# MEASURING INDIA'S CREATIVE ECONOMY

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## **SUMMARY**

- 1. The aim of this study is to provide the first ever measure of the economic contribution of copyright-relevant and related rights-relevant industries in India. The copyright-relevant industries are those defined by the World Intellectual Property Organization (WIPO) as "activities or industries where copyright [and related rights] play an identifiable role".
- 2. We adopted the **methodology** put forward in the WIPO (2015) Guide on surveying the economic contribution of copyright-related industries in India, which intends to maximise comparability with previous studies in other countries. We conduct the study for 2016-2017, which is the latest year where most of the required economic indicators are available at WIPO-defined industry categorisations.
- Statistics and Program Implementation (MOSPI), which gives comprehensive coverage of the manufacturing sector. We also aggregate company-level data from the Prowess database published by the Centre for Monitoring the Indian Economy and use this to supplement the ASI data for industries outside of manufacturing. We include data from industry studies such as the FICCI-KPMG report and the survey by the media and entertainment industry Skills Council (MESC) to cover industries outside of manufacturing. For the exports and imports figures, we use the trade data published by the Directorate General of Commercial Intelligence and Statistics (DGCI&S), which gives a comprehensive value for all goods traded. We supplement the exports and imports figures with trade data from the World Trade Organisation (WTO) on audio-visual services<sup>1</sup>.
- 4. For the selection of industries to include, we used the WIPO guide. WIPO distinguishes four categories: Core Copyright Industries, Interdependent Copyright Industries, Partial Copyright Industries and Non-Dedicated Support Industries. In 2016-2017, the Core Copyright Industries accounted for 44.74% of the value added generated by Indian copyright-relevant industries. Similar to other countries, the Core Copyright industries have the highest share of value added across all copyright-related industries.
- 5. The economic contribution of Indian copyright-relevant industries has been measured using three indicators: the Gross Value Added (the value added to goods and services used in the production process), employment, and the balance of trade (exports minus imports). Data is taken for the most recent year available (2016-2017). Table 1 summarises our results<sup>2</sup>.

Table 1: Economic Contribution of copyright-relevant industries in India

INDUSTRIES	GVA (RS. BILLION)	EMPLOYMENT	NET EXPORTS (USD BILLION)
Core	397.66	695,526	0.16
Partial	44.76	65,914	3.15
Interdependent	362.32	341,139	-19.03
Non-dedicated	84.16	No data	-0.64
Total (weighted)	888.89	1,102,579	-16.36

<sup>1</sup> The industries from these datasets are selected and classified as per the WIPO guidelines. For the full list, see the appendix.

<sup>2</sup> Note that the net exports will not add up exactly due to the copyright weights.

- 6. The Gross Value Added (GVA) of copyright-relevant industries amounted to Rs. 888.89 Billion in 2016-2017, or 0.58% of the Indian Gross Domestic Product (GDP)<sup>3</sup>. The Central Statistical Office reports GVA by 2-digit industries, to which we cannot apply the WIPO methodology. Our calculations cannot include this data, making our overall calculation for GVA an underestimation. The international average from available WIPO studies from varying years is a contribution of 5.48% by mean and 4.83% by median. The share of GVA of creative industries in overall GDP is visibly less for India than that of other countries. This can be partially attributed to the lack of comprehensive GVA data outside of the formal manufacturing sector, but not entirely, as we describe in the next point.
- 7. As a benchmark, consider the share of creative economy in the partial and interdependent industries, which mainly come under manufacturing. We can compare this to total manufacturing GVA. The share is 2.97% of total manufacturing GVA, which is still lower than median and mean shares to GDP from other countries, globally as well as across Asia.
- 8. Employment in India's copyright-relevant industries is approximately 1.1 million workers. The share to total employment cannot be calculated due to the absence of official employment data for 2016-2017. However, we calculate the share of partial and interdependent industries to total manufacturing employment in a calculation similar to the one for GVA described above using the ASI manufacturing employment data. This gives a share of 2.72% of copyright-related employment in manufacturing. The average share of national employment in other countries equals 5.4%, once again suggesting that the low share of copyright-related industries can only be partially explained by the lack of data.
- 9. Employment elasticity is high at 0.87 for the set of copyright-relevant industries. The highest elasticity is for the partial copyright industries due to their high labour intensity.
- 10. Economic contribution was furthermore measured in terms of the trade balance, which equals exports minus imports. Note that this measure captures only goods traded and excludes copyright-related services. We also add in audio-visual services from the FICCI Frames report for 2016 as they are a large component, but data on other services are not available. India is a net exporter in the Core, Partial and Non-Dedicated Copyright industries, while it is a net importer in the Interdependent Copyright industries. Overall, copyright relevant industries had a deficit of USD 16.4 Billion in 2016-2017, while overall India ran a trade deficit. Note that using unweighted data, we would get a trade surplus of USD 34 billion. This divergence is due to several methodological concerns including the absence of trade data on services, the prescribedmethod for selection of weights, and the detail of HS product code selected.
- 11. Various methodological and data issues had to be resolved to finalise this study. There are minimal assumptions on industry mappings from the WIPO guide to India's industry classification, which can often require assumptions for other countries. We make assumptions on assigning shares to narrow industries which overlap with each other, or report their data in an aggregated fashion. We also make simplifying assumptions on the weights or copyright factors, in the absence of firm survey and interview data. For the trade calculations, there is no reliable mapping between industry and product codes, so we matched these by description. Finally, we supplement core datasets with aggregate figures from company reports and industry reports for groups of narrow industries, in the absence of comprehensive data at the narrow industry level that the WIPO methodology requires.

- 12. For a richer estimate of the size of the copyright economy in India, our recommendation is for government agencies to produce an advanced version of this study. Access to data on GVA at the narrow industry level from the CSO will be necessary to estimating the contribution of copyright-related activities accurately. Trade data on services is crucial to capture the copyright economy for India. Estimates of employment from household and small enterprise surveys can be used to capture the informal sector.
- 13. Several qualitative aspects of the creative economy can also be included for better understanding of the creative economy. Periodic documentation of the copyright-relevant sectors can help understand trends. This study can be considered the first step towards measuring India's creative economy.
- 14. The WIPO methodology is more amenable to developed country settings where almost all economic activity takes place in the formal sector. The informal economy remains out of scope in settings such as India. We recommend WIPO consider this in future versions of its guide.

## 1/ INTRODUCTION

A large body of research has emerged in the past two decades on the economic contribution of industries for which copyright and related rights are relevant<sup>4</sup>. More recently, the economic aspects of copyright have come into the spotlight, as creative industries are often sizeable contributors to a country's economy. Measuring the share of the creative sector in the overall economy is a first important step in designing copyright policies. Copyright measurement can be considered important for specific reasons:

- rewarded adequately. Rewarding and promoting creative efforts adequately is crucial for the creative sector's existence. To determine fair value to an artist, artisan, writer or musician, we would first need to examine the economic value created through their work.
- Taking creative output to market generates a chain of economic activity through the production of various related goods and services. Measurement helps identify potential segments that can generate growth and employment.
- 3. The contribution of the creative sector in India has a large share in the informal economy, many folk artists, local artisans and handicraft workers as well as newspaper delivery services, contractual staff in media and entertainment industry, cable operators etc. are excluded. Bringing this workforce access to better working conditions as well as fair price for their efforts will improve the creative output of the economy.
- To negotiate international treaties in the copyright space, countries need to first know the size and scope of their creative economy.

Based on the WIPO released guidelines, over 50 countries have measured the economic contribution of industries that are associated with copyright protection. These studies aggregate key economic variables from national statistical agencies and supplement it with survey data and their own estimates.

The value of the creative sector in India remains unstudied so far. The primary objective of this study is to estimate the economic value of key economic variables of copyright-based industries in India based on the WIPO guidelines published in 2015, with the hope that this will pave the way for deeper focus on copyright industries and their contribution.

Given the lack of data on services and the informal sector at the narrow industry classifications that WIPO requires, India's copyright-relevant industry contributions can be safely understood to be underestimates. Though this study compares the values of India's estimates of key economic indicators with those of other countries that have followed the WIPO methodology, readers should keep in mind throughout that these comparisons simply reveal the relative size of the creative industries in the total economy, and do not allow normative conclusions: a low rank is not necessarily "bad", nor is a high rank necessarily "good".

