



# Beyond the Casino Floor: Economic Impacts of the Commercial Casino Industry

## I. Overview

The commercial casino industry in the U.S. has without question undergone significant growth over the last 25 years. During this time, the industry has gone from operating only in Nevada and Atlantic City, New Jersey to operating 566 casinos in 22 states in 2010. Coinciding with this growth, large portions of the industry have also undergone an evolutionary shift that has led to an increased emphasis being placed on a wide range of entertainment and recreational options beyond the casino floor.

Despite considerable evidence substantiating this evolutionary change in the commercial casino marketplace, in the popular mind the casino industry remains largely about gambling. There is a perception that people travel to casinos mainly to spend some money gambling and then return home. In this simplified view, the money they spend pays for the facilities they visit and the salaries of the employees with whom they interact. This view is, however, incomplete. In reality, this perception discounts how increasingly complex modern casinos in the U.S. have become, and how large and far-reaching a role they now play in the American economy.

This study, conducted by the Brattle Group for the American Gaming Association (AGA), uncovers several key findings about the U.S. commercial casino industry:

- Based on *direct, indirect and induced* impacts, the commercial casino industry supported approximately \$125 billion in spending and nearly 820,000 jobs in the U.S. economy in 2010, which is roughly equivalent to 1 percent of the \$14.5 trillion U.S. gross domestic product.
- These impacts are generated from diverse revenue streams. More than two-thirds of industry revenue is generated on the casino floor, while the remaining third is generated via the food and beverage, hotel and other lines of business within commercial casino properties.
- Taking all lines of business into account, commercial casinos directly generated \$49.7 billion in consumer spending and about 350,000 jobs with salaries and benefits totaling nearly \$15 billion in 2010.
- The secondary impacts of the commercial casino industry are also considerable, and the multiplier effects for this industry are higher than for many other segments of the recreation and retail sectors. When indirect and induced impacts are taken into account, the industry supports an additional \$76 billion in spending with

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suppliers and other businesses and more than 470,000 additional jobs with salaries and benefits totaling almost \$25 billion.

- The average salary in the gaming segment of the commercial casino industry exceeds that of other segments within the overall national recreation and retail sectors. In terms of producing jobs and employment per dollar of revenue, the commercial casino industry compares favorably to other similarly sized U.S. industries.
- The economic impacts of commercial casinos extend well beyond the casino properties. Of the approximately \$125 billion in total spending in the economy created by commercial casinos in 2010, about two-thirds of the activity was generated in host and surrounding counties, and about one-third was generated in other counties across the U.S.
- Taking just indirect and induced economic outputs from commercial casinos into account, well more than half (\$46.6 billion) in 2010 were generated beyond casino host and catchment counties.
- Over the last two decades, consumer spending on the overall gaming industry grew more quickly than any other component of the recreation sector as well as the broader economy.
- The commercial casino industry pays more in taxes than most industries. The industry directly paid nearly \$16 billion in taxes in 2010. Its effective tax rate totaled 32 percent, significantly higher than the economy-wide total tax burden of 27 percent. When indirect and induced economic activity is taken into account, the industry generated close to \$25 billion in taxes in 2010.

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## II. Approach and Methodology

This analysis focuses almost exclusively on “commercial casino” gaming facilities, which include land-based, riverboat and dockside, and racetrack casinos. Other types of venues that currently offer gaming in the U.S., such as Native American casinos, cruise ships, non-casino horse and dog racing tracks, and card rooms, are outside the scope of this study.

This report uses advanced economic modeling and analysis as well as survey data gathered from AGA member companies and publicly available sources to explain the role the commercial casino industry plays in the American economy. The report is the only one of its kind, in that it quantifies the industry’s economic impact on a national, regional, and local level and calculates not only its direct impacts, but also its indirect and induced ones.

The commercial casino industry is a significant generator of economic activity not only in communities where casinos are located but across the country. Casinos generate revenues from gaming activities, as well as food and beverage, lodging, retail, entertainment and convention operations. The economic impacts directly associated with these various lines of business are quantified as *direct* economic impacts. Additionally, casinos buy goods and services from other businesses, and these businesses and their employees in turn spend their earnings in countless ways throughout the economy, generating further business activity and benefits. When these secondary economic impacts ripple through the economy they are known as *indirect* (driven by casino spending through the supply chain) and *induced* (driven by individual spending by casino and casino industry supplier employees) economic impacts.

