



NATIONAL
ENDOWMENT
FOR THE ARTS

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Note #86
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THE PERFORMING ARTS IN THE GDP, 2002

by Bonnie Nichols

As the U.S. economy recovered in 2002, consumers spent \$12.1 billion (\$42 per person) on admissions to performing arts events. This amount was \$2.5 billion more than spending on tickets to movie theaters, but \$1.5 billion less than outlays on admissions to sporting events. Annual growth was moderate; adjusted for inflation, “real” spending on tickets to performing arts events grew by 2.7 percent in 2002, less than the annual growth reported for outlays on admissions to movies (3.4 percent) and sporting events (5.2 percent).

This note, #86, uses data issued by the U.S. Commerce Department, Bureau of Economic Analysis (BEA), to report on trends in consumer spending on the performing arts and in other types of recreation spending. In addition, the note examines selected types of entertainment spending (including tickets to performing arts, movies, and sporting events; books; newspapers and magazines; and video, audio, and computer equipment) as a share of all recreation spending. It also uses figures from the Survey of Public Participation in the Arts to summarize the number of adults that attended performing arts events in 2002.

The figures presented in this note reflect the BEA’s recent comprehensive revisions to the national income and product accounts. The final section of this note discusses these revisions.

Growth in Spending on Admissions to Performing Arts, Movie Theaters, and Spectator Sports

The 2002 economy was marked by varied strengths and weaknesses. It was the first recovery year from the 2001 recession, marking gains in household income, strong retail sales, historically low mortgage rates, and low core inflation.¹ The weaknesses, however, included reduced payrolls and postponed capital spending by businesses, rising energy prices, and uncertainties stemming from war and the possibility of terrorism. Against this backdrop, real consumer spending increased by 3.4 percent, and real recreation spending rose by 6.6 percent.²

Spending on tickets to performing arts events, movie theaters, and spectator sports is shown in Table 1.³ In 2002, consumers spent \$12.1 billion on admissions to the performing arts, \$2.5 billion more than the \$9.6 billion they spent to go to the movies. At \$13.6 billion, however, spending on admissions to sporting events exceeded the performing arts by \$1.5 billion.

Real spending on performing arts admissions was strong in 2001 and modest in 2002, an odd pattern given the 2001 recession and the 2002 recovery.⁴ Growth in real spending on tickets to movie theaters and sporting events displayed a more expected pattern—weaker in 2001 and stronger in 2002. For example, real spending on performing arts admissions grew by 6.8 percent in 2001, and then slowed to 2.7 percent in 2002. By contrast, real spending on movie and sports admissions grew by 1.2 percent and 0.9 percent, respectively, in 2001. In 2002, these rates increased to 3.4 percent for movies and 5.2 percent for sports.

During the early and mid-1990s, real spending on admissions to the performing arts surpassed spending on tickets to sporting events. In 1994, for instance, performing arts spending was \$9.7 billion, \$1 billion greater than outlays for sporting events. But in 1996 and 1997, spending on the two categories was about the same. And in 1998, sporting events surpassed the performing arts. In 2000, adjusted for inflation, consumers spent \$11.5 billion on sporting events admission, \$1.2 billion more than they spent to see the performing arts. By 2002, real spending on admissions to sporting events continued to exceed the performing arts, but the difference narrowed to \$900 million.

¹ Core inflation excludes price changes in food and energy.