The rest of the study is organized as follows: In Section 2 we provide a brief summary of the legal framework surrounding copyright in India. Section 3 briefly describes the WIPO methodology, and section 4 summarises the datasets and variable definitions we use for measuring the contribution of creative industries in India. Section 5 presents the results of our estimation of copyright-related industries. Section 6 gives a comparison of India's estimates with those of other countries. Section 7 suggests improvements in the measurement of the creative sector.

## 2/ FRAMEWORK FOR COPYRIGHT IN INDIA

## 2.1 HISTORY OF THE INDIAN COPYRIGHT REGIME

Copyright first made its way to India under an Enactment of the East India Company in 1847. The Enactment was brought in for the "encouragement of learning" and provided a copyright to an author for a term of the authors life plus seven years<sup>5</sup>. India's first homegrown copyright legislation was the Copyright Act of 1914 that was used to extend the provisions of the UK Copyright Act of 1911 to India.

Shortly after India gained independence from colonial rule, it enacted the Copyright Act of 1957. Since its inception, the 1957 Act has been amended significantly six times, namely in 1983, 1984, 1992, 1994, 1999, and 2012, to render it compliant with India's international copyright obligations and account for emerging developments in replication technologies. Minor amendments were made to the 1957 Act most recently by the Finance Act, 2017.

#### 2.2 WHAT IS COPYRIGHT?

A copyright is an exclusive right granted to authors of literary, dramatic, musical, and artistic works, cinematograph films, and sound recordings to carry out certain activities with respect to the works for economic gain. These activities broadly include reproduction, translations, adaptations, performance, communicating the work to the public, and selling or giving the work for commercial rental. Copyright subsists in original works, works of architecture that are located in India, foreign works, and works of international organisations that are either first published in India or the author of such a work is an Indian citizen. There can be no copyright in an idea. Rather copyright exists in the expression of an idea in some form.

#### 2.3 TERM OF COPYRIGHT

For original literary, dramatic, musical and artistic works, copyright lasts for the lifetime of the author and 60 years thereafter<sup>10</sup>. For anonymous and pseudonymous works, posthumous works, cinematograph films, sound recordings, works where the government, a public undertaking, or an international organisation is the first owner of copyright, the period of copyright is 60 years from the year following the year in which the relevant work is first published<sup>11</sup>.

## 2.4 AUTHOR AND FIRST OWNER OF COPYRIGHT

The creator of a work is generally considered to be its author. The author is usually the first owner of copyright in a work, meaning that copyright over a work automatically vests with the author. There may be certain exceptions, such as when certain works are created by persons during a person's employment, in which case the employer would be the first owner of copyright in the works. However, this may be overridden by agreements to the contrary<sup>12</sup>. In the case of a literary or dramatic work the author, i.e., the person who creates the work. In the case of a musical work, the composer. In the case of a cinematograph film, the producer. In the case of a sound recording, the producer. In the case of a photograph, the photographer. In the case of a computer-generated work, the person who causes the work to be created13.

#### 2.5 PURPOSE OF COPYRIGHT

The purpose of copyright is to serve the public interest by incentivising the generation of creative works while providing avenues for the dissemination of these works to the public through various means. The incentive

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5 The Indian Copyright Act, 1847 (XX of 1847)
6 The Copyright Act, 1957, S. 14.
7 Ibid.
8 The Copyright Act, 1957, S. 13 read with Ss 40 and 41 9Donoghue vs. Allied Newspaper Ltd., (1937) 3 ChD 503.
10 The Copyright Act, 1957, S. 22.
11 The Copyright Act, 1957, S. 3-7.
13 The Copyright Act, 1957, S. 17.
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mechanism is an exclusive right granted to authors of creative works under the copyright statute that they may exploit for monetary gain. The incentive is bolstered by protections granted to authors and copyright owners against encroachment on this exclusivity through civil and criminal remedies. It may not always be practicable for authors to facilitate the widespread dissemination of their works. In such circumstances, authors may carry out the following activities to allow for wider dissemination of their works and better management of royalty collection:

- Assign their copyrights to any person subject to conditions of the former's choosing. For an assignment to be valid it must be in writing and signed by the assignor or its authorised agent<sup>14</sup>.
- License their works voluntarily under Section 30 of the 1957 Act. Right-holders are free to grant any interest in their works through written licenses<sup>15</sup>.

#### 2.6 NEIGHBOURING RIGHTS

Neighbouring or related rights are rights that are akin to copyright, conferred on broadcasts and performances under the 1957 Act. The primary difference between a neighbouring right and a copyright is that the scope of the former is the mode of dissemination of a work whereas the latter pertains to the creative work itself. The purpose of neighbouring rights is to recognise the effort or investment made by broadcasting organisations and performers to make works available to the public. Under Section 37 of the 1957 Act, broadcasters are granted an exclusive right to transmit and retransmit their broadcasts. Section 38 grants performs an exclusive right to their performance for a period of fifty years. There are certain jurisdictions that accord the status of works to the subjects of neighbouring rights. For instance, the United Kingdom recognises a broadcast as a work16.

#### 2.7 MORAL RIGHTS

Moral rights are special rights available to the creators of works. These rights exist regardless of who owns the copyright in the works themselves and persist even after the end of the term of copyright protection or the death of the author. In India, moral rights include the following<sup>17</sup>:

- The right to claim authorship over the work; and
- The right against distortion, mutilation, modification, or other such acts in relation to the work, which are prejudicial to the author's honour or reputation.

#### 2.8 EXCEPTIONS TO COPYRIGHT

Compulsory and Statutory Licensing: Compulsory licenses may be granted if works are wilfully held from the public, or for the benefit of disabled individuals or when the author of published/unpublished work is either dead or untraceable<sup>18</sup>. Statutory licenses are granted to those who wish to make cover versions of sound recordings, those who desire to broadcast literary and musical works and sound recordings, and those who wish to publish translations of any literary or dramatic works in any language<sup>19</sup>.

Fair Use Provisions: Aside from compulsory and statutory licensing measures, the Act also culls out certain exceptions under section 52, known as fair use or fair dealing provisions. Section 52 holds that the fair dealing of any copyright work for the purposes of personal use, research activities, teaching, critique, and news reports does not constitute infringement under the 1957 Act<sup>20</sup>.

#### 2.9 INSTITUTIONAL FRAMEWORK

Administration The nodal ministry for copyright in India is the Ministry of Commerce and Industry. Under the Ministry, the Department in-charge of handling copyright-related affairs is the Department for the Promotion of Investment and Internal Trade (DPIIT). Prior to March 2016, copyright was under the purview of the Ministry of Human Resources and Development, the nodal ministry for all education-related matters in India.

The Act empowers the Central Government to appoint a Registrar of Copyright and one or more Deputy Registrars of Copyright<sup>21</sup>. The Registrar of Copyright is tasked with the responsibility of implementing the Copyright Act in India. Section 9 of the 1957 Act also provides for the creation of a copyright office that is to operate under the direct superintendence of the Registrar of Copyrights. The Office administers the various functions set forth in the Act, including but not limited to maintaining the Register of Copyrights in which entries such as names and the addresses of authors, publishers and owners of copyright are entered.

The administrative duties of the Registrar of Copyrights and the Copyright Office include:

- Publishing notices in the Gazette when an author relinquishes their copyright<sup>22</sup>.
- Grant compulsory licenses for works withheld from the public, unpublished or published works where the author is dead or their whereabouts are unknown, the benefit of the disabled in accordance with directions issued by the Appellate Board<sup>23</sup>.
- Collect fees for licenses issued under sections 32 and 32A.
- Receive applications for registration from prospective copyright societies and prepare reports on the workings of copyright societies and submit these documents to the Central Government for final consideration of grant of registration and renewal of registration respectively.

Adjudication Copyright adjudication in India is managed by several bodies. Originally, the Copyright Board, a quasi-judicial body was tasked with adjudicating disputes pertaining to copyright registration, assigning copyrights, granting compulsory licenses, and deciding royalty rates for statutory and compulsory licenses<sup>24</sup>. The Board comprised of a Chairman and two other members<sup>25</sup>. The Board was disbanded after the Act was amended in 2012<sup>26</sup>. However, the Government of India notified certain amendments to the Finance Act, 2017, which transferred the responsibilities of the Copyright Board to the Intellectual Property Appellate Board (Appellate Board). The IPAB was constituted under the Trade Marks Act, 1999 and deals with appeals against orders of the Registrar of Trademarks, the Registrar of Geographical Indications and the Controller of Patents.

