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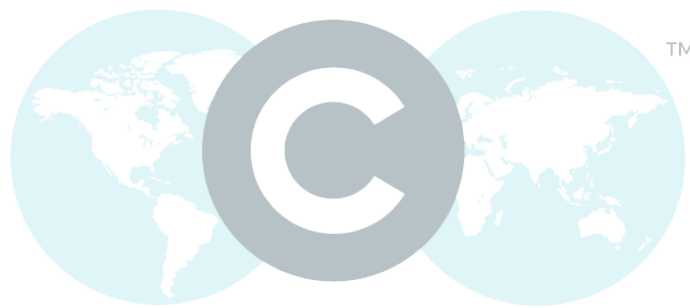
Copyright Industries in the U.S. Economy

2022 Report



Copyright Industries in the U.S. Economy

The 2022 Report



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

December 2022

Copyright Industries in the U.S. Economy: The 2022 Report is the 19th 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 2022 Report*, by Robert Stoner and Jéssica Dutra of Secretariat Economists, prepared for the IIPA, December 2022, available at www.iipa.org.

This latest *Report* updates and supplements 18 previous reports produced by Secretariat Economists (formerly known as 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);
- Stephen E. Siwek, *Copyright Industries in the U.S. Economy: The 2018 Report* (released in December 2018); and
- Robert Stoner and Jéssica Dutra, *Copyright Industries in the U.S. Economy: The 2020 Report* (released in December 2020).

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Cover design and graphic layout by BlueFusion Creative & Marketing Group, Reston, VA

ISBN: 979-8-218-12186-0

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TABLE OF CONTENTS

About the Authors	4
COVID-19	5
Preface	6
Executive Summary	8
Introduction	10
The Copyright Industries	12
Value Added by the Copyright Industries	13
Employment in the Copyright Industries	18
U.S. Copyright Materials in World Markets	23
Copyright and the Digital Economy	26
Conclusion	29
Appendix A: Tables of Statistics	30
Appendix B: Materials Considered List	32

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AUTHORS' ACKNOWLEDGEMENTS

Emily Buell, a Senior Associate at Secretariat Economists, performed much of the computer programming required to complete this study. Secretariat Economists 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 Kevin Rosenbaum of the IIPA for his guidance throughout this process.

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 foreign markets closed by piracy and other market access barriers. Members of the IIPA are *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

This *Report* is being released in 2022 when the COVID-19 pandemic seems to be waning, but the impact of the pandemic is reflected in the data and estimates of this report. For example, in 2020 when the economic impact of the pandemic was at its peak, U.S. real GDP experienced negative growth and, while the average growth rates for copyright industries' GDP contribution remained positive, they were lower. The copyright industries also had difficulty maintaining previous levels of employment and exports during this period. Nevertheless, it is clear that despite the curtailed figures in 2020, there has been remarkable recovery in 2021, with the copyright industries helping to lead the economy back into strong economic growth. Moreover, throughout the entire time period covered by this *Report* (2018-2021), the copyright industries have maintained their important role in generating value and supporting employment in the U.S. economy.

PREFACE

The International Intellectual Property Alliance (IIPA), founded in 1984, is 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 open foreign markets closed by piracy and other market access barriers. 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 and the workers employed by the creative industries 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 the creative industries' contributions 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, IIPA commissioned the first economic study to quantify the contributions of the copyright industries to the U.S. economy and, since then, has periodically commissioned subsequent reports. *Copyright Industries in the U.S. Economy: The 2022 Report (2022 Report)* is the 19th such report. Stephen E. Siwek, at Economists Incorporated (now known as Secretariat Economists), prepared the first study and every subsequent study through the 17th report in 2018. With the retirement of Mr. Siwek, Robert Stoner and Jéssica Dutra of Secretariat Economists, using the methodology pioneered by Mr. Siwek, prepared the 18th report in 2020 and the *2022 Report*. The *2022 Report* breaks new ground by measuring the copyright industries' significant contributions to the digital economy, as that concept has been defined by the U.S. Bureau of Economic Analysis ("BEA").

In the past few decades, as international trade in copyrighted materials increased, 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, 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 (Guide)*. 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 used in over 50 countries' national reports. In 2015, WIPO published a revised edition of The Guide,¹ which referenced the many national copyright industry 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

¹Guide on Surveying the Economic Contribution of the Copyright-Based Industries (Guide), revised 2015, available at: <https://www.wipo.int/copyright/en/performance/>

²Various 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/>.

The *2022 Report* covers the period from 2018 to 2021 and is based almost entirely on U.S. government data. Some of the period covered in the *2022 Report* has been impacted by the COVID-19 pandemic, which has taken a toll on individuals, governments, and industries around the world, including the copyright sector. Nevertheless, the report shows that the copyright industries continued to be a significant contributor to the United States economy and likely will remain so when the impact of the virus has been mitigated. The *2022 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; (4) contribute substantially to U.S. foreign sales and exports, outpacing many industry sectors; and (5) make significantly large contributions to what the BEA defines as the digital economy, which does not even encompass the full scope of the copyright industries' digital activities. As the *2022 Report* shows, the current contribution of the core copyright industries to the U.S. economy now surpasses 1.8 trillion dollars per year.³

Despite the robust achievements of the copyright industries during the period covered in this *Report* (and in the prior reports), significant challenges remain. As the *2022 Report* illustrates, the copyright industries make significant contributions to the digital economy. 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 digital 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 and their workers.

– Kevin M. Rosenbaum, Linda M. Quigley, and Madeline R. Dunn
International Intellectual Property Alliance

³The “core” copyright industries are those industries whose primary purpose is to create, produce, distribute or exhibit copyright materials.

EXECUTIVE SUMMARY

Copyright Industries in the U.S. Economy: The 2022 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); a significant number of high-paying jobs; real growth that outpaces the rest of the economy (even when the U.S. economy experienced negative growth due to the COVID-19 pandemic); and substantial foreign sales and exports, surpassing many industry sectors.

Copyright Industries Contribute Significantly to U.S. GDP

- In 2021, the value added by the core copyright industries to U.S. GDP reached more than \$1.8 trillion dollars (\$1,810.25 billion), accounting for 7.76% of the U.S. economy.
- In 2021, the value added by the total copyright industries⁴ to GDP exceeded \$2.9 trillion (\$2,919.15 billion), accounting for 12.52% of the U.S. economy.

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

- The core copyright industries employed 9.6 million workers in 2021, accounting for 4.88% of the entire U.S. workforce, and 5.53% of total private employment in the U.S.
- The average annual 2021 compensation paid to core copyright workers – \$121,583 – far exceeds the average annual compensation paid to all U.S. workers – \$80,566 – amounting to a 51% “compensation premium” over the average U.S. annual wage.
- The total copyright industries employed nearly 16.1 million workers in 2021, accounting for 8.14% of all U.S. employment, or 9.22% of all private employment in the United States. The average annual compensation paid to employees of the total copyright industries in 2021, \$103,752, exceeds the U.S. average annual wage by around 29%.

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

- During the period 2018-2021, the core copyright industries grew at an aggregate annual rate of 6.15%. The average annual growth rate of the entire U.S. economy over the same period was only 1.76%. The core copyright industries grew more than three times the rate of the remainder of the U.S. economy.

⁴The “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 non-dedicated support and partial industries is considered 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.

- During the same period, the total copyright industries grew at an annual rate of 4.67%, 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 \$230.3 billion in 2021, an increase from 2018 to 2021.⁵
- The foreign sales of selected copyright industry sectors exceeded foreign sales of other major U.S. industries, including the chemicals manufacturing industry (\$161.4 billion), the agricultural products industry (\$131.8 billion), the aerospace products and parts industry (\$93.3 billion), the pharmaceutical and medicines industry (\$92.5 billion), and the food and kindred products industry (\$77.8 billion).