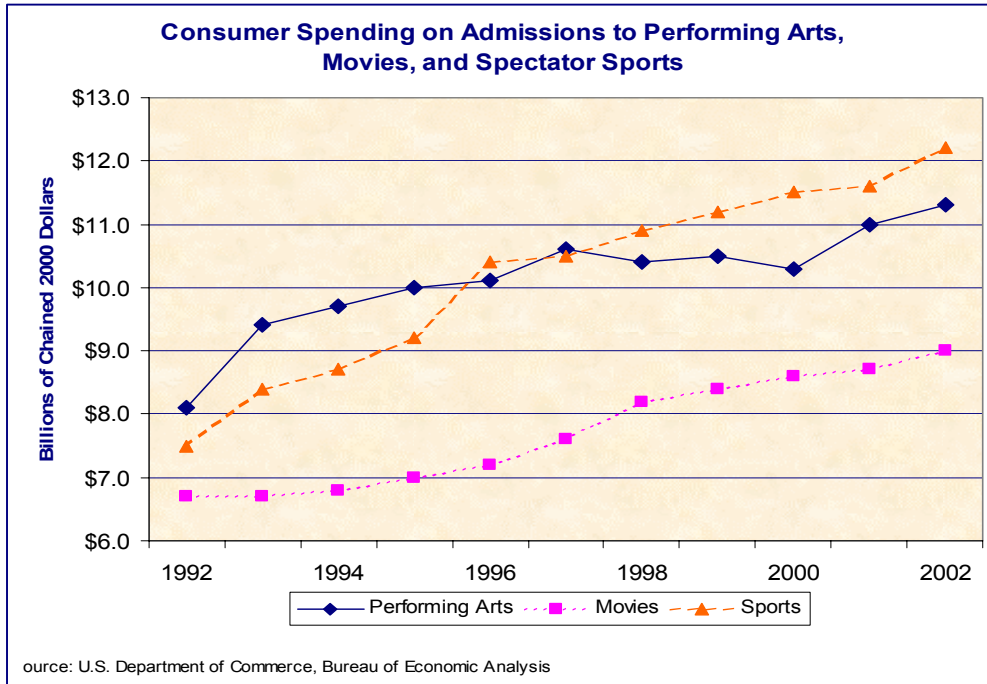
² “Real” estimates are measured in chained 2000 dollars. For more information, see Landefeld, Steven J., Brent R. Moulton, and Cindy M. Vojtech. “Chained Dollar Indexes: Issues, Tips on Their Use, and Upcoming Changes,” *Survey of Current Business*, November 2003.

³ The BEA defines admissions as ticket purchases. The estimates exclude concessions and other types of spending at these events. Also, the Bureau defines performing arts events as legitimate theaters, opera, and entertainments of nonprofit institutions. The performing arts category includes rock concerts. Consumer spending on spectator sports consists of admissions to professional and amateur athletic events and racetracks.

⁴ The unexpected growth pattern in spending on admissions to the performing arts in 2001 and 2002 may be due, in part, to the relatively small size of this spending category. Small changes to a spending category this size can result in large or unusual percentage changes.

Past Research Division notes showed real spending on admissions to the performing arts exceeding spending on tickets to sporting events in every year reported. This new pattern in which spending on sporting events exceeds the performing arts was revealed by the recent comprehensive revisions to the national income and product accounts. These revisions are discussed later in this note.

The revised estimates, as well as estimates reported in earlier notes, show that real spending on admissions to the performing arts and sporting events outpaced spending on tickets to movie theaters. This was true throughout the 11-year period shown in Table 1.



Per Capita Spending on Admissions to Performing Arts, Movie Theaters, and Spectator Sports

The \$12.1 billion consumers spent on admissions to the performing arts in 2002 translated into \$42 per person. This amount was more than the \$33.30 spent on movie tickets, but less than the per capita \$47.20 for sporting events.

Between 1992 and 2002, and adjusted for inflation, per capita spending on performing arts admissions grew by \$7.50 or 24 percent. This growth exceeded the 19 percent gain recorded for movie theater tickets, but was well below the 44 percent growth in real per capita outlays for tickets to sporting events. Per capita spending on admissions is shown in Table 2.

GDP and Consumer and Recreation Spending

Table 3 shows year-over-year percentage changes in real gross domestic product (GDP, a broad measure of economic production), personal consumption spending, and recreation spending (a subset of personal consumption spending that includes outlays for tickets to performing arts, movie theaters, sporting events, and other types of recreation spending).

