

The Economic Contribution of Copyright-Based Industries in Kenya



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Dickson Nyariki

Summary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1. Introduction

1.1 Background and Context

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

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

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

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

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

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

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

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

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

1.2 Objectives and Structure of the Study

The key objectives of this study were to:

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

The structure of the study is in seven parts:

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

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

1.3 Scope of Study

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

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

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

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

2. Copyright Policy and Law in Kenya

2.1 Policies Related to Creative and Copyright Industries

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

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

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

2.2 Copyright Law

2.2.1 The Subject Matter and Beneficiaries of Copyright Law

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

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

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

2.2.2 Overview of the Kenyan Copyright Law

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

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

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

- 1) The establishment of the Kenya Copyright Board (KCB). Having recognized the negative impacts of piracy in the copyright industry on the economy and on the creativity of the authors, the KCB was created as a corporate and autonomous body for administration and enforcement of copyright and related rights.
- 2) The appointment of copyright inspectors and prosecutors trained to enforce the Act under the KCB.
- 3) The establishment of a databank of authors and their works to provide a point of reference for the public and potential users of copyright works as a way of reducing piracy.
- 4) The enhancement of penalties with imprisonment of up to 10 years and fines up to KSh800,000 in order to deter piracy.
- 5) The introduction of authentication devices to distinguish genuine from pirated works.
- 6) Registration and supervision of collective management societies to strengthen the rights holders by bringing them together.
- 7) The establishment of a competent authority headed by qualified personnel to adjudicate on arising issues.
- 8) Jurisdiction to hear copyright cases, where only experienced magistrates hear and determine court cases.

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

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

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

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

2.2.3 Economic Considerations of the Kenyan Copyright Law

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

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

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

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

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

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

3. Copyright-based Industries in Kenya

3.1 Composition of Copyright-Based Industries

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

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

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

3.2 Types of Copyright-Based Industries

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

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

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

3.2.1 Core Copyright-Based Industries

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

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

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

3.2.2 Interdependent Copyright-Based Industries

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

This category of industries includes:

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

3.2.3 Partial Copyright-Based Industries

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

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

3.2.4 Non-Dedicated Support Industries

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

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

3.3 Comparison of Industry Classification for Kenya with the WIPO Guide

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

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

Table 1: Copyright-based industries in Kenya

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

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

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

3.4 Copyright Factors

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

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

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

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

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

Partial copyright-based industries	Copyright factors (%)			
	Kenya	Hungary	Singapore	Latvia
Apparels	0.45	0.5	0.4	0.46
Footwear	0.44	0.5	0.4	0.42
Textiles	0.44	0.5	0.4	0.42
Jewellery and coins	14.14	25.0	8.3	9.13
Household goods, china and glass	0.55	0.5	0.6	NA
Wall coverings and carpets	1.78	2.0	1.7	1.65
Toys and computer games	45.83	50.0	42.0	45.50
Furniture, fittings and furnishings	29.33	5.0	42.0	41.00
Museums	50.00	50.0	NA	NA
Other crafts	41.00	40.0	42.0	NA
Architecture, engineering, surveying	9.15	10.0	8.3	NA
Wholesale and retail of partial copyright industries	5.00	5.0	NA	NA

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

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

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

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

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

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

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

Table 4: Copyright factors adopted for the Kenyan study

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

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

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

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

Kenya's Coding	Code	ISIC	Rev. 3.1	Code
I. Core copyright industries		I. Core copyright industries		
Printing, publishing and allied services	3420	Publishing of newspapers		2212
		Publishing of books, brochures etc		2211
		Other publishing		2219
		Printing		2221
		Services related to printing		2222
		Library and archive activities		9231
		News agency activities		9220
Retail of books, newspapers and stationery	6247	Wholesale of other household goods		5139
		Other retail sales in specialized stores		5239
Data processing and tabulating services	8323	Software publishing		7221
		Other software consultancy and supply		7229
		Database activities and online distribution		7240
		Data processing		7230
		Wholesale of computers		5151
Advertising services	8325	Advertising		7430
Business, professional and labour associations	9350	Activities of professional organizations		9112
Radio and TV broadcasting	9413	Radio and TV activities		9213
		Other business activities		7499
		Telecommunication		6420
Theatrical producers and entertainment services	9414	Dramatic arts and music etc		9214
Authors, music composers and other artists	9415	Other entertainment activities		9219
Amusement and recreational services	9490	Other recreational services		9249
		Publishing of music		2213
		Reproduction of recorded media		2230
		Retail sale of household appliances		5233
		Renting of personal goods		7130
		Wholesale of household goods		5139
Motion picture production	9411	Motion picture and video prod.		9211
Motion picture distribution and projection	9412	Motion picture projection		9212
Photographic studios including commercial photography	9592	Photographic activities		7494
		Other business activities N.E.C.		7499
II. Interdependent copyright		II. Interdependent copyright		
Manufacture of pulp, paper and paperboard	3411	Manufacture of pulp, paper and paperboard		2101
Manufacture of containers and boxes of paper	3412	Wholesale of other intermediate products		5149
Manufacture of pulp and paperboard articles N.E.C.	3419	Other retail sale		5239
Manufacture of radios and TVs	3832	Manufacture of TV and radio receivers		3230
Wholesale of radios and TVs	6143			
Manufacture of professional and scientific equipment	3851	Manufacture of office machinery		3000
		Wholesale of computers and equipment		5151
		Renting of office machinery		7123
		Wholesale of other machinery		5159
Manufacture of photographic and optical goods	3852	Manufacture of photographic and optical equipment		3320
		Other retail sale in specialized stores		5239
		Renting of other machinery		7129
Retail sale of household appliances and radio and TV goods	6245	Retail sale of household appliances, articles and equipment		5233

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

4. Data Collection and Methods of Analysis

4.1 Sources of Information

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

4.2 Methodology

4.2.1 Data Collection

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

4.2.2 Dealing with Missing Data

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

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

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

4.2.3 Calculation of Indicators of Economic Contribution

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

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

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

The overall methodological approach consisted of three principal components:

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

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

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

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

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

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

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

4.3 Survey Challenges

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

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

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

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

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

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

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

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

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

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

Overall Performance of Copyright-Based Industries

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

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

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

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

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

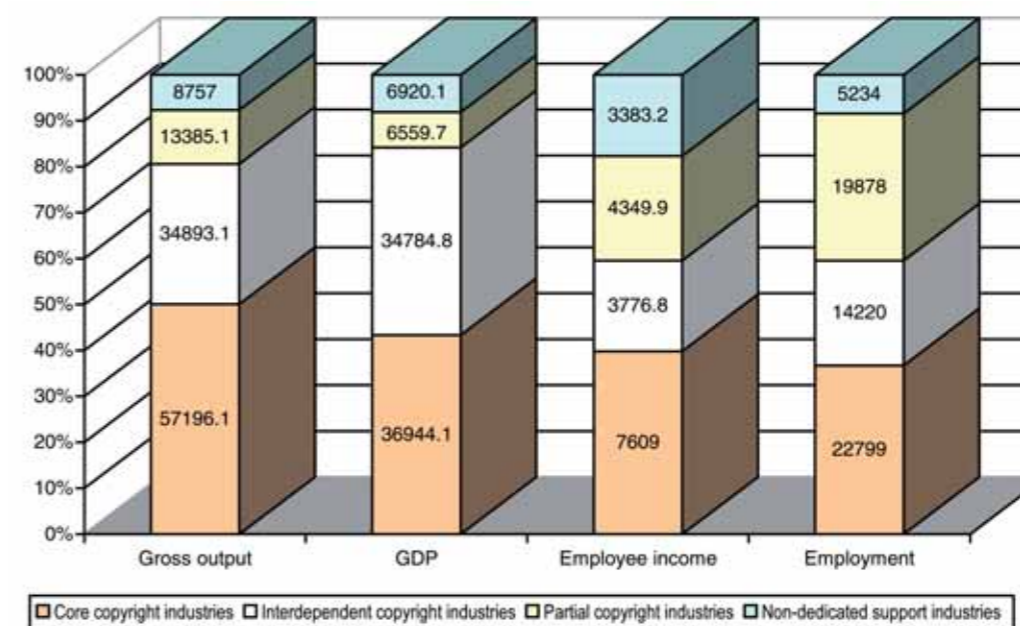
Overall, considering that the full contribution of the copyright-based industries may not be captured under the Kenyan circumstances, these industries may be contributing upwards of 7% to the national economy in terms of GDP, with the core copyright-based industries making a contribution of about 3–4%.

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

Copyright industries	Gross domestic product (GDP)		Gross output		Employee incomes		Employee numbers	
	Million KSHs	%	Million KSHs	%	Million KSHs	%	People	%
Core copyright industries	36,944.1	2.304	57,196.4	1.881	7,609.0	1.015	22,799	1.195
Interdependent copyright industries	34,784.8	2.170	34,893.1	1.147	3,776.8	0.504	14,220	0.746
Partial copyright industries	6,559.7	0.409	13,385.1	0.440	4,349.9	0.5801	19,878	1.042
Non-dedicated support industries	6,920.1	0.432	8,757.0	0.288	3,383.2	0.451	5,234	0.274
TOTAL COPYRIGHT INDUSTRIES	85,208.7	5.320	114,231.6	3.760	19,118.9	1.970	62,131	3.257
Total national economy	1,603,176	100	3,041,382	100	749,818.5	100	1,907,250	100

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

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



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

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

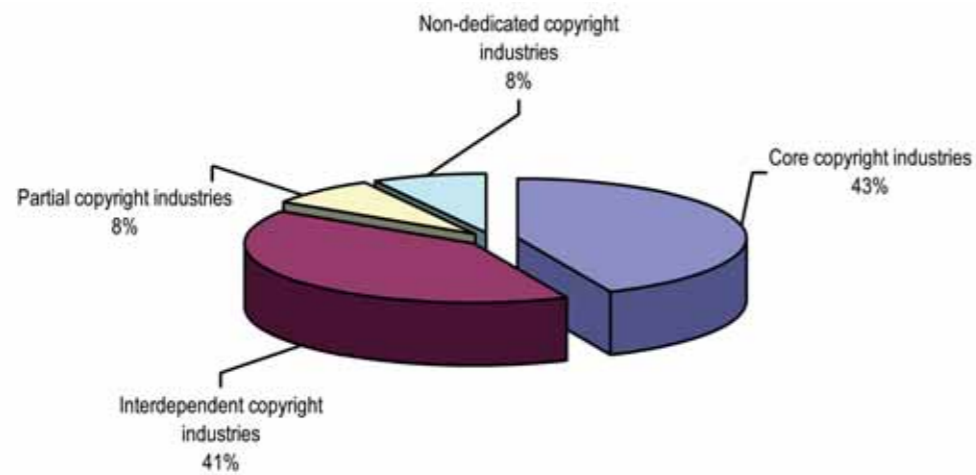


Figure 3: Share contributions within copyright-based industries in Kenya based on total gross output in 2007 (%)

