

COPYRIGHT INDUSTRIES in the U.S. Economy



The 2020 Report

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Prepared for the
International Intellectual
Property Alliance® (IIPA®)

COPYRIGHT INDUSTRIES in the U.S. Economy



The 2020 Report

Copyright Industries in the U.S. Economy: The 2020 Report is the 18th report on the U.S. copyright industries prepared for the International Intellectual Property Alliance (IIPA) since 1990.

Citation format: *Copyright Industries in the U.S. Economy: The 2020 Report*, by Robert Stoner and Jéssica Dutra of Economists Incorporated, prepared for the International Intellectual Property Alliance (IIPA), (December 2020), www.iipa.org.

This latest *Report* updates and supplements 17 previous reports produced by Economists Incorporated for the IIPA:

- Stephen E. Siwek and Harold Furchtgott-Roth, *Copyright Industries in the U.S. Economy* (released in November 1990);
- Stephen E. Siwek and Harold Furchtgott-Roth, *Copyright Industries in the U.S. Economy: 1977-1990* (released in September 1992);
- Stephen E. Siwek and Harold Furchtgott-Roth, *Copyright Industries in the U.S. Economy: 1993 Perspective* (released in October 1993);
- Stephen E. Siwek and Harold Furchtgott-Roth, *Copyright Industries in the U.S. Economy: 1977-1993* (released in January 1995);
- Stephen E. Siwek and Gale Mosteller, *Copyright Industries in the U.S. Economy: The 1996 Report* (released in October 1996);
- Stephen E. Siwek and Gale Mosteller, *Copyright Industries in the U.S. Economy: The 1998 Report* (released in May 1998);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 1999 Report* (released in December 1999);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2000 Report* (released in December 2000);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2002 Report* (released in April 2002);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2004 Report* (released in October 2004);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2006 Report* (released in January 2007);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2003-2007 Report* (released in July 2009);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2011 Report* (released in November 2011);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2013 Report* (released in November 2013);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2014 Report* (released in December 2014);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2016 Report* (released in December 2016); and
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2018 Report* (released in December 2018).

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Cover design and graphic layout by Liz Holland, El Cerrito, California

ISBN: 978-0-9911233-4-6

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AUTHORS ACKNOWLEDGEMENTS

Trevor Lerner, a Research Associate at Economists Incorporated, performed much of the computer analysis and programming required to complete the World Market component of this *Report*. Economists Incorporated is grateful to the International Intellectual Property Alliance (IIPA) and its member associations for their support and assistance in the drafting of this *Report*. We thank Eric Schwartz and Kevin Rosenbaum of the IIPA for their guidance throughout this process, and Pamela Burchette for her assistance in preparing this *Report*.

IIPA is a private sector coalition, formed in 1984, of trade associations representing U.S. copyright-based industries working to improve copyright protection and enforcement abroad and to open up foreign markets closed by piracy and other market access barriers. Members of the IIPA include *Association of American Publishers*, *Entertainment Software Association*, *Independent Film & Television Alliance*, *Motion Picture Association*, and *Recording Industry Association of America*. Collectively, IIPA's five member associations represent over 3,200 U.S. companies producing and distributing copyrightable content. The materials produced and distributed by IIPA member companies include: entertainment software (including interactive video games for consoles, handheld devices, personal computers and the Internet) and educational software; motion pictures, television programming, DVDs and home video and digital representations of audiovisual works; music recorded in all formats (from digital files to CDs and vinyl) for streaming and other online services as well as broadcasting, public performance and synchronization in audiovisual materials; and fiction and non-fiction books, educational instructional and assessment materials, and professional and scholarly journals, databases and software in all formats. Visit <https://iipa.org/>.

COVID-19 DISCLAIMERS

This *Report* is being released in 2020, a year that has no doubt been unprecedented in the contemporary economy due to the presence of Coronavirus Disease (COVID-19). Since the data used in this study only go through 2019, the effects of COVID-19 in the economy cannot be clearly seen and/or estimated at this point. Some effects can, however, already be seen in foreign sales (reflected in the World Market section), as other economies were hit earlier than the U.S, diminishing international activity towards the end of 2019.

The full effects in the economy as a whole and within the copyright industries from this pandemic can only be estimated at a later point. However, this report shows the steady prominent role and significant growth of the copyright industries in the United States, which seem likely to continue even if there are potential short run impacts from the virus.

PREFACE

The International Intellectual Property Alliance (IIPA) was founded in 1984 as an alliance of trade associations representing creators, producers, and distributors of copyrighted material, including: movies and television programming; recorded music; entertainment software and video games; and books and journals. Since its inception, the IIPA has worked with the U.S. government, foreign governments, and rights holders to improve copyright protection and enforcement abroad and to provide fair and equitable market access in foreign markets. These efforts have resulted in significant improvements in foreign copyright laws and on-the-ground enforcement in dozens of countries, as well as the lowering of market access barriers to allow creators to compete on a level playing field in global markets. These legal reform, enforcement, and market access improvements have had a substantial positive impact on how the creative industries contribute to the U.S. economy, whether measured in terms of overall contribution, employment and wages, or foreign sales and exports, to the benefit of millions of individuals and enterprises in the United States.

In 1990, in order to quantify the contribution of the copyright industries, IIPA commissioned the first economic study of the contributions of the copyright industries to the U.S. economy and, since then, has periodically prepared subsequent reports. *Copyright Industries in the U.S. Economy: The 2020 Report* is the 18th report. Stephen E. Siwek, at Economists Incorporated, prepared that first study and every subsequent study through 2018. With the recent retirement of Mr. Siwek, Robert Stoner and Jéssica Dutra of Economists Incorporated have prepared this *Report* using the methodology pioneered by Mr. Siwek. *The 2020 Report* covers the period from 2016 to 2019 and is based almost entirely on U.S. government data. This *2020 Report* shows that the copyright industries: (1) make up an increasingly large percentage of value added to GDP; (2) create more and better paying jobs than other sectors of the U.S. economy; (3) grow faster than the rest of the U.S. economy; and (4) contribute substantially to U.S. foreign sales and exports, outpacing many industry sectors. As this *Report* shows, the current contribution of the core copyright industries to the U.S. economy well surpasses one trillion dollars per year.¹

In the past few decades, as international trade in copyrighted materials increased and globalized, foreign governments and intergovernmental organizations such as the World Intellectual Property Organization (WIPO) took note of the significance of the copyright industries to national economies and the positive impact these industries were having on economic growth, technological innovation and digital trade, and cultural diversity. In 2003, WIPO took a critical step forward to document this impact by issuing a *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*. The *Guide*, developed by an experts' group of economists from many countries, including Mr. Siwek, described methodologies for measuring the role of copyright industries in domestic economies. Those methodologies have since been adapted in well over 40 countries' national reports. In 2015, WIPO published a revised edition of the *Guide*, which can be found at: <http://www.wipo.int/publications/en/details.jsp?id=259>. The revised *Guide* referenced the many national copyright industry

¹The "core" copyright industries are those industries whose primary purpose is to create, produce, distribute or exhibit copyright materials.

studies that were released since the original *Guide* was published. The revised *Guide* also included a variety of tables and charts that quantify the extent to which the WIPO principles of copyright contributions to national economies have been adopted in national studies throughout the world. These national studies provide the economic underpinnings for efforts to reform copyright laws, improve enforcement to open markets for new and existing methods of dissemination of copyrighted materials, and to effectively address copyright piracy.²

Despite the robust achievements of the copyright industries during the period covered in this *Report* (and in the prior reports), significant challenges remain. The copyright industries derive a growing percentage of their revenue from the digital marketplace. Problems such as outdated copyright and related enforcement laws, inadequate or ineffective enforcement (especially against online piracy), unlicensed uses of copyright materials, and market access challenges inhibit the growth of these markets in the United States and abroad. Economic reports such as this one underscore what is at stake. They provide a compelling argument for more effective laws, improved enforcement, and market access regimes that will promote and foster the growth of the copyright industries throughout the world for the benefit of consumers, as well as the creators, producers, and distributors of copyrighted materials.

– Eric J. Schwartz, Kevin M. Rosenbaum, Sofia Castillo, and Pamela S. Burchette

International Intellectual Property Alliance



² Various national studies were described and compared in a WIPO document titled, 2014 WIPO Studies on the Economic Contribution of the Copyright Industries Overview, http://www.wipo.int/export/sites/www/copyright/en/performance/pdf/economic_contribution_analysis_2014.pdf. The WIPO website now provides links to 51 country studies employing virtually the same agreed-upon methodology, <http://www.wipo.int/copyright/en/performance/>.