After exhibiting strong growth in the late 1990s, real GDP and consumer spending weakened in 2001 (marking the 2001 recession), and then recovered in 2002. For example, real GDP grew by 4.5 percent in 1999, dropped to 0.5 percent during the 2001 recession, and recovered, somewhat, to a rate of 2.2 percent in 2002. Consumer spending was more resilient. Real recreation spending, for instance, clipped at a growth rate of 10.7 percent in 1999. Growth slowed in 2001, but at a stronger rate of 4.4 percent. By 2002, growth in real recreation spending picked up to 6.6 percent.

Table 3 also shows detailed categories of recreation spending as a share of total recreation spending.⁵ Throughout the 1997-2002 time period, the selected categories, as a share of all recreation spending, have remained stable. For example, outlays on video and audio goods, computers, and software ranged between 19 and 20 percent of recreation spending.⁶ Commercial amusements (an extensive category that includes spending on site seeing, private flying, bowling, billiards, casino gambling, and amusement parks) hovered around 12 and 13 percent of the total.

The smallest shares of recreation spending shown in Table 3 were admissions to performing arts, movies, and sporting events. Spending on these categories ranged from 1.4 to 1.9 percent of all recreational outlays.

Attendance at Performing Arts Events

In addition to issuing notes on admissions spending, the Research Division of the National Endowment for the Arts also tracks attendance at performing arts events through the Survey of Public Participation in the Arts (SPPA).⁷ The most recent SPPA showed that 31.8 percent of adults 18 and over, 65 million people, attended a performing arts event in 2002. The following shows highlights from the 2002 survey:

⁵ Detailed categories of recreation spending are reported in nominal dollars (i.e., not adjusted for inflation).

⁶ Musical instruments are included among audio goods.

⁷ For more information, see Research Division Note #81, "2002 Survey of Public Participation in the Arts."

2002 Survey of Public Participation in the Arts

Performing Art	Percent of Adults Attending	Millions of Adults Attending
Jazz	10.8%	22.2
Classical music	11.6%	23.8
Opera	3.2%	6.6
Musicals	17.1%	35.1
Plays	12.3%	25.2
Ballet	3.9%	8.0
Other Dance	6.3%	12.1

Comprehensive Revisions to the National Income and Product Accounts

The estimates presented in this note reflect the BEA's latest comprehensive revisions to the national income and product accounts (NIPA). The comprehensive revisions, which are made every five years, incorporate three major types of improvements: (1) changes in definitions and classifications that update the accounts to portray more accurately the evolving U.S. economy; (2) statistical changes that update the accounts to reflect improved methodologies and source data; and (3) changes to improve the presentation of NIPA tables.⁸ In addition, the new base year for price and quantity measures is 2000.

Table 4 shows original and revised estimates of recreation spending and expenditures on admissions to the performing arts, movies, and sports events.⁹ For example, the comprehensive revisions increased the 2002 estimate of nominal spending on tickets to the performing arts by \$1.5 billion. The revisions also increased estimated spending on admissions to sporting events by \$3 billion, but decreased the amount reported for spending on movie tickets by \$500 million.

The comprehensive revisions had a noteworthy effect on the ranking of real spending on admissions to the performing arts and sporting events. The original estimates, measured in chained 1996 dollars to control for inflation, show spending on performing arts tickets exceeding outlays for sporting events admissions (though, by 1999, sporting events started to gain, coming close to spending on the performing arts). However, beginning in 1996, the revised estimates, including the upgrade of the base year to 2000, show spending on sporting events tickets outpacing the performing arts.

⁸ For more information, see Moulton, Brent R. and Eugene P. Seskin. "Preview of the 2003 Comprehensive Revision of the National Income and Product Accounts," *Survey of Current Business*, June 2003.

⁹ Though Table 4 shows data for 1992 through 2002, the BEA's comprehensive revisions are used to adjust the entire NIPA time series. Comprehensive revisions to recreation spending, for example, data back to 1930.