The Appellate Board is a quasi-judicial body that decides on matters related to copyright registration, publication of copyrighted works, term of a copyrighted work, tariff schemes of copyright societies, royalties for compulsory and statutory licensing, assignment, licensing, and other miscellany<sup>27</sup>. It also has the power to order the rectification of the register of copyrights. The Appellate Board has appellate jurisdiction on certain orders passed by the Registrar of Copyrights. Appeals from decisions of the Appellate Court lie before a High Court of competent jurisdiction. Parties aggrieved with orders of IP offices and the Appellate Board may also file a writ petition against such orders with the High Court under Article 226 of the Constitution and before the Supreme Court under Article 136 of the Constitution<sup>28</sup>.

Under Section 74 of the 1957 Act grants both the Registrar of Copyright as well as the Appellate Board certain powers of a civil court. For the purposes of this section, the jurisdiction of both the Registrar as well as the Appellate Board extend to the entire territory of India. Section 12 of the 1957 Act empowers the Appellate Board to regulate its own procedure. The Appellate Board comprises of a Chairman and not more than 14 members. Prior to 2017, the functions of the Appellate Board were to be carried out by a body known as the Copyright Board.

<sup>21</sup> The Copyright Act, 1957, S. 10.

<sup>22</sup> The Copyright Act, 1957, S. 21.

<sup>23</sup> The Copyright Act, 1957, Ss. 31, 31A, 31B, 31C, 31D, 32, and 32A.

<sup>24</sup>The Copyright Act, 1957, S. 11.

<sup>25</sup> Ibid

<sup>26</sup> Shamnad Basheer, Specialised IP Courts (IV): Correcting the Copyright Board https://spicyip.com/2016/02/specialised-ip-courts-iv-correcting-the-copyright-board.html

<sup>27</sup> The Copyright Act, 1957, Ss. 6, 19A, 31, 31A, 31B, 31C, 31D, 32, 32A, 33A

 $<sup>28\ \</sup>underline{https://pib.gov.in/PressReleseDetail.aspx?PRID=1595232}$ 

The 1957 Act provides for certain civil and criminal remedies against violations of its provisions. District courts are charged with hearing civil matters pertaining to copyright whereas Metropolitan Magistrates or Judicial Magistrates of the first class are responsible for handling criminal cases relevant to copyright<sup>29</sup>.

Copyright Societies In India, collective rights management is facilitated by copyright societies. These entities have a legal monopoly for issuing licenses for literary, dramatic, musical and artistic works integrated in cinematograph films or sound recordings<sup>30</sup>. Copyright societies typically acquire the rights for a large repertory of works from copyright holders and license them to users for a fee31. The proceeds are then distributed amongst their members. Ordinarily, there can be only one copyright society for any given class of works. A copyright society must exist under the collective control of the authors and other owners of copyright whose rights it administers<sup>32</sup>. As per the Copyright Rules, 2013 members must have equivalent control over the workings of the society. Copyright societies can only issue licenses if they are registered with the Central Government<sup>33</sup>. Any person aggrieved with their tariff scheme may approach the Appellate Board with a complaint34.

## 2.10 ISSUES WITH THE COPYRIGHT REGIME IN INDIA

- Lack of effective copyright enforcement frameworks, including inadequate training and expertise in IP, particularly to tackle specific issues of digital copyright infringement.
- 2. Lack of coordination among enforcement agencies.
- Complicated and expensive judicial processes, which especially impact independent artists/ creators, who lack bargaining power in matters of licensing and remuneration.
- Lack of administrative support to help courts resolve cases swiftly
- Lack of technical expertise and quorum in appellate tribunals, leading to inordinate delays in providing remedies to the relevant parties.
- 6. Inefficient functioning of collective management societies.

- 7. Laws that have not been updated to keep pace with the issues of digital age. Penalty mechanisms are inadequate for dealing with the varying forms of infringement presented by the digital medium. Collective licensing mechanisms are not commensurate with the dynamism of the digital age, leading to disputes between rights-holders and digital content companies<sup>35</sup>. These disputes, in turn, are prompting inordinate invocation of statutory licensing provisions, eroding value for rights-holders for whom the internet is becoming an increasingly significant avenue for dissemination and rights monetization.
- 8. Lack of data on the size of the copyright economy and the specific impact of various laws and policies.
- Safe-harbour provisions relevant to the transient storage of works on digital media are overbroad and lack consonance with safe-harbour provisions in the Information Technology Act, 2000.
- 10. Outdated regulations and legislations that overlap with the workings of certain copyright industries prevent them from maximizing the value potential of their works under the 1957 Act.
- II. Vague and contradictory terminology within the Act precipitates disputes and confusion. For instance, it may seem like the intention of Section 33 of the 1957 Act is to ensure that only one society issues licenses with respect to a single class of works. However, the presence of the word "ordinarily" in the provision creates some ambiguity, signaling that in certain cases it is alright for more than one society proffer licenses for a single class of works.
- 12. There is a dearth of recognition of the instrumental role played by industry in the creation of copyright works. As such, incentive mechanism to encourage more industrial investment in creative or cultural products is lacking.

<sup>30</sup> The Copyright Act, 1957, S. 33.

<sup>31</sup> Balaji Subramanian, "Updating Indian Copyright Law", Seminar, no. 687 (November 2015). http://www.india-seminar.com/2016/687/687\_balaji\_subramanian.htm 22 Ibid. supra 12.

<sup>33</sup> The Copyright Act, 1957, S. 30

<sup>34</sup>The Copyright Act, 1957, S. 33A

<sup>35</sup>See Warner Music Group vs. Spotify

## 3/ THE WIPO METHODOLOGY

The WIPO methodology for measuring the size of the creative economy in a country considers the entire copyright-relevant segment of the economy. It groups these industries into classes depending on how as well as how much they are linked to copyright-related activities. The four categories of industries are described below.

- Core Copyright Industries: Industries wholly engaged in the creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter.
- Interdependent Copyright Industries: Industries
  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.
- 3. Partial Copyright Industries: Industries in which a portion of the activities is related to works and other protected subject matter and may involve creation, production and manufacturing, performance, broadcast, communication and exhibition or distribution and sales. To evaluate the economic contribution of the copyright-based industries, only the portion related to works and other protected subject matter is included.
- 4. Non-Dedicated Copyright Industries: Industries in which a proportion of activity is related to facilitating broadcast, communication, distribution and sales of works and other protected subject matter, and whose activities have not been included in the core copyright industries

In each of the four categories of creative industries, WIPO provides a list of internationally recognised detailed classification codes for narrow industries that fall in that category. The US NAICS industry classification as well as the UN ISIC industry classification are listed in the WIPO guide. The first step is to map these to a country's industry codes, either through existing crosswalks from government sources or other studies, or through matching on industry descriptions. The appendix shows the WIPO classification of industries as well as the mapping between WIPO industries and the Indian NIC classification that were used in this report.

Once the mapping is complete, the values of GVA, employment, exports and imports in narrow industries have to be collected. Typically, the data available is collected for other statistical, administrative or commercial purposes, and does not fit the WIPO industry classification exactly. Data may be reported at an aggregated level, pulling together multiple narrow industries. If the multiple industries fall under the same category of the four creative classes of industries listed by WIPO, there are no assumptions to be made. However, if the collected data fall under more than one of the four broad categories of industries, assumptions are required to assign value of the grouped data across industries.

Once the total value of GVA, employment, and exports and imports is extracted for narrow industries within the four classes of copyright industries at the most disaggregated level possible, weights or "copyright factors" are assigned to industries.

These factors encapsulate how a country would scale the values under various narrow industries. The weight given to all narrow industries in the Core Copyright Industry is always 1. Countries determine the weight to the narrow industries under the Interdependent Copyright Industry through a survey, or in the absence of a survey, often assign it a value of 1. For calculating the Partial Copyright Industry factors, methodologies can vary across countries. Surveys, input-output tables, or taking the average of copyright factor values of neighbouring or similar countries are often used. Different industries within the Partial Copyright Sector have different copyright factors.

The copyright factor of Non-Dedicated Support Industries can be determined on the basis of the WIPO Guide. According to the WIPO Guide:

"This weighting is built on the assumption that the proportionate contribution of the copyright-based industries to the total distribution industry value added (transportation and trade sectors) is the same as the percentage contribution of the copyright industries to the total non-distribution industries." (WIPO 2003, p.59.)