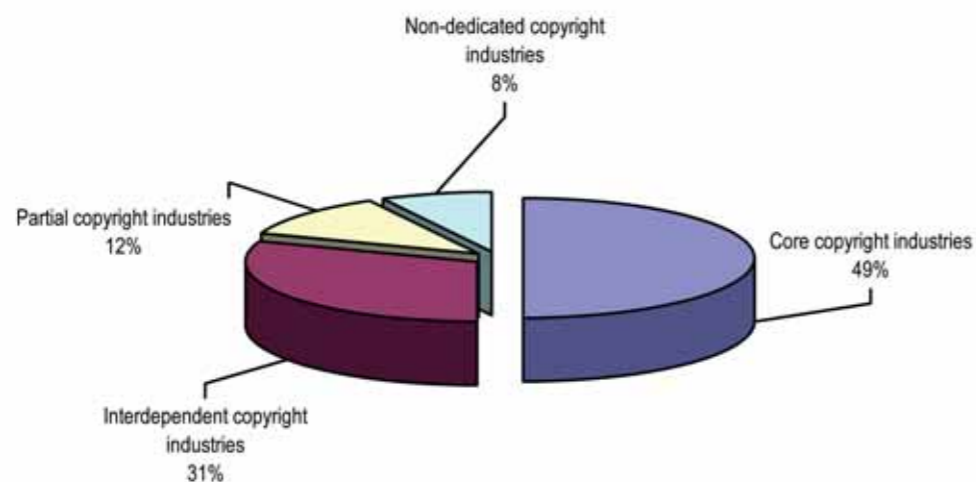
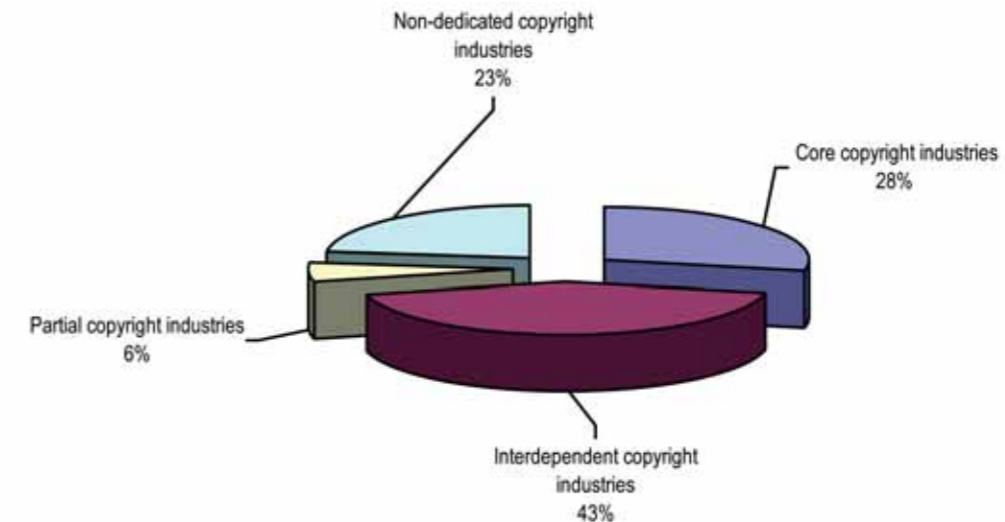


Figure 4 shows employee productivity shares within the copyright-based industries in Kenya with respect to total added-value. Productivity, which is usually distinguished from production, is, in general terms, the ratio of output to input, often physical but also monetary and even sometimes non-material.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

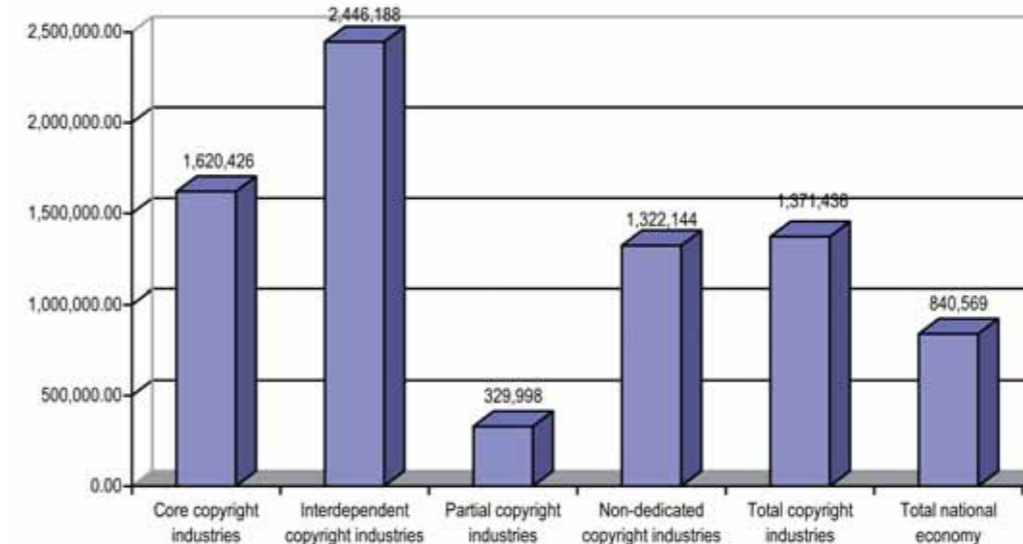
In terms of the total added value per employee in 2007, of the copyright-based industries, the most productive category was the interdependent industries with a contribution of 43%, followed by the core copyright industries with a contribution of 28%, the non-dedicated industries with 23%, and the partial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

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



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

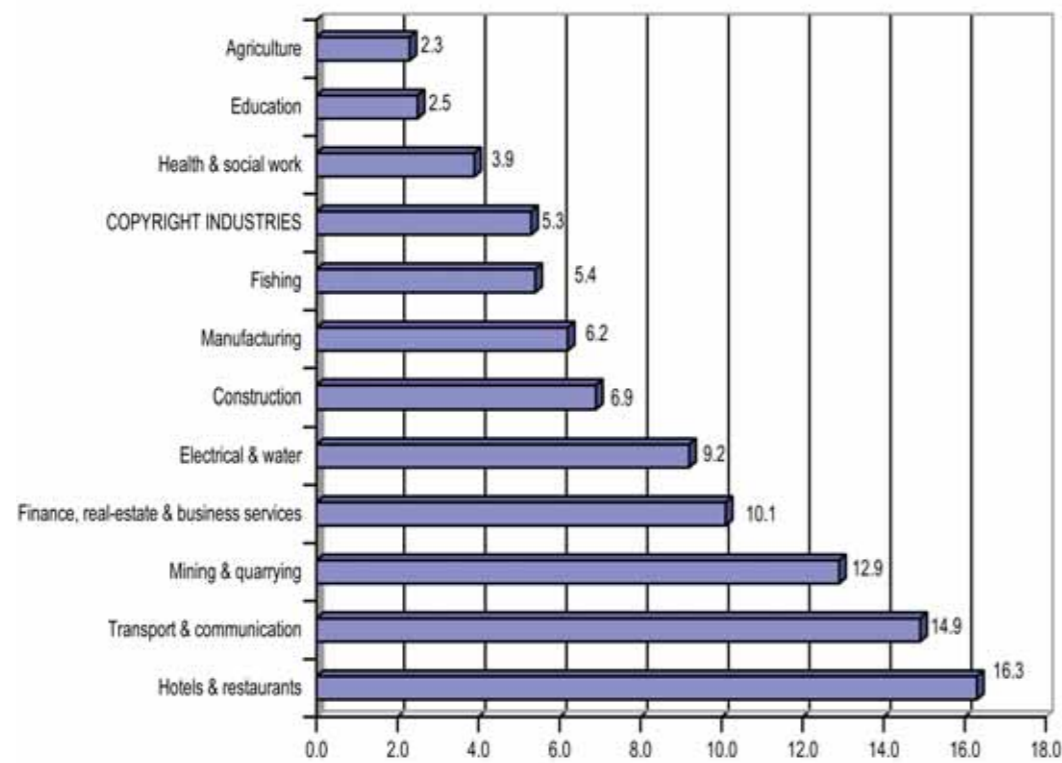
Figure 5: Productivity of copyright-based industries compared to the national productivity in Kenya in 2007 (total added value per employee)



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

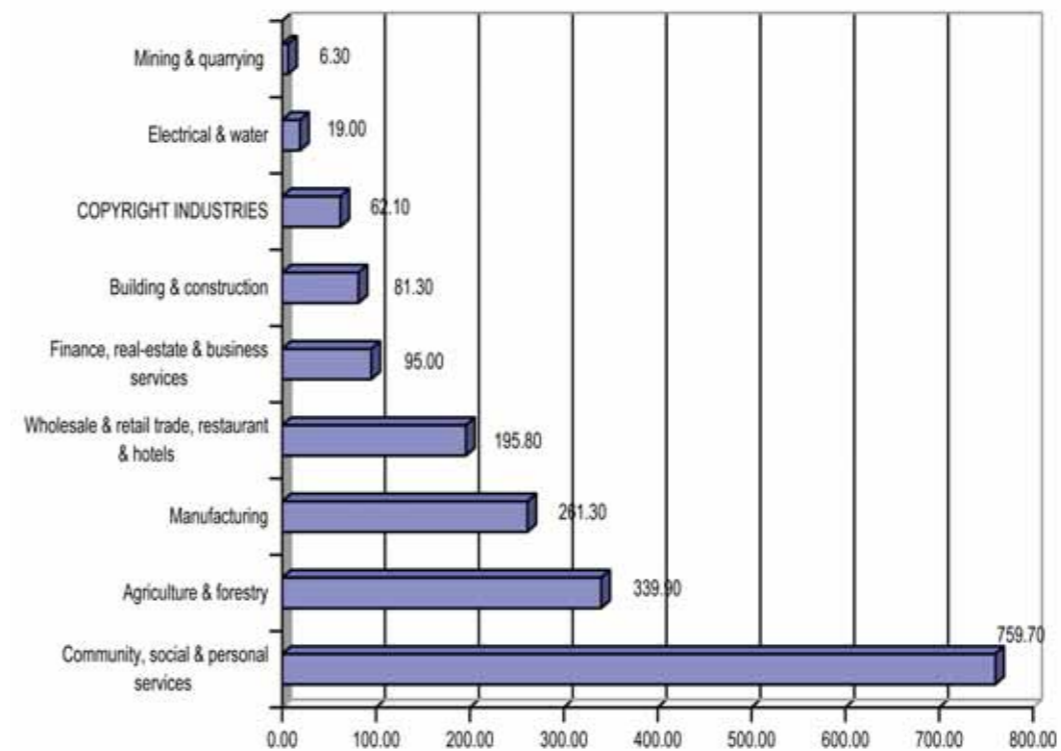
The contribution of the copyright-based industries to the national economy on the basis of GDP compared to a selected number of main sectors in Kenya is shown in Figure 6. This contribution shows that copyright-based industries in 2007 did better than the agriculture-and-forestry, education, and healthcare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

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



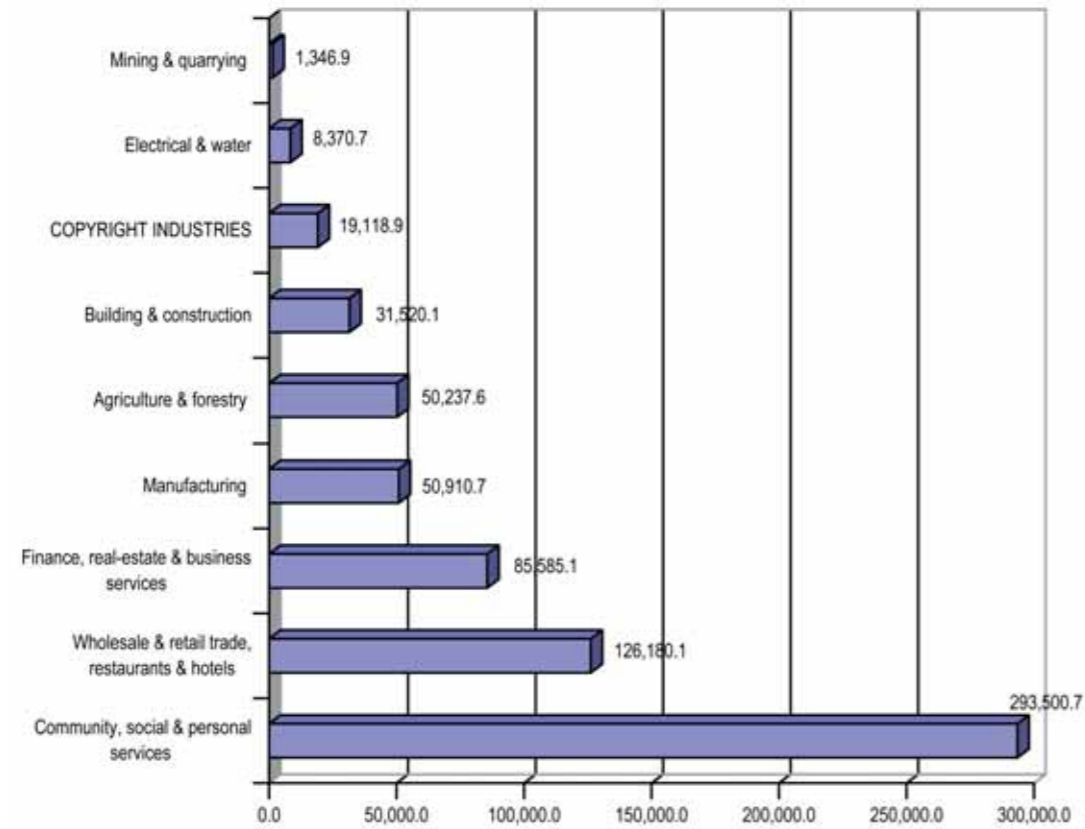
On the basis of employment, the copyright-based industries collectively employed 62,131 people in 2007 compared to the national workforce (government and private sector employment) of 1,907,250 (Figure 7, Table 6). This was about 3.3% of total employment. These employment figures were higher than those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