Copyright Industries are a Significant Portion of the Digital Economy

- In 2021, core copyright industries accounted for 52.26% of the U.S. digital economy, while total copyright industries accounted for 64.87% of that value added.
- Both core and total copyright economies have experienced positive growth throughout the entire observed period as a percentage of the digital economy.
- In 2021, core and total copyright contributed 48.1% and 58.9% respectively to the U.S. digital economy employment.
- These numbers represent a lower bound of contributions by the copyright industries to a broader digital economy, because the digital economy definition used by the BEA does not encompass the full range of the copyright industries' digital activities, such as digital production of music, post production of movies, theatrical distributions of movies in digital formats, and e-book publishing.

⁵This 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.

INTRODUCTION

Copyright Industries in the U.S. Economy: The 2022 Report is the 19th in a series issued over the last 30 years by Secretariat Economists (formerly known as Economists Incorporated), updating and supplementing 18 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 2018-2021; 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. This *Report* also provides, for the first time, data on the contribution of the copyright industries to the digital economy in the United States, as measured by value added and percent of employment. The underlying data used in this *Report* is current through 2021.⁶

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, a fact that was particularly highlighted in recent years by the creative industries' positive economic activity as measured by value added at the same time the U.S. economy experienced a contraction. 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 in terms of foreign sales and exports during 2018-2021, with foreign sales and exports in those sectors outperforming many key U.S. industrial sectors. Finally, the copyright industries are major contributors to the U.S. digital economy.

This study 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 ("WIPO") in its 2015 review⁷ regarding the development of economic and statistical standards to measure the impact of domestic copyright industries on domestic economies.

⁶In this study the values presented for 2018 and 2019 for value added and exports have been updated from the results presented in *Copyright Industries in the U.S. Economy: The 2020 Report*. These updates result from data revisions published by the BEA and by other government agencies since the last report was completed. In addition, there was a change in methodology and data source for the employment numbers, which have been fully recalculated for 2019-2021. More details on the methodological change are included in the Employment section of this report.

⁷World Intellectual Property Organization, Guide on Surveying the Economic Contribution of the Copyright-Based Industries, 2015 Revised Edition.

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, as well as real annual growth; industry employment, share of national employment, and compensation per employee; and revenues generated from foreign sales and exports. We are also complementing these indicators by exploring the critical role the copyright industries play in the U.S. digital economy, as defined by the BEA. As set forth in this *Report*, during the period 2018-2021, the copyright industries, both core and total, achieved positive real growth rates every year despite the economic stresses caused by the COVID-19 pandemic, and, when these stresses began to subside, a real growth rate in excess of 10% in 2020-2021.

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

THE COPYRIGHT INDUSTRIES

In preparing this *Report* we followed most of the methodology of our latest reports, conforming to the international standard for classifying copyright industries defined by WIPO. The basis of the classification “provides comprehensive, integrated, and internationally agreed recommendations for the measurement and analysis of economic activity.”⁸ There are four categories: core, partial, non-dedicated, and interdependent, which are described in further detail below.

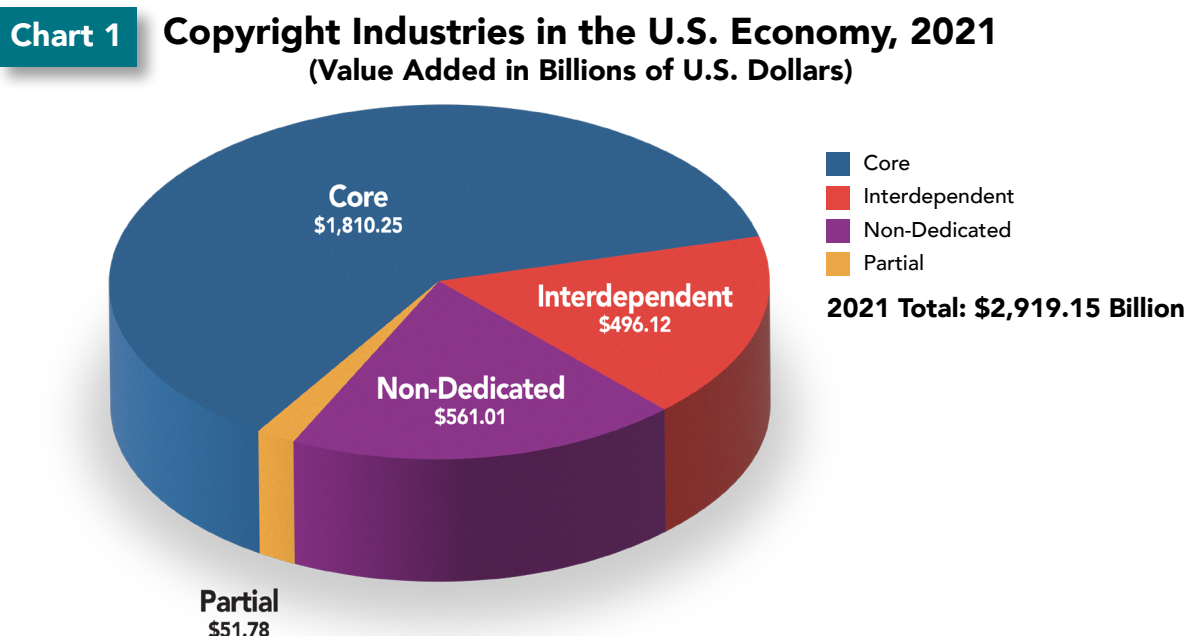
Core copyright industries include those industries whose primary purpose is to create, produce, distribute, or exhibit copyright materials. These industries include books, newspapers and periodicals, motion pictures, recorded music, radio and television broadcasting, and software in all formats, including 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. As in past reports, only a portion of the total value added by these industries is considered part of the copyright industries.

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 reports, only a portion of the total value added by these industries is considered 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.



⁸*Id.* 4, ¶ 101.

VALUE ADDED BY THE COPYRIGHT INDUSTRIES

One of the main ways to capture 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 to the larger economy net of intermediate inputs. 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 recent reports, in which industry specific value-added estimates produced by the BEA were employed to derive the contribution 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 (inflation adjusted) 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 \$1.810 trillion in 2021. In the same year, U.S. GDP reached \$23.315 trillion. Thus, in 2021 the core copyright industries maintained a 7.76% share of nominal U.S. GDP. The value added by the total copyright industries in the same period are also shown in **Table 1**. As reported, the value added to U.S. GDP by the total copyright industries in 2021 was \$2.919 trillion, or 12.52% of U.S. GDP.

Table 1

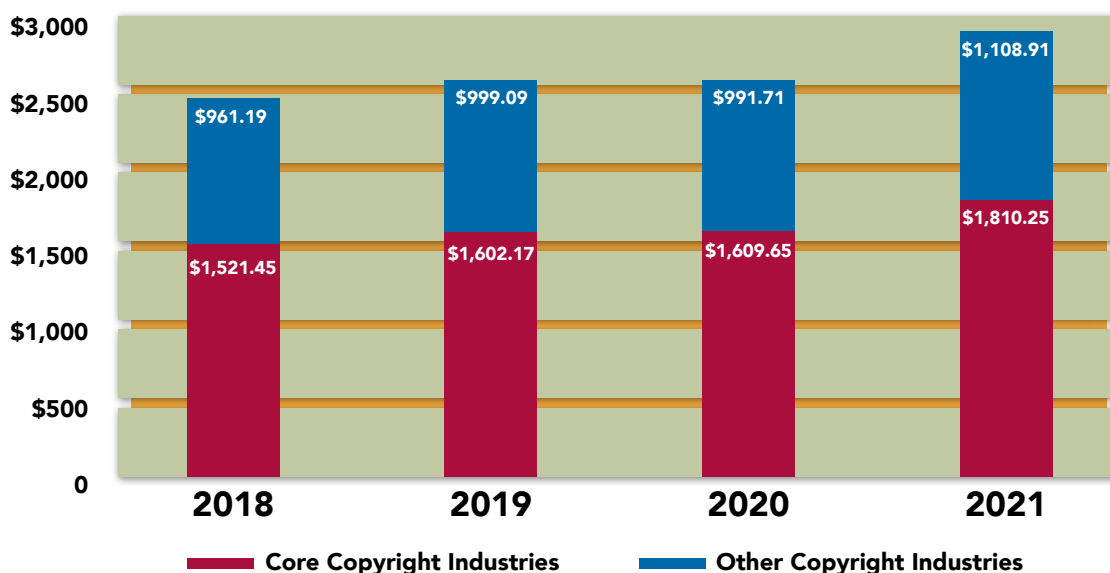
Copyright Industries Value Added (Billions of U.S. Dollars), 2018-2021