This study measures all of these economic activities at the local, state and national levels, and puts them in context. But measuring something as complex and extensive as the economic impact of a multibillion dollar industry necessarily requires the use of estimates and assumptions. Our approach to estimating the economic impacts of the commercial casino industry involved converting revenues generated by this sector into a set of economic impact measures. We took the following steps:

1. We developed an establishment-level dataset of gaming and non-gaming revenues from surveys we conducted with members of the AGA (a partial but substantial subset of the total U.S. commercial casino industry) and publicly available data. The relationships we were able to develop from this sample of establishments were then used to estimate gaming and non-gaming revenues for all of the other establishments in the commercial casino industry for which direct data were not available;
2. Using a standard input-output social accounting matrix model of economic activity calibrated to county-level data, we leveraged the gaming and non-gaming revenues to estimate the total economic impacts of commercial casinos;
3. We then segregated commercial casino spending on select supplier categories and traced the economic impacts of that spending on the suppliers' communities;
4. Finally, the data, which were generated at a small-area level, were aggregated into larger areas, such as congressional district, county, state and nation.

The report also compares the economic impacts of the commercial casino industry to other industries in the U.S. in order to give readers an additional frame of reference for understanding the primary focus of our analysis.

### III. The Commercial Casino Industry Impacts an Increasingly Large Portion of the U.S. Economy

#### A. The National Macroeconomic Picture

In 2010, commercial casinos *directly* generated about \$49.7 billion in consumer spending<sup>1</sup> from casino operations, hotel, food and beverage, and other lines of business (e.g., retail, meetings and conventions, entertainment, spas, golf). A little more than two-thirds of this consumer spending – or \$34.6 billion – was generated on the gaming floors of these casinos' operations. Additionally, the commercial casino industry directly employed about 350,000 people in 2010.

However, these direct consumer spending and employment figures provide only a partial picture of what the industry means to the overall U.S. economy. In fact, when *indirect* and *induced* impacts are taken into consideration, the industry supports an additional \$76 billion in spending<sup>2</sup> and more than 470,000 jobs at the national level.

	<b>Gaming</b>	<b>Food and Beverage</b>	<b>Hotel</b>	<b>Other</b>	<b>Total</b>
Direct	\$34.6	\$6.5	\$5.1	\$3.5	\$49.7
Indirect	\$19.8	\$5.4	\$3.6	\$2.2	\$31.0
Induced	\$30.8	\$6.4	\$4.6	\$3.2	\$44.9
<b>Total</b>	<b>\$85.1</b>	<b>\$18.4</b>	<b>\$13.4</b>	<b>\$8.8</b>	<b>\$125.7</b>

Source:

The Brattle Group

Notes:

[1] The indirect and induced impacts from the Other line of business are based on multipliers across the gaming, food and beverage, and hotel sectors.

[2] The components may not add up to the total due to rounding.

<sup>1</sup> Consumer spending is the equivalent of industry revenue.

<sup>2</sup> This additional spending includes spending by casinos, their suppliers, and other businesses further up the production chain and spending by thousands of individuals employed by the commercial casino industry and suppliers.

