Office of Research & Analysis National Endowment for the Arts January 2015

ACPSA Issue Brief #4: Arts and Cultural Contributions to the Creative Economy

The United States currently lacks an official definition of the "creative economy." Still, one commonly accepted proxy is the amount of economic value represented by intellectual property. For the purpose of this Issue Brief, we define the creative economy as valued added by those industries identified as *copyright intensive* by the U.S. Patent and Trademark Office.¹

In 2012, copyright-intensive industries contributed \$869 billion to the U.S. economy. Of that value, half (\$433.5 billion) stemmed from the production of arts and cultural goods and services. In other words, the arts and cultural sector represents half of the U.S. copyright-intensive creative economy.

Moreover, copyright-intensive ACPSA production accounts for a steadily increasing share of total U.S. GDP, and it represents more than 70 percent of all ACPSA investment.

The Production of Arts and Cultural Goods and Services Versus All Production by Copyright-Intensive Industries

To understand the role of arts and cultural production in the creative economy, consider publishing, which is defined as a copyright-intensive industry by the USPTO. This industry comprises the publishing of newspapers and periodicals; books; other paper publishing such as art prints and calendars; directories; and, notably, software. Total value added by the publishing industry was \$183.4 billion in 2012.

For an additional definition of copyright-intensive industries, see the 2006 report, <u>National Studies on Assessing the Economic Contribution of the Copyright-Based Industries</u>, World Intellectual Property Organization.

publication, Intellectual Property and the U.S. Economy: Industries in Focus.

¹ There are slight differences between the USPTO list of copyright-intensive industries and the ACPSA creative industries considered in this analysis. The USPTO list, which adheres to NAICS codes, defines "other professional, scientific, and technical services" as photography and translation services. ACPSA industries, alternatively, are derived from arts and cultural commodities and exclude translation services. Additionally, ACPSA photographic services include photo-processing services (except one-hour photo processing). For more information on USPTO-defined copyright-intensive industries, see the March 2012

The ACPSA, however, excludes the publishing of directories and it restricts software publishing to games and arts-related software such as photo-processing software and CAD (computer-assisted design software). Consequently, ACPSA publishing is a fraction of the industry's total output and value added. In 2012, value added by ACPSA publishing was \$77.9 billion—or 42 percent of the publishing industry's total value added.

Among copyright-intensive industries, computer systems design generates the greatest value added—more than \$116 billion in 2012. Because the ACPSA includes only computer system designs supporting motion picture and sound recording, it claims just 2.3 percent (\$2.7 billion) of the industry's total value added.

Conversely, virtually all output and value added by copyright-intensive industries such as the performing arts and motion pictures are counted as arts and cultural and are part of ACPSA value added.

In 2012, the arts and cultural share of the creative industries' value added was \$433.5 billion—half of all value added by the creative industries.

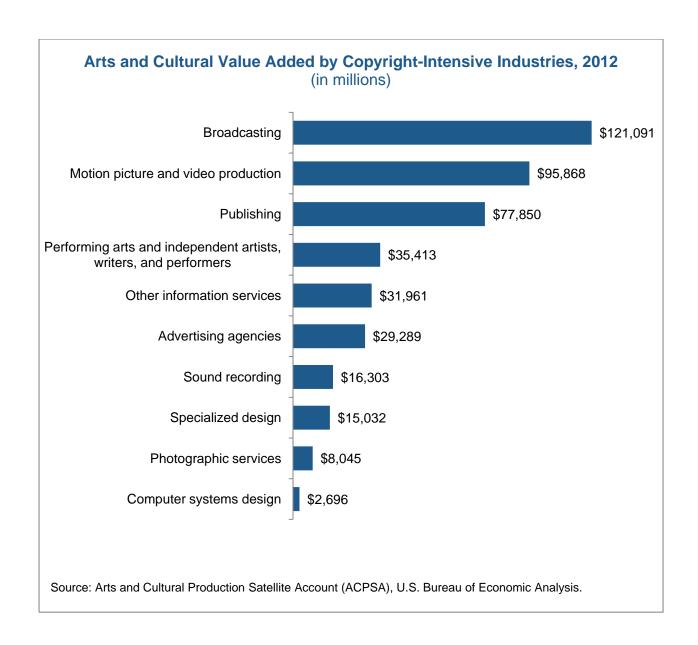
/alue Added by the Creative Industries, 2012		
	Value added only from arts and cultural copyright-intensive production	copyright-intensive production
Copyright-intensive industries:	\$433,548	\$869,328
Broadcasting	\$121,091	\$275,249
Motion picture and video production	\$95,868	\$96,855
Publishing	\$77,850	\$183,423
Performing arts and independent		
artists, writers, and performers	\$35,413	\$37,771
Other information services	\$31,961	\$35,369
Advertising agencies	\$29,289	\$82,757
Sound recording	\$16,303	\$16,347
Specialized design	\$15,032	\$16,432
Photographic services	\$8,045	\$8,266
Computer systems design	\$2,696	\$116,859