	2018	2019	2020	2021
Core Copyright				
Core Copyright Industries	\$1,521.45	\$1,602.17	\$1,609.65	\$1,810.25
Total U.S. GDP	\$20,533.10	\$21,381.00	\$21,060.50	\$23,315.10
Core Share of U.S. GDP	7.41%	7.49%	7.64%	7.76%
Total Copyright				
Total Copyright Industries	\$2,482.64	\$2,601.26	\$2,601.35	\$2,919.15
Total U.S. GDP	\$20,533.10	\$21,381.00	\$21,060.50	\$23,315.10
Total Share of U.S. GDP	12.09%	12.17%	12.35%	12.52%

As shown in **Chart 2**, our current estimates of the value added for the core copyright industries increased from \$1,521.45 billion in 2018 to \$1,810.25 billion in 2021. The estimated value added for the other (non-core) copyright industries rose from \$961.19 billion in 2018 to \$1,108.91 billion in 2021.

Chart 2

Copyright Industries' Value Added (Billions of Current U.S. Dollars) 2018-2021

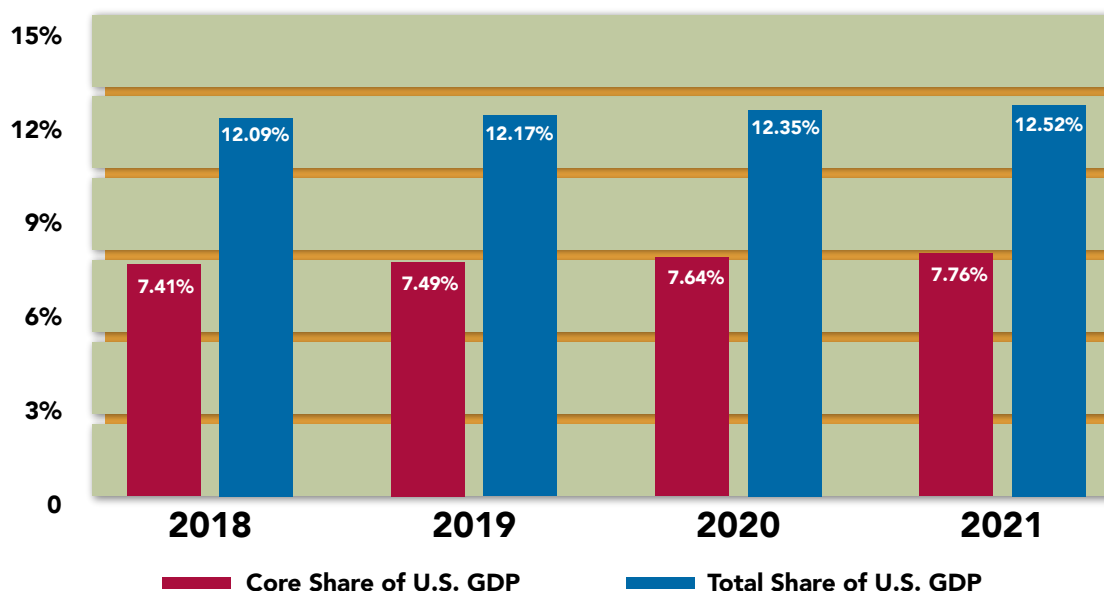


The copyright industries' current dollar share of the U.S. economy is provided in **Chart 3** below.

Based on the methodology described above, we now estimate that the core copyright industries' current dollar share of the U.S. economy has increased from approximately 7.41% to 7.76% of the U.S. economy over the years 2018 through 2021. Total copyright industries' current dollar share of U.S. GDP reached 12.52% in 2021.

Chart 3

Copyright Industries' Share of Current Dollar GDP 2018-2021



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 2020 and 2021 are shown in **Table 2**.

Table 2 Value Added Comparisons Between Copyright and Other Sectors
(Billions of U.S. Dollars), 2020-2021

	2020	2021
Copyright		
Core Copyright	\$1,609.65	\$1,810.25
Total Copyright	\$2,601.35	\$2,919.15
Government		
Federal Government	\$849.40	\$887.50
State & Local Government	\$1,850.90	\$1,925.40
Other Industries		
Construction	\$894.40	\$945.30
Healthcare & Social Assistance	\$1,615.70	\$1,735.80
Finance & Insurance	\$1,794.80	\$1,959.00

As reported in **Table 2**, the total value added to the U.S. economy by the entire federal government in 2021 was \$887.5 billion.⁹ This amount is substantially lower than the value added by the total copyright industries in the same year. In 2021, the total value added to the U.S. economy by state and local governments was \$1,925.4 billion, or over \$1.9 trillion. This value is approximately 34% lower than the value added by the total copyright industries in 2021. Comparisons of the copyright industries' value added in 2020 and 2021 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 (in both current dollar and real terms) as starting points to derive the contributions made by the core and total copyright industries to U.S. GDP.

⁹U.S. GDP figures from U.S. BEA, Value Added by Industry, see <https://apps.bea.gov/iTable/?reqid=150&step=2&isuri=1&categories=gd-pxind#eyJhcHBpZCI6MTUwLjZdGVwcyI6WzEsMiwzXSwiZGF0YSI6W1siY2F0ZWdvcmlIcyIsIkdkeHhJbmQiXSxbIlRyYmxlX0xpc3QiLCIxIl1d-fQ==>

Real growth rates in value added experienced during the period 2018-2021 by the U.S. copyright industries, and by the U.S. economy as a whole, are provided in **Table 3**.¹⁰ For each of the periods 2018-2019, 2019-2020, and 2020-2021, the U.S. core copyright industries experienced positive real growth, despite the difficult economic environment in 2020 and part of 2021 caused by the COVID-19 pandemic. Over the entire period 2018-2021, the core copyright industries grew at an average real annual growth rate of 6.15%.

The total copyright industries experienced a comparable pattern of real growth during the years 2018-2021. As shown in **Table 3**, in 2018-2019, 2019-2020, and 2020-2021, the total copyright industries grew at positive annual rates, even during the economic strain caused by the COVID-19 pandemic. For the full period of 2018-2021, the real value added by the total copyright industries grew at an average rate of 4.67% per year.

To provide a basis of comparison, the growth patterns for the U.S. economy are also provided in **Table 3**. For the period 2018-2021, the U.S. economy grew at an average annual rate of 1.76%. For the individual years 2018-2019, 2019-2020, and 2020-2021, the U.S. economy grew at annual rates of 2.29%, -2.77%, and 5.95% 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.