I. EXECUTIVE SUMMARY

Copyright Industries in the U.S. Economy: The 2020 Report demonstrates that the core copyright industries of the United States—those industries whose primary purpose is to create, produce, distribute or exhibit copyright materials—provide significant value added to Gross Domestic Product (GDP); an increasing number of high-paying jobs; real growth which outpaces the rest of the economy; and substantial foreign sales and exports, surpassing many industry sectors.

Copyright Industries Contribute Significantly to U.S. Gross Domestic Product (GDP)

- In 2019, the value added by the core copyright industries to U.S. GDP reached more than \$1.5 trillion dollars (\$1,587.16 billion), accounting for 7.41% of the U.S. economy.
- In 2019, the value added by the total copyright industries³ to GDP exceeded \$2.5 trillion (\$2,568.23 billion), accounting for 11.99% of the U.S. economy.

Copyright Industries Employ Millions of Workers Who Earn a “Compensation Premium”

- The core copyright industries employed 5.7 million workers in 2019, accounting for 3.79% of the entire U.S. workforce, and 4.46% of total private employment in the U.S.
- The average annual 2019 compensation paid to core copyright workers – \$107,805 – far exceeds the average annual compensation paid to all U.S. workers – \$75,214 – amounting to a 43% “compensation premium” over the average U.S. annual wage.
- The total copyright industries employed nearly 11.7 million workers in 2019, accounting for 7.71% of all U.S. employment, or 9.06% of all private employment in the United States. The average annual compensation paid to employees of the total copyright industries in 2019, \$88,278.13, exceeds the U.S. average annual wage by around 17%.

Copyright Industries’ Real Growth Rates Outpace the Rest of the U.S. Economy

- During the period 2016-2019, the core copyright industries grew at an aggregate annual rate of 5.87%. The average annual growth rate of the entire U.S. economy over the same period was only 2.48%. The core copyright industries grew more than two times the rate of the remainder of the U.S. economy.
- During the same period, the total copyright industries grew at an annual rate of 4.85%, also well surpassing the growth rate for the remainder of the U.S. economy.

Copyright Industries Contribute Significantly to Foreign Sales and Exports, Outperforming Many Major U.S. Industry Sectors

- Sales of select U.S. copyright products in overseas markets amounted to \$218.76 billion in 2019, a significant increase over previous years.⁴
- The foreign sales of selected copyright industry sectors exceed foreign sales of other major U.S. industries, including the electronic equipment, appliances and components industry (\$173.2 billion), the chemicals manufacturing industry (\$142.3 billion), the pharmaceutical and medicines industry (\$140.7 billion), the agricultural products industry (\$96.7 billion), and the aerospace products and parts industry (\$66.2 billion).

³The “total” copyright industries include not only the core copyright but also the partial copyright, non-dedicated support, and interdependent industries. “Partial” copyright industries are industries in which only some aspect or portion of the products that they create qualify for copyright protection. These industries range from fabric to jewelry to furniture to toys and games. “Non-dedicated support” industries include industries that distribute both copyright and non-copyright protected materials to businesses and consumers. Examples here include transportation services, telecommunications and wholesale and retail trade. As in past studies, only a portion of the total value added by these industries is considered to be part of the copyright industries. “Interdependent” industries include those that produce, manufacture, and sell equipment whose function is primarily to facilitate the creation, production, or use of works of copyrighted matter. These industries include manufacturers, wholesalers and retailers of TV sets, personal computers, and other devices, and usage dependent products including blank recording material, and certain categories of paper.

⁴This includes total foreign sales of the following “selected” core copyright industry sectors: recorded music, motion pictures, television, and video; software publishing; and non-software publications including newspapers, books and periodicals.

II. INTRODUCTION

Copyright Industries in the U.S. Economy: The 2020 Report is the 18th in a series issued over the last 30 years by Economists Incorporated, updating and supplementing 17 earlier reports prepared on behalf of the IIPA. This latest *Report* presents data on the value added contributions of the copyright sector to the U.S. economy for the years 2016-2019; the percentage contribution of the copyright sector to the overall U.S. economy; the relative growth of the copyright industries compared with the remainder of the economy; employment levels in the copyright sector; the average compensation for workers in the copyright sector in comparison to other sectors; and the contributions of selected copyright industries to exports and foreign sales. The underlying data used in this *Report* is current through 2019.⁵

This *Report* confirms once again that the U.S. copyright industries contribute significantly to U.S. GDP. The creative industries continue to outpace the rest of the economy in real growth. The copyright industries also continue to employ millions of workers whose average compensation levels substantially exceed the average level of compensation paid to all U.S. workers. Indicators from select core copyright industries of the U.S. demonstrate growth of foreign sales and exports during 2016-2019, with foreign sales and exports in those sectors outperforming many key U.S. industrial sectors.

This *Report* is presented in six sections:

- The copyright industries
- Value added by the copyright industries
- Employment in the copyright industries
- U.S. copyright materials in world markets
- Copyright and the digital economy
- Conclusion

This study continues to reflect the use of industry data classifications adopted under the North American Industry Classification System (“NAICS”) which has been widely implemented by U.S. statistical agencies. It also continues to follow the international standards and recommendations propounded by the World Intellectual Property Organization’s (“WIPO”) review in 2015 regarding the development of economic and statistical standards to measure the impact of domestic copyright industries on domestic economies.⁶

The data in this *Report* quantify the size and critical importance of the copyright industries to the U.S. economy, generally using the most current data available. As in the past, the U.S. copyright industries’ contribution to the U.S. economy is measured by three economic indicators: value-added to the U.S. gross domestic product (“GDP”) in current dollars, and real annual growth; industry employment, share of national employment, and compensation per employee; and revenues generated from foreign sales and exports. As set forth in this *Report*, during the period 2016-2019, the copyright industries, both core and total, achieved real growth rates in excess of 4.3% per year.

As this *Report* documents, the U.S. copyright industries continue to make a disproportionately positive contribution to real growth in U.S. GDP.

⁵In this study the values presented for 2016 and 2017 have been updated from the results presented in *Copyright Industries in the U.S. Economy: The 2018 Report*. The updates result from data revisions published by the U.S. Bureau of Economic Analysis (“BEA”) and by other government agencies since the last report was completed.

⁶World Intellectual Property Organization, *Guide on Surveying the Economic Contribution of the Copyright-Based Industries*, 2015 Revised Edition.

III. THE COPYRIGHT INDUSTRIES

In preparing this *Report* we followed the methodology of the latest reports, conforming to the international standard defined by WIPO. The basis of the classification “provides comprehensive, integrated, and internationally agreed recommendations for the measurement and analysis of economic activity.”⁷ There are four categories: core, partial, non-dedicated, and interdependent; which are described in further detail below.

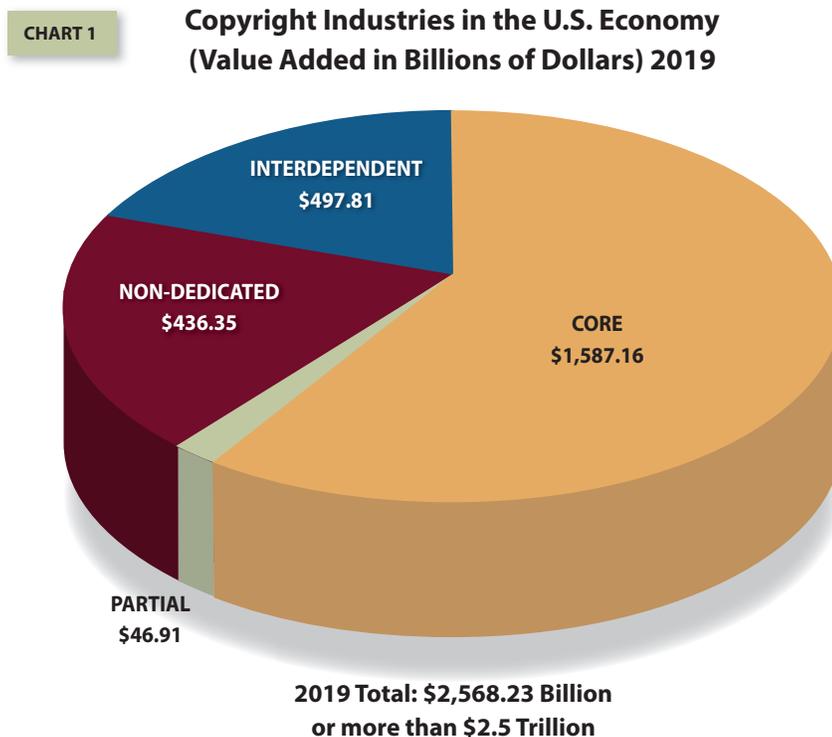
The **core** copyright industries include those industries whose primary purpose is to create, produce, distribute or exhibit copyright materials. These industries include books, newspapers and periodicals, motion pictures, recorded music, radio and television broadcasting, and software in all formats, including video games.