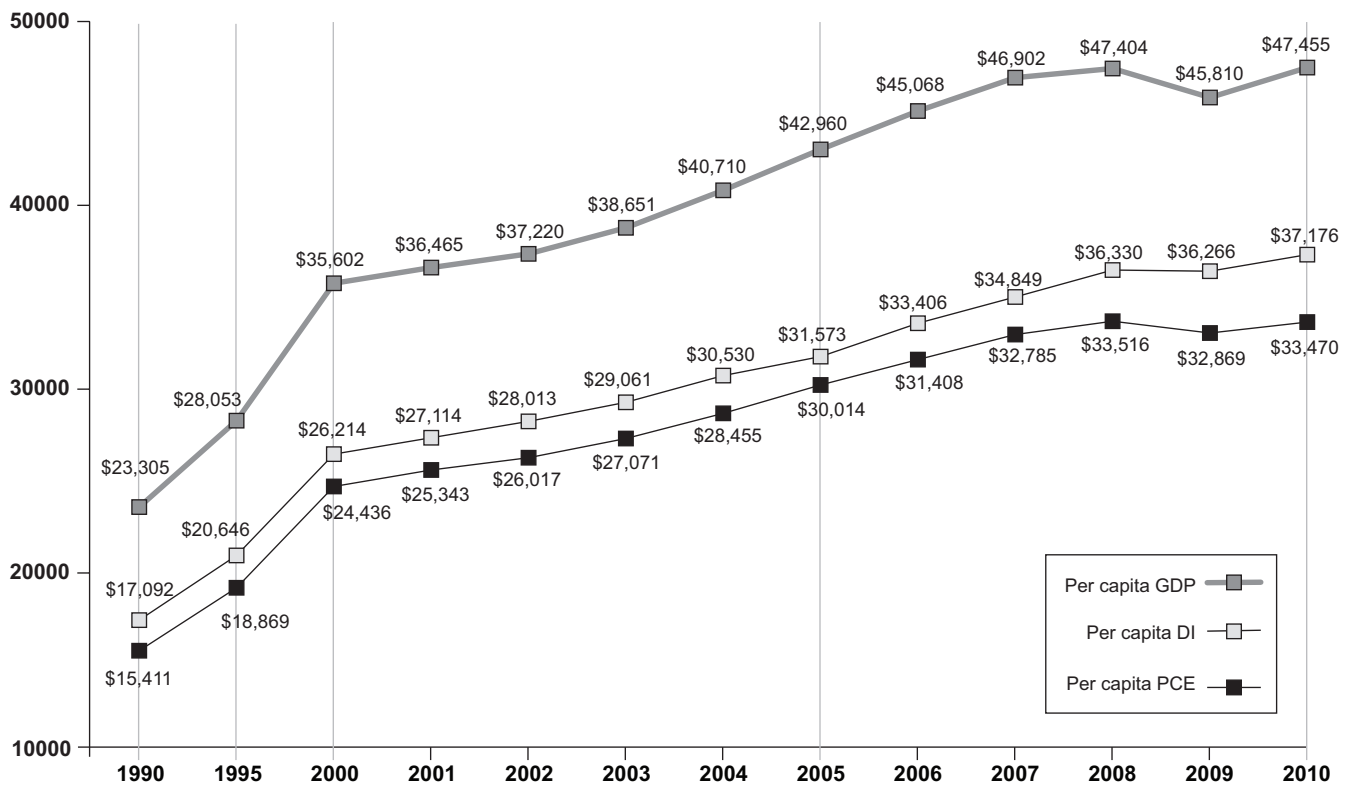
Taken all together, the commercial casino industry supported approximately \$125 billion in spending and nearly 820,000 jobs in the U.S. in 2010. Spending by the commercial casino industry flowing through the economy is roughly equivalent to \$1 in every \$115 in the U.S. economy or nearly 1 percent of the \$14.5 trillion U.S. Gross Domestic Product (GDP).<sup>3</sup> Table 1 on page 3 details this *direct*, *indirect*, and *induced* spending for 2010.

## B. Disposable Income and Recreation Spending on the Rise in the U.S.

To better understand how and why the commercial casino industry has grown into such a significant component of the national economy, it is important to first understand some of the broader underlying trends in our nation's economy, particularly as they relate to consumer spending.

The U.S. economy, as measured by GDP, has grown at an average rate of nearly 5 percent per year over the last two decades, more than doubling from a base of nearly \$6 trillion in 1990.<sup>4</sup> With GDP of about \$14.5 trillion in 2010, a growth rate of 5 percent equates to about \$725 billion in additional economic activity (also known as "economic output") each year.

**Figure 1: Per Capita Nominal GDP, Disposable Income, and Personal Consumption Expenditure in the U.S. (1990-2010)**



Sources:

[1] Current dollar and "real" GDP, Bureau of Economic Analysis, U.S. Department of Commerce available at <http://bea.gov/national/index.htm#gdp> (last accessed August 2, 2011).

[2] 1990-2010 Disposable Income: "Table 678: Personal Income and its Disposition," The 2012 Statistical Abstract, U.S. Census Bureau available at [http://www.census.gov/compendia/statab/cats/income\\_expenditures\\_poverty\\_wealth.html](http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth.html) (last accessed October 7, 2011).

[3] 1990-2009 Personal consumption expenditure: "Table 677: Personal Consumption Expenditures by Function," The 2012 Statistical Abstract, U.S. Census Bureau, [http://www.census.gov/compendia/statab/cats/income\\_expenditures\\_poverty\\_wealth.html](http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth.html) (last accessed October 7, 2011); 2010 Personal Consumption Expenditure: Selected NIPAA Tables, U.S. Department of Commerce available at <http://bea.gov/national/index.htm#gdp> (last accessed August 2, 2011).