Among copyright-intensive ACPSA industries, broadcasting (i.e., radio and TV broadcasting) is the largest—in 2012, ACPSA value added by the broadcasting industry was \$121 billion.² The motion picture and publishing industries also contribute large amounts of ACPSA value added—nearly \$96 billion and \$78 billion, respectively, in 2012.

Nearly all production by the performing arts and independent artists industries is included in the tally of ACPSA GDP. This amount, \$35.4 billion in 2012, surpasses valued added by "other information services" (which includes Internet broadcasts) and by advertising agencies. Indeed, performing arts and independent artists contribute more than twice the value added by sound-recording and specialized-design industries. Consequently, the performing arts and independent artists are among the largest contributors to the U.S. creative economy.

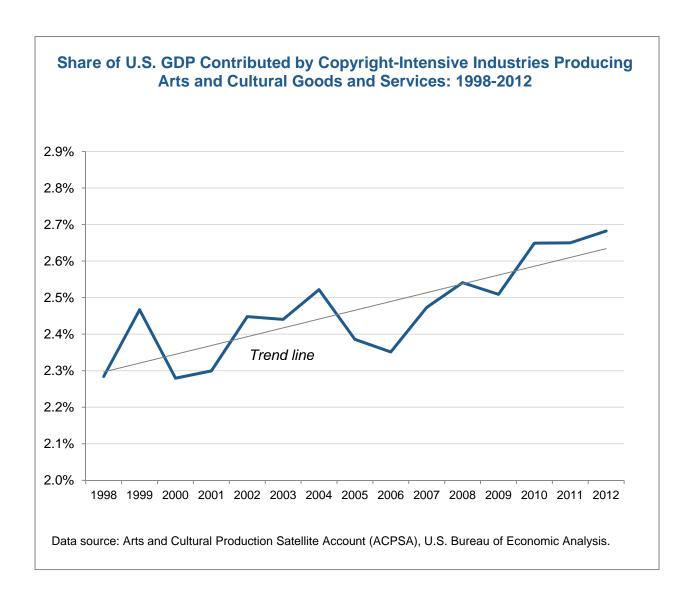
-

² ACPSA broadcasting excludes radio and TV broadcasts of sporting events. ACPSA broadcasting also excludes the industry's revenue from services related to equipment repair and maintenance, among other items.



Copyright-Intensive ACPSA Industries Account For Increasing Shares of U.S. GDP

In addition to representing a substantial share of the creative economy, copyright-intensive ACPSA industries account for a steadily increasing share of total U.S. GDP. In 1998, for example, value added by ACPSA copyright-intensive industries amounted to 2.3 percent of U.S. GDP. Although exhibiting variation, that share steadily rose to 2.7 percent of U.S. GDP in 2012. Given that U.S. nominal GDP was \$16.2 trillion in 2012, the 0.4 percentage-point gain in the share composed by copyright-intensive ACPSA industries amounted to nearly \$64.7 billion.



Employment and Compensation

In producing arts and cultural commodities, copyright-intensive industries employ more than 1.6 million workers. In 2012, those workers were compensated \$151.4 billion. The broadcasting, motion picture, and publishing industries each employed between 350,000 and 400,000 workers, and they earned roughly \$30-\$38 billion.

The performing arts and independent artists, writers, and performers employed nearly 137,000 workers, who, in 2012, were compensated \$13 billion. Advertising agencies employed a similar number (just under 134,000) and paid \$11.5 billion in compensation.