Final Notes

The Research Division of the National Endowment for the Arts has been reporting annual statistics on consumer spending on the performing arts and other recreational expenditures since 1982. Visit the agency's web site at www.arts.gov for a list of Research Division notes and reports, including a new report on the 2002 Survey of Public Participation in the Arts (Report #45). For more information about the economic and demographic figures reported in this note, see the following sites:

Bureau of Economic Analysis
www.bea.gov

National Bureau of Economic Research
www.nber.org

The Federal Reserve
www.federalreserve.gov

Census Bureau
www.census.gov

Table 1. Consumer Spending on Admissions to Performing Arts, Movies, and Spectator Sports

Billions of Nominal and Real Dollars

Year	Total Admissions to Performing Arts, Movies, and Spectator Sports		Performing Arts		Movies		Spectator Sports	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
1992	\$16.6	\$22.3	\$6.0	\$8.1	\$4.9	\$6.7	\$5.6	\$7.5
1993	\$18.5	\$24.5	\$7.1	\$9.4	\$5.1	\$6.7	\$6.4	\$8.4
1994	\$19.7	\$25.2	\$7.6	\$9.7	\$5.3	\$6.8	\$6.8	\$8.7
1995	\$21.1	\$26.2	\$8.1	\$10.0	\$5.6	\$7.0	\$7.4	\$9.2
1996	\$23.5	\$27.8	\$8.6	\$10.1	\$6.1	\$7.2	\$8.9	\$10.4
1997	\$25.0	\$28.7	\$9.2	\$10.6	\$6.6	\$7.6	\$9.2	\$10.5
1998	\$26.2	\$29.5	\$9.2	\$10.4	\$7.2	\$8.2	\$9.8	\$10.9
1999	\$28.4	\$30.2	\$9.9	\$10.5	\$7.9	\$8.4	\$10.6	\$11.2
2000	\$30.4	\$30.4	\$10.3	\$10.3	\$8.6	\$8.6	\$11.5	\$11.5
2001	\$32.8	\$31.3	\$11.4	\$11.0	\$9.0	\$8.7	\$12.4	\$11.6
2002	\$35.3	\$32.5	\$12.1	\$11.3	\$9.6	\$9.0	\$13.6	\$12.2

Year-Over-Year Percentage Change

Year	Total Admissions to Performing Arts, Movies, and Spectator Sports		Performing Arts		Movies		Spectator Sports	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
1992	3.8%	3.2%	11.1%	9.5%	-5.8%	-5.6%	5.7%	5.6%
1993	11.4%	9.9%	18.3%	16.0%	4.1%	0.0%	14.3%	12.0%
1994	6.5%	2.9%	7.0%	3.2%	3.9%	1.5%	6.2%	3.6%
1995	7.1%	4.0%	6.6%	3.1%	5.7%	2.9%	8.8%	5.7%
1996	11.4%	6.1%	6.2%	1.0%	8.9%	2.9%	20.3%	13.0%
1997	6.4%	3.2%	7.0%	5.0%	8.2%	5.6%	3.4%	1.0%
1998	4.8%	2.8%	0.0%	-1.9%	9.1%	7.9%	6.5%	3.8%
1999	8.4%	2.4%	7.6%	1.0%	9.7%	2.4%	8.2%	2.8%
2000	7.0%	0.7%	4.0%	-1.9%	8.9%	2.4%	8.5%	2.7%
2001	7.9%	3.0%	10.7%	6.8%	4.7%	1.2%	7.8%	0.9%
2002	7.6%	3.8%	6.1%	2.7%	6.7%	3.4%	9.7%	5.2%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

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Notes: Real refers to estimates measured in chained 2000 dollars to

control for inflation.

Detail may not add to total due to rounding.