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



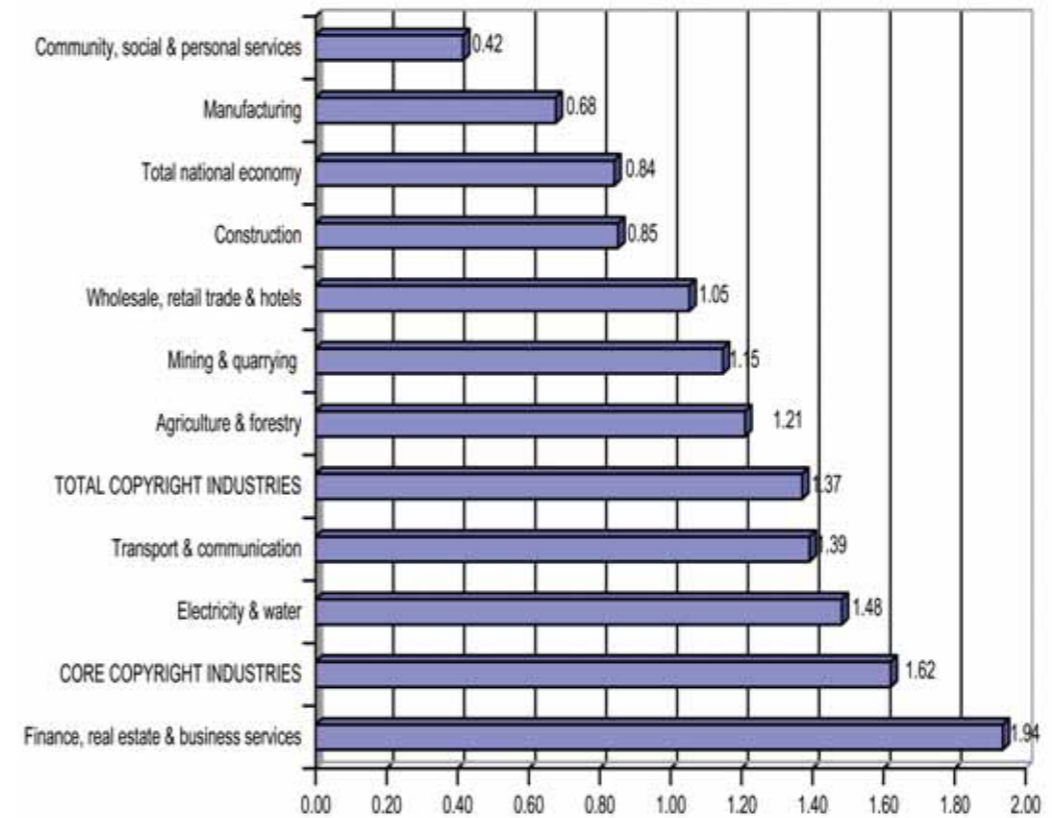
Concerning the contribution to employee income, in 2007 the copyright-based industries combined generated KSHs 19,118.9 million compared to the national employee income (government and private sector) of KSHs 749,818.5 million (Figure 8, Table 6). This accounted for about 2% of the total national employee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

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



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

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

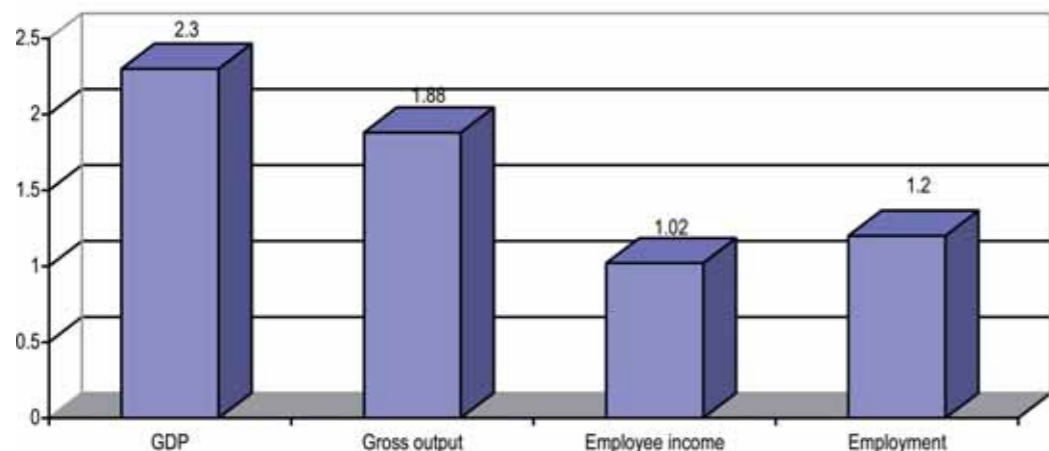


5.3 Economic Contribution of Decomposed Core Copyright-Based Industries

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

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

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



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

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

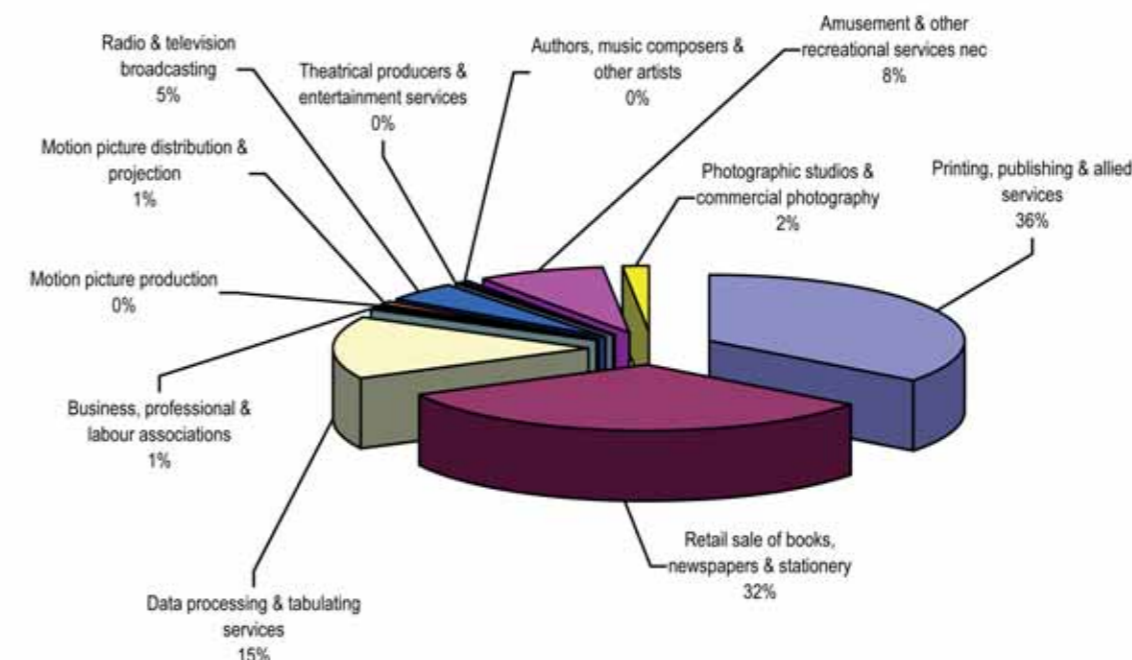
Table 7 shows the contribution of the decomposed core copyright-based industries/activities in 2007 in Kenya. Printing, publishing and allied services contributed KSHs 13,053 million to GDP in 2007, followed by the retail sale of books, newspapers and stationery (KSHs 11,947 million). Further illustration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

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

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

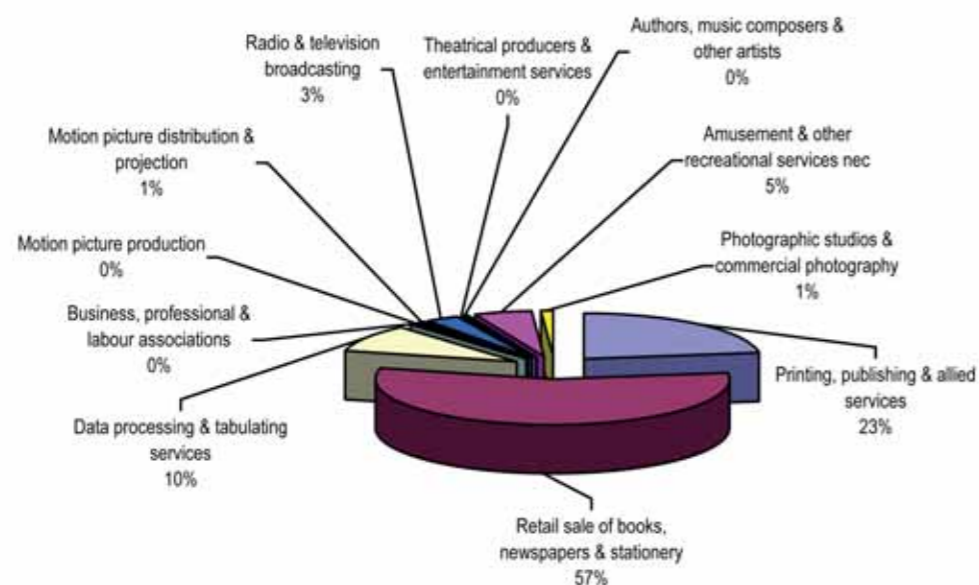
Description	Value-added (KSHs)	% of GDP	Gross output (KSHs)	% of total national gross output
Printing, publishing and allied services	13,053,050,975	0.814	12,972,844,506	0.427
Retail sale of books, newspapers and stationery	11,947,315,450	0.745	32,170,498,055	1.058
Data processing and tabulating services	5,563,777,563	0.347	5,568,486,133	0.183
Business, professional and labour associations	220,589,044	0.014	220,915,126	0.007
Motion picture production	176,374,994	0.011	178,857,734	0.006
Motion picture distribution and projection	390,499,881	0.024	392,742,530	0.013
Radio and television broadcasting	1,675,666,086	0.105	1,674,878,376	0.055
Theatrical producers and entertainment services	179,708,800	0.011	181,803,984	0.006
Authors, music composers and other artists	176,579,150	0.011	175,786,081	0.006
Amusement and other recreational services N.E.C.	2,927,458,700	0.183	2,989,131,334	0.098
Photographic studios and commercial photography	633,123,888	0.0395	670,485,995	0.022
TOTAL CORE COPYRIGHT INDUSTRIES	36,944,144,531	2.304	57,196,429,854	1.881
Total national economy	1,603,176,000,000	100	3,041,382,000,000	100