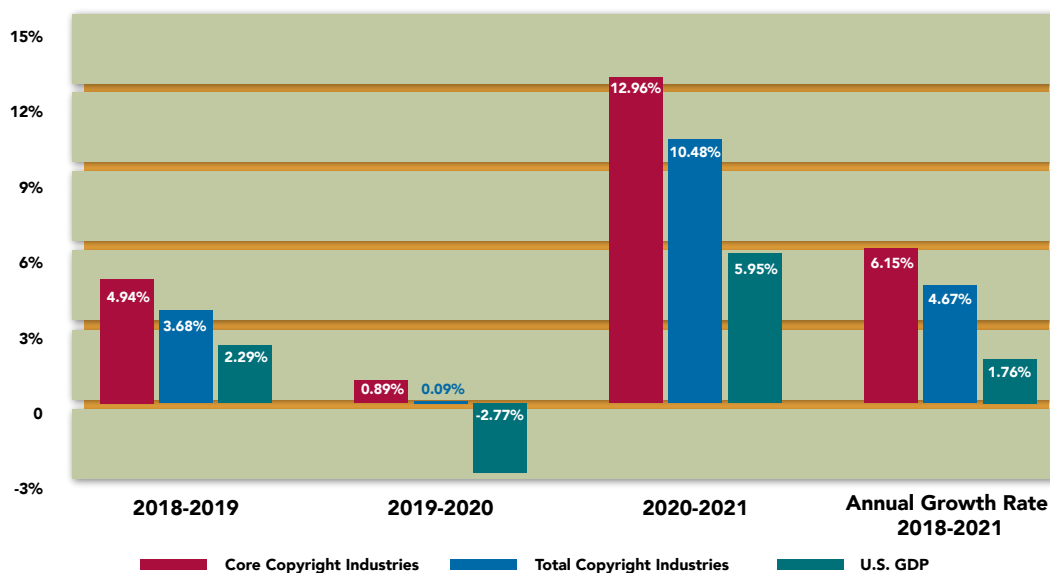
<div>Table 3</div> <div>Real Annual Growth Rates, Value Added to U.S. GDP 2018-2021</div>				
	2018-2019	2019-2020	2020-2021	Annual Growth Rate 2018-2021
Core Copyright Industries	4.94%	0.89%	12.96%	6.15%
Total Copyright Industries	3.68%	0.09%	10.48%	4.67%
U.S. GDP	2.29%	-2.77%	5.95%	1.76%

¹⁰Real growth rates measure changes in constant dollar value added over time.

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 2018-2019, 2019-2020, and 2020-2021. As **Chart 4** demonstrates, since 2018 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 and have been able to withstand periods of extreme turbulence in the economic environment.

Chart 4

Real Annual Growth Rates, Copyright Industries and U.S. GDP, 2018-2021



EMPLOYMENT IN THE COPYRIGHT INDUSTRIES

In this *Report*, we estimate the number of workers employed in the core and total copyright industries for the years 2018-2021. The procedures used to derive our estimates of employment in this *Report* are updated this year based on new available data, but are still consistent with the NAICS classification system. Employee counts were extracted from IMPLAN industry employment, which in turn is calculated based primarily on Bureau of Economic Analysis Regional Economic Accounts (“BEA REA”) and Bureau of Labor Statistics Census of Employment and Wages (“BLS CEW”) data.¹¹ IMPLAN employment is often larger than that reported in most public employment datasets, especially since IMPLAN, unlike the data used in previous reports, includes proprietor and seasonal employment. Hence our employment numbers are higher than in previous reports.

IMPLAN data is divided into 546 industries, and bridges are easily available between these industries and the NAICS classification system.¹² With the use of IMPLAN-NAICS crosswalks and the 2017 Survey of U.S. Businesses¹³ we allocated employment to the respective copyright industries.

Employment figures for the core and total copyright industries for the years 2018-2021 are provided in **Table 4**. As shown, the core copyright industries employed more than 9.824 million workers in 2018. These workers represented 4.94% of the total U.S. workforce in 2018. Similar to the pattern we observe in the U.S. economy as a whole, the pandemic years hit the copyright industries’ employment numbers hard, and although we see signs of recovery between 2020 and 2021, the copyright industries have not yet recovered the overall number of jobs generated in 2019, for example. Nevertheless, the share of total U.S. employment by the core and total copyright industries held steady between 2018 and 2021. In 2021, the number of core copyright employees in the United States was upwards of 9.6 million, an increase from the more than 9.5 million employed in 2020. During the entire period of 2018-2021 the core copyright industries employment remained close to 4.9% of the

Table 4

**Copyright Industries and Total U.S. Employment
(in Thousands), 2018-2021**

	2018	2019	2020	2021
Core Copyright				
Core Copyright Industries	9,824.7	9,898.5	9,508.5	9,630.6
Total U.S. Employment	198,964.2	203,141.0	194,928.5	197,432.4
Core Share of Total U.S. Employment	4.94%	4.87%	4.88%	4.88%
Total Copyright				
Total Copyright Industries	16,265.8	16,497.5	15,869.5	16,073.4
Total U.S. Employment	198,964.2	203,141.0	194,928.5	197,432.4
Total Share of Total U.S. Employment	8.18%	8.12%	8.14%	8.14%

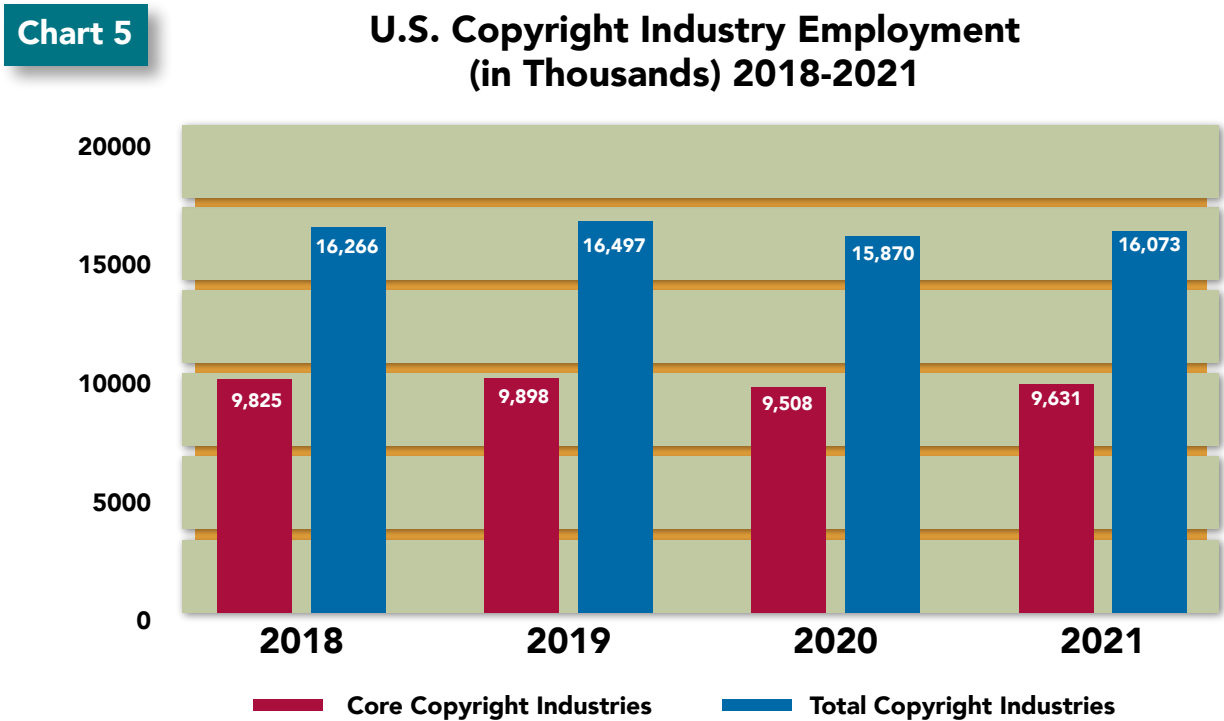
¹¹For more detail on how IMPLAN calculates employment, see <https://support.implan.com/hc/en-us/articles/115009510967-Employment-Data-Details>

¹²IMPLAN Industries & NAICS Correspondences – IMPLAN - Support.