Employment and Compensation by Copyright-Intensive Industries Producing Arts and Cultural Goods and Services, 2012

	Employment (in thousands)	Compensation (in millions)
Copyright-intensive industries:	1,648.5	\$151,438.7
Broadcasting	401.3	\$34,419.5
Motion picture and video production	367.3	\$27,855.9
Publishing	345.3	\$38,194.7
Performing arts and independent artists, writers,		
and performers	136.8	\$13,043.2
Advertising	133.5	\$11,508.5
Specialized design	107.4	\$6,212.9
Photographic services	78.0	\$3,580.0
Other information services	48.0	\$11,933.2
Computer systems design	18.1	\$2,371.9
Sound recording	12.8	\$2,318.9

Source: Arts and Cultural Production Satellite Account (ACPSA), U.S.

Bureau of Economic Analysis.

Arts and Cultural Production as Investment

In addition to measuring the production of arts and cultural commodities, the ACPSA also tracks the consumption of those goods and services. For example, of the nearly \$1.2 trillion in 2012 *supply* of arts and cultural commodities, \$368 billion was consumed by U.S. households (i.e., "personal consumption expenditures") and \$60 billion was exported.³

In 2012, \$105.5 billion of the U.S. supply of arts and cultural commodities was used as gross private fixed investment, a term used to describe additions to and replacement of fixed assets. Fixed assets, in turn, are assets used repeatedly and continuously in the production process for more than one year.⁴

³ Supply of commodities includes commodities domestically produced plus imports. The supply of commodities includes wholesale and retail trade margins and changes in inventory. Additionally, supply is measured as purchaser' value.

⁴ For more information on fixed investment, see the U.S. Bureau of Economic Analysis' <u>NIPA Handbook</u>, <u>Chapter 6</u>, <u>Private Fixed Investment</u>.

Historically, private fixed assets were in the form of physical capital (i.e., plant and equipment assets). In more recent years, however, the BEA has expanded its definition of investment to include the capitalization of intangible assets. For example, software development was first counted as fixed private investment in 1999. And in 2013, the national income and product accounts (NIPAs) were revised to include research and development expenditures as investment.⁵

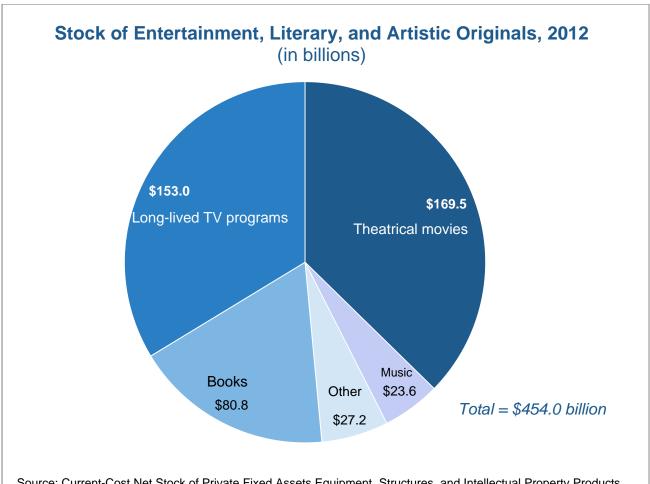
Also in 2013 was the BEA revision that capitalized "entertainment originals." Entertainment originals refer to theatrical movies; long-lived television programs; books; music; and other "miscellaneous entertainment" such as scripts and scores for the performing arts, greeting card designs, and stock photography. These entertainment items are designed to generate mass reproductions for sale to the general public and have a useful lifespan of more than one year.

The BEA reports that the *stock* of U.S. entertainment, literary, and artistic originals was valued as \$454 billion in 2012. Movies and long-lived TV programs account for the largest shares—\$169.5 billion and \$153 billion, respectively.

_

⁵ For more information, see Marissa J. Crawford, et. al., in <u>Measuring R&D in the National Economic</u> Accounting System, November 2014, *Survey of Current Business*.

⁶ See Rachel H. Soloveichik, <u>Artistic Originals as Capital Assets</u>, *Survey of Current Business*, June 2011. "Theatrical movies" is a term used by the BEA to refer to movies premiering in movie theaters. Television movies and direct-to-video movies are counted by the BEA as "long-lived TV programs."



Source: Current-Cost Net Stock of Private Fixed Assets Equipment, Structures, and Intellectual Property Products by Type, U.S. Bureau of Economic Analysis.

Note: "Other" includes scripts and scores for the performing arts, greeting card designs, and stock photography.

Of the \$105.5 billion in ACPSA gross fixed investment in 2012, more than 70 percent (\$74.2 billion) was investment in entertainment, literary, and artistic originals. Moreover, virtually all entertainment originals were produced by the copyright-intensive industries.