[4] Population 1990-2010: "Table P-1. Total CPS Population and Per Capita Income," U.S. Census Bureau available at <http://www.census.gov/hhes/www/income/data/historical/people/> (last accessed October 7, 2011)

<sup>3</sup> In nominal terms. Current dollar and "real" GDP, Bureau of Economic Analysis, U.S. Department of Commerce available at <http://bea.gov/national/index.htm#gdp> (last accessed August 2, 2011).

<sup>4</sup> See, id at footnote 3.

However, the U.S. population has grown far more slowly, at around 1 percent per year on average.<sup>5</sup> To the casual observer, these differences in rates (economic growth compared to population growth) may not seem particularly consequential, but when they are spread over a population of hundreds of millions, an economy comprised of trillions of dollars and a span of 20 years, these differences become truly meaningful. At the most basic level, though, these concurrent trends mean that today there is notably more economic activity – which can be measured in many different ways – on a per capita basis than there was 20 years ago.

One of the most important metrics with respect to individuals' economic activity is disposable income. Disposable income is, very simply, the amount of income consumers have available to spend. As a percentage of our nation's income, consumers today have more available to spend than ever before.<sup>6</sup> In fact, between 1990 and 2010, per capita disposable income in the U.S. more than doubled, going from just over \$17,000 per person to more than \$37,000.<sup>7</sup>

Not surprisingly, when consumers' disposable income increases, their spending tends to follow suit. On a national level, U.S. consumers spent about \$3.8 trillion in 1990, and by 2010, this spending had jumped to \$10.2 trillion.<sup>8</sup> Since consumer spending is tied to the general state of the economy, from its peak in 2008, growth rates in per capita consumer spending have declined or gone negative along with the nation's broader economic activity impacted by the recession. Figure 1 on the previous page illustrates the changes in per capita GDP, disposable income and consumer spending (also known as "personal consumption expenditure" or PCE) over the last two decades.

During times of economic growth and increased disposable income, the makeup of consumer spending tends to change. Consumers, whether deliberately or not, tend to spend an increasing percentage of their disposable income on leisure activities such as recreation, travel, entertainment, etc. By contrast, they tend to spend a smaller percentage of their disposable income on necessities such as housing and food.<sup>9</sup> To be clear, this is not to suggest that consumers today spend less per capita on food, for example, than they did 20 years ago, but rather that relative to what they spend on leisure activities today, spending on food has proportionately decreased. This phenomenon has certainly taken place over the last two decades, and some scholars argue it has been taking place in the U.S. for more than a century.<sup>10</sup>

By analyzing data on the composition of consumer spending from the U.S. Census Bureau between 1990 and 2009 (the most recent figures available at the time of this analysis), one can get a more specific sense of how the focus of consumer spending patterns has shifted.<sup>11</sup> For example, in 1990, spending on food and accommodation made up roughly 17 percent of the average American's annual expenditures, yet by 2009, this category's share of spending had dropped to 13.8 percent. By contrast, over this same period, the share of spending going toward recreation went from 8.2 to 9.0 percent. While this small percentage shift may not seem particularly significant, consumers in fact spent \$582 billion more on recreation in 2009 (\$897 billion) than they did in 1990 (\$315 billion). Indeed, recreation spending grew on average at 6 percent per year, outpacing the growth of the overall U.S. economy.

Figure 2 on the following page illustrates the changing composition of consumer spending in the U.S. over the last two decades.

5 See, "Table P-1. Total CPS Population and Per Capita Income," U.S. Census Bureau available at <http://www.census.gov/hhes/www/income/data/historical/people/> (last accessed October 7, 2011).

6 Calculated as a percentage of nominal U.S. national income, with about \$5.1 trillion in national income and \$4.3 trillion in disposable income, disposable income accounted for about 84 percent of U.S. national income in 1990. Similarly, with \$12.8 trillion in national income and \$11.4 trillion in disposable income, disposable income accounted for 89 percent of U.S. national income in 2010. See, "Table 673: Relation of GDP, GNP, Net National Product, National Income, Personal Income, Disposable Personal Income, and Personal Saving," The 2012 Statistical Abstract, U.S. Census Bureau available at [http://www.census.gov/compendia/statab/cats/income\\_expenditures\\_poverty\\_wealth.html](http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth.html) (last accessed October 7, 2011). Similar trends are seen in real terms as well.