¹³U.S. Census Bureau, 2017 SUSB Annual Data Tables by Establishment Industry.

total U.S. workforce. In 2021, employment in the total copyright industries was more than 16 million workers, up from under 15.9 million workers in 2020. During the entire period of 2018-2021, the total copyright industries represented more than an 8.1% share of total U.S. employment.

These same U.S. copyright industry employment figures as a share of total U.S. employment are also expressed graphically in **Chart 5** below. The core copyright share of employment remained at approximately 4.9%, varying between 4.87% and 4.94%; while the total copyright share of employment varied between 8.12% and 8.18% from 2018 and 2021.



For U.S. private industry, employment growth during the years 2018 through 2021 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 decreased slightly from 175,785,000 in 2018 to 174,301,000 in 2021. During these years, the core copyright industries’ share of all private employment varied between 5.51% and 5.59% while the total copyright industries’ share of private employment varied between 9.18% and 9.25%.

Table 5

Copyright Industries and Total Private Employment (in Thousands), 2018-2021

	2018	2019	2020	2021
Core Copyright				
Core Copyright Industries	9,824.7	9,898.5	9,508.5	9,630.6
Total U.S. Private Employment	175,785.0	179,779.1	172,090.4	174,301.0
Core Share of Total U.S. Private Employment	5.59%	5.51%	5.53%	5.53%
Total Copyright				
Total Copyright Industries	16,265.8	16,497.5	15,869.5	16,073.4
Total U.S. Private Employment	175,785.0	179,779.1	172,090.4	174,301.0
Total Share of Total U.S. Private Employment	9.25%	9.18%	9.22%	9.22%

In this *Report*, we also quantify the average compensation per employee received by workers in the copyright industries and in the U.S. economy as a whole across all industries. 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.”¹⁴ These compensation data are shown in **Table 6**.

Table 6

Copyright Industries and Total Compensation per Employee 2018-2021

	2018	2019	2020	2021
Core Copyright				
Core Copyright Industries	\$116,310	\$113,472	\$117,513	\$121,583
Ratio: Core to U.S.	1.53	1.48	1.51	1.51
Total Copyright				
Total Copyright Industries	\$99,209	\$97,597	\$100,279	\$103,752
Ratio: Total to U.S.	1.30	1.28	1.29	1.29
U.S. Average Compensation	\$76,182	\$76,539	\$77,869	\$80,566

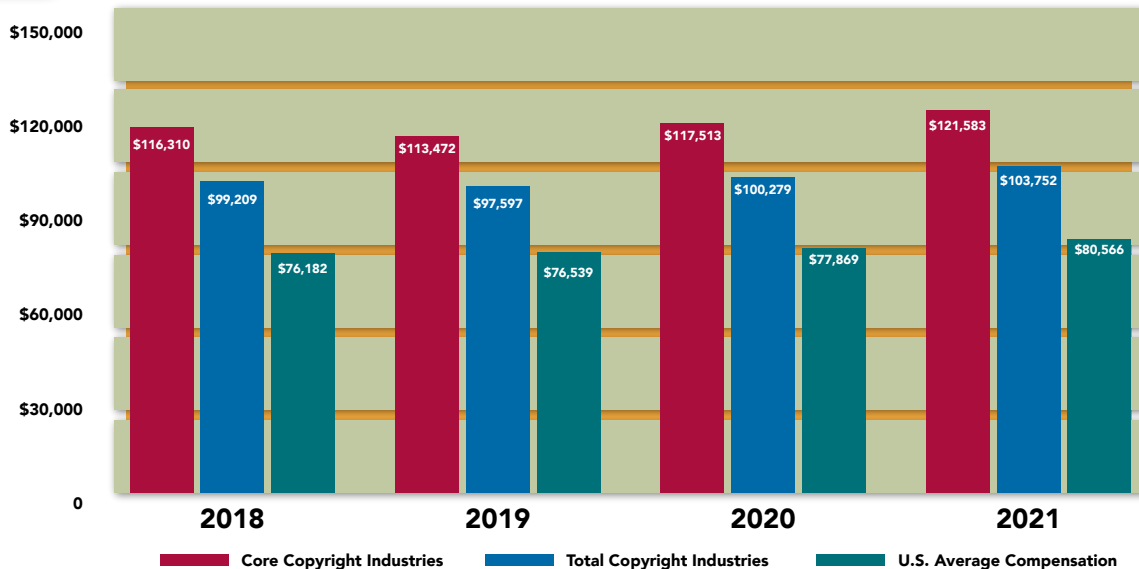
During the period 2018-2021, average compensation per employee in both the core and total copyright industries increased. As shown in **Table 6**, average compensation earned by core copyright employees stood at \$121,583 in 2021. This value was 51% higher than the average compensation paid to all U.S. employees in 2021 (\$80,566). For total copyright industry workers, average compensation in 2021 was \$103,752, about 29% higher than the U.S. average.

¹⁴See U.S. BEA, *Glossary Index*, see <https://www.bea.gov/help/glossary>.

Compensation data are also reported graphically in **Chart 6**.

Chart 6

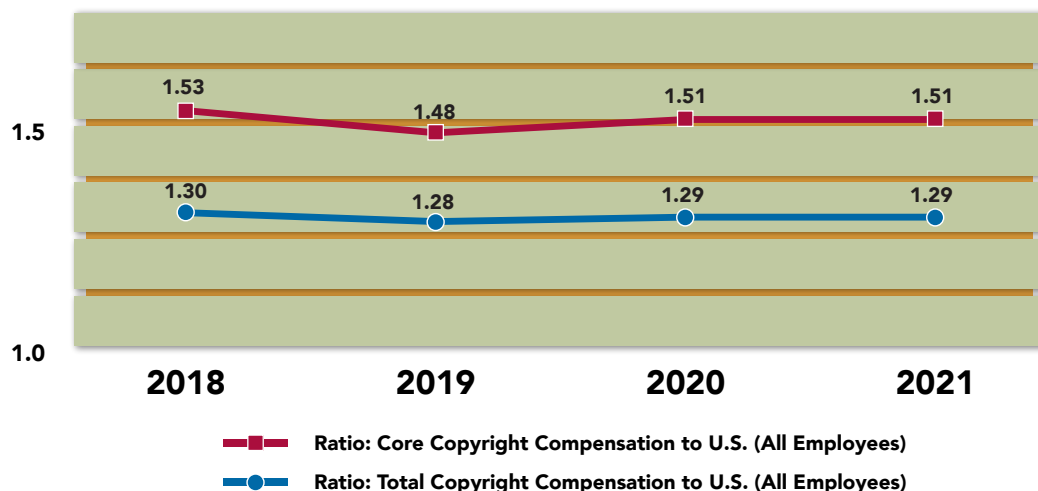
U.S. Copyright Industry Compensation per Employee 2018-2021



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 was between approximately 48%-53% from 2018 to 2021. For total copyright employees, the compensation premium was between about 28%-30% during this same time period. In 2021, for example, core copyright employees on average received about 51% more compensation than the average U.S. worker, while total copyright industry employees received about 29% more compensation than the average worker.