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



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

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

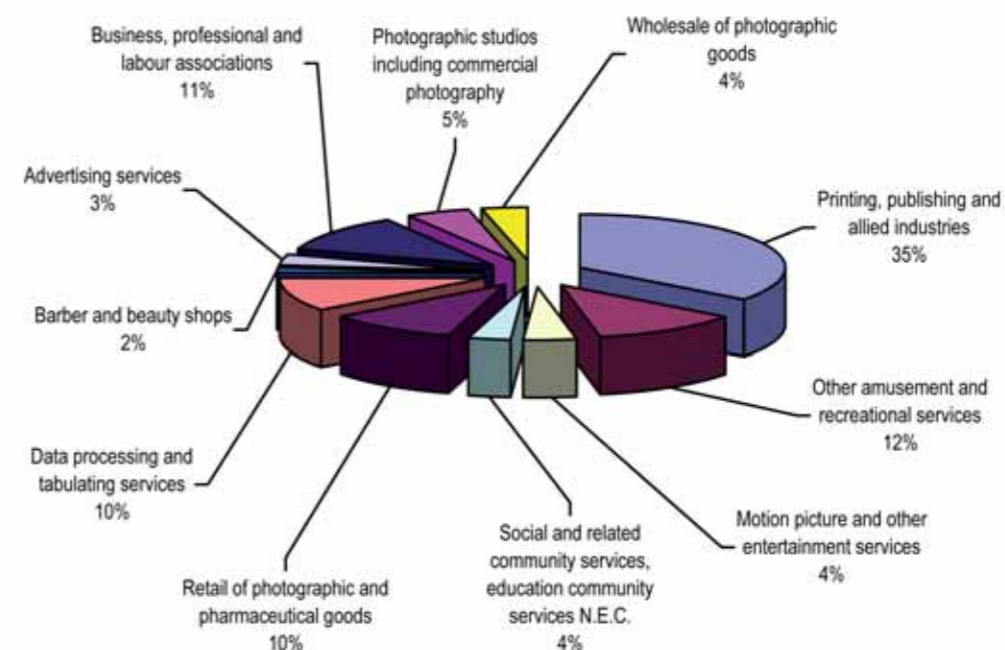


With respect to the contribution to employment within the core industries in 2007, printing, publishing and allied services had the largest number of employees (9,051 people), followed by amusement and recreational services (3,005); business, professional and labour associations (2,912); and data processing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

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

Core copyright industries	Number	%
Printing, publishing and allied industries	9,051	0.475
Other amusement and recreational services	3,005	0.158
Motion picture and other entertainment services	1,075	0.056
Social and related community services, education community services N.E.C.	918	0.048
Retail of photographic goods	753	0.041
Data processing and tabulating services	2,684	0.141
Barber and beauty shops	417	0.022
Advertising services	879	0.046
Business, professional and labour associations	2,912	0.153
Photographic studios including commercial photography	187	0.010
Wholesale of photographic goods	918	0.048
TOTAL CORE COPYRIGHT INDUSTRIES	22,799	1.196
TOTAL COPYRIGHT INDUSTRIES	92,150	4.832
Total national economy (government and private sector salaried employment)	1,907,250	100

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



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

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

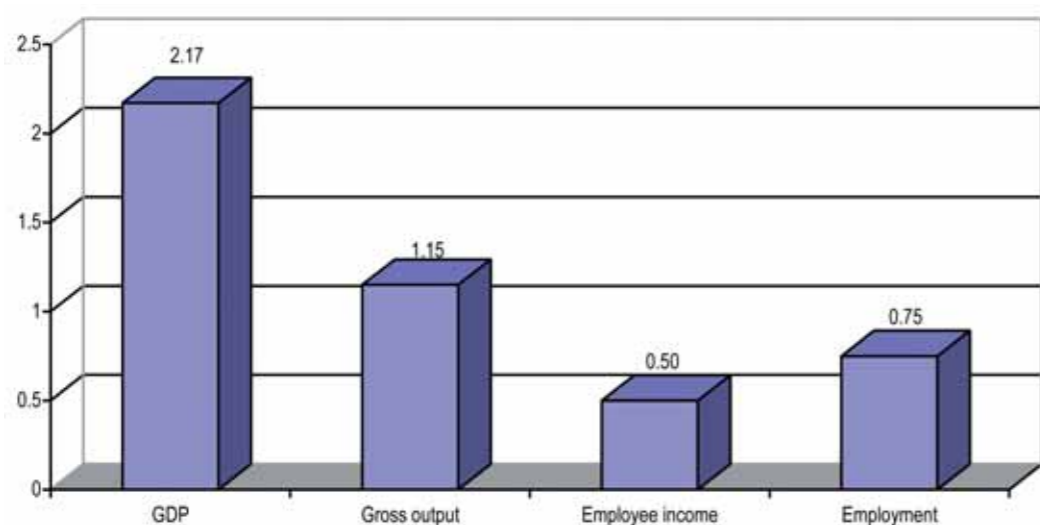
Core copyright industries	Million KSHs	%
Printing, publishing and allied industries	1,837.6	0.245
Other amusement and recreational services N.E.C.	913.8	0.122
Motion pictures and other entertainment	618	0.082
Social and related services N.E.C.	411.1	0.055
Retail of photographic goods	296.2	0.040
Wholesale of photographic goods	429.5	0.057
Data processing and tabulating services	732.1	0.098
Barber and beauty shops	125.2	0.017
Advertising services	307.3	0.041
Business, professional and labour associations	1,255.9	0.168
Photographic studios including commercial photography	682.3	0.091
TOTAL CORE COPYRIGHT INDUSTRIES	7,609.0	1.015
TOTAL NATIONAL ECONOMY	749,818.5	100

5.4 Economic Contribution of Interdependent Copyright-Based Industries

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

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

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



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

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

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

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

Interdependent copyright industries	Value-added (KSHs)
Manufacture of pulp, paper and paperboard	4,026,938,150
Manufacture of containers and boxes of paper and paperboard	5,427,202,875
Manufacture of photographic and optical goods	65,816,463
Manufacture of professional and scientific equipment	78,190,375
Manufacture of radio, TV and communication equipment and apparatus	539,293,338
Wholesale of machinery for textile industry and of sewing and knitting	3,614,469,869
Manufacture of pulp, paper and paperboard articles N.E.C.	5,634,623,844
Retail sale of household appliances and radio and TV goods	14,700,281,413
Manufacture of musical instruments	382,869
Manufacture of office, computing and accounting machinery	697,645,613
TOTAL INTERDEPENDENT COPYRIGHT INDUSTRIES	34,784,844,802

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

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

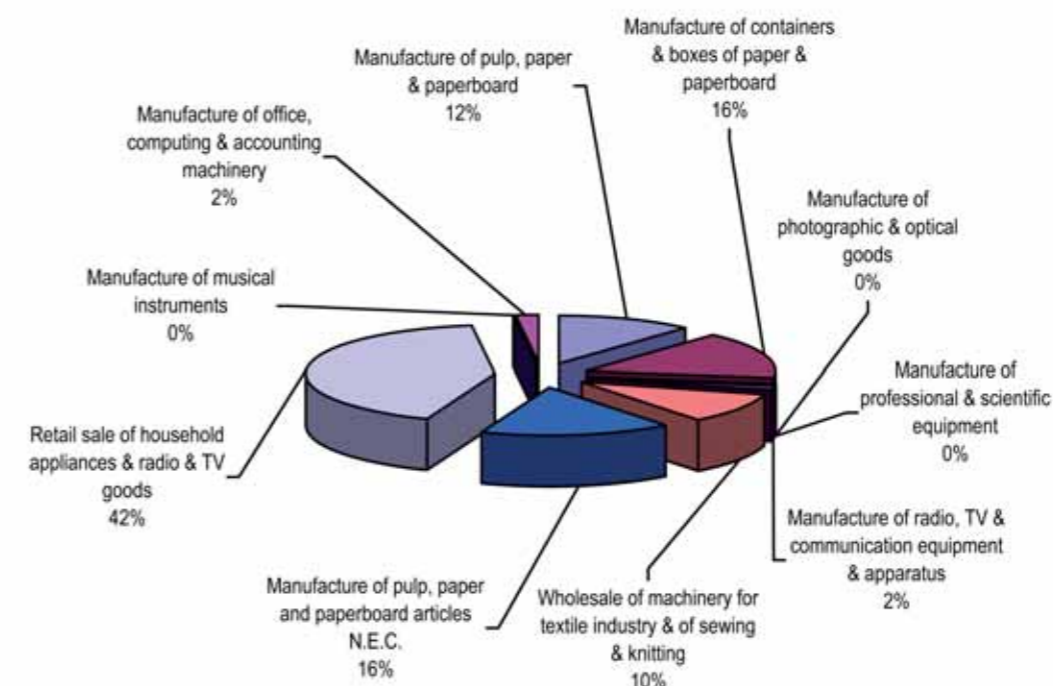
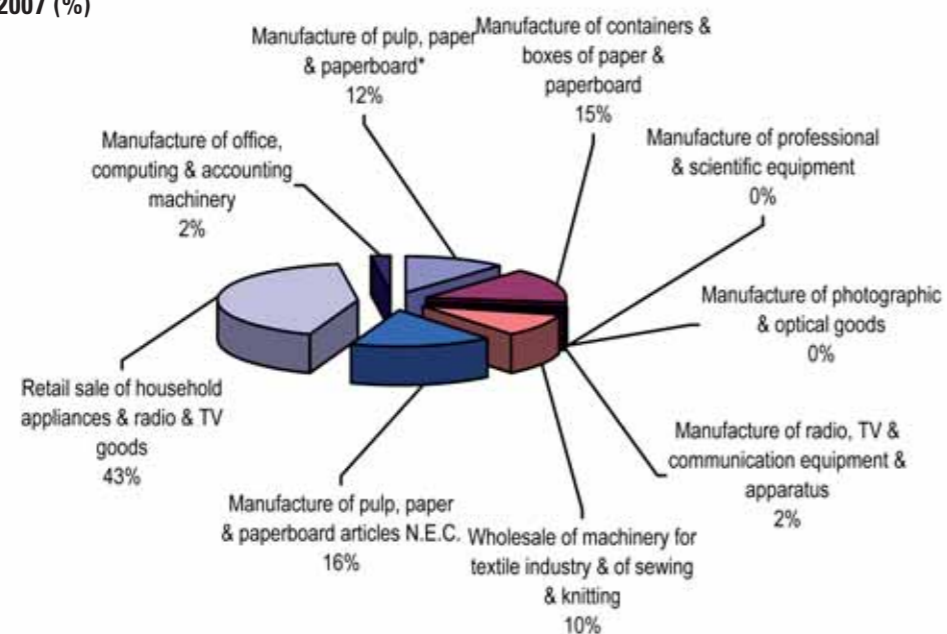


Figure 16: Contribution of decomposed interdependent copyright-based industries to gross output in Kenya in 2007 (%)

