creators of any original work and those having potential for this must be organised.
- A simple but thorough handbook encompassing all essential information should be published with key messages and contacts to guide industry professionals.
- Service delivery of IP Registries, especially of the Copyright Office to be improved through automation and BPR (Business Process Re-engineering).
- Public awareness, advocacy & behavioural change communication to be enhanced: Sufficient funding may be made available to use all media tools including electronic and print media as well as billboards, seminars, workshops, documentaries, etc. for increasing public awareness and reinforcing advocacy and behavioural change communication.
- Enforcement coordination to be improved:
 - IPO Pakistan should take responsibility for hosting enforcement coordination meetings every month, where the situation of piracy in the country is analysed, strengths and weaknesses appraised and a monthly third party monitoring is not only discussed but responsibility of failures is fixed.
- Dedicated units in all enforcement agencies to be created:
 Special enforcing units may be created in the Collectorates of Customs, Police and Federal Investigation Agency, who should be responsible for registration of complaints, investigations of complaints, routine IP infringement detections, arrests and seizures, and attending the meetings hosted by the IPO Pakistan.
- Specialised courts to be established, the Copyright Board may be given more powers:

 The time taken in rectification of mistakes, whether or not intentional, and in decision making on complaints and appeals of the aggrieved parties allow the usurper to take full advantage for as long as the decision is pending and even afterwards. It is therefore very important to strengthen the Copyright Board and establish special courts for speedy justice to be given in copyright infringement cases.
- Capacity building of IPO professionals collaboration with an existing institute:

 Instead of the IPO establishing its own IP Academy in the same office, an education institute already involved in IP related research or giving education in creative or related fields may be asked to collaborate with IPO Pakistan and be given funds with the task of training on IP related subjects. In this regard, an international institute of IP research and studies / management training, such as the International Intellectual Property Training Institute of Korea can be studied as a possible model.
- IPO Pakistan must practically help Establish a Collective Management Organization (CMO):
 Pakistan does not have a single CMO. WIPO has provided assistance in setting up a CMO. However, the
 commitment by the IPO in this regard must be reinforced. It is recommended that a CMO is established
 under the principles of public-private partnership.

- Regularisation of Video Shops: Video selling / renting as well as retail DVD shops need to be regulated, for instance by granting of licenses by PEMRA.
- Strengthening the Private Public Partnership approach in the field of IPR: IP infringement can be reduced by raising awareness and by focusing on a comprehensive strategy to actively combat it. Advisory Committees of experts from private sector as well as public sector may be established by IPO (Pakistan to help the government in its efforts to strengthen the enforcement of IP rights.

Appendix 1 Questionnaire for Associations

ECONOMIC CONTRIBUTION OF COPYRIGHT-BASED INDUSTRIES

(Time required: 25 Minutes)

| 1. | Name of Respondent (on behalf of the association): |
|-----|--|
| 2. | Designation in Association: |
| 3. | Length of time with Association: |
| 4. | What is the role of your Association (brief objectives)? |
| 5. | How long has this association been operational? |
| 6. | At how many administrative levels does your association operate (federal / provincial / local, etc.)? |
| 7. | How many company / firms are registered with your association? |
| 8. | Can you give us an approximate figure of active people employed / registered with your association? |
| 9. | What are the average skilled and unskilled wage rates (or monthly salaries) in your industry (specify wage |
| | according to employment categories if possible, see labour force survey)? |
| 10. | Does the association maintain a record on overall sales / turnover in your industry? [if yes then ask specific |
| | values for years between 2000 – 2008] |
| 11. | What are the future global trade prospects for your industry? |
| 12. | Does the association maintain a record on the value of trade (export and import)? [if yes then ask specific |
| | values for years between 2000 and 2008] |
| 13. | Does the association maintain a record on the value of royalties and license fee paid and received? [if yes |
| | then ask specific values for years between 2000 – 2008] |
| 14. | Does the association maintain a record on the overall contribution towards tax revenues in Pakistan? [if |
| | yes then ask specific values for years between 2000 – 2008] |

| 15. | What in your opinion will be the rate of growth of your industry in the medium term $(3 - 5 \text{ years})$? |
|-----|--|
| 16. | Can you rank the importance of copyrights protection for your industry: |
| | a. Very significant |
| | b. Significant |
| | c. Slightly significant |
| | d. Insignificant |
| | Please rank the following factors in order of importance in shaping the future of your industry (where '1' is most important): |
| | a. Technological Change |
| | b. Global Competition |
| | c. Access to Financing |
| | d. Government Regulation / Policy |
| | e. Access to Skilled Manpower |
| | f. Other (please specify) |
| 18. | How has the business of your industry changed in the last one decade? |
| | |
| 19. | Are there any available estimates regarding the average fixed cost of setting up a firm in your industry |
| | (including costs related to licenses / NOC)? |
| 20. | What is the average annual running cost of a medium-scale firm in your industry (variable costs depending |
| | upon the scale or production / employment)? |
| 21. | What is the most significant changes facing your industry nowadays? |
| 22. | What kind of government support does your industry require? |
| | |

| 23. | How well can the entities registered in your association compete with foreign entities? | | | | | | | |
|-----|--|--|--|--|--|--|--|--|
| 24 | How much time does it takes on average to initiate business (approximate number of days and department | | | | | | | |
| ۷٦. | involved in registration process)? | | | | | | | |
| 25. | What is the impact of IPO-Pakistan on the operations of your industry? | | | | | | | |
| | | | | | | | | |

Appendix 2 Data Requirement under ISIC

| Division | Group | Classes | Explanation | Туре |
|----------|----------------------|---------|---|----------|
| 22 | 221 | | | |
| | 2211 2212 2213 | | Publishing of books, brochures and other publications | Core |
| | | | Publishing of newspapers, journals and periodicals | Core |
| | | | Publishing of music | Core |
| 2219 | | 2219 | Other publishing | Core |
| | 222 | | Printing and service activities related to printing | Core |
| | | 2221 | Printing | Core |
| | | 2222 | Service activities related to printing | Core |
| | 223 | | Reproduction of recorded media | Core |
| | 322 | | Manufacture of television and radio transmitters and apparatus for line telephony | Non-Core |
| | 642 | 6420 | Telecommunications | |
| | 722 | 7221 | Software publishing | |
| | 723 | 7230 | Data processing | |
| | 724 | 7240 | Database activities and online distribution of electronic content | |
| 73 | | | Research and development | Non-Core |
| 74 | | | Other business activities | Non-Core |
| | 742 | 7421 | Architectural, engineering and other technical activities | Non-Core |
| | | 7422 | Technical testing and analysis | Non-Core |
| | 743 | 7430 | Advertising | Non-Core |
| | 749 | 7494 | Photographic activities | Non-Core |
| 92 | | | Recreational, cultural and sporting activities | |
| | 921 | 9211 | Motion picture and video production and distribution | Core |
| | | 9212 | Motion Picture projection | Core |
| | | 9213 | Radio and television activities | Core |
| | | 9214 | Dramatic arts , music and other arts activities | Core |
| | 922 | 9220 | News agency activities | Core |
| | 923 | 9231 | Library, archives, museums and other cultural activities | Core |

Source: International Standard Industrial Classification, UN 2002.