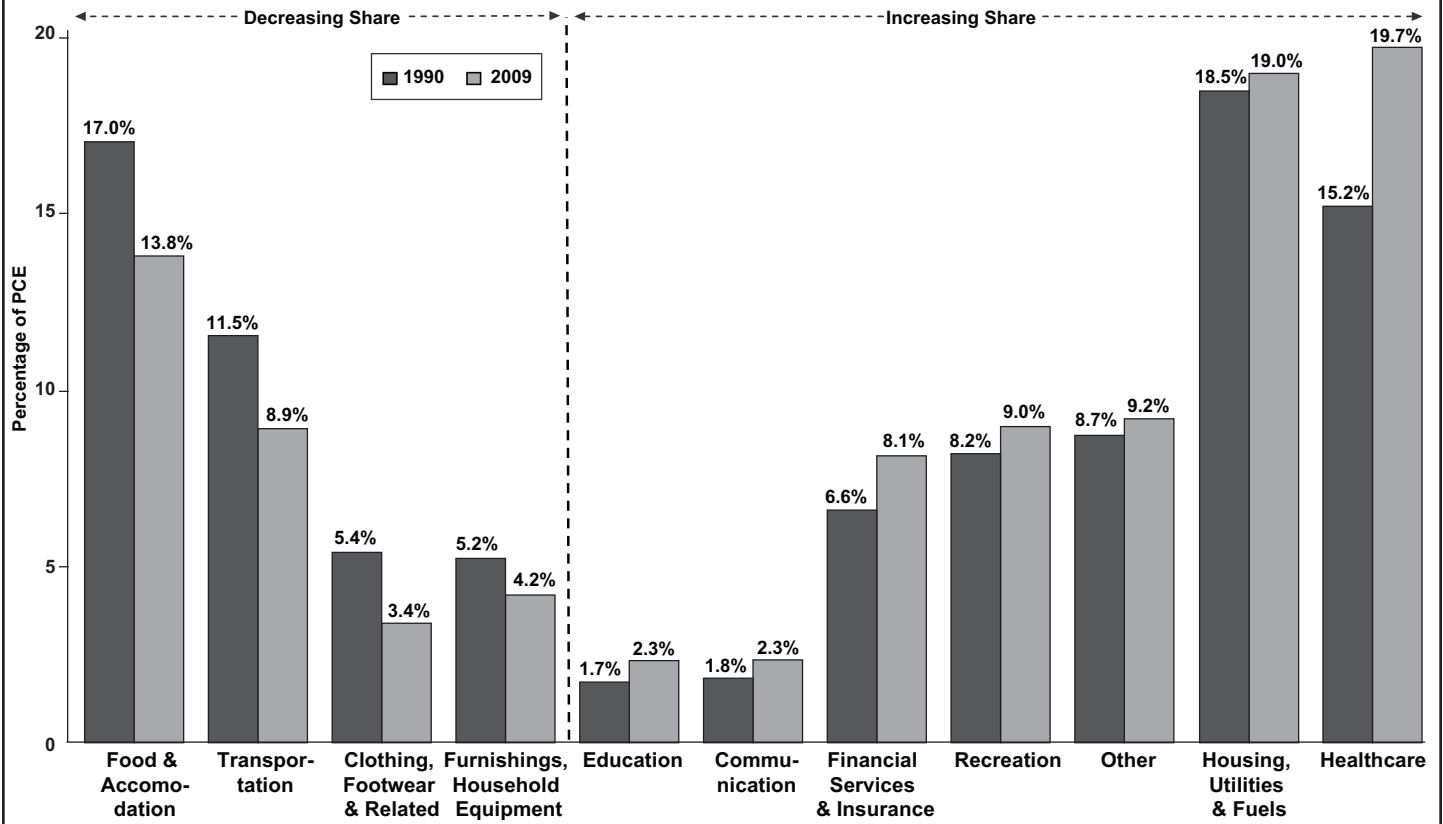
7 See, *supra* at footnote 6.