Partial copyright industries include industries in which only some aspect or portion of the products they create qualify for copyright protection. These industries range from fabric to jewelry to furniture to toys and games.

Non-dedicated support industries include those that distribute both copyright and non-copyright protected materials to businesses and consumers. Examples here include transportation services, telecommunications and wholesale and retail trade. As in past studies, only a portion of the total value added by these industries is considered to be part of the copyright industries.

Interdependent industries include those that produce, manufacture, and sell equipment whose function is primarily to facilitate the creation, production, or use of works of copyrighted matter. These industries include manufacturers, wholesalers and retailers of CD players, TV sets, VCRs, personal computers and usage dependent products including blank recording material and certain categories of paper.

We refer to these four groups collectively as the “**total**” copyright industries.



⁷ *Id.*, ¶1101.

IV. VALUE ADDED BY THE COPYRIGHT INDUSTRIES

The most appropriate way to measure an industry’s contribution to the national economy is to measure the industry’s value added. Value added reflects the economic contribution of labor and capital of a particular industry. The sum of the value added of all industries in the United States is equal to gross domestic product (“GDP”), a standard measure of the size of the U.S. economy. For this reason, value added calculations can be used to draw comparisons of the relative size and growth rates of different industries in a way that is consistent with the federal government’s national income and product accounting data.

This *Report* gives continuity to the methodology in the recent reports, in which industry specific value added estimates produced by the U.S. Bureau of Economic Analysis (“BEA”) were employed to derive the contributions made by the core, interdependent, non-dedicated, and partial copyright industries to the U.S. economy. A benefit of using these data is that the BEA calculates both current dollar and constant dollar value added for the industry classifications that it analyzes. In this *Report*, the constant dollar value added figures are used to derive estimates of the real growth rates achieved by the core and total copyright industries on a year-by-year basis. These data are also used to measure the contribution made by the copyright industries to the real annual growth achieved by the U.S. economy as a whole.

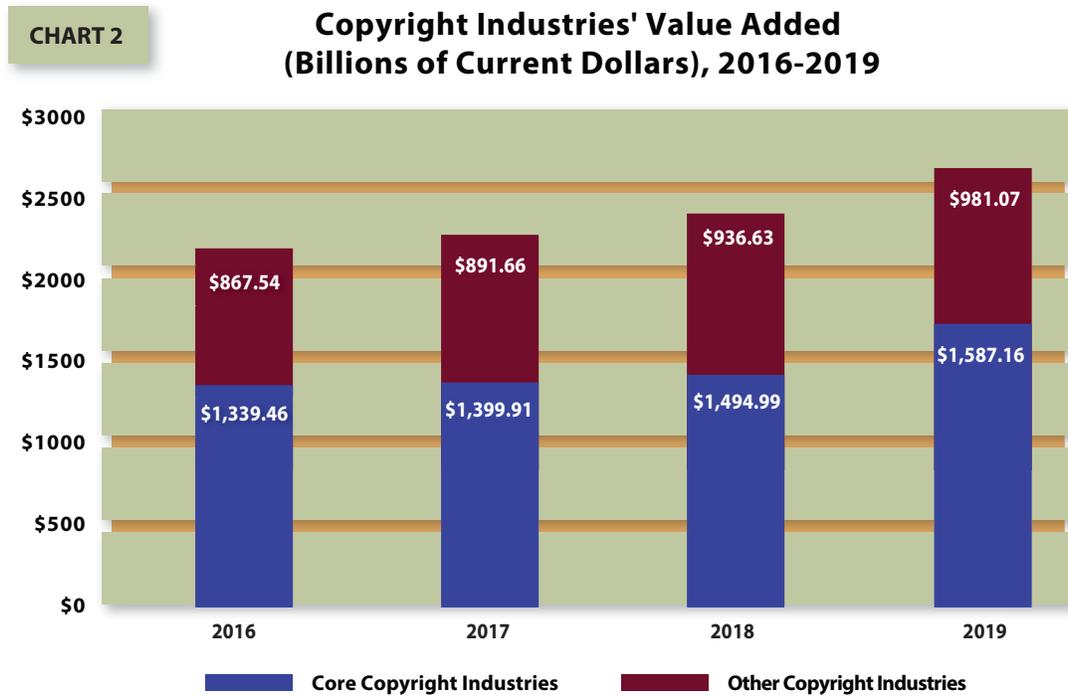
Within this context, the copyright industries remain a particularly important contributor to U.S. GDP. As shown in Table 1 below, the current dollar value added to U.S. GDP by the core copyright industries reached \$1.587 trillion in 2019. In the same year, U.S. GDP reached \$21.427 trillion. Thus, in 2019, the core copyright industries maintained a 7.41% share of nominal U.S. GDP. The values added by the total copyright industries in the same period are also shown in Table 1. As reported in Table 1, the value added to U.S. GDP by the total copyright industries in 2019 was \$2.568 trillion, or 11.99% of U.S. GDP.

TABLE 1

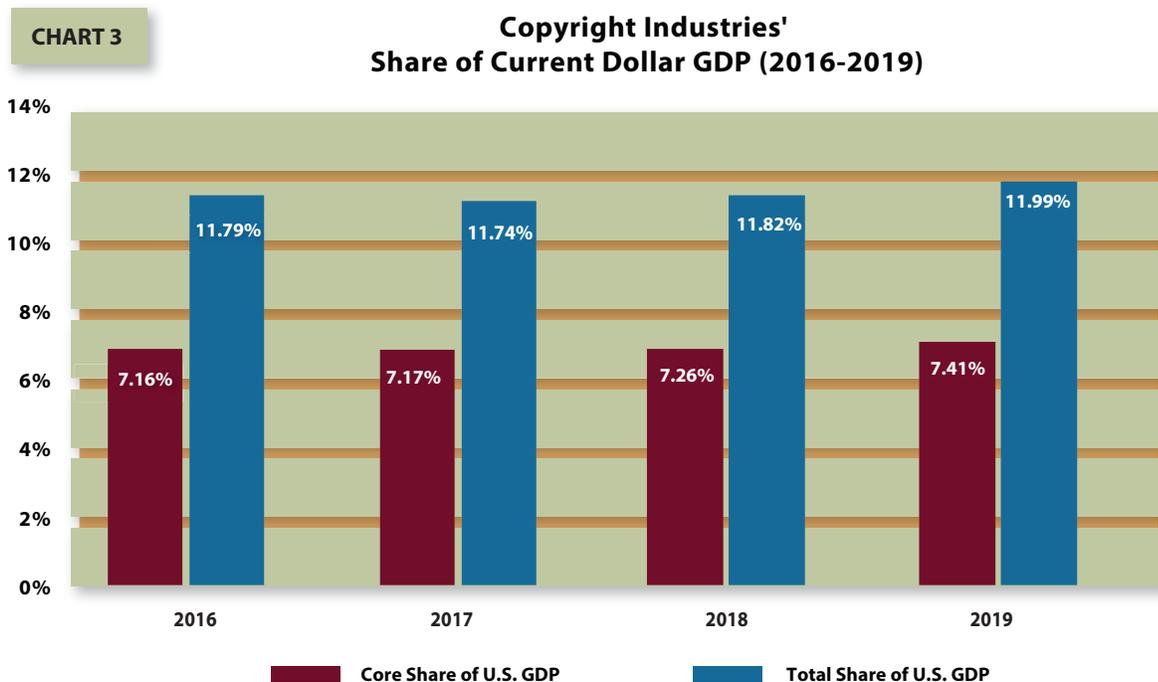
**Copyright Industries Value Added
(Billions of U.S. Dollars), 2016-2019**

	2016	2017	2018	2019
Core Copyright Industries	\$1,339.46	\$1,339.91	\$1,494.99	\$1,587.16
Total U.S. GDP	\$18,715.00	\$19,519.00	\$20,580.20	\$21,427.70
Core Share of U.S. GDP	7.16%	7.17%	7.26%	7.41%
	2016	2017	2018	2019
Total Copyright Industries	\$2,207.00	\$2,291.57	\$2,431.62	\$2,568.23
Total U.S. GDP	\$18,715.00	\$19,519.00	\$20,580.20	\$21,427.70
Total Share of U.S. GDP	11.79%	11.74%	11.82%	11.99%

As shown in Chart 2, our current estimates of the value added for the core copyright industries increased from \$1,339.46 billion in 2016 to \$1,587.16 billion in 2019. The estimated value added for the other (non-core) copyright industries rose from \$867.54 billion in 2016 to \$981.07 billion in 2019.