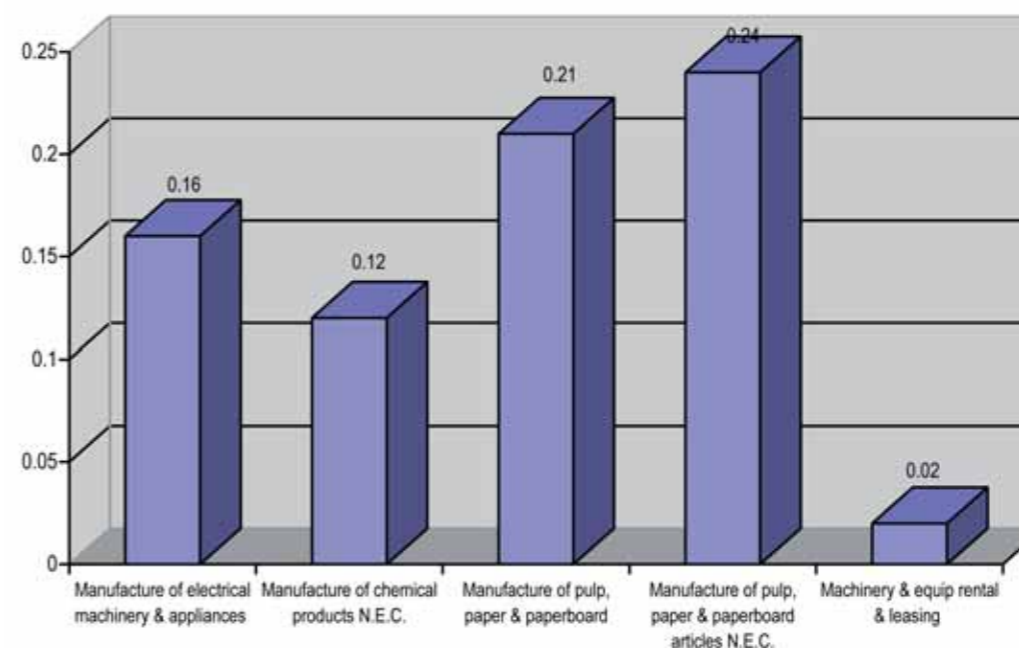


As shown in Table 11 and Figure 17, the sector with the highest number of employees in 2007 was the manufacture of pulp, paper and paperboard articles, making up about 0.24% of total salaried employment. This was followed by the manufacture of pulp, paper and paperboard (about 0.21%), and by wholesale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

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

Interdependent copyright industries	Number	%
Manufacture of electrical machinery and appliances	3,016	0.158
Manufacture of chemical products N.E.C.	2,287	0.120
Manufacture of pulp, paper and paperboard	4,032	0.211
Manufacture of pulp, paper and paperboard articles N.E.C.	4,486	0.235
Machinery and equipment rental and leasing	399	0.021
TOTAL INTERDEPENDENT COPYRIGHT INDUSTRIES	14,220	0.746
TOTAL EMPLOYED (SALARIED)	1,907,250	100

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

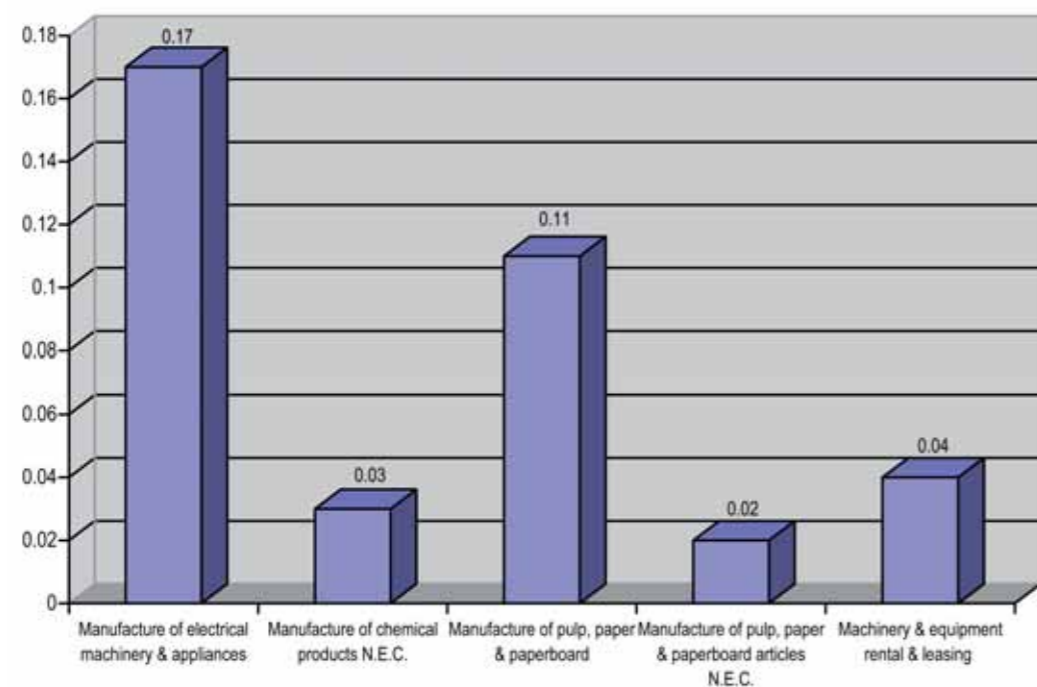


With respect to employee income, the manufacture of electrical machinery and appliances made the highest contribution in 2007 by registering employee income of KSHs 1,289.4 million (0.17%), which was close to 35% of the total employee income in the interdependent copyright-based industries category.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

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

Interdependent industries	Million KSHs	%
Manufacture of electrical machinery and appliances	1,289.4	0.172
Manufacture of chemical products N.E.C.	227.2	0.030
Manufacture of pulp, paper and paperboard	786.2	0.105
Manufacture of pulp, paper and paperboard articles N.E.C.	115.7	0.015
Machinery and equipment rental and leasing	318.3	0.043
TOTAL INTERDEPENDENT COPYRIGHT INDUSTRIES	3,776.8	0.504
TOTAL NATIONAL ECONOMY	749,818.5	100

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



5.5 Economic Contribution of Partial Copyright-Based Industries

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

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

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

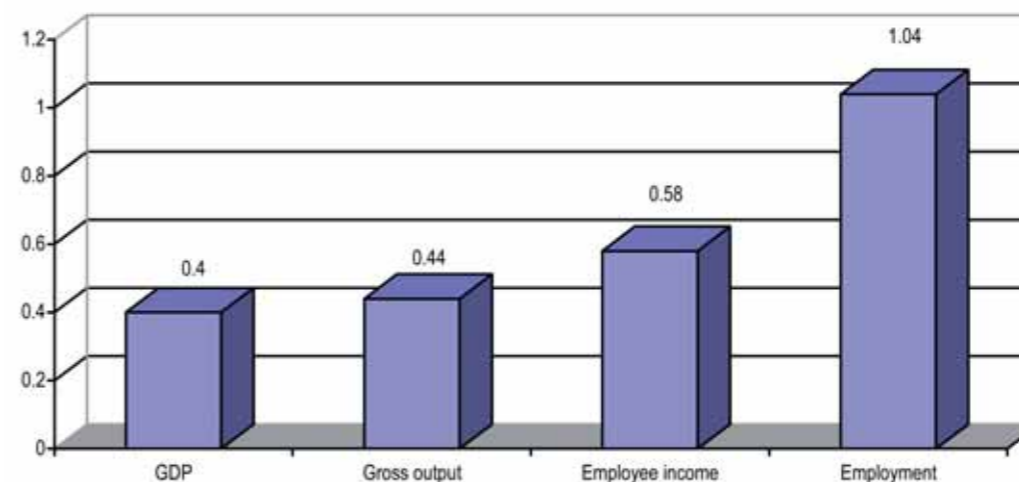


Table 13 shows the contribution of decomposed partial copyright-based industries, with copyright factors applied. Spinning, weaving and finishing articles made the highest contribution of 6,035 employees (0.32%), followed by sawmill planing and other wood mills with 2,027 employees (0.11%), manufacture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

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

Partial copyright industries	Number before applying copyright factor	Number after applying copyright factor	%
Manufacture of furniture and fixtures	1,591	467	0.024
Manufacture of glass and glass products	1,709	9	0.000
Manufacture of furniture and fixtures except primarily of metal or plastic	4,481	1,314	0.069
Cotton ginners	578	123	0.006
Spinning, weaving and finishing articles	28,466	6,035	0.316
Manufactures of textile goods except wearing apparel	6,067	27	0.001
Knitting mills	7,704	1,633	0.086
Cordage rope and twine industries	2,189	464	0.024
Manufacture of textiles N.E.C.	859	4	0.000
Manufacture of wearing apparel except from footwear	16,026	72	0.004
Tanneries and leather finishing	30	6	0.000
Manufacture of products of leather except footwear and wearing apparel	0	0	0.000
Manufacture of footwear except plastic	1,740	8	0.000
Sawmill planing and other wood mills	9,560	2,027	0.106
Manufacture of wooden and cane containers	35	7	0.000
Manufacture of wood and cork products N.E.C.	108	23	0.001
Manufacture of pottery, china and earthenware	227	1	0.000
Manufacture of structural clay products	980	5	0.000
Manufacture of cutlery, hand tools and general hardware	1,132	6	0.000
Basic metal industrious	5,469	1,159	0.061
Manufacture of fabricated metal products except machinery	8,820	1,870	0.098

Partial copyright industries	Number before applying copyright factor	Number after applying copyright factor	%
Wholesale of soft furnishing clothing and shoes	1,066	53	0.003
Retail of soft furnishings of clothing and shoes	4,537	227	0.012
Wholesale of domestic hardware	899	45	0.002
Wholesale of engineering products; scrap, industrial and agricultural	4,673	234	0.012
Libraries, museums, botanical and zoological gardens	1,504	752	0.039
Repair of footwear and other leather goods	49	0	0.000
Other repairs N.E.C.	596	126	0.001
Manufacture of rubber products	3,728	790	0.041
Manufacture of plastic	8,869	1,880	0.099
Painters, roof tiles and minor repairs	966	205	0.011
Manufacture of structural metal products	3,344	306	0.016
TOTAL PARTIAL COPYRIGHT INDUSTRIES	128,002	19,878	1.042
Total Employed (salaried)	1,907,250	1,907,250	100

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

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

Partial copyright industry	Income before applying copyright factor	Income after applying copyright factor	%
Manufacturing of furniture and fixtures	1,214.2	356.1	0.0475
Manufacturing of glass and glass products	191.2	1.1	0.0001
Manufacture of furniture and fixtures except primarily metal or plastic	1,380.0	404.8	0.0540
Cotton ginners	151.2	32.1	0.0043
Spinning, weaving and finishing articles	3230.4	684.8	0.0913
Manufacture of up textile goods except wearing apparel	361.6	159.1	0.0212
Knitting mills	1910.1	404.9	0.0540
Cordage rope and twine industries	255.0	54.1	0.0072
Manufacture of textiles N.E.C.	292.2	1.3	0.0002
Manufacture of wearing apparel except footwear	3,202.1	14.4	0.0019
Tanneries and leather finishing	1.7	0.4	0.0000
Manufacture of products of leather except footwear and wearing apparel	0	0	0.0000
Manufacture of footwear except plastic footwear	531.3	2.3	0.0003
Sawmill planing and other wood mills	1,561.3	331.0	0.0441
Manufacture of wood and cane products	8.3	1.8	0.0002
Manufacture of wood and cork products N.E.C.	45.9	9.7	0.0013
Manufacture of pottery, china and earthenware	130.6	0.7	0.0001
Manufacture of structural clay products	163.7	0.9	0.0001
Manufacture of cutlery, hand tools and general hardware	256.3	1.4	0.0002
Basic metal industries	442.0	93.7	0.0124
Manufacture of fabricated metal products except machinery and equipment N.E.C.	1,929.3	409.0	0.0545
Wholesale of soft furnishings, clothing and shoes	813.4	40.7	0.0054
Retail of soft furnishings, clothing and shoes	965.1	48.3	0.0064
Wholesale of domestic hardware	569.4	28.4	0.0039
Wholesale of engineering products; scrap, industrial and agricultural	4,539.0	227.0	0.0303
Libraries, museums, botanical gardens and zoological gardens	775.5	387.8	0.0517
Repair of footwear and other leather goods	21.3	0.1	0.0000
Other repair shops N.E.C.	107.4	22.8	3.0407