The WIPO formula, uses the copyright factors (CF) of Core, Partial and Interdependent Copyright Industries, as well as their Gross Value Added (GVA). It also uses the overall GDP as a basis to calculate the non-dedicated industries' copyright factor. This is given by the following formula:

$$CF_{non-dedicated} = \frac{(\textit{GVA}_{core} * \textit{CF}_{core}) + \left(\textit{GVA}_{interdep} * \textit{CF}_{interdep}\right) + \left(\textit{GVA}_{partial} * \textit{CF}_{partial}\right)}{\textit{GDP} - \textit{GVA}_{non-dedicated}}$$

After obtaining the values of the economic indicators and the copyright factors, we can complete the calculation. The value of each economic variable for each of the four creative industries is defined as the weighted sum of the value across sub-industries within the four industries. For example, the total value of employment for the Partial Copyright Industry is given by the weighted sum across the narrow industries in the Partial Copyright Industry, where the weights are the copyright factors:

$$Employment_{Partial} = \sum_{i \in Partial} cf_i * Emp_i$$

Finally, the value of the overall copyright economy can be calculated as the sum of each of the three key economic indicators over the four copyright industries. Shares of the creative industry to GDP, employment and trade follow.

## 4/ MEASURING THE CREATIVE ECONOMY FOR INDIA

#### 4.1 INDUSTRY MAPPING

India's NIC (2008) classification maps directly to the ISIC industry classification by design. The first step of mapping industries from the WIPO guide (which gives 4 digit industry codes for creative industries) to India's codes for the creative industries is straightforward.

The WIPO 4 digit industry codes themselves sometimes appears more than once in the WIPO guide. In such cases, we can assign either partial values to industries or assign the entire value to one narrow industry to avoid double counting. Note that assigning the economic value to one industry versus another will have different contributions to the total as the copyright factors can differ.

For example, the ISIC codes 4649 and 9000 appear both in Core and Partial Copyright Industries. We assign the full value of that industry's economic indicator to the Core Copyright Industry, where the copyright factor is 1. Another situation is where an industry is listed twice within the Partial Copyright Industries. We assign the economic contribution to the industry where it appears with the highest occurences<sup>36</sup>.

## 4.2 DATA SOURCES AND VARIABLE DEFINITIONS

The three main data sources used in this study are the Annual Survey of Industries (ASI) 2016-2017, the Prowess dataset published by the Centre for Monitoring the Indian Economy (CMIE), the annual report of the Directorate General of Commercial Intelligence and Statistics (2016-2017). These data sources are supplemented wherever possible with other sources to capture industry-level data more comprehensively. In the Core Copyright and Non-Dedicated Copyright Industries, data was primarily from CMIE Prowess, while in Partial and Interdependent Industries, most of the data was from ASI.

The Annual Survey of Industries records information on India's registered manufacturing and repair units. It is the principle source of information on manufacturing GVA and employment for the country. As our primary data source, it drives the choice of year for this study. The latest round of the ASI available at the 4 digit industry level is for 2016-2017.

The CMIE Prowess dataset provides audited annual reports and information filed with the Ministry of Company Affairs. It assembles financial variables for over 50,000 listed and unlisted Indian companies.<sup>37</sup> We use this for GVA data. Employment is not required to be reported by firms, and is often missing.

Gross Value Added is reported directly in the ASI Annual Report. This covers most of the manufacturing sector. For the few remaining industries under manufacturing as well as services, retail and wholesale, we take data from CMIE Prowess on all companies in the 4 digit industry that report data, and calculate GVA from the income side. The Value Added from the income side is defined by the Reserve Bank of India as "the sum of wages, indirect taxes, equity dividends, preference dividends, dividend tax, financial services expenditure and retained profits"<sup>38</sup>.

The export and import data is available at the Harmonized System (HS) product code levels through the Directorate General of Excise and Customs. We focus on data from the year 2016-2017 as this is the latest year for which ASI data (our primary source for GVA and employment) is publicly available at the 4 digit industry level, allowing us to map product codes to the WIPO industry definitions. Note the data at the narrow industry level required for applying the WIPO methodology is available only for the exports and imports of goods, and not services<sup>39</sup>. We additionally incorporate data on audio-visual services from the WTO to supplement the measure<sup>40</sup>. Audio-visual services relates to the production of motion pictures (on film, videotape, or disk or transmitted electronically), radio and television programmes (live or on tape) and musical

recordings. Performing arts and other live entertainment event presentation and promotion services (namely, live performances such as concerts and plays) are excluded from this item and included in artistic related services. However, the recording of live performances is included in audio-visual services and for these recordings, the same treatment as for other audio-visual products applies. Included in audio-visual services are amounts receivable or payable for rentals of audio-visual and related products and charges for access to encrypted television channels (such as those offering cable and satellite services).

We use industry reports wherever there are gaps in the primary datasets used for the study, as these provide more comprehensive estimates at the country level<sup>41</sup>. For employment, we use data from the Media and Entertainment Skills Council, which extrapolates from their 2014 skills gap study in the media and entertainment sector. industries. The KPMG-FICCI Indian Media and Entertainment Industry report (2017) captures export and import numbers for media services in 2016.<sup>42</sup>

## 4.3 COPYRIGHT FACTORS FOR INDIA

According to the WIPO guide, copyright factors are the necessary measure of the relevance of copyrights in economic activities. Copyrights are assumed to contribute 100% to economic activities in Core Copyright Industries. In Interdependent and Partial Copyright Industries, however, the relevance of copyrights is lower, and it is also lower in the Non-Dedicated industries. In determining the economic contribution of copyright-relevant industries, the value added, employment and trade data in these industries will be weighted by these factors.

## 4.3.1 COPYRIGHT FACTOR FOR THE CORE COPYRIGHT INDUSTRIES

Following the WIPO (2015) guidelines, the Core Copyright Industries will fully contribute value to the creative economy. Hence the copyright factor used for each of the core industries is taken as 1 for the narrow industries within the Core Copyright Industries as shown in Table 2.

Table 2: Copyright factors in the Core Copyright Industries

#### **CORE COPYRIGHT INDUSTRIES COPYRIGHT FACTOR** Press and literature 1 1 Music, Theatrical Productions, Operas Motion picture and video 1 Radio and Television 1 1 Photography Software, database and computer games 1 1 Visual and Graphic arts 1 Advertisement Copyright Collection Societies 1

Notes: The copyright factor for all industries in the Core Copyright Industries is normalised to 1 to match the WIPO Guidelines and other country studies.

<sup>39</sup> This is not just for India, globally also there is little information on the import and export of services, which are important to copyright-relevant industries. However, India's service sector is strong and could change the trade contributions significantly if it could be included.

<sup>40</sup> Manual on Statistics of International Trade in Services 2010, para. 3.256

<sup>41</sup> For a full table of the data and its sources at the narrow industry level, please contact the author.

<sup>42</sup> Media for the masses: the promise unfolds https://assets.kpmg/content/dam/kpmg/in/pdf/2017/04/FICCI-Frames-2017.pdf

## 4.3.2 COPYRIGHT FACTOR FOR THE INTERDEPENDENT COPYRIGHT INDUSTRIES

Country studies typically use one of the following three methods to determine copyright factors for the Interdependent Copyright Industries. One approach is to use interviews and surveys to determine the copyright factor in the interdependent industry. These countries include Bhutan, Brunei, Darussalam, Malaysia, Pakistan, Romania, Singapore, Thailand, Trinidad and Tobago. The copyright factor they use vary between 20-40% depending on the country and the industry. Another is to use copyright factors of other countries or averages of other countries in the absence of original information. Some countries also assign 100% weight to these industries in the Interdependent Copyright Industries. Bulgaria, China, Hungary, Jordan, Malawi, South Korea, Tanzania and the United States have all followed this method. We follow this approach. These are shown in Table 3. This means that all output, value added, and employees in interdependent industries are considered as fully contributing to the copyright economy.

## 4.3.3 COPYRIGHT FACTORS IN THE PARTIAL COPYRIGHT INDUSTRIES

WIPO recommends using surveys to determine copyright factor for Partial Copyright Industries. This can be, for example, through firm surveys which capture the share of employees in organisations fully dedicated towards copyright-relevant activities. Survey information is often combined with microeconomic data such as value added, employment and investments in education, scientific and R&D activities.