The copyright industries' current dollar share of the U.S. economy is provided in Chart 3 below. On the basis of the methodology described above, we now estimate that the core copyright industries' current dollar share of the U.S. economy has increased from approximately 7.16% to 7.41% of the U.S. economy over the years 2016 through 2019. Total copyright industries' current dollar share of U.S. GDP reached 11.99% in 2019.



To put these figures in perspective, it is useful to compare the economic contributions of the U.S. copyright industries to the contributions made by other U.S. industries in the same time period. Inter-industry comparisons to the U.S. copyright industry in 2018 and 2019 are shown in Table 2.

Copyright	2018	2019
Core Copyright	\$1,494.99	\$1,587.16
Total Copyright	\$2,431.62	\$2,568.23
Government	2018	2019
Federal Government	\$790.80	\$813.30
State & Local Government	\$1,753.80	\$1,817.60
Other Industries	2018	2019
Construction	\$839.10	\$886.60
Healthcare & Social Assistance	\$1,536.90	\$1,617.90
Finance & Insurance	\$1,567.30	\$1,627.90

As reported in Table 2, the total value added to the U.S. economy by the entire federal government in 2019 was \$813.3 billion.⁸ This amount is substantially lower than the value added by the total copyright industries in the same year. In 2019, the total value added to the U.S. economy by state and local governments was \$1,817.6 billion, or over \$1.8 trillion. This value is approximately 30% lower than the value added by the total copyright industries in 2019. Comparisons of the copyright industries' value added in 2018 and 2019, to other sectors of the U.S. economy, are also provided in Table 2. These comparisons clearly document the size and importance of the copyright industries today.

The value added estimates for the copyright industries that are contained in this *Report* reflect underlying data obtained from the BEA, the U.S. Census Bureau and other government statistical agencies. In particular, the estimates of copyright industry value added make direct use of the industry-specific estimates of U.S. value added regularly published by the BEA. These industry-specific estimates (in both current dollar and real terms) are used as starting points to derive the contributions made by the core and total copyright industries to U.S. GDP.

Real growth rates in value added experienced during the period 2016-2019 by the U.S. copyright industries, and by the U.S. economy as a whole, are provided in Table 3.⁹ For each of the periods 2016-2017, 2017-2018, and 2018-2019, the U.S. core copyright industries experienced positive real growth in excess of 5.30% annually. Over the entire period 2016-2019, the core copyright industries grew at a real annual growth rate of 5.87%.

The total copyright industries experienced a comparable pattern of real growth during the years 2016-2019. As shown in Table 3, in 2016-2017, 2017-2018, and 2018-2019, the total copyright industries grew at annual rates in excess of 4.30% per year. For the full period of 2016-2019, the real value added by the total copyright industries grew at a rate of 4.85% per year.

⁸U.S. GDP figures from U.S. BEA, *Value Added by Industry*.

⁹Real growth rates measure changes in constant dollar value added over time. In these estimates, current dollar value added figures are converted to "chained" dollars for the year 2012.

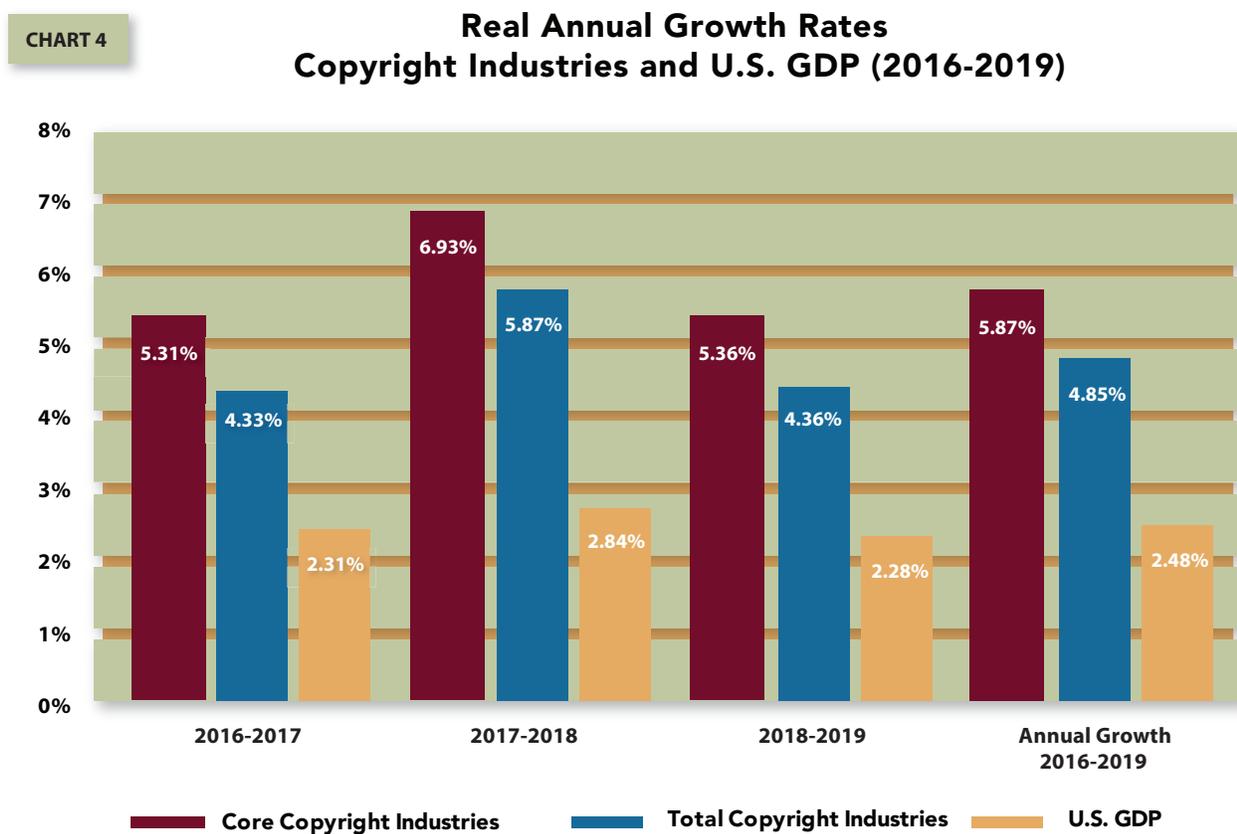
In order to provide a basis of comparison, the growth patterns for the U.S. economy are also provided in Table 3. For the period 2016-2019, the U.S. economy grew at an average annual rate of 2.48%. For the individual years 2016-2017, 2017-2018, and 2018-2019 the U.S. economy grew at annual rates of 2.31%, 2.84%, and 2.28% respectively. As these figures make clear, for this period, the compound annual growth rate achieved by the U.S. copyright industries significantly exceeded the compound annual growth rate achieved by the U.S. economy as a whole.

TABLE 3

**Real Annual Growth Rates
Value Added to U.S. GDP, 2016-2019**

	2016-2017	2017-2018	2018-2019	Annual Growth Rate 2016-2019
Core Copyright Industries	5.31%	6.93%	5.36%	5.87%
Total Copyright Industries	4.33%	5.87%	4.36%	4.85%
U.S. GDP	2.31%	2.84%	2.28%	2.48%

We illustrate these data graphically in Chart 4, which shows the real annual growth rates experienced by the copyright industries, compared with the real growth rate achieved by the U.S. economy as a whole, during the periods 2016-2017, 2017-2018, and 2018-2019. As Chart 4 demonstrates, since 2016 the core and the total copyright industries have grown substantially faster than the real annual rate of growth experienced for the U.S. GDP as a whole.



V. EMPLOYMENT IN THE COPYRIGHT INDUSTRIES

In this *Report*, as in the past, we estimate the number of workers employed in the core and total copyright industries for the years 2016-2019. The procedures used to derive our estimates of employment in this *Report* were largely based on the formulas derived in the earlier reports. In those reports, employee counts were derived so that the counts would be consistent in both the NAICS and ISIC classification systems. As in the past, the actual employee counts by NAICS code were extracted from the Bureau of Labor Statistics (“BLS”) database.