Partial copyright industry	Income before applying copyright factor	Income after applying copyright factor	%
Manufacture of rubber products	754.5	160.0	0.0213
Manufacture of plastic	1,077.8	228.5	0.0305
Painters, roof tiles and minor repairs	443.0	93.9	0.0125
Manufacture of structural metal products	1,002.9	91.8	0.0122
TOTAL PARTIAL COPYRIGHT INDUSTRIES	28,327.7	4,349.9	0.5801
Total national economy	749,818.5	749,818.5	100

5.6 Economic Contribution of Non-Dedicated Support Industries

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

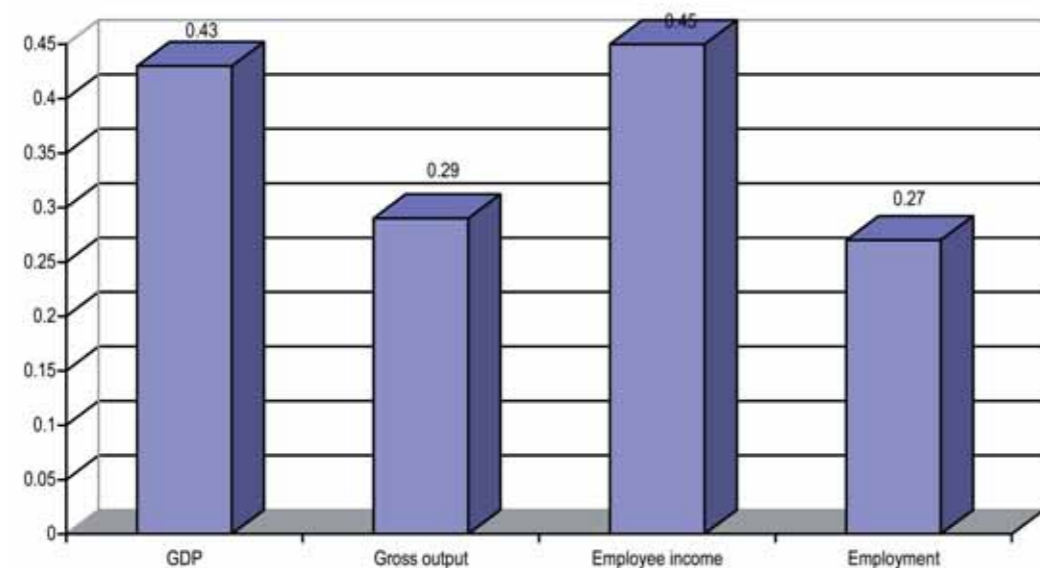
$$NDSI \text{ Copyright Factor} = \left(\frac{\text{Value Added for Core, Interdependent and Partial Industries}}{\text{Non - Distribution GDP}} \right) \quad (2)$$

$$= \frac{\text{KSHs 78.3 billion}}{\text{KSHs 1,621.8 billion}} = 0.048 = 4.8\%$$

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

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

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

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

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

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

Non-dedicated copyright industries	Value-added (KSHs)
Communication	4,544,357,346.0
Supporting services to land transport	15,651,984.2
Supporting services to water transport	217,355,514.2
Supporting services to air transport	67,808.2
Freight transport by road	910,920,598.8
Pipeline transport	219,731,683.5
Services incidental to transport	44,703,195.0
Urban, suburban and inter-urban passenger transport	4,114,611.3
Land transport	325,670,490.0
Other passenger land transport	2,841,429.6
Air transport carriers	30,320,956.5
Storage and warehousing	78,910,461.3
Ocean and coastal water transport	3,581,573.7
Inland water transport	35,959.4
Other provisions for lodging N.E.C.	158,953,579.8
Camping sites	31,193,894.1
Inland water transport	35,958.9
Wholesale of office machinery and equipment	331,622,406.3
TOTAL NON-DEDICATED SUPPORT INDUSTRIES	6,920,069,451

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

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

Non-dedicated copyright industries	Number of employees after applying copyright factor	Employee income after applying copyright factor
Kenya railway central administration	3	0.2
Railway transport	86	17.6
Urban, suburban and inter-urban highway passenger transport	269	86.4
Other passenger land transport	287	207.1
Freight transport by road	283	123.3
Pipeline transport	45	12.6
Support services to land transport	5	2.0
Ocean and coastal water transport	18	2.8
Inland water transport	8	2.3
Supporting services to water transport	249	235.3
Air transport carriers including aircraft rental	117	111.9
Support services to air transport	112	107.8
Booking and travel agencies	62	44.8
Services incidental to water transport N.E.C.	100	58.1
Storage and warehousing	159	84
Communications	1,945	1,463.3
Kenya pipeline administrative service	58	28.9
General retail	554	277
Retail N.E.C.	346	194.3
General wholesale	268	82.4
Wholesale N.E.C.	66	47.4
Hunting and tourist guide service	45	17.7
Wholesale and retail of electrical machinery and appliances	149	176.0
TOTAL NON-DEDICATED COPYRIGHT INDUSTRIES	5,234	3,383.2
Total salaried employees and income	1,907,250	749,818.5

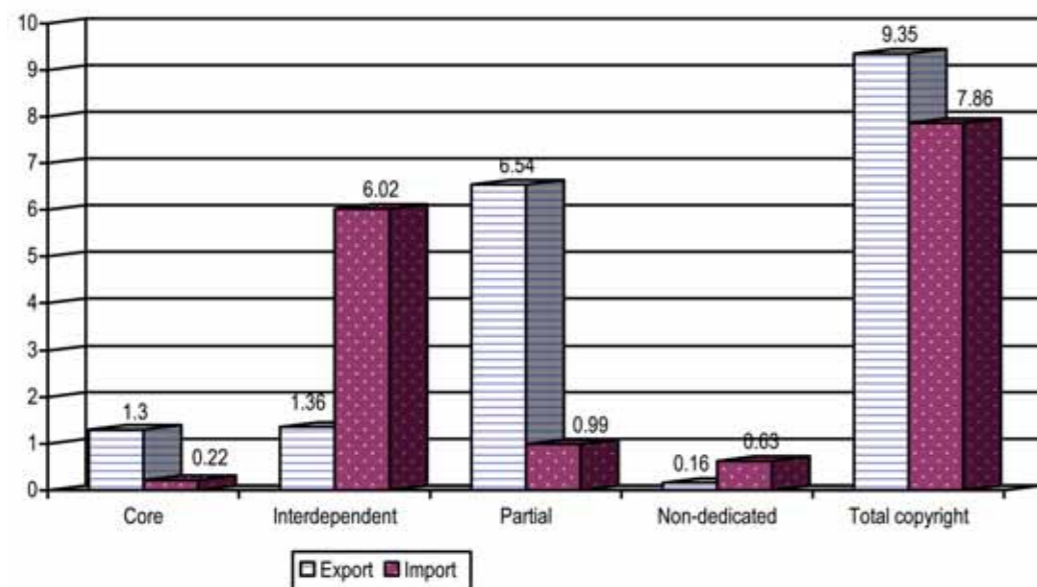
5.7 Foreign Trade in Copyright-Based Goods and Services

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

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

Copyright-based industry	Exports	% of total national economy	Imports	% of total national economy	Trade balance (exports minus imports)
Core	3,403,637	1.30	1,340,282	0.22	2,063,355
Interdependent	3,547,361	1.36	36,402,448	6.02	-32,855,087
Partial	17,100,667	6.54	5,997,643	0.99	11,103,024
Non-dedicated	421,737	0.16	3,815,540	0.63	-3,393,803
TOTAL COPYRIGHT INDUSTRIES	24,473,402	9.35	47,555,913	7.86	-23,082,511
Total national economy	261,626,153	100	605,117,797	100	-343,491,644

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

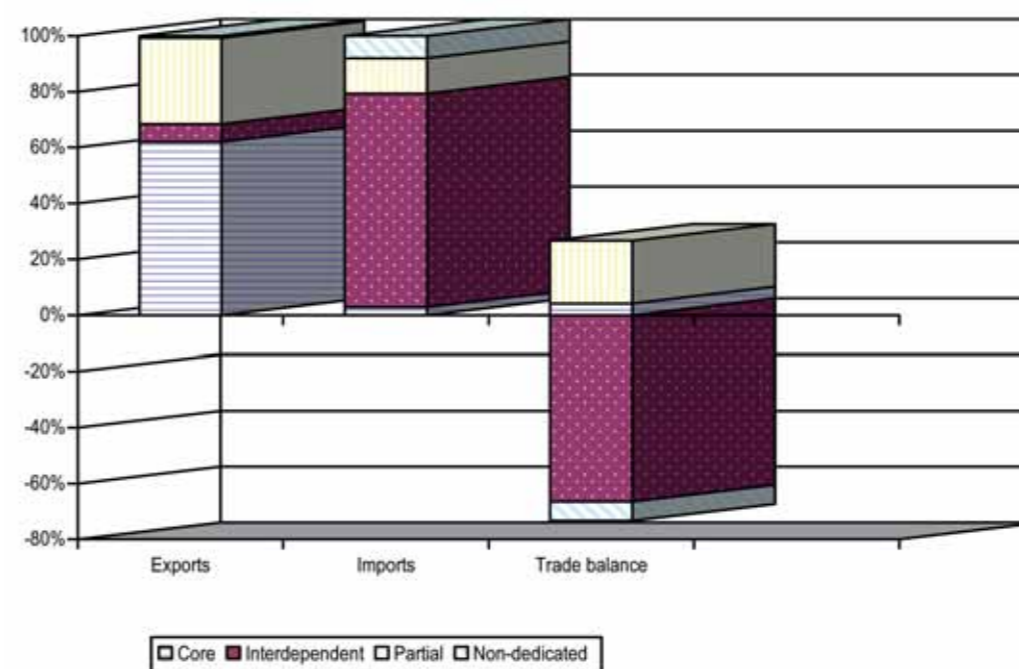
Figure 21: Contribution of copyright-based industries to exports and imports in relation to the total national economy in Kenya in 2007 (%)

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

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

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

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

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

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

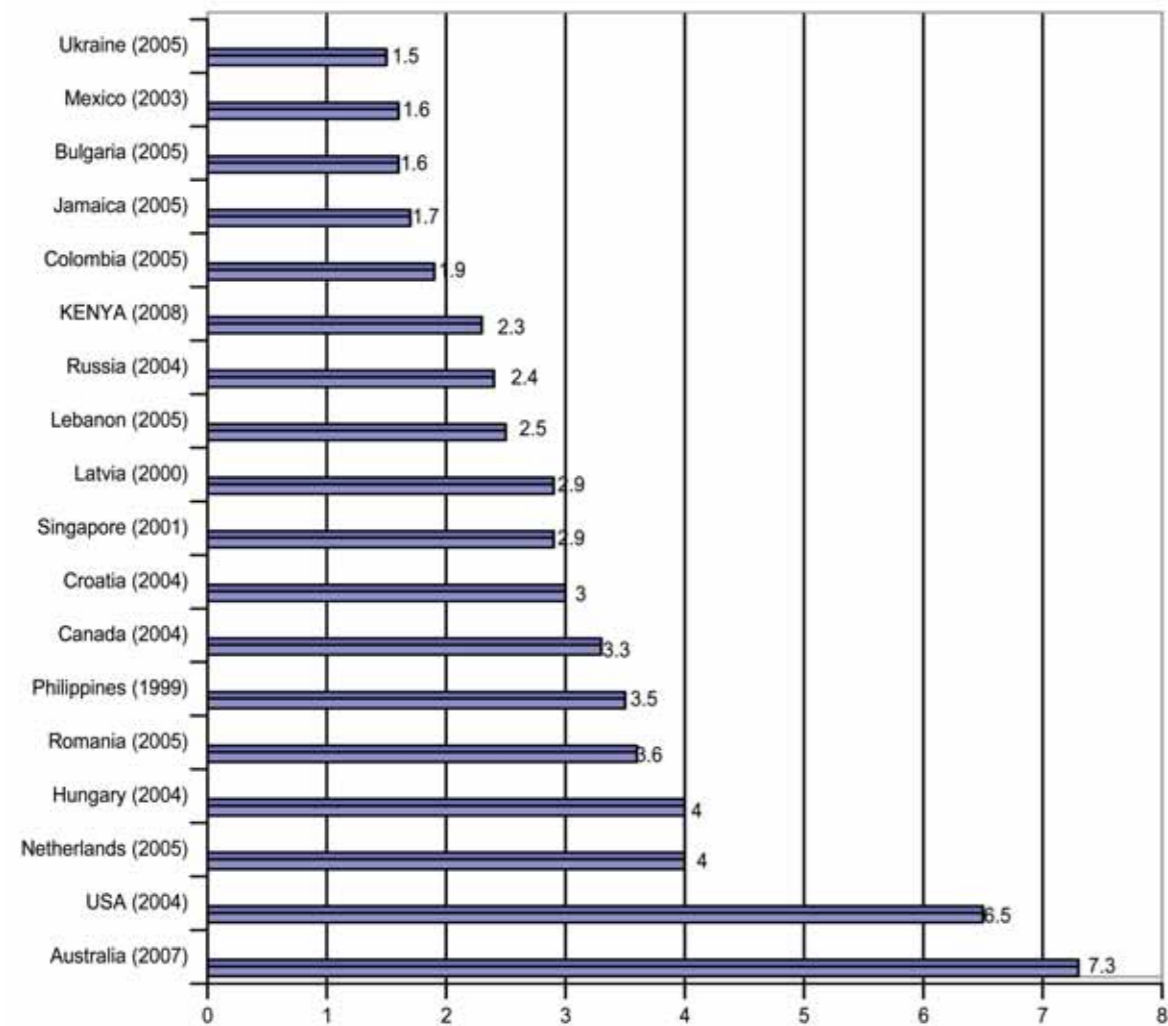
With respect to partial copyright-based industries, the main export value was derived from assorted manufacture goods (over KSHs 16 billion), aluminium ware (over KSHs 413 million), footwear (over KSHs 151 million), and wood carving (about KSHs 124 million). The main costs of imports in this category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