Some countries such as Korea, Romania and Indonesia used firm surveys to establish copyright factors in the Partial Copyright Industries. WIPO does not specify a strategy for calculating the factors in the absence of a survey, and many countries derive factors from those of other countries. Singapore, Hungary and United States conducted WIPO studies in the early 2000s, and most countries use combinations of their copyright factors to calculate their own. Bhutan, Brunei, Darussalam, France and South Korea also determined their own copyright

Table 3: Copyright factors in the Interdependent Copyright Industries

#### INTERDEPENDENT COPYRIGHT INDUSTRIES

#### **COPYRIGHT FACTOR**

TV Sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Game Equipment, and Other Similar Equipment	1
Computers and Equipment	1
Musical Instruments	1
Photographic and Cinematographic Instruments	1
Photocopiers	1
Blank Recording Material	1
Paper	1

Notes: The copyright factor for all industries in the Interdependent Copyright Industries is set to be 1 following the WIPO studies of Bulgaria, China, Hungary, Jordan, Malawi, South Korea, Tanzania and the United States

#### Table 4: Copyright factors in the Partial Copyright Industries

#### **PARTIAL COPYRIGHT INDUSTRIES**

#### **COPYRIGHT FACTOR**

Apparel, Textiles, And Footwear	0.0051
Jewellery And Coins	0.25
Other Crafts	0.4
Furniture	0.05
Household Goods, China And Glass	0.005
Wall Covering And Carpets	0.02
Toys And Games	0.5
Architecture, Engineering, Surveying	0.1
Design	0.1
Museums	0.5

Notes: The copyright factor for industries in the Partial Copyright Industries is determined using the median value for each industry in countries which disclose their copyright factors.

factors for Partial Copyright Industries, and other countries derive factors from them.

Countries choose factors of "comparable" countries among those available, however, there is no metric of how particular "close" countries are chosen, nor are the weights given to each such neighbour countries justified. For example, the copyright factor for Lebanon is a weighted average of copyright factors of US, Latvia, Hungary and Singapore, and it unclear how the similarity is determined in this case<sup>43</sup>. For some countries such as France, the weights are assigned manually, without a survey or methodological justification. In general, factors vary between 0.5% and 50%.

Given these variations and the absence of a relevant survey in India, we took 26 countries which published their copyright factor for the Partial Copyright Industries and use the modal values. We are taking the modal value as we don't assume a prior on Indian partial copyright industries being similar to other countries' Partial Copyright Industries in the absence of WIPO guidelines on what defines "close". The resulting copyright factors for the Partial Copyright Industries are shown in Table 4.

#### **4.3.4 NON-DEDICATED COPYRIGHT INDUSTRIES**

To derive the copyright factor for the group of Non-Dedicated Copyright Industries, we follow the WIPO (2015) methodology. We assume that the Non-Dedicated Copyright Industries serve the copyright industries and other non-copyright industries in the same ratios as their respective size in the economy.

We first calculate the total value of Gross Value Added of the other industries and then use GDP to calculate the copyright factor for the Non-dedicated Copyright Industries<sup>44</sup>. For India this gives a copyright factor of 0.58 for the combined Non-Dedicated Copyright Industries, which is comparable to other countries. This is shown in Table 5.

Table 5: Copyright factors in the Non-dedicated Copyright Industries

#### **NON-DEDICATED COPYRIGHT INDUSTRIES**

#### **COPYRIGHT FACTOR**

General Wholesale and retailing	0.58
General transportation	0.58
Information and communications	0.58

Notes: The copyright factor in the Non-dedicated Copyright Industries is determined using the WIPO guidelines based on value added in the other copyright-related industries and GDP values.

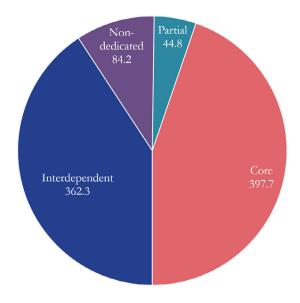
## 5/ INDIA'S CREATIVE ECONOMY

#### **5.1 VALUE ADDED**

Gross Value Added refers to the income formed in the production process, i.e. the production value minus the value of the intermediate inputs. It thus represents the value that is added to goods and/or services used in the production process, including depreciation.

As shown in Figure 1, in 2016-2017 the Gross Value Added of copyright-relevant industries in India Rs 888.89 Billion with Core copyright industries account for 44.74% of value added, followed by Interdependent Copyright Industries (40.76%), Non-dedicated Copyright Industries (9.47%) and Partial Copyright Industries (5.04%).

Figure 1: Gross Value Added across copyright industries



Notes: The share of Gross Value Added across different copyright industries as defined by WIPO. Labels represent the total Rs. Lakh amount of Value Added in each sector.

#### **5.2 EMPLOYMENT**

Employment in India's copyright-relevant industries is calculated to be 1,102,579 workers as shown in Table 11. This cannot be compared with the overall employment due to lack of aggregate figures for employment in 2016-2017. Only employees and not the self-employed are included in these measurements. This is comparable (and in some cases sizeably larger) to employment in copyright-related industries for other countries, but is relatively low given total employment and population figures in India. Better estimates of this can be reached through using data obtained in collaboration with government agencies.

The data for the narrow industries that fall under the manufacturing sector is sourced from the Annual Survey of Industries. This is supplemented with firmlevel data from CMIE Prowess, however employment is not a required part of the financial filings, thus the information on employment is sparse. We supplement this data with figures from the FICCI Frames reports which give employment figures for the media and entertainment industries.

As shown in the table, this gives us a (weighted) total equivalent of 695,526 employees in the Core Copyright Industries, 65,914 employees in the Partial Copyright Industries, and 341,139 employees in the Interdependent Copyright Industries. There is no data available on employment for the Non-dedicated Copyright Industries.

Table 6: Employment across copyright industries

CATEGORY	EMPLOYMENT
Core Copyright Industries	695,526
Partial Copyright Industries	65,914
Interdependent Copyright Industries	341,139
Non-dedicated Copyright Industries	No Data

Notes: Data for employment sourced from the Annual Survey of Industries, CMIE Prowess. Supplemented with FICCI Frames report media and entertainment industry employment figures for 2016-2017.

#### **5.2.1 EMPLOYMENT ELASTICITIES**

We have data on employment as well as value added for multiple industries, using which we can calculate the elasticity of employment to value added. This would tell us where to focus our growth efforts so that we can create the maximal number of jobs. We follow the methodology of Misra and Suresh (2014) and consider a regression framework with log employment regressed on log value added. This is done overall as well as Sector wise. The coefficient from this linear regression translates into: "What is the percentage change in employment associated with a 1% change in value added?"

We find that overall, employment elasticity is statistically significant at 0.87, which can be interpreted as a 10% growth in value addition creating an 8.6% increase in employment. The highest employment elasticity is for the partial copyright industries at 0.91, while the interdependent copyright industries are the same as aggregate elasticity at 0.87. The elasticity of non-dedicated copyright industries cannot be calculated due to lack of data<sup>45</sup>.

#### **5.2.2 INFORMAL SECTOR EMPLOYMENT**

Government datasets only capture the formal sector workforce. For example, in the film industry, only the permanent employees of production houses would be included, whereas spot boys, set workers, and all other contractual workers are excluded. In our case, we were able to supplement formal sector data with employment figures from the Media and Entertainment Skills Council (MESC) Skill's gap study, but for other copyright-relevant industries, these are not covered. For example, newspaper distribution is an informal activity, not captured in any government datasets available for use. Similarly, there are about 1 Lakh cable operators in India46 which are small enterprises and remain outside the ambit of formal sector employment figures. Any copyright-relevant work in handicrafts, leather goods and textiles in the informal sector is not captured in the government figures of employment or value-added in the current study. These numbers make the overall figures in this report on the contribution of copyright-relevant works an underestimate.

Table 7: Exports and Imports across copyright industries

COPYRIGHT SECTOR	EXPORTS (US BILLION)	EXPORTS %	IMPORTS (US BILLION)	IMPORTS %
Core Copyright Industries	0.7	10.76	0.6	2.66
Partial Copyright Industries	3.42	47.77	0.3	1.62
Interdependent Copyright Industries	2.83	40.24	21.91	95.06
Non-dedicated Copyright Industries	0.87	1.22	0.15	0.66
Total	7.16	100	23.05	100

Notes: Trade data sourced from Directorate General of Excise and Customs for 2016-2017, and data on the audio-visual industry trade sourced from the WTO.

#### **5.3 BALANCE OF TRADE**

The trade deficit of copyright-relevant industries - total exports minus total imports - totalled USD 16.36 Billion in 2016-2017. Overall, India typically runs a trade deficit annually, including in 2016-2017. The breakdown of exports and imports into copyright-related industries is shown in Table 7.