8 As measured by Personal Consumption Expenditure (PCE). See, 2009 Personal consumption expenditure: "Table 677: Personal Consumption Expenditures by Function," The 2012 Statistical Abstract, U.S. Census Bureau, [http://www.census.gov/compendia/statab/cats/income\\_expenditures\\_poverty\\_wealth.html](http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth.html) (last accessed October 7, 2011); 2010 Personal Consumption Expenditure: Selected NIPAA Tables, U.S. Department of Commerce available at <http://bea.gov/national/index.htm#gdp> (last accessed August 2, 2011).

9 Until recently the share of the Housing, Utilities & Fuels category has been trending downward.

10 See, Costa, Dora L. "American Living Standards: Evidence from Recreational Expenditures," NBER Working Paper No. 7148, May 1999, available at <http://www.nber.org/papers/w7148> (last accessed December 10, 2011).

11 See, "Table 677: Personal Consumption Expenditures by Function," The 2012 Statistical Abstract, U.S. Census Bureau, [http://www.census.gov/compendia/statab/cats/income\\_expenditures\\_poverty\\_wealth.html](http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth.html) (last accessed October 7, 2011).

**Figure 2: Change in Composition of Consumer Spending (1990 vs. 2009)**

Source:

[1] "Table 677: Personal Consumption Expenditures by Function," The 2012 Statistical Abstract, U.S. Census Bureau, [http://www.census.gov/compendia/statab/cats/income\\_expenditures\\_poverty\\_wealth.html](http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth.html) (last accessed October 7, 2011).

Notes:

[1] Does not include all categories of spending. Some key categories noted above.

[2] Food and Accommodation includes food services and accommodation, and food and beverage purchased for off-premises consumption.

[3] Recreation includes the following goods and services: video and audio equipment, computers, and related services; sports and recreational goods and related services; membership clubs, sports centers, parks, theaters, and museums; magazines, newspapers, books, and stationery; gambling; pets, pet products, and related services; photographic goods and services; and package tours.

[4] Other includes other goods and services, net foreign travel and expenditures abroad by U.S. residents, and final consumption expenditures of nonprofit institutions serving households.

### C. Spending on Gaming is Growing Faster than Other Components of the Recreation Sector

U.S. consumer spending on recreation is particularly relevant to this study because the U.S. Census Bureau reports its data on gambling expenditures within the recreation sector.<sup>12</sup> It is important to note, however, that the Census Bureau does not specifically break out expenditures related to the commercial casino sector; rather, commercial casinos are included in a broader "overall gaming" category that includes Native American casinos, lotteries and pari-mutuel wagering.<sup>13</sup> When we refer to the overall gaming industry in the discussion below, we include these other gaming sectors along with the commercial casino segment. In terms of gaming revenues, commercial casinos account for about one-third of the overall gaming industry and have maintained a relatively steady share since 1990.<sup>14</sup>

<sup>12</sup> See, id at footnote 11.