Employment figures for the core and total copyright industries for the years 2016 through 2019 are provided in Table 4. As shown in Table 4, the core copyright industries employed 5.628 million workers in 2016. These workers represented 3.87% of the total U.S. workforce in 2016. By 2019, the number of core copyright employees in the United States had increased to more than 5.761 million. These workers represented 3.79% of the total U.S. workforce in 2019. In 2016, the total copyright industries employed more than 11.5 million workers. By 2019, employment in the total copyright industries had increased to over 11.7 million. During these years, the total copyright industries represented more than a 7.7% share of all U.S. employment. The total U.S. employment during this period increased from 145,442,000 in 2016 to 151,998,000 in 2019.

TABLE 4

**Copyright Industries and Total U.S. Employment
(in Thousands), 2016-2019**

	2016	2017	2018	2019
Core Copyright Industries	5,628.0	5,680.3	5,729.0	5,761.6
Total U.S. Employment	145,442.0	147,551.0	149,865.0	151,998.0
Core Share of U.S. GDP	3.87%	3.85%	3.82%	3.79%
	2016	2017	2018	2019
Total Copyright Industries	11,510.1	11,604.6	11,668.5	11,713.7
Total U.S. Employment	145,442.0	147,551.0	149,865.0	151,998.0
Total Share of U.S. GDP	7.91%	7.86%	7.79%	7.71%

For U.S. private industry, employment growth during the years 2016 through 2019 was comparable to the employment trends experienced for the U.S. economy as a whole. As shown in Table 5 below, total U.S. private employment increased from 123,134,000 in 2016 to 129,319,000 in 2019, and core and total copyright employment increased as well. During these years, the core copyright industries’ share of all private employment varied between 4.46% and 4.57% while the total copyright industries’ share of private employment varied between 9.06% and 9.35%.

TABLE 5

Copyright Industries and Total Private Employment (in Thousands), 2016-2019

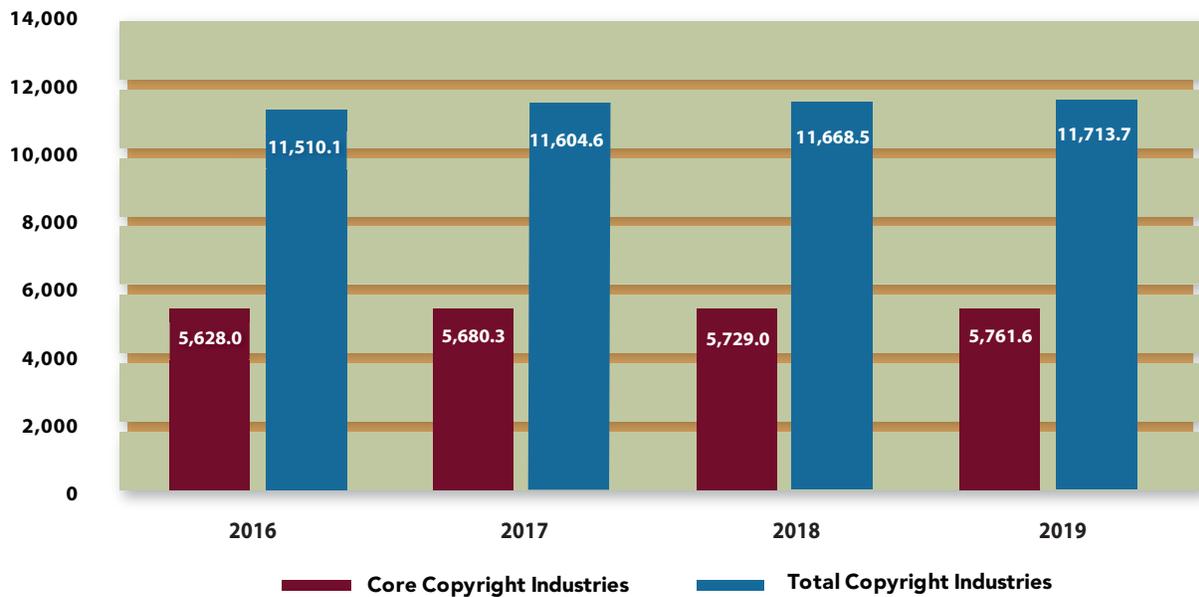
	2016	2017	2018	2019
Core Copyright Industries	5,628.0	5,680.3	5,729.0	5,761.6
Total U.S. Private Employment	123,134.0	125,170.0	127,370.0	129,319.0
Core Share of U.S. GDP	4.57%	4.54%	4.50%	4.46%

	2016	2017	2018	2019
Total Copyright Industries	11,510.1	11,604.6	11,668.5	11,713.7
Total U.S. Private Employment	123,134.0	125,170.0	127,370.0	129,319.0
Total Share of U.S. GDP	9.35%	9.27%	9.16%	9.06%

These same U.S. copyright industry employment figures are also expressed graphically in Chart 5 below. This chart demonstrates graphically that the total number of workers in the core copyright industries consistently increased from 2016 to 2019. Because U.S. total employment also rose during this period, the core copyright share of employment remained at approximately 4.5%, varying between 4.46% and 4.57%; while the total copyright share of employment varied between 9.06% and 9.35% from 2016 and 2019.

CHART 5

U.S. Copyright Industry Employment (in Thousands), 2016-2019



In this *Report*, we also quantify the average compensation per employee received by workers in the copyright industries and in the U.S. as a whole. In these calculations “compensation” means “wages and salary accruals and supplements to wages and salary accruals.” These supplements include “employer contributions for employee pensions and insurance funds and employer contributions for government social insurance.”¹⁰ These data are shown in Table 6.

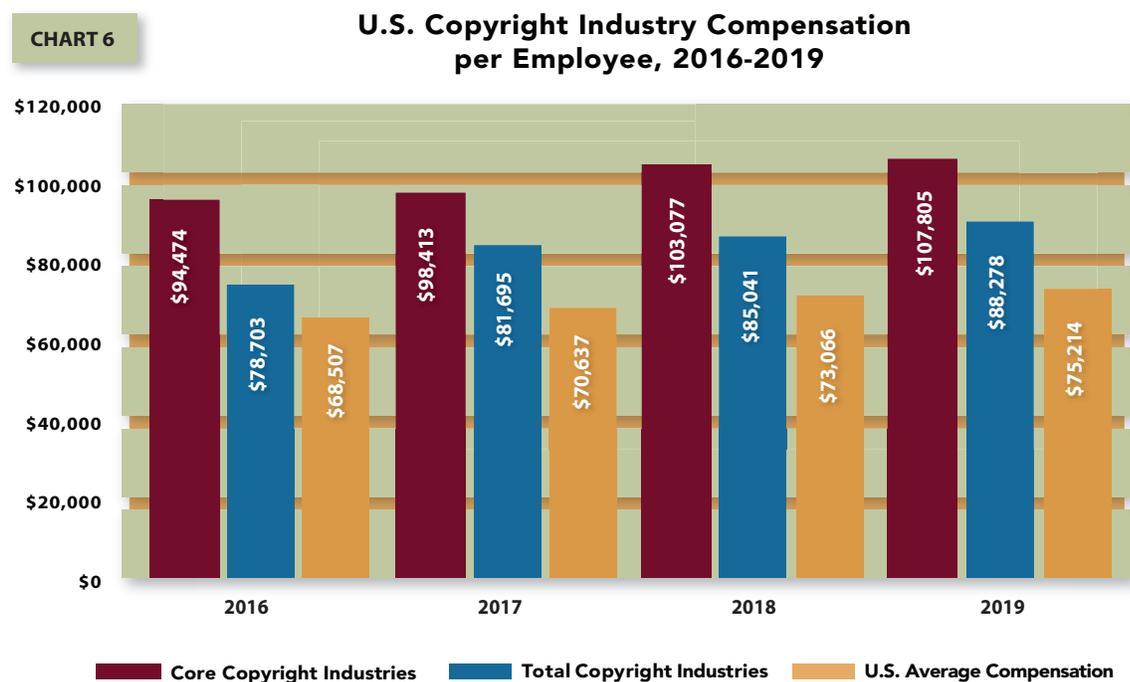
During the period 2016-2019, average compensation per employee in both the core and total copyright industries increased. As shown in Table 6, average compensation earned by core copyright employees stood at \$107,805 in 2019. This value was 43% higher than the average compensation paid to all U.S. employees in 2019 (\$75,214.36). For total copyright industry workers, average compensation in 2019 was \$88,278.13, about 17% higher than the U.S. average.