Chart 6A

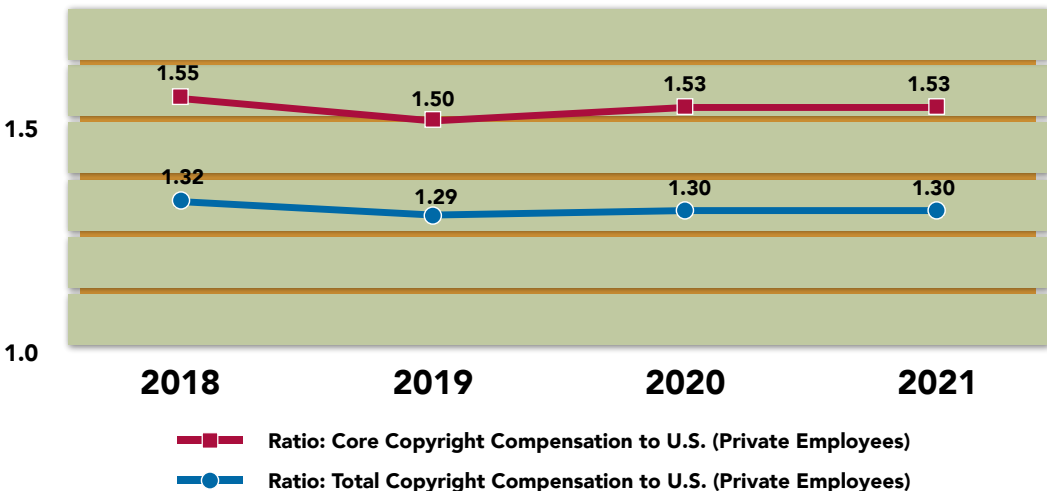
U.S. Copyright Industry Compensation Ratios Compared to All U.S. Employees (1.00 = 100%) 2018-2021



Copyright industry workers are also paid more than the average U.S. worker in private industry. As shown in **Chart 6B**, from 2018 to 2021 the compensation paid to workers in the core copyright industries varied between 50%-55% 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 was between 29%-32% 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%)
2018-2021**



U.S. COPYRIGHT MATERIALS IN WORLD MARKETS

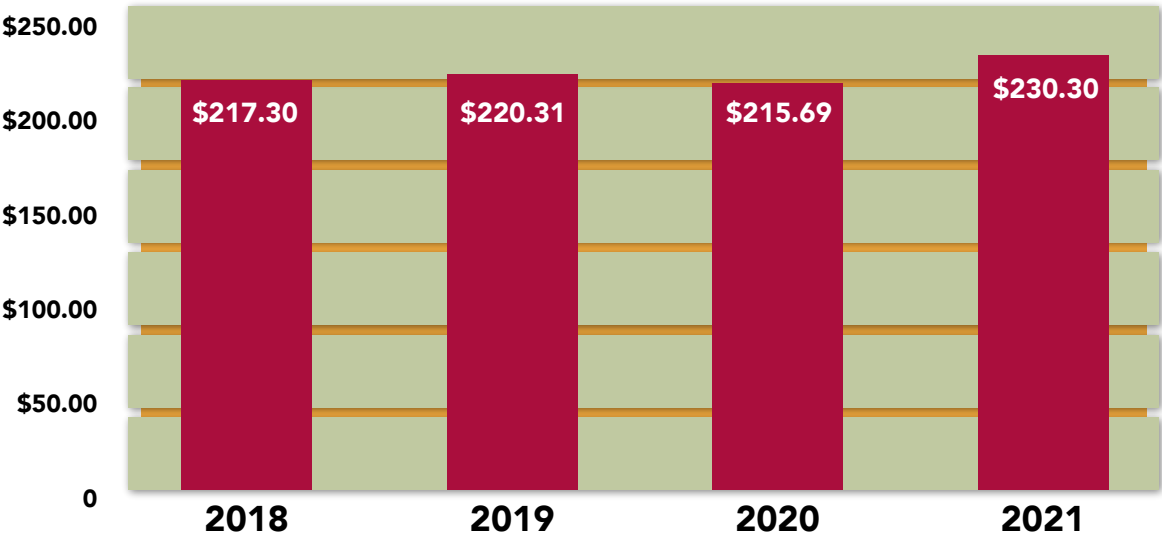
Consumers in non-U.S. markets continue to demand products that embody American creativity. Copyright products that are sold abroad may be manufactured in the U.S. or in foreign markets, but, in either case, the creative (copyrighted) components of those products are nurtured by the protection afforded 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 fall short of measuring 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, publishers, and the sound recording industry.¹⁵ However, the export statistics reported by Census are substantially lower than foreign market sales figures derived from non-government sources, while also often not meeting their own publication standards due to high sampling variability, making it hard to track annual growth.

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 2018 through 2021: 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 industries of \$217.30 billion in 2018, \$220.31 billion in 2019, \$215.69 billion in 2020, and \$230.30 billion in 2021. **Chart 7** below demonstrates these figures graphically.

Chart 7

Revenue Generated by Foreign Sales and Exports of
Selected Copyright Sectors
(Billions of U.S. Dollars), 2018-2021



¹⁵See U.S. Census Bureau, Service Annual Survey Latest Data (NAICS-basis): *Estimated Export Revenue for Employer Firms: 2013 through 2020*, Table 6, see <https://www.census.gov/data/tables/2020/econ/services/sas-naics.html>.

Annual growth rates for foreign sales of these selected core copyright industries are provided in **Table 7** below. The annual growth rate for exports and foreign sales has been increasing except in 2019-2020, when the growth rate was negative reflecting the economic difficulties caused by the COVID-19 pandemic. In other years, the growth rate of foreign sales and exports increased, and, after the economic effects of the pandemic subsided, the growth in 2021 of foreign sales in the selected copyright industries was particularly robust at 6.78%.

Table 7 Annual Growth Rate of Foreign Sales and Exports, 2018-2021

	2018-2019	2019-2020	2020-2021
Growth Rate	1.39%	-2.10%	6.78%

In addition, the foreign sales and exports of these core copyright industries exceeded the entirety of exports of several other major industry sectors. As reported in **Table 8** below for 2021, the selected copyright industry sales in foreign markets exceeded the exports of the following U.S. industries: chemicals (excluding pharmaceutical & medicines); agricultural products; aerospace products and parts; pharmaceuticals & medicines; and food & kindred products. More specifically, the selected copyright industries generated non-U.S. sales of \$230.3 billion. In the same year, the foreign sales and exports for the U.S. chemicals manufacturing industry reached \$161.4 billion; U.S. agricultural foreign sales and exports were approximately \$131.8 billion; foreign sales and exports for U.S. aerospace products and parts approached \$93.3 billion; foreign sales and exports of U.S. pharmaceutical and medicines reached \$92.5 billion; and foreign sales and exports of U.S. food and kindred products were approximately \$77.8 billion.

Table 8 Foreign Sales and Exports for Selected U.S. Industries
(Billions of U.S. Dollars) 2021

	2021
Selected Copyright industries	\$230.30
Chemicals (excluding Pharmaceuticals & Medicines) ¹	\$161.40
Agricultural Products ²	\$131.80
Aerospace Products and Parts ¹	\$93.30
Pharmaceuticals & Medicines ¹	\$92.50
Food & Kindred Products ¹	\$77.80