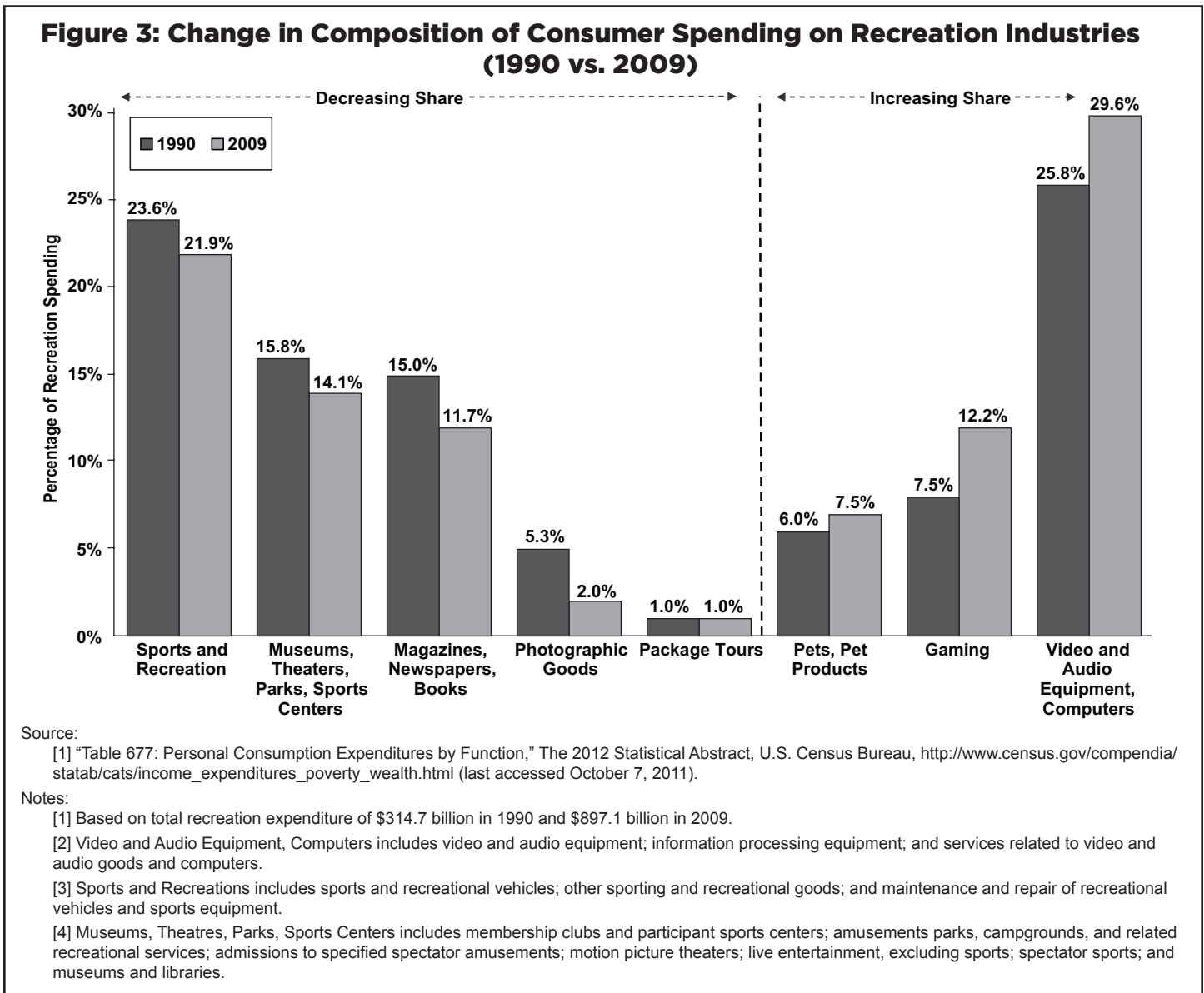
<sup>13</sup> Overall gaming sector estimates include data for casino gambling, lotteries, and pari-mutuel betting. See, Concepts and Methods of the U.S. National Income and Product Accounts (Chapters 1-7), Bureau of Economic Analysis, U.S. Department of Commerce, November 2010, at p.5-22 available at <http://www.bea.gov/national/pdf/NIPHandbookch1-7.pdf> (last accessed August 3, 2011).

<sup>14</sup> For instance, in 2009, with gaming revenues of \$34 billion, commercial casinos accounted for about 31 percent of the \$109 billion overall gaming industry.

Over the last two decades, consumer spending on the overall gaming industry grew more quickly than any other component of the recreation sector. In fact, the overall gaming industry grew nearly five-fold between 1990 and 2009 (from \$24 billion to \$109 billion) and now accounts for more than 12 percent of consumer spending in the \$897 billion recreation sector in the U.S. (see Figure 3). The overall gaming sector growth rate of nearly 9 percent per year on average is markedly higher than the average growth rate of the broader economy (5 percent) and the recreation sector (6 percent), and the commercial casino sector significantly contributed to this growth.<sup>15</sup>

It is also important to note that spending on gaming is not merely replacing spending on other industries or activities, since other recreation industries are growing as well. Instead, the gaming industry is meeting consumer demand, created partly by the increasing disposable income of U.S. consumers.