Table 2. Per Capita Spending on Admissions to Performing Arts, Movies, and Spectator Sports

Year	U.S. Resident Population (in millions)	Total Admissions to Performing Arts, Movies, and Spectator Sports		Performing Arts		Movies		Spectator Sports	
		Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
1992	255.0	\$65.1	\$87.4	\$23.5	\$31.8	\$19.2	\$26.3	\$22.0	\$29.4
1993	257.8	\$71.8	\$95.0	\$27.5	\$36.5	\$19.8	\$26.0	\$24.8	\$32.6
1994	260.3	\$75.7	\$96.8	\$29.2	\$37.3	\$20.4	\$26.1	\$26.1	\$33.4
1995	262.8	\$80.3	\$99.7	\$30.8	\$38.1	\$21.3	\$26.6	\$28.2	\$35.0
1996	265.2	\$88.6	\$104.8	\$32.4	\$38.1	\$23.0	\$27.1	\$33.6	\$39.2
1997	267.8	\$93.4	\$107.2	\$34.4	\$39.6	\$24.6	\$28.4	\$34.4	\$39.2
1998	270.2	\$96.9	\$109.2	\$34.0	\$38.5	\$26.6	\$30.3	\$36.3	\$40.3
1999	272.7	\$104.1	\$110.7	\$36.3	\$38.5	\$29.0	\$30.8	\$38.9	\$41.1
2000	282.2	\$107.7	\$107.7	\$36.5	\$36.5	\$30.5	\$30.5	\$40.8	\$40.8
2001	285.1	\$115.0	\$109.8	\$40.0	\$38.6	\$31.6	\$30.5	\$43.5	\$40.7
2002	288.0	\$122.6	\$112.9	\$42.0	\$39.2	\$33.3	\$31.3	\$47.2	\$42.4

Source: U.S. Department of Commerce, Bureau of Economic Analysis

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Notes: Real refers to estimates measured in chained 2000 dollars to and Census Bureau

control for inflation.

Detail may not add to total due to rounding.

Table 3. GDP and Consumer Spending

<i>Year-Over-Year Percentage Change</i>	1997	1998	1999	2000	2001	2002
Real GDP	4.5%	4.2%	4.5%	3.7%	0.5%	2.2%
Real personal consumption spending	3.8%	5.0%	5.1%	4.7%	2.5%	3.4%
Real recreation consumption spending	7.9%	9.1%	10.7%	8.3%	4.4%	6.6%
<i>Selected Spending as a Percentage of All Recreation Spending</i>	1997	1998	1999	2000	2001	2002
Admissions to performing arts events	1.9%	1.8%	1.8%	1.8%	1.9%	1.9%
Admissions to movie theaters	1.4%	1.4%	1.4%	1.5%	1.5%	1.5%
Admissions to spectator sporting events	1.9%	1.9%	1.9%	2.0%	2.1%	2.1%
Books and maps	5.7%	5.7%	5.8%	5.8%	5.7%	5.6%
Magazines, newspapers, and sheet music	6.6%	6.3%	6.1%	6.0%	5.7%	5.4%
Flowers, seeds, and potted plants	3.3%	3.2%	3.1%	3.1%	3.0%	2.9%
Video and audio goods and computers and software	19.5%	19.7%	19.8%	19.9%	19.1%	19.1%
Commercial amusements	12.1%	12.5%	12.5%	12.6%	12.9%	13.2%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

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Note: Real refers to estimates measured in chained 2000 dollars to control for inflation.

Table 4. Comprehensive Revisions to Consumer Spending on Recreation and Admissions to Performing Arts,