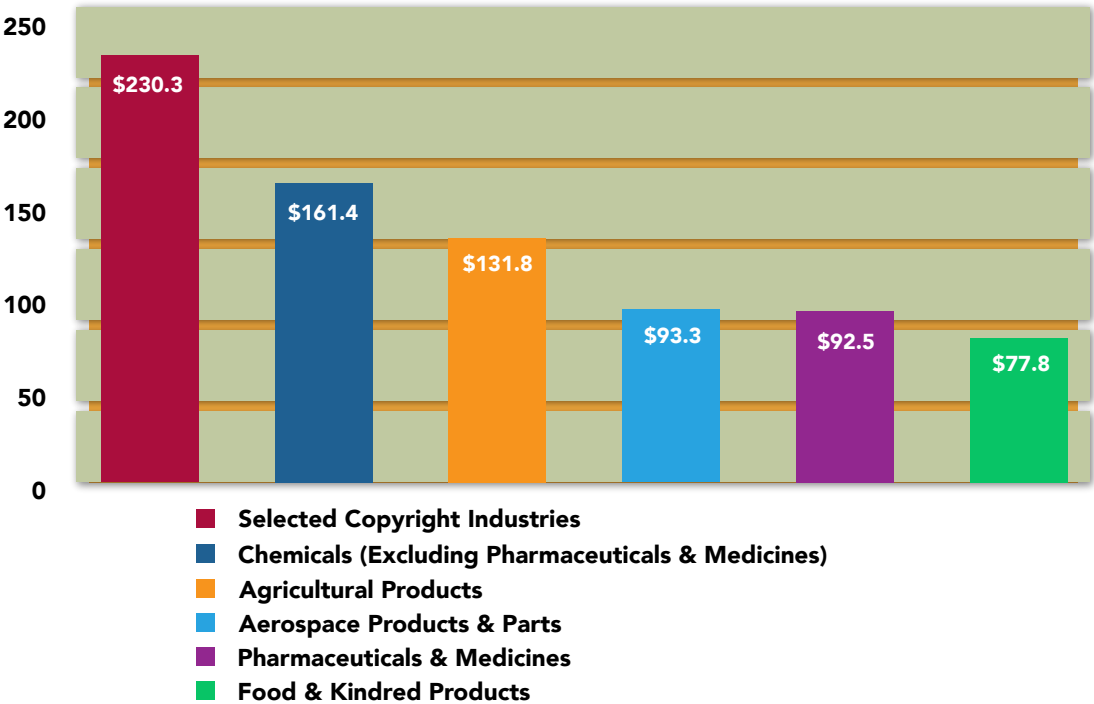
¹Source: U.S. Census Bureau: Economic Indicators Division USA Trade Online, <https://usatrade.census.gov/>

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 and compare very favorably to other significant industry sectors.

Chart 8

Foreign Sales and Exports for Selected Industries
(Billions of U.S. Dollars), 2021



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.

One concept that has been gaining traction and eliciting lengthy discussion, not only in the United States but also in different economies around the globe, has been the concept of the **digital economy**. This concept refers to a measurement of the contribution to the overall economy of the industries that heavily rely on the conversion of information into digital form.

While an earlier related effort had concentrated on measuring ICT (information and communications technology),¹⁶ which is essentially the infrastructure and components that enable modern computing, the proposed digital economy frameworks today in many countries are broader, and although they tend to encompass ICT, they are no longer limited to it.

The OECD released a report in 2020¹⁷ that among other things highlights the “lack of a commonly agreed definition of the digital economy in order to orientate the measurement and policy agenda.” The report proposes a comprehensive definition, with the understanding that although it is relatively broad, each country can adjust this consensual framework to compare indicators.

“The Digital Economy incorporates all economic activity reliant on, or significantly enhanced by the use of digital inputs, including digital technologies, digital infrastructure, digital services and data. It refers to all producers and consumers, including government, that are utilising these digital inputs in their economic activities.”¹⁸

In the United States, the BEA is responsible for defining the boundaries of what constitutes the digital economy, as well as for providing several economic indicators of its aggregate and detailed contribution.¹⁹ To identify the role of the copyright industries within the digital economy in the United States, we attempt to determine the intersection between the latest definition of the digital economy provided by the BEA²⁰ and the copyright industries definition described earlier in this Report.²¹

¹⁶As early as June 2004, the *Partnership on Measuring ICT for Development* (https://www.itu.int/en/ITU-D/Statistics/Documents/partnership/Partnership_Project_June2004.pdf) was established as a global initiative to close the data gap on the international level and to collect reliable data and indicators for ICT readiness, use, and impact. This project is still ongoing and ICT indicators are constantly updated and monitored. (https://www.itu.int/en/ITU-D/Statistics/Documents/coreindicators/Core-List-of-Indicators_March2022.pdf)

¹⁷OECD, *A Roadmap Toward a Common Framework for Measuring the Digital Economy*, Saudi Arabia, 2020. <https://www.oecd.org/sti/roadmap-toward-a-common-framework-for-measuring-the-digital-economy.pdf>

¹⁸*Id.* p. 34

¹⁹The BEA provides several measures of economic contribution of the Digital Economy, including gross output, value added, employment and compensation, which can be found here: <https://www.bea.gov/data/special-topics/digital-economy>.

²⁰For the latest definition of the digital economy by the BEA, see NAICS listed in Appendix Table 1 at <https://www.bea.gov/system/files/2022-05/New%20and%20Revised%20Statistics%20of%20the%20U.S.%20Digital%20Economy%202005-2020.pdf>. Unlike the BEA, we do not separate the digital economy into three sectors: infrastructure, e-commerce, and priced digital services, but rather treat the digital economy as an entire construct, because the distinction in question was not germane to this Report.

²¹The methodology is presented in Highfill, T., Surfield, C., *New and Revised Statistics of the U.S. Digital Economy, 2005-2020*, BEA. May 2022. <https://www.bea.gov/system/files/2022-05/New%20and%20Revised%20Statistics%20of%20the%20U.S.%20Digital%20Economy%202005-2020.pdf>.

In **Table 9** below we demonstrate that the core copyright industries have represented over 50% of the total U.S. digital economy for the entirety of the observed time period, having grown their participation in the digital economy over time from 51.6% in 2018 to 52.26% in 2021, representing in 2021 a total of \$1.2 trillion in value added to the U.S. digital economy. If we expand this definition to include the total copyright industries, there is a similar upward trend, with more the \$1.5 trillion contributed to the U.S. digital economy in 2021. These figures are even more impressive when one considers the resilience of the digital economy, which **Table 9** shows has experienced positive growth throughout the entire 2018-2021 period, including during the peak of the COVID-19 pandemic, which was similarly true for the core copyright-digital and total copyright-digital industries.

Table 9

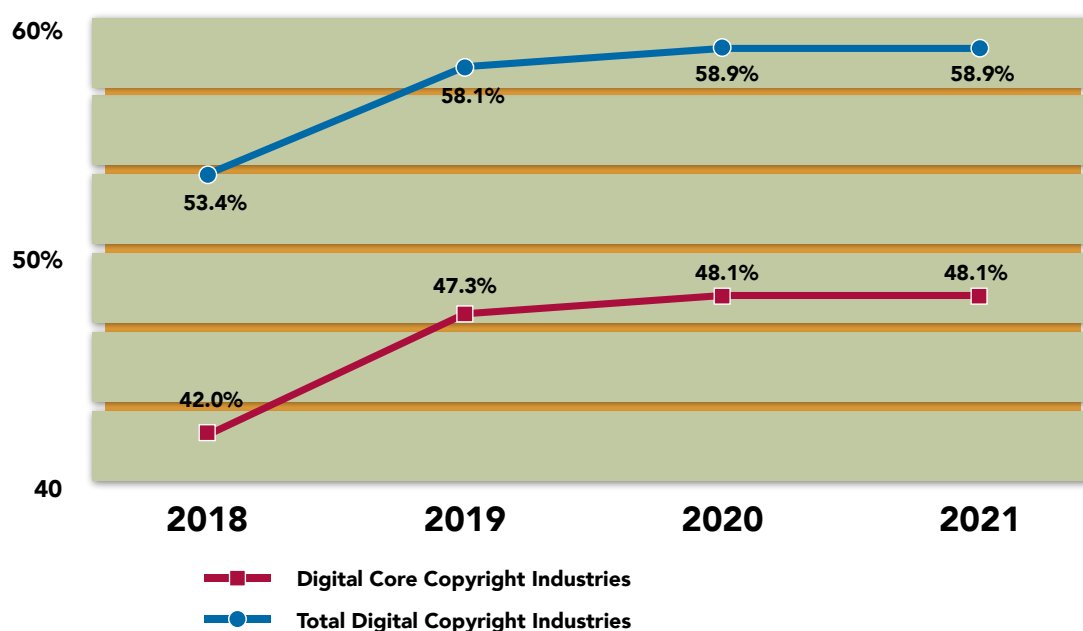
**Digital Copyright Industries Value Added
(Billions of U.S. Dollars), 2018-2021**