5.8 International Comparisons

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

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

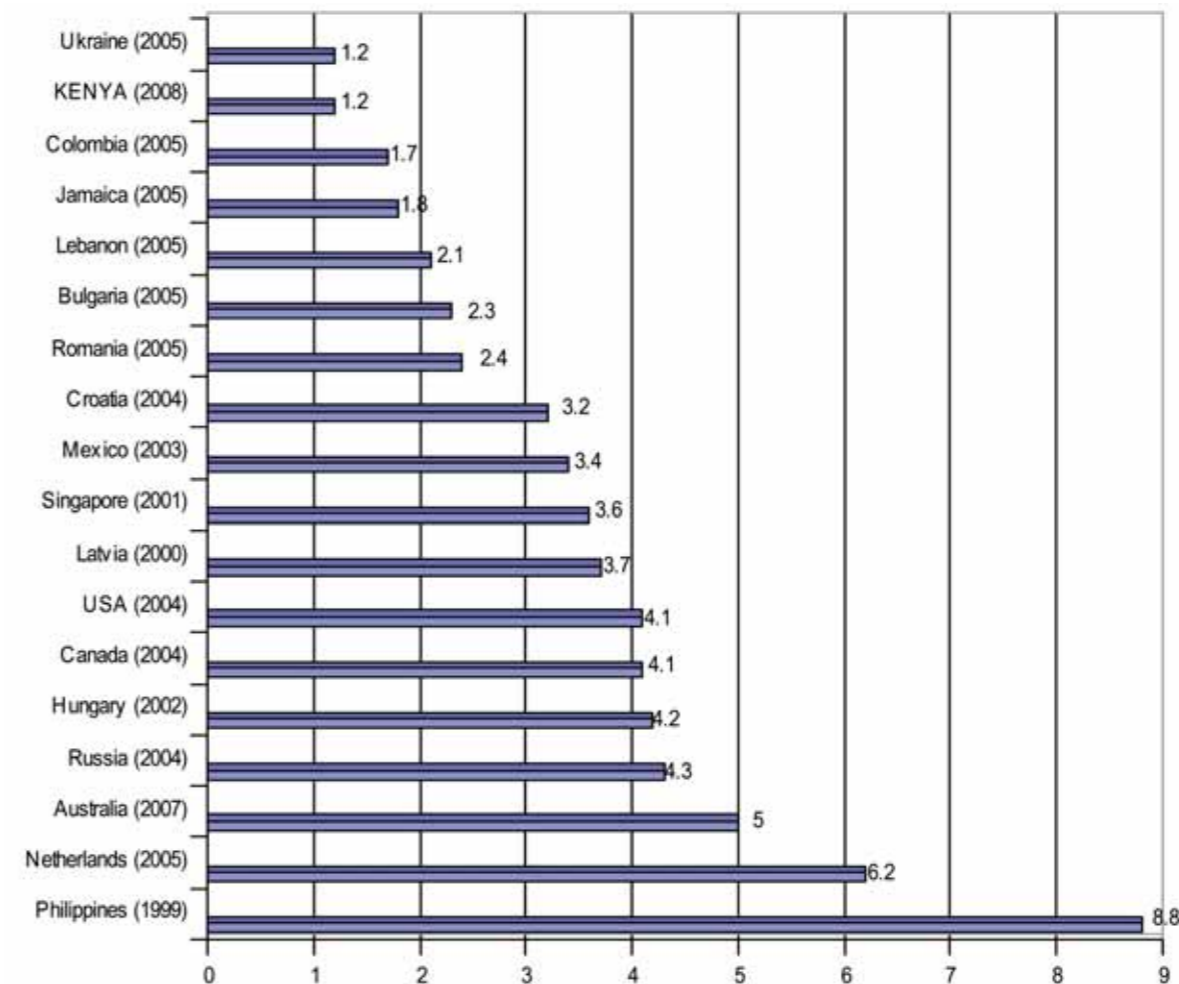
Figure 23: International comparison of the contribution of core copyright-based industries to GDP (%)



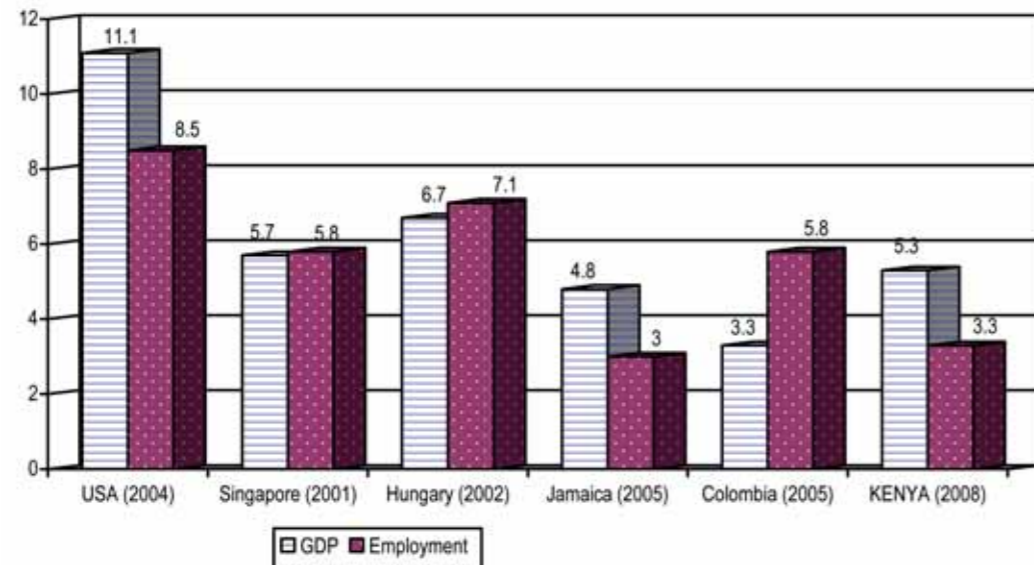
¹⁵ While the statistics generally provide a picture of the international situation, the fact that they represent different years of study (shown in brackets in the figures) is a disadvantage.

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

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



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

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

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

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

6.1 Press and Literature

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

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

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

6.1.1 The Press Market

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

6.1.2 The Book Market

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

6.2 Music, Theatrical Productions and Opera

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

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

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

6.2.1 The Music Industry

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

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

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

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

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

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

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

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

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

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

6.2.2 Theatres

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

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

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

6.3 Film Production and Video

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

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

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

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

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

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

6.4 Radio and Television

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

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

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

	Unit	2003	2004	2005	2006	2007
Radio frequencies	No.	60	77	89	123	127
TV frequencies	No.	137	148	244	348	368

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

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

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

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

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

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

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

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

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

²⁵ See http://markets.nairobist.com/financial/rwx_gallery/Nation media.

²⁶ See http://markets.nairobist.com/financial/rwx_gallery/Nation media.

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

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

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

6.5 Collective Management Societies

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

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

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

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

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

²⁷ Frequency Spectrum Fee Schedule by CCK. Press Sector.

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

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

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

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

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

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

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

6.6 Institutions set up to safeguard the interests of their members

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

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

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

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

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

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

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

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

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

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

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

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

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

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

7. Conclusions and Recommendations

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

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

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

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

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

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

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

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

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

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

Appendix

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

Producers

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

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

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

- What percentage of your sales did the artists receive?

18. Costs and Sales in the production of Music:

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

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

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

Investment (capital)	Costs (KSHs)

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

- How did you try to solve the problems?.....
- In your opinion, how best do you think these problems can be solved?.....
- Who do you think should help solve these problems?.....
- Are there any opportunities you know of that are yet to be exploited in this industry? If yes, give examples.....
- Do you know of any producer who is involved in a similar activity? If yes, fill the table below (Use separate sheet if list is long):

Producer	Location

Artists

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

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

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

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

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

17. Costs and Sales in the production of Music:

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

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

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

Investment (capital)	Costs (KSHs)

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

Artist	Location

Consumer

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

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

Appendix II: Further Information on Kenya's Copyright Law

A. Subject Matter of Copyright Protection

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

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

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

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

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

B. Ownership of Copyright

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

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

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

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

C. Rights Conferred by Copyright

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

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

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

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

D. Exceptions to the Exclusive Rights (Fair Use)

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

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

E. Related Rights

Related rights or rights neighbouring on copyright include:

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

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

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

1. Core copyright industries breakdown

ISIC	Description	Value-added (KSHs)	% of GDP	Gross output (KSHs)	% of total national gross output
3420	Printing, publishing and allied services	13,053,050,975	0.814	12,972,844,506	0.427
6247	Retail sale of books, newspapers and stationery	11,947,315,450	0.745	32,170,498,055	1.058
8323	Data processing and tabulating services	5,563,777,563	0.347	5,568,486,133	0.183
9350	Business, professional and labour associations	220,589,044	0.014	220,915,126	0.007
9411	Motion picture production	176,374,994	0.011	178,857,734	0.006
9412	Motion picture distribution and projection	390,499,881	0.024	392,742,530	0.013
9413	Radio and television broadcasting	1,675,666,086	0.105	1,674,878,376	0.055
9414	Theatrical producers and entertainment services	179,708,800	0.011	181,803,984	0.006
9415	Authors, music composers and other artists	176,579,150	0.011	175,786,081	0.006
9490	Amusement and other recreational services N.E.C.	2,927,458,700	0.183	2,989,131,334	0.098
	Photographic studios and commercial photography	633,123,888	0.0395	670,485,995	0.022
	TOTAL CORE COPYRIGHT INDUSTRIES	36,944,144,531	2.304	57,196,429,854	1.881
	Total national economy	1,603,176,000,000	100	3,041,382,000,000	100