TABLE 6 **Compensation per Employee (U.S. Dollars) 2016-2019**

Core Copyright	2016	2017	2018	2019
Core Copyright Industries	\$94,474	\$98,413	\$103,077	\$107,805
U.S. Average Compensation	\$68,507	\$70,637	\$73,066	\$75,214
Ratio: Core to U.S.	1.38	1.39	1.41	1.43

Total Copyright	2016	2017	2018	2019
Total Copyright Industries	\$78,703	\$81,695	\$85,041	\$88,278
U.S. Average Compensation	\$68,507	\$70,637	\$73,066	\$75,214
Ratio: Total to U.S.	1.15	1.16	1.16	1.17

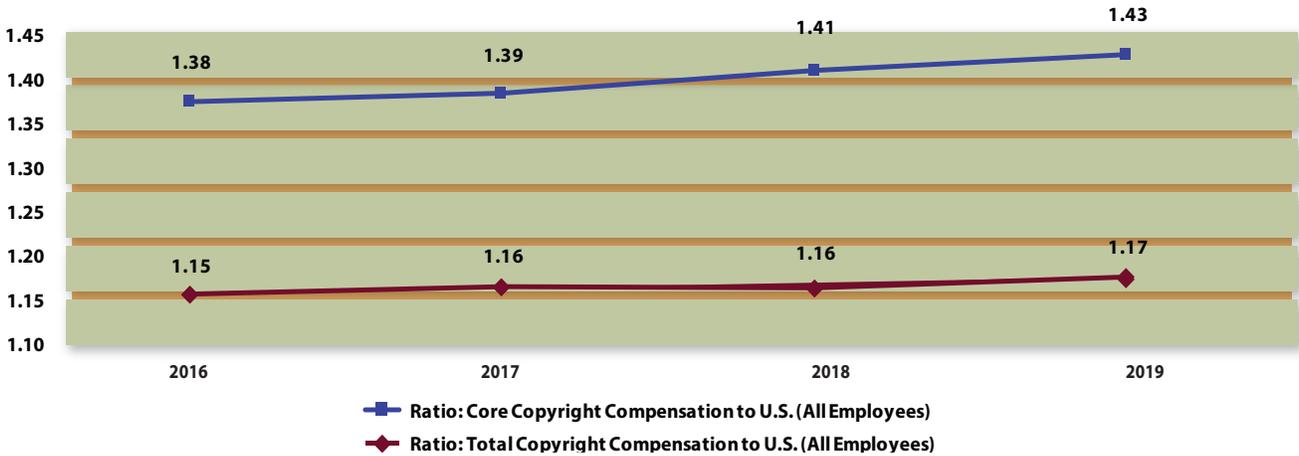
Compensation data are also reported graphically in Chart 6. The compensation “premium” paid to workers in the copyright industries continued and increased from 2016 through 2019.



¹⁰See U.S. BEA, *Glossary Index*.

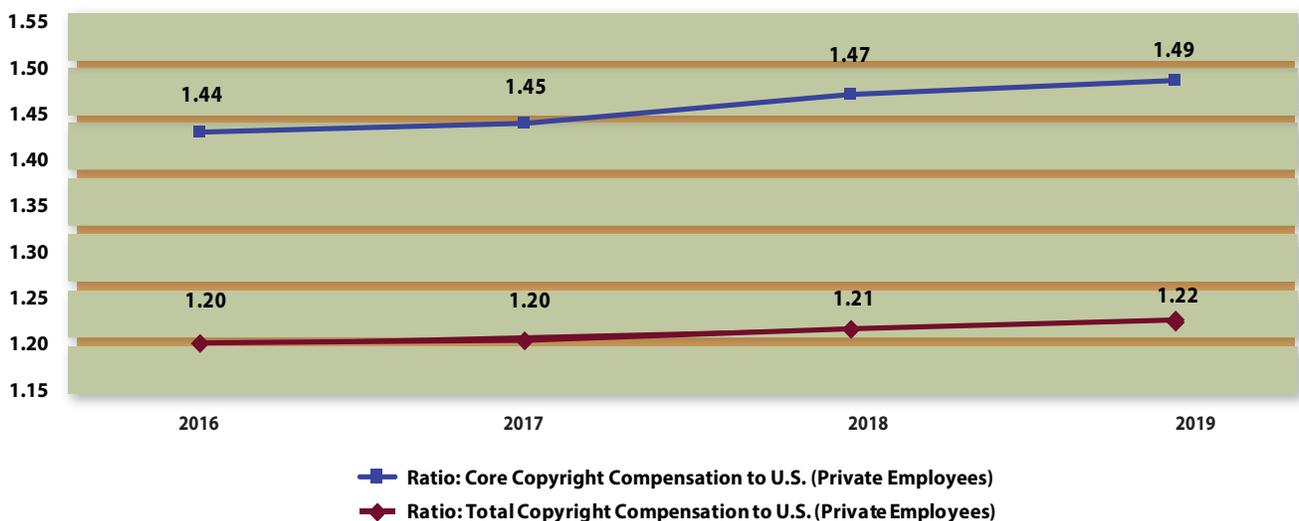
The compensation premium paid to copyright industry employees can also be illustrated by ratio. In Chart 6A, the average compensation paid to employees in the core and total copyright industries is compared to the average compensation paid to all workers in the United States. For core copyright employees, the compensation premium has risen from 37.9% to 43% from 2016 to 2019. For total copyright employees, the compensation premium has increased from 14.9% to 17.4%. In other words, in 2019 core copyright employees on average received about 43% more compensation than the average U.S. worker, while total copyright industry employees received about 17% more compensation than the average worker.

CHART 6A
U.S. Copyright Industry Compensation Ratios
Compared to All U.S. Employees (1.00 = 100%), 2016-2019



Copyright industry workers are also paid more than the average U.S. worker in private industry. As shown in Chart 6B, from 2016 to 2019 the compensation paid to workers in the core copyright industries has increased from 43.8% to 49% higher than the average compensation paid to U.S. private industry. Similarly, over the same time period, the compensation paid to workers in the total copyright industries increased from 19.8% to 22% higher than the average compensation paid to U.S. private industry employees as a whole.

CHART 6B
U.S. Copyright Industry Compensation Ratios
Compared to Private U.S. Employees (1.00 = 100%), 2016-2019

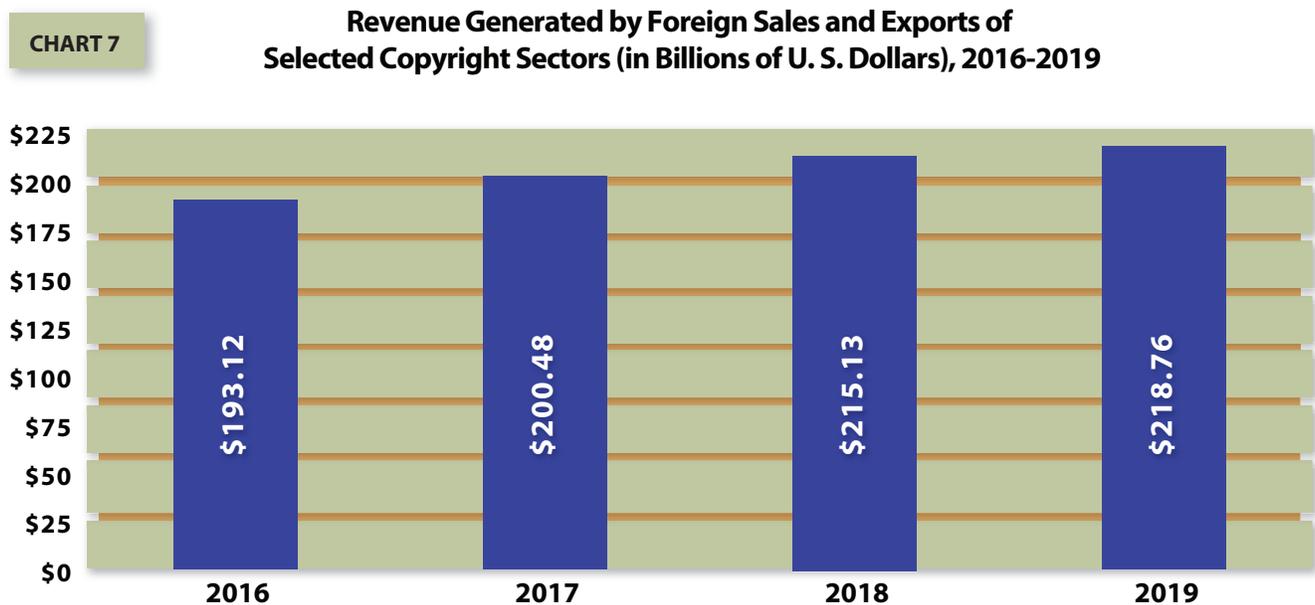


VI. U.S. COPYRIGHT MATERIALS IN WORLD MARKETS

Consumers in non-U.S. markets continue to demand products that embody American creativity. Copyright products that are sold abroad may be manufactured in the U.S. or in foreign markets, but, in either case, the creative components of those products are nurtured by the protection afforded under U.S. laws.