	2018	2019	2020	2021
Digital Core Copyright				
Digital Core Copyright Industries	\$1,015.68	\$1,073.34	\$1,113.08	\$1,237.51
Total Digital Economy	\$1,968.52	\$2,068.22	\$2,123.09	\$2,368.07
Digital Core Copyright Share of Total Digital Economy	51.60%	51.90%	52.43%	52.26%
Total Digital Copyright				
Total Digital Copyright Industries	\$1,272.95	\$1,339.74	\$1,383.83	\$1,536.07
Total Digital Economy	\$1,968.52	\$2,068.22	\$2,123.09	\$2,368.07
Total Digital Copyright Share of Total Digital Economy	64.67%	64.78%	65.18%	64.87%

In a similar fashion, we calculate the share of digital economy employment that derives from core copyright industries, which is shown in **Chart 9** below. For the core copyright industries, this share has been increasing from 42.0% in 2018 to 48.1% in 2021. Similarly, the total digital copyright industries share of digital economy employment has been increasing from 53.4% in 2018 to 58.9% in 2021.

Chart 9

Digital Copyright Industries' Share of Total Digital Economy Employment, 2018-2021



The BEA is constantly improving its methodology, definitions, and estimates of the digital economy to continue to provide insights regarding the digital economies' impact on the overall U.S. economy. It is important to note that the BEA's current digital economy definition does not encompass the full scope of the copyright industries' digital activities. Accordingly, the figures discussed above are based on an incomplete picture of the digital economy and are likely to understate the contribution of the copyright industries to the digital economy to the extent that the omitted digital areas are copyright intensive. As such, we anticipate this section of the *Report* to continue to evolve, as we keep abreast of likely future developments and changes in the definition of the digital economy as it relates to the United States. Some areas of potential study have already been signaled by the BEA,²² including additional digital goods and services, accounting for digital inputs to production, among others.

²²Barefoot, K., Curtis, D., Jolliff, W., Nicholson, J.R., Omohundro, R. *Defining and Measuring the Digital Economy*, BEA. 2018. <https://www.bea.gov/system/files/papers/WP2018-4.pdf>

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 an outsized role in the growth of U.S. exports, as well as in the digital economy.

Value added in the copyright industries continues to grow. As of 2021, the value added by the core copyright industries was \$1,810.25 billion, approximately 7.76% of U.S. GDP. In the same year, value added for the total copyright industries stood at \$2,919.15 billion, or 12.52% of GDP. In 2018-2019, 2019-2020, and 2020-2021, 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 9.6 million workers while some 16.1 million people are employed by the total copyright industries. In 2021, the annual compensation paid to core copyright workers exceeded the average annual compensation paid to all U.S. workers by 51%, while the average compensation paid to employees of the total copyright industries exceeded the U.S. average by 29%.

Sales of U.S. copyright materials continue to expand in overseas markets. For selected core copyright sectors, sales in foreign markets exceeded \$230.3 billion in 2021. The foreign sales of these selected copyright sectors exceeded the foreign sales of other U.S. industries including the chemicals manufacturing industry, the aerospace products and parts industry, the agricultural products industry, the pharmaceutical and medicines industry, and the food and kindred products industry.

The copyright industries constitute a significant portion of the U.S. digital economy, where core digital copyright represents 52.26% of the digital economy value added in 2021, and total digital copyright represents 64.87% of the digital economy value added in the same year. Core digital copyright also represents a significant portion of digital economy employment, 48.1% in 2021, while total digital copyright represents 58.9% of the digital economy employment in 2021. As the BEA's digital economy definition does not include many of the copyright industries' digital activities, these numbers seem likely to understate the total contribution of the copyright industries to the digital economy.

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.

APPENDIX A: TABLES OF STATISTICS

Table A1

Core Copyright Industries Value Added to GDP 2018-2021

	2018	2019	2020	2021
Nominal Value Added (Billions of Dollars)				
Core Copyright Industries	\$1,521.45	\$1,602.17	\$1,609.65	\$1,810.25
U.S. GDP	\$20,533.10	\$21,381.00	\$21,060.50	\$23,315.10
Share	7.41%	7.49%	7.64%	7.76%
Real Value Added (Billions of Dollars of 2012)				
Core Copyright Industries	\$1,582.51	\$1,660.72	\$1,675.45	\$1,892.55
U.S. GDP	\$18,609.10	\$19,036.10	\$18,509.10	\$19,609.80
Share	8.50%	8.72%	9.05%	9.65%

Table A2

Total Copyright Industries Value Added to GDP 2018-2021

	2018	2019	2020	2021
Nominal Value Added (Billions of Dollars)				
Total Copyright Industries	\$2,482.64	\$2,601.26	\$2,601.35	\$2,919.15
U.S. GDP	\$20,533.10	\$21,381.00	\$21,060.50	\$23,315.10
Share	12.09%	12.17%	12.35%	12.52%
Real Value Added (Billions of Dollars of 2012)				
Total Copyright Industries	\$2,517.83	\$2,610.55	\$2,613.01	\$2,886.92
U.S. GDP	\$18,609.10	\$19,036.10	\$18,509.10	\$19,609.80
Share	13.53%	13.71%	14.12%	14.72%

Table A3

U.S. Copyright Industry Employment (Thousands) 2018-2021

	2018	2019	2020	2021
U.S. Employment				
Total U.S. Employment	198,964	203,141	194,929	197,432
Total Private U.S. Employment	175,785	179,779	172,090	174,301
Core Copyright				
Core Copyright Employment	9,824.70	9,898.50	9,508.50	9,630.60
Core Copyright Share of U.S. Employment	4.94%	4.87%	4.88%	4.88%
Core Copyright Share of Private U.S. Employment	5.59%	5.51%	5.53%	5.53%
Total Copyright				
Total Copyright Employment	16,265.80	16,497.50	15,869.50	16,073.40
Total Copyright Share of U.S. Employment	8.18%	8.12%	8.14%	8.14%
Total Copyright Share of Private U.S. Employment	9.25%	9.18%	9.22%	9.22%

Table A4

U.S. Copyright Industry Compensation per Employee (U.S. Dollars), 2018-2021

	2018	2019	2020	2021
U.S. Employment				
Average U.S. Compensation/Employee	\$76,181.55	\$76,539.00	\$77,869.35	\$80,565.94
Average Private U.S. Compensation/Employee	\$75,194.91	\$75,610.51	\$77,042.52	\$79,710.48
Core Copyright				
Core Copyright Compensation/Employee	\$116,310	\$113,472	\$117,513	\$121,583
Ratio: Core Copyright Compensation to U.S. Compensation	1.53	1.48	1.51	1.51
Ratio: Core Copyright Compensation to Private U.S. Compensation	1.55	1.50	1.53	1.53
Total Copyright				
Total Copyright Compensation/Employee	\$99,209.50	\$97,597.30	\$100,278.98	\$103,751.61
Ratio: Total Copyright Compensation to U.S. Compensation	1.30	1.28	1.29	1.29
Ratio: Total Copyright Compensation to Private U.S. Compensation	1.32	1.29	1.30	1.30

APPENDIX B: MATERIALS CONSIDERED LIST

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Copyright Industries in the U.S. Economy 2022 Report

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ISBN: 979-8-218-12186-0