2. Interdependent copyright industries

ISIC	Description	Value-added	Sales
3411	Manufacture of Pulp, Paper and Paperboard	4,026,938,150	4,062,367,605
3412	Manufacture of Containers and Boxes of Paper and Paperboard	5,427,202,875	5,351,791,781
3852	Manufacture of Photographic and Optical Goods	65,816,463	66,539,538
3851	Manufacture of Professional and Scientific Equipment	78,190,375	78,200,620
3832	Manufacture of Radio, TV and Communication Equipment and Apparatus	539,293,338	527,339,517
6143	Wholesale of Machinery for Textile Industry and of Sewing and Knitting	3,614,469,869	3,607,762,818
3419	Manufacture of Pulp, Paper and Paperboard Articles N.E.C.	5,634,623,844	5,695,829,124
	Retail sales of household appliances and radio and TV goods	14,700,281,413	14,743,518,834
3902	Manufacture of Musical Instruments	382,869	389,874
3825	Manufacture of Office, Computing and Accounting Machinery	697,645,613	759,387,294
	TOTAL INTERDEPENDENT	34,784,844,802	34,893,127,005

3. Partial copyright industries

ISIC	Description	Value-added	Sales
6246	Retail Sale of Glass and Hardware	2,742,600,848	2,761,512,263
6243	Retail Sale of Footwear and Leather	63,488,102	210,395,371
6116	Sales agents of Textiles, Clothing, Footwear etc	55,200,707	55,218,584
3320	Manufacture of Furniture and Fixtures	324,475,801	319,886,091
3620	Manufacture of Glass Products	12,894,169	14,274,671
6142	Wholesale of Clothing and Footwear	150,810,739	151,182,495
3901	Manufacture of Jewellery and Related Articles	8,276,630	8,370,261
6144	Wholesale of China and Glassware etc	26,380,845	26,600,060
9420	Libraries, Museums etc	6,364,769	6,375,526
3213	Knitting Mills	4,549,427	4,671,992
3610	Manufacturing of Pottery, China and Earthenware	79,388	79,388
3212	Manufacture of Made-up Textile Goods	6,778,512	6,786,434
3232	Fur Dressing and Dyeing Industry	82,796	84,758
3215	Cordage, Rope and Twine Industries	2,717,226	2,612,550
3691	Manufacture of Structural Clay Products	1,352,600,581	1,352,847,984
3214	Manufacture of Carpets and Rugs	3,108,953	3,108,953
3319	Manufacture of Wood and Cork Products	73,958,311	71,115,033
8324	Engineering, Architectural and Technical Services	741,789,799	7,407,620,395
3219	Manufacture of Textiles, N.E.C.	7,597,283	7,600,110
3240	Manufacture of Footwear except moulded by rubber	16,848,914	16,778,194
3220	Manufacturing of Wearing Apparel except footwear	23,811,195	25,274,162
6241	Retail Sale of Textiles	201,634,912	201,653,689
6242	Retail Sale of Clothing	517,758,634	517,978,459
3311	Sawmills, Planing and other Wood Mills	52,511,233	52,522,130
3312	Manufacture of Wooden and Cane Containers	884,481	884,481
3211	Spinning, Weaving and Finishing Textiles	14,744,482	14,744,482
6141	Wholesale of Textiles	147,784,430	144,912,206
	TOTAL PARTIAL	6,559,733,167	13,385,090,722

4. Non-dedicated copyright industries

ISIC	Description	Value-added	Sales
7200	Communication	4,544,357,346	4,583,824,728
7116	Supporting Services to Land Transport	15,651,984.2	1,607,862,619
7123	Supporting Services to Water Transport	217,355,514.2	217,307,820
7132	Supporting Services to Air Transport	67,808.2	1,147,011.5
7114	Freight Transport By Road	910,920,598.8	911,200,971.5
7115	Pipeline Transport	219,731,683.5	96,655,368
7191	Services incidental to Transport	44,703,195	45,040,265.7
7112	Urban, Suburban and Inter-Urban Passenger Transport	4,114,611.3	4,112,966.4
7110	Land Transport	325,670,490	313,232,039
7113	Other Passenger Land Transport	2,841,429.6	71,395,768
7131	Air Transport Carriers	30,320,956.5	303,356,586.2
7192	Storage and Warehousing	78,910,461.3	79,013,383.1
7121	Ocean and Coastal Water Transport	3,581,573.7	3,580,141.1
7122	Inland Water Transport	35,959.4	35,810.5
6523	Other Provisions for Lodging N.E.C.	158,953,579.8	157,667,967.1
6522	Camping Sites	31,193,894.1	31,347,923.9
7122	Inland Water Transport	35,958.9	35,810.5
6164	Wholesale Office Machinery and Equipment	331,622,406.3	330,143,384.7
	TOTAL NON-DEDICATED	6,920,069,451	8,756,960,564

Appendix IV: Productivity Values

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

Industry	GDP/employee	Gross output/employee	Employee income/employee
Core Industry	1,620,426	2,508,724	333,743
Interdependent	2,446,188	2,453,805	265,598
Partial	329,998	673,363	218,830
Non-dedicated	1,322,144	1,673,099	646,389
Total Copyright	1,371,436	1,838,560	307,719
Total National Economy	840,569	1,594,643	393,141

2. Productivity by sector

Productivity with respect to value-added			
Sector	Value added (mil)	Employment	Productivity
Agriculture and forestry	410,967	339,582	1,210,214
Mining and quarrying	7,163	6,247	1,146,630
Manufacturing	176,610	261,345	675,773
Electricity and water	28,105	18,961	1,482,253
Construction	69,279	81,303	852,109
Wholesale, retail, hotel	206,180	195,827	1,052,868
Transport and communication	207,300	149,049	1,390,818
Finance, real estate and business services	183,873	94,968	1,936,157
Community, social and personal services	315,129	759,698	414,808
Total national economy	1,603,176	1,907,250	840,569
Total copyright industries	85,208.7	62,131	1,371,436
Total core copyright	36,944.1	22,799	1,620,426
Employee income			
Sector	Income (mil)	Employment	Productivity
Agriculture and forestry	50,237.7	339,582	147,940
Mining and quarrying	1,346.9	6,247	215,607
Manufacturing	50,910.7	261,345	194,803
Electricity and water	8,370.7	18,961	441,469
Construction	31,520.1	81,303	387,687

Wholesale, retail, hotel	126,180.1	195,827	644,345
Transport and communication	102,167.5	149,049	685,462
Finance, real estate and business services	85,585.1	94,968	901,199
Community, social and personal services	293,500.6	759,698	386,339
Total national economy	749,818.5	1,907,250	393,142
Total copyright industries	19,118.9	62,131	307,719
Total core copyright	7,609.0	22,799	333,743
Gross output			
Sector	Gross output (mil)	Employment	Productivity
Agriculture and forestry	532,499	339,582	1,568,101
Mining and quarrying	20,233	6,247	3,238,835
Manufacturing	603,695	261,345	2,309,954
Electricity and water	53,495	18,961	2,821,317
Construction	191,296	81,303	2,352,878
Wholesale, retail, hotel	476,157	195,827	2,431,517
Transport and communication	441,836	149,049	2,964,367
Finance, real estate and business services	257,010	94,968	2,706,280
Community, social and personal services	320,129	759,698	4,213,898
Total national economy	3,041,382	1,907,250	1,594,643
Total copyright industries	114,231.6	62,131	1,838,560
Total core copyright	57,196.4	22,799	2,508,724

3. Productivity comparisons, all sectors

Sector	Value-added	Income	Gross output
Agriculture and forestry	1,210,214.3	147,940	1,568,101
Mining and quarrying	1,146,630.3	215,607	3,238,835
Manufacturing	675,773.4	194,803	2,309,954
Electricity and water	1,482,253	441,469	2,821,317
Construction	852,109	387,687	2,352,878
Wholesale, retail, hotel	1,052,868	644,345	2,431,517
Transport and communication	1,390,818	685,462	2,964,367
Finance, real estate and business services	1,936,157	901,199	2,706,280
Community, social and personal services	414,808	386,339	4,213,898
Total national economy	840,569.4	393,142	1,594,643
Total copyright industries	1,371,436	307,719	1,838,560
Total core copyright	1,620,426	333,743	2,508,724

1. Contribution of core copyright industries to exports in Kenya

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

2. Contribution of interdependent copyright industries to exports in Kenya

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

3. Contribution of partial copyright industries to exports in Kenya

Industry	2007 (KSHs, 000)	%
Timber (rough or simply worked)	108	0.000
Textiles, fabrics and made-up textiles	16,000	0.006
Leather	15,181	0.006
Wood carvings	123,982	0.047
Other woods	38,183	0.015
Glassware	7,174	0.003
Steel doors and windows	12,774	0.005
Aluminium ware	413,338	0.158
Footwear	151,472	0.058
Other manufactured goods	16,183,419	6.186
Total partial	17,100,667	6.536
Total national economy	261,626,153	100

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

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

5. Contribution of copyright industries in Kenya to exports

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

6. Contribution of core copyright industries to imports in Kenya

Industry	2007 (KSHs, 000)	%
Newspapers and periodicals	0	0.000
Books and pamphlets	1,340,282	0.222
Total core copyright	1,340,282	0.222
Total national economy	605,117,797	100

7. Contribution of interdependent copyright industries to imports in Kenya

Industry	2007 (KSHs),000	%
Paper and paperboard manufacturers	9,557,928	1.580
News print paper	1,866,537	0.325
Printing paper	2,931,154	0.484
Packing paper	1,335,328	0.221
Other manufacturers' paper	3,324,908	0.550
Paper pulp and paperboard articles	3,551,448	0.587
Electric power machinery and switch gear	11,793,871	1.949
Domestic wireless sets	43,5679	0.072
TV sets	1,505,595	0.249
Total interdependent copyright	36,402,448	6.016
Total national economy	605,117,797	100

8. Contribution of partial copyright industries to imports in Kenya

Industry	2007 (KSHs, 000)	%
Materials of rubber	228,240	0.038
Rubber and tyre tubes	2,063,483	0.341
Wood and cork products	217,138	0.036
Cotton yarn and thread	1,268	0.000
Yarn and thread of synthetic fibres	5,725	0.001
Cotton piece goods	29,338	0.005
Jute bags and sacks	70,560	0.012
Blankets, cotton	241	0.000
Other types of blankets and rugs	603	0.000
Bed, table and kitchen linen	1,887	0.000
Glass and glassware	0	0.000
Bar roads, angles, shapes and sections	1,763,005	0.291
Corrugated coated plates and sheets	42,521	0.007
Tin-coated plates and sheets	496,432	0.082
Mechanic (hand tools)	298,164	0.049
Agricultural hand tools	129,777	0.021
Domestic utensils of base metals	27,210	0.005
Metal containers	0	0.000
Wire products	471,301	0.078
Furniture and fixtures	100,410	0.017
Clothing	21,603	0.004
Footwear	6,966	0.001
Fittings	21,771	0.004
Total partial copyright	5,997,643	0.991
Total national economy	605,117,797	100

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

Industry	2007 (KSHs, 000)	%
Insulated wire and cable	64,504	0.001
Telecommunication equipment N.E.C.	1,096,275	0.181
Aircraft engines complete	242,076	0.004
Combustion engines complete	8,618	0.001
Railway locomotives	2	0.000
Passenger motor cars complete	1,985,544	0.328
Buses, trucks and lorries complete	1,117,944	0.185
Chases with engines mounted for buses	8,178	0.001
Bicycles	47,704	0.008
All roads and vehicles and parts	1,838,435	0.304
Aircraft complete	235,095	0.039
Other transport equipment N.E.C.	0	0.000
Total non-dedicated copyright	6,644,375	1.098
Total national economy	605,117,797	100

10. Contribution of copyright industries in Kenya to imports

Industry	2007 (KSHs, 000)	%
Core copyright	1,340,282	0.222
Interdependent copyright	36,402,448	6.016
Partial copyright	5,997,643	0.991
Non-dedicated	3,815,540	0.631
Total copyright industries	47,555,913	7.859
Total national economy	605,117,797	100