As noted in prior reports on these industries, we believe that the U.S. government’s statistics on “exports” of copyright products generally fail to measure accurately the true value of American copyright works sold abroad. We recognize that, in recent years, efforts have been undertaken to improve the scope of the copyright product export statistics that are gathered in government surveys. For example, the U.S. Census Bureau reports “Estimated Export Revenue for Employer firms” for a number of the copyright industries, including the motion picture industry and the sound recording industry.¹¹ However, the export statistics reported by Census are substantially lower than foreign market sales figures derived from non-government sources.

As in past reports, we again provide estimates of foreign sales and exports for four selected core copyright areas for which we have data during the years 2016 through 2019: recorded music; motion pictures, television and video; software publishing; and non-software publications including newspapers, books and periodicals. For these years, we report total foreign sales for these “selected” core copyright areas of \$193.12 billion in 2016, \$200.48 billion in 2017, \$215.13 billion in 2018, and \$218.76 billion in 2019. Chart 7 below demonstrates these figures graphically.



¹¹See U.S. Census Bureau, Service Annual Survey Latest Data (NAICS-basis): *Estimated Export Revenue for Employer Firms: 2016 through 2019*, Table 6.

Annual growth rates for foreign sales of the selected core copyright industries are provided in Table 7 below. The annual growth rate has surpassed the GDP growth rate for the same years except for 2018-2019. As indicated above, growth of foreign sales and exports from 2018-2019 was impacted by the effects of COVID-19.

TABLE 7

**Annual Growth Rate of
Foreign Sales and Exports, 2016-2019**

	2016-2017	2017-2018	2018-2019
Growth Rate	3.81%	7.30%	1.69%

In addition, the foreign sales and exports of these core copyright areas exceed the entirety of exports of other major industry sectors. As reported in Table 8 below, copyright industry sales in foreign markets exceeded the exports of the following U.S. industries: electronic equipment, appliances & components; chemicals (excluding pharmaceutical & medicines); pharmaceuticals & medicines; agricultural products; and aerospace products and parts. In 2019, the selected copyright industries generated non-U.S. sales of \$218.8 billion. In the same year, foreign sales and exports for the U.S. electronic equipment industry were \$173.2 billion; the foreign sales and exports U.S. chemicals manufacturing industry reached \$142.3 billion; foreign sales and exports of U.S. pharmaceutical and medicines reached \$140.7 billion; U.S. agricultural foreign sales and exports were approximately \$96.7 billion; and foreign sales and exports for U.S. aerospace products and parts approached \$66.2 billion.

TABLE 8

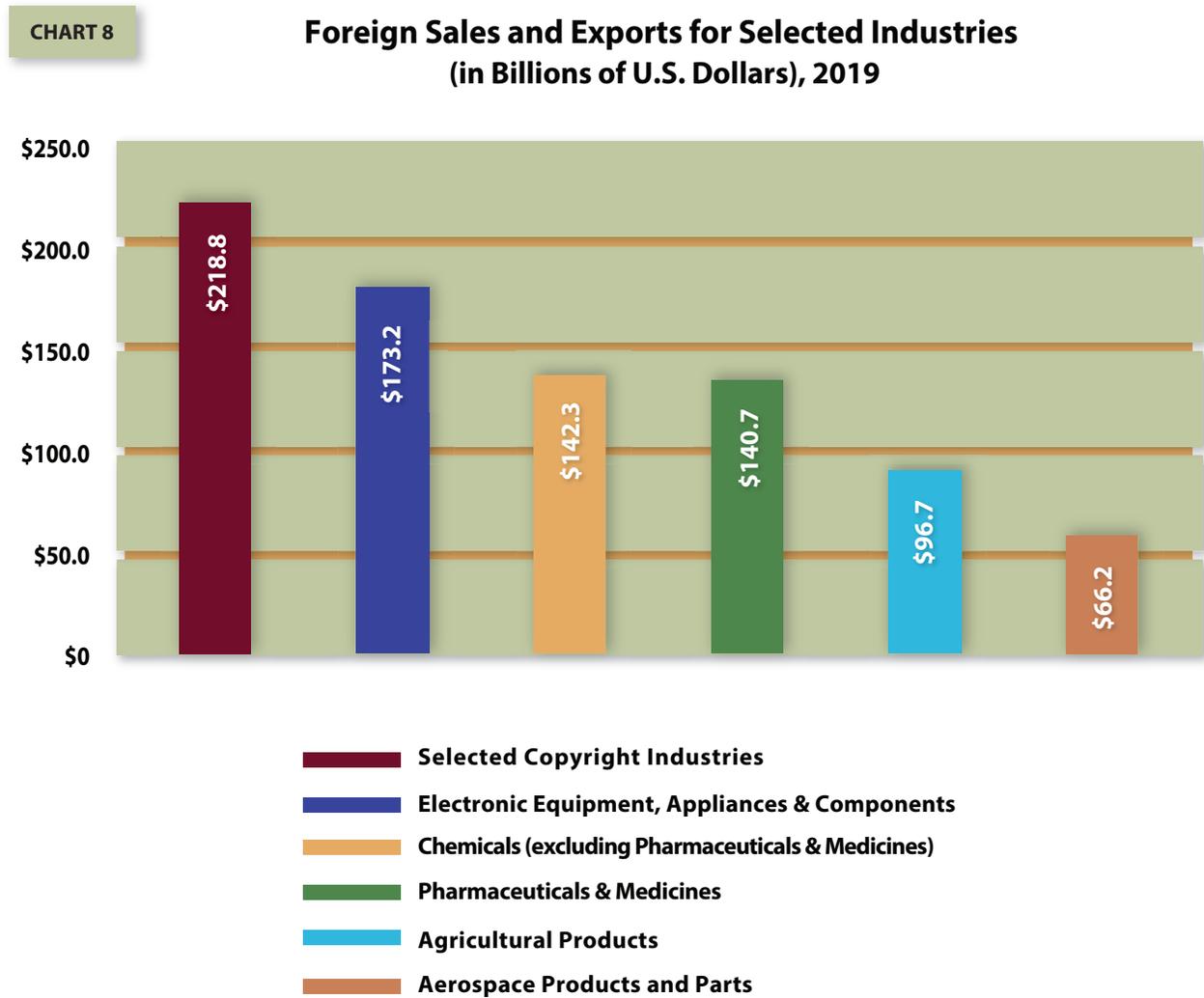
**Foreign Sales and Exports for Selected
U.S. Industries (in Billions of U.S. Dollars), 2019**

	2019
Selected Copyright industries	\$218.8
Electronic Equipment, Appliances & Components²	\$173.2
Chemicals (excluding Pharmaceuticals & Medicines)¹	\$142.3
Pharmaceuticals & Medicines¹	\$140.7
Agricultural Products²	\$96.7
Aerospace Products and Parts¹	\$66.2

¹Source: U.S. Census Bureau: Economic Indicators Division USA Trade Online.

²Source: U.N. Comtrade database, <https://comtrade.un.org/>.

Foreign sales and exports data by industry are also reported graphically in Chart 8. The data represent the significant contribution made by American copyright works sold abroad to the overall trade balance of the U.S. economy, as well as by comparison with other industry sectors.



VII. COPYRIGHT AND THE DIGITAL ECONOMY

The copyright industries are leaders in digitalization and have helped drive the growth of the Internet economy, including through streaming. Unfortunately, current data, including data collected by the U.S. government, is insufficient under our current methodology to adequately reflect the contributions of the creative sector to the digital economy, including in critical areas of employment, GDP, and cross-border trade in goods and services. For example, although the U.S. Patent and Trademark Office has very helpfully demonstrated the U.S. domestic economic impacts of the intellectual property (IP)-intensive industries, its reports have not included data on the digital economy and the contributions of the copyright-intensive sector to it. Similarly, the U.S. International Trade Commission has assessed the economic impact of the Intellectual Property Rights chapters of sever-

al U.S. trade agreements, but these assessments, by their very nature, focus on trade data with foreign countries and would not allow us to assess domestic participation of the copyright sector in the digital economy. Likewise, while the BEA tracks certain variables that are of interest when determining the value of digitalized sales and cross-border trade—e.g., information and communications technology (ICT) services, and ICT-Enabled services in exports, including the value of IP licensing as a form of ICT-Enabled services¹²—this breakdown unfortunately does not offer the granularity needed to explore the various copyright industries in detail, nor does it provide national data which is needed for a more complete exploration. It is challenging to isolate digital copyright sales using other government data, although we would hope to expand our current estimates in the future. A potential application would be to use the classification system of the ICT data and apply it beyond international sales to our study of national sales, which would involve cross-referencing several classification systems.