Only 10% of exports are from the core copyright industries. This is because the data is primarily data on goods. In the absence of trade data on services, we can therefore expect Partial Copyright and Interdependent Industries to have higher shares of total exports as well as imports as they are mostly in the manufacturing sector<sup>47</sup>. Exports as well as imports data from the Directorate General of Excise and Customs for services would be most helpful in evaluating the value of net exports of the creative sector. Guidance from WIPO on selecting appropriate weights and mapping product codes to industry classes will also improve the estimates48.

<sup>48</sup> We have made our calculations at the 4 digit HS product codes. A more detailed mapping with 6 digit codes could refine the data further to give more accurate estimates.

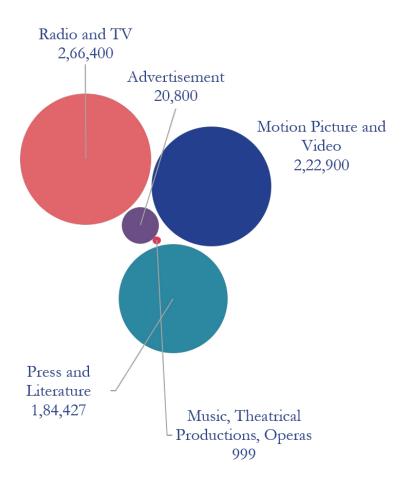
#### **5.4 CORE COPYRIGHT INDUSTRIES**

In this section, we provide further insights into the Core Copyright industries. Core Copyright Industries are "industries that are wholly engaged in creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter". All activities in Core Copyright Industries are considered copyright-relevant, therefore 100% of the value added and employment should be assigned as a contribution to the national economy (WIPO, 2005).

Figure 2 breaks down the employment in Core Copyright Industries into subcategories. Radio and Television account for a large share of the employment (38.30%), closely followed by Motion pictures and video (32.04%). Press and literature covers another 26.52%. Shares of other industries remains low, and data for many subcategories is not available. The value added figures reflect the shares of the Core Copyright Industries as being slightly different. In this case, Software, Databases and Computer games dominates (Rs. 216.51 Billion), followed by Press and Literature(Rs. 166.70 Billion). These are then followed by Advertisement(Rs. 8.93 Billion), Radio and Television (Rs. 3.96 Billion), Motion Picture (Rs. 1.24 Billion) and finally Music, Theatrical Production and Operas (Rs. 313.4 Million).

For many industries in the Core Copyright Industries, data on Value Added is not available at the industry level, and the low figures reflect aggregation of data from a limited set of firms in the CMIE Prowess dataset.

Figure 2: Composition of Core Copyright Industries by employment



Notes: Employment of Core Copyright Industries with size of the bubbles showing relative size of the industry and labels showing the absolute figures for employment in each industry within the Core Copyright Industries.

#### **5.5 INTERDEPENDENT INDUSTRIES**

Interdependent Copyright Industries are industries which 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" (WIPO).

The Core Copyright Industries are considered fully copyright-relevant, and therefore their economic contribution in terms of value added, employment and trade. However, the other three copyright industries, Partial, Interdependent and Non-Dedicated are not. These are assigned copyright factors to take into account that only a fraction of the value added, employment and trade is considered copyright relevant. For this reason, WIPO advises researchers to use field research to determine copyright factors, as these capture the share

of the industry dedicated towards copyright related activities. In the absence of field studies, countries use a variety of strategies to arrive at copyright factors. We follow one such strategy which is simply to assign the full value of the industry to copyright-related activities, through a copyright factor of I.

From Table 8, we can see that with GVA as the measure of economic significance, the most important narrow industries within the Interdependent Copyright Industries are those of paper (45.28%) and TV sets, Radios, VCRs, CD Players, DVD players, and similar equipments (36.35%). If we examine employment, once again we have the same two dominant industries, although the shares change with paper having 74.29% share of employment and TV sets, Radios, VCRs, CD Players, DVD players, and similar equipments having 18.83%. This is shown in table 15.

Table 8: GVA and GVA shares in the Interdependent Copyright Industries

INTERDEPENDENT COPYRIGHT INDUSTRIES	GVA (RS BILLION)	SHARE (%)
TV sets, Radios, VCRs, CD Players, DVD players, and similar equipments	134.47	36.35%
Computer and Equipments	49.20	13.30%
Musical Instruments	0.12	0.03%
Photographic and Cinematographic Instruments	7.67	2.07%
Blank Recording Material	2.00	0.54%
Paper	167.52	45.28%
Photocopiers	1.3386	0.36%

Notes: Data for GVA sourced from ASI, CMIE Prowess and industry reports.

Table 9: Employment and employment shares in the Interdependent Copyright Industries

INTERDEPENDENT COPYRIGHT INDUSTRIES	GVA (RS BILLION)	SHARE (%)
TV sets, Radios, VCRs, CD Players, DVD players,and similar equipments	64239	18.83%
Computer and Equipments	19043	5.58%
Musical Instruments	294	0.09%
Photographic and Cinematographic Instruments	2670	0.78%
Blank Recording Material	235	0.06%
Paper	253423	74.29%
Photocopiers	1235	0.36%

Notes: Data for employment for Interdependent Copyright Industries from ASI, CMIE Prowess and industry reports.

Table 10: GVA in the Partial Copyright Industries

PARTIAL COPYRIGHT INDUSTRIES	GVA (RS. BILLION)
Apparel, textiles and footwear	360.33
Architecture, engineering, surveying	38.98
Furniture	32.09
Household goods, china, glass	310.96
Jewellery and coins	135.87
Toys and games	3.26
Wallcoverings and carpets	15.27

Notes: Data for GVA of the Partial Copyright Industries primarily sourced from Annual Survey of Industries, as the narrow industries in this sector fall under the manufacturing sector.

Table 11: Employment in Partial Copyright Industries

#### **PARTIAL COPYRIGHT INDUSTRIES**

#### **GVA (RS. BILLION)**

Apparel, textiles and footwear	1161961
Furniture	70189
Household goods, china, glass	731303
Jewellery and coins	193968
Toys and games	6906
Wall coverings and carpets	49674

Notes: Data for Employment of the Partial Copyright Industries primarily sourced from Annual Survey of Industries, as the narrow industries in this sector fall under the manufacturing sector.

## 5.6 PARTIAL COPYRIGHT INDUSTRIES

Gross Value Added within the Partial Copyright Industries is shown in Table 11 The highest contribution is that of Apparel, textiles and footwear (Rs. 360.33 Billion) followed by Household goods, china and glass (Rs. 310.96 Billion). Value Addition in Jewellery and coins follow at Rs. 135.87 Billion. There is no information for Value Added on the subcategories of Museums and Other Crafts.

Employment for Partial Copyright Industries is shown in Table 17. Once again, the dominant industries are Apparel, textiles and footwear, Household goods, china and glass, and Jewellery and coins<sup>49</sup>. There was no employment information available for Architecture, engineering and surveying, as well as Museums and Other Crafts as before.

## 5.7 NON-DEDICATED COPYRIGHT INDUSTRIES

The Gross Value Added and shares of Gross Value Added in the Non-dedicated Copyright Industries is given in Table 18. Half of the Value Added can be attributed to General Transportation. General Wholesale and Retail is 41.5% while Information and communication has the smallest share at 8%.

## 6/ HIGHLIGHTS AND TRENDS

Table 12: GVA and GVA shares in Non-dedicated Copyright Industries

NON-DEDICATED COPYRIGHT INDUSTRIES	VALUE ADDED (RS. BILLION)	SHARE (%)
General transportation	73.61	50.51%
General wholesale & retailing	60.52	41.54%
Information and communication	11.58	7.95%

Notes: Data for the Gross Value Added in Non-dedicated Copyright Industries is sourced from CMIE Prowess.

We can compare our findings with the outcomes of 39 studies in other countries that are also based on the WIPO Guide, and published in a compiled report by WIPO in 2015, titled "Economic contribution of the copyright industries". The country studies, although they were conducted for different years, are assumed to be comparable to the present research.

The contribution of Indian copyright relevant industries to the Gross Domestic Product (0.58%) is an order of magnitude below the international average of 5.2%, as shown in Figure 3. However, we should discount this comparison for several reasons.