Billions of Nominal Dollars

Year	Recreation Spending			Performing Arts			Movies			Spectator Sports		
	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change
1992	\$313.8	\$321.3	\$7.5	\$6.0	\$6.0	\$0.0	\$4.9	\$4.9	\$0.0	\$5.1	\$5.6	\$0.5
1993	\$340.1	\$351.0	\$10.9	\$6.8	\$7.1	\$0.3	\$5.0	\$5.1	\$0.1	\$5.7	\$6.4	\$0.7
1994	\$368.7	\$383.4	\$14.7	\$7.2	\$7.6	\$0.4	\$5.2	\$5.3	\$0.1	\$5.8	\$6.8	\$1.0
1995	\$401.6	\$418.1	\$16.5	\$7.6	\$8.1	\$0.5	\$5.5	\$5.6	\$0.1	\$6.1	\$7.4	\$1.3
1996	\$429.6	\$448.4	\$18.8	\$8.0	\$8.6	\$0.6	\$5.8	\$6.1	\$0.3	\$6.9	\$8.9	\$2.0
1997	\$456.6	\$474.5	\$17.9	\$8.6	\$9.2	\$0.6	\$6.3	\$6.6	\$0.3	\$7.1	\$9.2	\$2.1
1998	\$489.1	\$505.8	\$16.7	\$8.7	\$9.2	\$0.5	\$6.9	\$7.2	\$0.3	\$7.7	\$9.8	\$2.1
1999	\$526.5	\$546.1	\$19.6	\$8.9	\$9.9	\$1.0	\$7.6	\$7.9	\$0.3	\$8.5	\$10.6	\$2.1
2000	\$564.7	\$585.7	\$21.0	\$9.9	\$10.3	\$0.4	\$7.8	\$8.6	\$0.8	\$9.5	\$11.5	\$2.0
2001	\$593.9	\$603.4	\$9.5	\$10.6	\$11.4	\$0.8	\$8.7	\$9.0	\$0.3	\$10.1	\$12.4	\$2.3
2002	\$620.1	\$633.9	\$13.8	\$10.6	\$12.1	\$1.5	\$10.1	\$9.6	-\$0.5	\$10.6	\$13.6	\$3.0

Billions of Real Dollars

Year	Recreation Spending			Performing Arts			Movies			Spectator Sports		
	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change
1992	\$313.0	\$296.6	-\$16.4	\$6.9	\$8.1	\$1.2	\$5.6	\$6.7	\$1.1	\$5.8	\$7.5	\$1.7
1993	\$338.3	\$322.9	-\$15.4	\$7.7	\$9.4	\$1.7	\$5.6	\$6.7	\$1.1	\$6.3	\$8.4	\$2.1
1994	\$365.2	\$350.9	-\$14.3	\$7.8	\$9.7	\$1.9	\$5.7	\$6.8	\$1.1	\$6.3	\$8.7	\$2.4
1995	\$398.7	\$383.6	-\$15.1	\$8.0	\$10.0	\$2.0	\$5.8	\$7.0	\$1.2	\$6.4	\$9.2	\$2.8
1996	\$429.6	\$415.0	-\$14.6	\$8.0	\$10.1	\$2.1	\$5.8	\$7.2	\$1.4	\$6.9	\$10.4	\$3.5
1997	\$463.7	\$447.8	-\$15.9	\$8.4	\$10.6	\$2.2	\$6.1	\$7.6	\$1.5	\$6.9	\$10.5	\$3.6
1998	\$506.3	\$488.7	-\$17.6	\$8.3	\$10.4	\$2.1	\$6.6	\$8.2	\$1.6	\$7.4	\$10.9	\$3.5
1999	\$558.3	\$540.9	-\$17.4	\$8.1	\$10.5	\$2.4	\$6.9	\$8.4	\$1.5	\$7.7	\$11.2	\$3.5
2000	\$604.9	\$585.7	-\$19.2	\$8.4	\$10.3	\$1.9	\$6.6	\$8.6	\$2.0	\$8.1	\$11.5	\$3.4
2001	\$644.6	\$611.2	-\$33.4	\$8.7	\$11.0	\$2.3	\$7.1	\$8.7	\$1.6	\$8.1	\$11.6	\$3.5
2002	\$682.8	\$651.3	-\$31.5	\$8.4	\$11.3	\$2.9	\$8.0	\$9.0	\$1.0	\$8.2	\$12.2	\$4.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Notes: Real original estimates measured in chained 1996 dollars.

Real revised estimates measured in chained 2000 dollars.

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