Ultimately, while existing data demonstrate the significant and critical contributions of the creative sector to the U.S. economy, particularly when it comes to traditional indicators of value added and employment, a significant data gap exists regarding the contributions of the creative sector to the digital economy, including of copyright-enabled trade in goods and services. We strongly encourage the U.S. government to work to bridge this data gap and develop more consistent and comprehensive measurements of and reporting on the copyright industries' contributions to the digital economy, including digital trade of copyright-enabled goods and services.

VIII. CONCLUSION

The U.S. copyright industries have consistently outperformed the rest of the U.S. economy, in terms of their real annual growth rates and their contributions to the overall growth of the U.S. economy as a whole. These industries also command significant shares of U.S. gross domestic product and they employ millions of U.S. workers. In addition, the compensation paid to U.S. workers in the copyright industries consistently and substantially exceeds the average compensation level paid to U.S. workers as a whole. Finally, copyright sectors continue to play a prominent role in the growth of U.S. exports.

Value added in the copyright industries continues to grow. As of 2019, the value added by the core copyright industries was \$1,587.16 billion, approximately 7.41% of U.S. GDP. In the same year, value added for the total copyright industries stood at \$2,568.23 billion or 11.99% of GDP. In 2016-2017, 2017-2018, and 2018-2019, the real annual growth rates achieved by both the core and total copyright industries were significantly higher than the real growth rates exhibited by the U.S. economy as a whole.

The U.S. core copyright industries now employ nearly 5.7 million workers while some 11.7 million people are employed by the total copyright industries. In 2019, the annual compensation paid to core copyright workers exceeded the average annual compensation paid to all U.S. workers by 43%, and the average compensation paid to employees of the total copyright industries exceeded the U.S. average by 17%.

Sales of U.S. copyright materials continue to expand in overseas markets. For selected core copyright sectors, sales in foreign markets exceeded \$218 billion in 2019. The foreign sales of these selected copyright sectors exceeded the foreign sales of other U.S. industries including the electronic equipment, appliances and components industry, the chemicals manufacturing industry, the pharmaceutical and medicines industry, the agricultural products industry, and the aerospace products and parts industry.

These consistently positive trends solidify the status of the U.S. copyright industries as a key engine of growth for the U.S. economy as a whole. As new technologies support the development of new distribution methods for legitimate copyrighted products, the U.S. copyright-based industries represented in the IIPA remain optimistic that economic growth, combined with strong laws, effective enforcement, and steps to open markets, will continue to pave the way for economic growth both in the U.S. and abroad.

¹²U.S. BEA: Table 3.1. U.S. Trade in ICT and Potentially ICT-Enabled Services, by Type of Service.

APPENDIX A: TABLES OF STATISTICS

TABLE A.1

Core Copyright Industries Value Added to U.S. GDP, 2016-2019

Nominal Value Added (Billions of Dollars)	2016	2017	2018	2019
Core Copyright Industries	\$1,339.46	\$1,399.91	\$1,494.99	\$1,587.16
U.S. GDP	\$18,715.00	\$19,519.40	\$20,580.20	\$21,427.70
Share	7.70%	7.94%	8.29%	8.56%
Real Value Added (Billions of 2012 Dollars)	2016	2017	2018	2019
Core Copyright Industries	\$1,361.50	\$1,437.89	\$1,544.90	\$1,632.46
U.S. GDP	\$17,688.90	\$18,108.10	\$18,638.20	\$19,073.10
Share	7.70%	7.94%	8.29%	8.56%

TABLE A.2

Total Copyright Industries Value Added to U.S. GDP, 2016-2019

Nominal Value Added (Billions of Dollars)	2016	2017	2018	2019
Total Copyright Industries	\$2,207.00	\$2,291.57	\$2,431.62	\$2,568.23
U.S. GDP	\$18,715.00	\$19,519.40	\$20,580.20	\$21,427.70
Share	11.79%	11.74%	11.82%	11.99%
Real Value Added (Billions of 2012 Dollars)	2016	2017	2018	2019
Total Copyright Industries	\$2,212.43	\$2,312.60	\$2,456.75	\$2,568.65
U.S. GDP	\$17,688.90	\$18,108.10	\$18,638.20	\$19,073.10
Share	12.51%	12.77%	13.18%	13.47%

TABLE A.3

**U.S. Copyright Industry Employment
(in Thousands), 2016 - 2019**

U.S. Employment	2016	2017	2018	2019
Total U.S. Employment	145,422	147,551	149,865	151,998
Total Private U.S. Employment	123,134	125,170	127,370	129,319
Core Copyright	2016	2017	2018	2019
Core Copyright Employment	5,628.0	5,680.3	5,729.0	5,761.6
Core Copyright Share of U.S. Employment	3.87%	3.85%	3.82%	3.79%
Core Copyright Share of Private U.S. Employment	4.57%	4.54%	4.50%	4.46%
Total Copyright	2016	2017	2018	2019
Total Copyright Employment	11,510.1	11,604.6	11,668.5	11,713.7
Total Copyright Share of U.S. Employment	7.91%	7.86%	7.79%	7.71%
Total Copyright Share of Private U.S. Employment	9.35%	9.27%	9.16%	9.06%

TABLE A.4

**U.S. Copyright Industry Compensation
per Employee (U.S. Dollars), 2016-2019**

U.S. Employment	2016	2017	2018	2019
Average U.S. Compensation/Employee	\$68,507.43	\$70,636.89	\$73,066.42	\$75,214.36
Average Private U.S. Compensation/Employee	\$65,684.35	\$67,883.73	\$70,222.38	\$72,366.33
Core Copyright	2016	2017	2018	2019
Core Copyright Compensation/Employee	\$94,474	\$98,413	\$103,077	\$107,805
Ratio: Core Copyright to U.S. Compensation	1.38	1.39	1.41	1.43
Ratio: Core Copyright to Private U.S. Compensation	1.44	1.45	1.47	1.49
Total Copyright	2016	2017	2018	2019
Total Copyright Compensation/Employee	\$78,703.35	\$81,695.28	\$85,041.04	\$88,278.13
Ratio: Total Copyright to U.S. Compensation	1.15	1.16	1.16	1.17
Ratio: Total Copyright to Private U.S. Compensation	1.20	1.20	1.21	1.22

APPENDIX B: LIST OF REFERENCES

IBIS World, Software Publishing in the US, September 2020

International Federation of the Phonographic Industry (IFPI), Global Music Report, Full Report, 2019.

Motion Picture Association, Theme Report 2019, Global Box Office Market, All Films.

Statista: Estimated revenue of U.S. software publishers from 2005 to 2019.

Siwek, Stephen E., *Copyright Industries in the U.S. Economy: The 2018 Report*, December 2018

The New York Times: The Virus Changed the Way We Internet (April 7, 2020).

UN Comtrade 2015-2019.

U.S. Bureau of Economic Analysis, Glossary of Terms, 2018.

U.S. Bureau of Economic Analysis, Industry Data, Value Added by Industry, 2012-2019.

U.S. Bureau of Economic Analysis, Industry Data, Real Value Added by Industry, 2012-2019.

U.S. Bureau of Economic Analysis, Industry Data, Table 6.2D, Compensation of Employees by Industry, 2008-2017.

U.S. Bureau of Economic Analysis, Industry Data, Table 6.4D, Full-Time and Part-Time Employees by Industry, 2008-2017.

U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, Economic Indicators Division
USA Trade Online, Census Database.

U.S. Department of Labor, Bureau of Labor Statistics, Employment, Hours and Earnings from the Current Employment
Statistics Survey (National).

U.S. Department of Labor, Bureau of Labor Statistics, Subject Areas: Overview of BLS Statistics on Employment.

World Intellectual Property Organization, Guide on Surveying the Economic Contribution of the Copyright-Based Industries, 2015 Revised Edition, WIPO Publication No. 893 €, ISBN 978-92-805-2679-0.



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ISBN 978-0-9911233-4-6