First, the data on GVA is not available at disaggregated levels that are required for WIPO calculations, and we have sometimes created our measure from the small set of listed firms in the narrow industries that have data available. Second, these outcomes as well as other international comparisons, do not allow normative conclusions: a low rank is not necessarily "bad", nor is a high rank necessarily "good". At best, these comparisons reveal the relative size of the creative industries in the total economy. Normative comparisons between countries is also not appropriate due to different measurement years (see the year of publication of the country studies between brackets in the figure). Moreover, the WIPO methodology has been revised, making this study less comparable with previous WIPObased country studies.

When we compare to the average of Asian countries in Figure 4, we find that the contribution of the copyright industries is India is lower than the Asian average as well. Relative to the Asian benchmark, our estimate of 2.97% share of manufacturing GVA still shows India to be low in copyright contribution, suggesting that the lack of data is not the only driver for the low number. In the case that the creative economy was to be scaled up to the global average of 5.2% of GDP, in this case its value would be ten times as high as it is measured to be today. This would correspond to value added from creative industries become Rs. 8 Trillion instead of Rs. 800 Billion. The ten-fold increase appears very high, but it is actually composed of two components an approximately five-fold increase due to better measurement (approximated from the manufacturing share of GVA) and a doubling due to higher GDP translating into higher GVA for copyright-relevant works. Without better measurement, we would get approximately a doubling in GVA of the copyright-relevant economy, making it about Rs 1.5 Trillion.

If India were operating at the global average, the employment would also be higher, given the high average elasticity of 0.87. With GVA of Rs. 8 Trillion, the corresponding employment given the elasticity would be 94.77 lakh. Once again, this is implicitly composed of two parts - a five-fold increase due to better measurement, and slightly less than doubling due to the GVA increase. Without improvements in measurement but reaching the global average of GVA share to GDP, we would have instead of 11 lakh workers about 20.5 lakh workers employed through the copyright-relevant economies.

Figure 3: Cross-country shares of creative economy to GDP

Source: WIPO studies on the economic contribution of the copyright industries (2014).

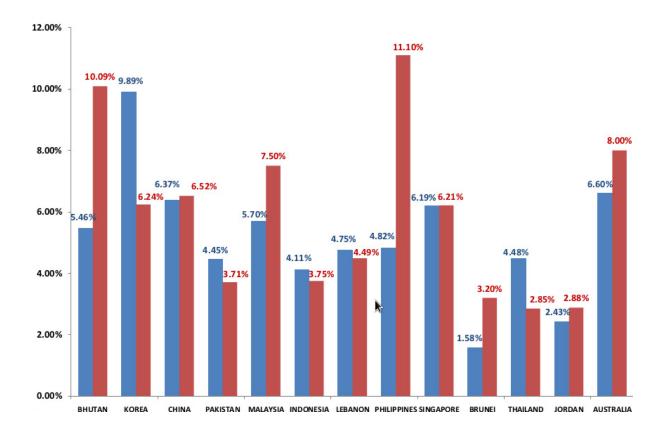


Figure 4: Asia shares of creative economy to GDP

Source: WIPO studies on the economic contribution of the copyright industries, WIPO (2014)

## 7/ CONCLUSIONS AND RECOMMENDATIONS

Copyright industries are well connected with the rest of the economy and contribute sizeable shares to productive activity. In many countries, copyright industries can be considered as important as traditional industries. The performance of creative industries is enhanced when stimulated by governments (economic freedom), the legal system (well established property rights) and the businesses environment (competitiveness, innovation).

We make the following recommendations based on the work in this report:

- 1. Completing this study in coordination with government agencies will significantly improve estimates. For example, the Central Statistical Office releases GVA figures at the 2-digit industry classification. Having GVA figures available at the 4 digit classification will give a much more realistic share value for the GVA of copyright-related industries.
- 2. National studies confirm the applicability of the WIPO methodology in countries at various levels of development. However, the WIPO methodology itself is suited to developed countries rather than countries, where most of the firms are informal, data such as that on employment is collected through household surveys. Though data on value added is captured mostly through the formal sector, most of the employment of the economy is in the informal sector, and thus the measures for employment is particularly poor. Moving to include a greater share of emerging and developed economies will help refine or modify the WIPO methodology to capture countries like India better.
- 3. Subsequent revisions to this analysis will benefit greatly from trade data on services, especially data on imports which is not available through public sources. Since services are a sizeable share of India's trade, we expect them to be relevant for the creative industry as well.

4. Including qualitative analysis in addition to quantitative measures consistent with the WIPO methodology will help inform copyright-relevant activities in the Indian setting. Surveys, qualitative interviews, and community-sourced data can help in this regard.

The merit of further studies and deeper analysis of the copyright industries is in outlining the relevance of copyright for economic growth. The WIPO model is a valuable tool in the context of such analysis.

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## 8/ A1: INDUSTRY MAPPING

SECTOR	SUB-SECTOR	WIPO industry	NIC	DESCRIPTION
CORE	Press and Literature	9000	9000	Dramatic arts, music and other arts activities
CORE	Press and Literature	7490	7490	Other technical activities n.e.c.(for translation and interpretation)
CORE	Press and Literature	8299	8299	Other business support service activities n.e.c. (inc. real-time, i.e. simultaneous, closed captioning of live television performances of meetings,conferences)
CORE	Press and Literature	5811	5811	Publishing of books, brochures, and other publications
CORE	Press and Literature	5813	5813	Publishing of newspapers, journals, and periodicals
CORE	Press and Literature	6391	6391	News agency activities
CORE	Press and Literature	5819	5819	Other publishing activities
CORE	Press and Literature	1811	1811	Printing
CORE	Press and Literature	1812	1812	Service activities related to printing
CORE	Press and Literature	8219	8219	Photocopying, document preparation, and other specialized office support activities
CORE	Press and Literature	4649	4649	Wholesale of other household goods (inc. wholesale of stationery, books, magazines and newspapers
CORE	Press and Literature	4761	4761	Retail sale of books, newspapers, and stationery in specialized shops
CORE	Press and Literature	7729	7729	Renting and leasing of other personal and household goods (inc. books, journals, and magazines)
CORE	Press and Literature	9101	9101	Library and archives activities
CORE	Music, Theatrical Productions, Operas	9000	9000	Creative, arts, and entertainment activities
CORE	Music, Theatrical Productions, Operas	5920	5920	Sound recording and music publishing activities
CORE	Music, Theatrical Productions, Operas	1820	1820	Reproduction of recorded media
CORE	Music, Theatrical Productions, Operas	4762	4762	Retail sale of music and video recordings in stores
CORE	Music, Theatrical Productions, Operas	7722	7722	Renting of video tapes and disks
CORE	Music, Theatrical Productions, Operas	7990	7990	Other reservation service and related activities (inc. ticket sales, activities for theatrical, sports and other amusement and entertainment events)
CORE	Motion Picture and Video	5911	5911	Motion picture, video, and television program production activities
CORE	Motion Picture and Video	5912	5912	Motion picture, video, and television program post production activities
CORE	Motion Picture and Video	5913	5913	Motion picture, video and television programme distribution activities

SECTOR	SUB-SECTOR	WIPO industry	NIC	DESCRIPTION
CORE	Radio and Television	6010	6010	Radio broadcasting
CORE	Radio and Television	6020	6020	Television programming and broadcasting activities
CORE	Photography	7420	7420	Photographic activities
CORE	Software, Databases and Computer Games	5820	5820	Software publishing
CORE	Software, Databases and Computer Games	6201	6201	Computer programming activities
CORE	Software, Databases and Computer Games	6202	6202	Computer consultancy and computer facilities management activities
CORE	Software, Databases and Computer Games	6209	6209	Other information technology and computer service activities
CORE	Software, Databases and Computer Games	4651	4651	Wholesale of computers, computer peripheral equipment, and software (inc. software)
CORE	Software, Databases and Computer Games	474	474	Retail sale of computers, peripheral units, software and telecommunications equipment in specialized stores (inc. retail sale of non-customized software, including video games)
CORE	Software, Databases and Computer Games	6311	6311	Data processing, hosting, and related activities
CORE	Software, Databases and Computer Games	6312	6312	Web portals
CORE	Visual and Graphic Arts	7410	7410	Specialized design activities (inc. graphic designers)
CORE	Advertisement	7310	7310	Advertising
CORE	Advertisement	7320	7320	Market research and public opinion polling (inc. marketing studies)
CORE	Copyright Collecting	9412	9412	Activities of professional membership organizations (inc. associations of specialists engaged in cultural activities)
PARTIAL	Apparel, textiles, and footwear	1410	1410	Manufacture of wearing apparel
PARTIAL	Apparel, textiles, and footwear	1392	1392	Manufacture of made-up textile articles, except apparel
PARTIAL	Apparel, textiles, and footwear	1520	1520	Manufacture of footwear
PARTIAL	Apparel, textiles, and footwear	4641	4641	Wholesale of textiles, clothing, and footwear
PARTIAL	Apparel, textiles, and footwear	4751	4751	Retail sale of textiles in specialized stores
PARTIAL	Apparel, textiles, and footwear	4771	4771	Retail sale of clothing, footwear, and leather articles in specialized stores
PARTIAL	Jewelry and coins	3211	3211	Manufacture of jewelry and related articles
PARTIAL	Jewelry and coins	3212	3212	Manufacture of imitation jewelry and related articles
PARTIAL	Jewelry and coins	4719	4719	– Other retail sales in non-specialized stores (inc. jewelry)
PARTIAL	Other crafts	9499	9499	Activities of other membership organizations n.e.c. (inc. craft and collectors' clubs).
PARTIAL	Furniture	3100	3100	Manufacture of furniture

PARTIAL	Household goods, china and glass	2310	2310	Manufacture of glass and glass products
PARTIAL	Household goods, china and glass	1391	1391	Manufacture of knitted and crocheted fabrics
PARTIAL	Household goods, china and glass	1430	1430	Manufacture of knitted and crocheted apparel
PARTIAL	Household goods, china and glass	1629	1629	Manufacture of other products of wood
PARTIAL	Household goods, china and glass	2599	2599	Manufacture of other fabricated metal products n.e.c.
PARTIAL	Household goods, china and glass	4752	4752	Retail sale of hardware, paints, and glass in specialized stores
PARTIAL	Wallcoverings and carpets	1393	1393	Manufacture of carpets and rug
PARTIAL	Wallcoverings and carpets	4753	4753	Retail sale of carpets, rugs, wall, and floor coverings in specialized stores
PARTIAL	Toys and games	3240	3240	Manufacture of games and toys
PARTIAL	Toys and games	4764	4764	Retail sale of games and toys in specialized stores
PARTIAL	Architecture, engineering, surveying	7110	7110	Architectural and engineering activities and related technical consultancy
PARTIAL	Design	7410	7410	Specialized design activities (inc. interior decorators)
PARTIAL	Museums	9102	9102	Museums activities and preservation of historical sites and buildings
INTERDEP.	TV Sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Game Equipment, and Other Similar Equipment	2630	2630	Manufacture of communication equipment (inc. radio and TV studio and broadcasting equip.)
INTERDEP.	TV Sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Game Equipment, and Other Similar Equipment	2640	2640	Manufacture of consumer electronics (inc. TVs, VCRs, DVDs, Hi-Fis, consoles
INTERDEP.	TV Sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Game Equipment, and Other Similar Equipment	4742	4742	Retail sale of audio and video equipment in specialized stores
INTERDEP.	TV Sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Game Equipment, and Other Similar Equipment	7730	7730	Renting and leasing of other machinery, equipment, and tangible goods (inc. profess. radio and TV equip.)
INTERDEP.	Computers and Equipment	2620	2620	Manufacture of computers and peripheral equipment
INTERDEP.	Musical Instruments	3220	3220	Manufacture of musical instruments
INTERDEP.	Musical Instruments	4759	4759	Retail sale of electrical household appliances (inc. musical instruments)
INTERDEP.	Photographic and Cinematographic Instruments	2670	2670	Manufacture of optical instruments and photographic equipment
INTERDEP.	Photographic and Cinematographic Instruments	4773	4773	Other retail sales of new goods in specialized stores (inc. photographic, optical and precision equipment)
INTERDEP.	Photocopiers	2817	2817	Manufacture of office machinery and equipment (inc. photocopy machines)
INTERDEP.	Photocopiers	4659	4659	Wholesale of other machinery and equipment (inc. office machinery and equipment)
INTERDEP.	Blank Recording Material	2680	2680	Manufacture of magnetic and optical media.

INTERDEP.	Blank Recording Material	4652	4652	Wholesale of electronic and telecommunications equipment and parts (inc. blank material)
INTERDEP.	Paper	1701	1701	Manufacture of pulp, paper, and paperboard
INTERDEP.	Paper	1702	1702	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
INTERDEP.	Paper	1709	1709	Manufacture of other articles of paper and paperboard
NON-DEDICATED	General wholesale and retailing (G)	461	461	461 – Wholesale on a fee or contract basis
NON-DEDICATED	General wholesale and retailing (G)	464	464	464 – Wholesale of household goods (not prev. inc. in other CIs)
NON-DEDICATED	General wholesale and retailing (G)	466	466	466 – Other specialized wholesale
NON-DEDICATED	General wholesale and retailing (G)	471	471	471 – Retail sale in non-specialized stores(not prev. inc. in other CIs)
NON-DEDICATED	General wholesale and retailing (G)	474	474	474 – Retail sale of information and communications equipment in specialized stores (not prev. inc. in other CIs)
NON-DEDICATED	General wholesale and retailing (G)	475	475	475 – Retail sale of other household equipment in specialized stores (not prev. inc. in other Cls)
NON-DEDICATED	General wholesale and retailing (G)	476	476	476 – Retail sale of cultural and recreation goods in specialized stores (not prev. inc. in other CIs)
NON-DEDICATED	General wholesale and retailing (G)	477	477	477 – Retail sale of other goods in specialized stores (not prev. inc. in other CIs)
NON-DEDICATED	General wholesale and retailing (G)	478	478	478 – Retail sale via stalls and markets
NON-DEDICATED	General wholesale and retailing (G)	479	479	479 – Retail trade not in stores, stalls,or markets
NON-DEDICATED	General transportation (H)	49	49	Division: 49 – Land transport; transport via pipelines
NON-DEDICATED	General transportation (H)	50	50	Division: 50 – Water transport
NON-DEDICATED	General transportation (H)	51	51	Division: 51 – Air transport
NON-DEDICATED	General transportation (H)	52	52	Division-52 support activities for transportation
NON-DEDICATED	General transportation (H)	53	53	Division: 53 – Postal and courier activities
NON-DEDICATED	General transportation (H)	79	79	Division: 79 – Travel agency, tour operator, reservation service, and related activities
NON-DEDICATED	Information and communication (J)	61	61	Division: 61 – Telecommunications

## 9/ A2: LEGAL FRAMEWORKS RELEVANT TO COPYRIGHT

NATIONAL LEGISLATION	Berne Convention for the Protection of Literary and Artistic Works, 1886			
The Indian Penal Code, 1860				
The Code of Civil Procedure, 1908	Convention for the Protection of Producers of Phonograms Against Unauthorised Duplication of Their Phonograms, 1971			
The Constitution of India, 1950  Cinematograph Act, 1952	Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled, 2013			
The States Re-organisation Act, 1956	WIPO Performances and Phonograms Treaty, 1996			
The Copyright Act, 1957	WIPO Copyright Treaty, 2002			
Income Tax Act, 1961	Protocols 1,2, and 3 annexed to the Universal Copyright Convention as signed at Geneva on 6 September 1952			
The Specific Relief Act, 1963	Universal Copyright Convention of 6 September 1952, with Appendix Declaration relating to Article XVII and Resolution concerning Article XI			
The Code of Criminal Procedure, 1973	Protocol to the Convention for the Protection of Cultural Property in the Event of Armed Conflict, 1954			
Prasar Bharti (Broadcasting Corporation of India) Act, 1990	Convention for the Protection of Cultural Property in the Event of Armed Conflict, 1954			
Cable Television Networks (Regulation) Act, 1995	Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958			
Persons with Disabilities (Equal Opportunities, Protection or Rights and Full Participation) Act, 1995	Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, 1970			
The Arbitration and Conciliation Act, 1996	Convention concerning the Protection of the World Cultural and Natural Heritage, 1972			
The Trade Marks Act, 1999	International Covenant on Economic, Social and Cultural Rights, 1996			
Designs Act, 2000	Protocols 1 and 2 annexed for Universal Copyright Convention as revised at Paris on 24 July 1971			
Information Technology Act, 2000	Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), 1994			
The Competition Act, 2002	Convention for the Safeguarding of the Intangible Cultural Heritage, 2003			
Sports Broadcasting Signals (Mandatory Sharing with Prasar Bharati) Act, 2007	Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005			
The Companies Act, 2013	Convention on the Rights of Persons with Disabilities, 2007			



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