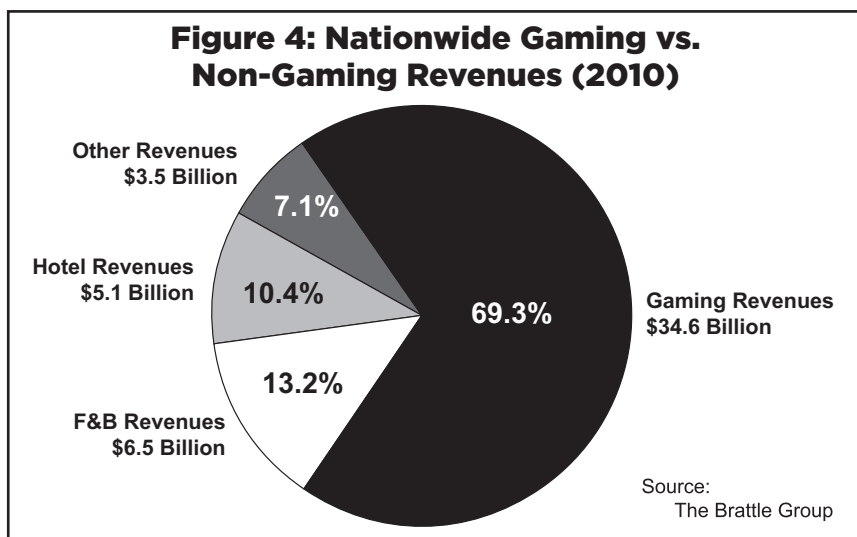
Figure 3 illustrates the changing composition of spending in the recreation sector in the U.S. over the last two decades.



15 Growth calculated as the average year-over-year percentage change. Overall gaming and recreation sector data: "Table 677: Personal Consumption Expenditures by Function," The 2012 Statistical Abstract, U.S. Census Bureau, [http://www.census.gov/compendia/statab/cats/income\\_expenditures\\_poverty\\_wealth.html](http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth.html) (last accessed October 7, 2011). Commercial casino data: 1990: AGA, 1999 State of the States; 1991-2001: AGA, 2002 State of the States; 2002 to 2008: AGA, 2011 State of the States available at <http://www.americangaming.org/industry-resources/research/state-states>. Commercial casino gaming growth based on commercial casino gaming revenues. 1990-2001 commercial casino gaming revenues do not include gaming revenues from racinos.

## IV. The Commercial Casino Industry is About a Lot More Than Gambling

The U.S. casino industry generates approximately \$61 billion in annual gaming revenue with more than half of those revenues – almost \$35 billion – generated by commercial casinos. There is also a significant casino industry run by the Native American tribes in the U.S. with gaming revenues totaling nearly \$27 billion, but further quantification of the economic impacts of the Native American casino sector is outside the scope of this study.<sup>16</sup>



While gaming revenues are widely reported, statistics on non-gaming casino revenues are much less readily available. Nonetheless, combining and cross-checking data from a variety of sources and supplementing that research with statistical analyses and survey results from AGA member companies provides a quantitative profile of these other, less visible segments of the industry.

In 2010, the commercial casino industry consisted of 566 commercial casinos across 22 states in the U.S.<sup>17,18</sup> The most readily available and widely quoted statistics in the U.S. on the commercial casino industry are typically gross gaming revenues – the \$34.6 billion in revenues reported above – provided by state gaming commissions.

Commercial casino establishments are about much more than just gaming though. Commercial gaming and related hotel, food and beverage, and other lines of business *directly* generated a total of about \$49.7 billion in consumer spending in 2010. Commercial casinos earned more than two-thirds of this revenue – \$34.6 billion – from gaming and the remaining one-third – \$15.2 billion – from non-gaming sources.<sup>19</sup> Figure 4 details these various revenue streams at commercial casinos based upon 2010 data and Brattle Group projections.

### A. The Commercial Casino Industry Consists of a Diverse Range of Properties

In looking at the various revenue streams within today's modern casino establishments, it is important to remember that the commercial casino industry is far from monolithic. The proportion of revenue generated from various business segments will vary at the property level.

Commercial casinos in the U.S. are extremely diverse and varied in terms of their entertainment and leisure offerings. Some casino properties, often referred to as destination casino resorts, attract customers from long distances, even from outside the U.S. These destination casino resorts commonly have construction and opening costs exceeding \$1 billion and typically cater to customers who are attracted to these properties because they have one or more of the following: dramatic architecture and design; a full service casino; high-end retail and shopping establishments; high quality restaurants; well-appointed hotel guest rooms; extensive meeting and convention facilities; or various other non-gaming entertainment and leisure options such as golf

<sup>16</sup> In 2010, the commercial casino industry generated about \$34.6 billion in gross gaming revenues. Native American gaming generated more than \$26.5 billion in gaming revenues in 2010. Thus, the casino industry is about a \$61 billion gaming revenue industry. See, NIGC Tribal Gaming Revenues, National Indian Gaming Commission (NIGC), available at: <http://www.nigc.gov/LinkClick.aspx?fileticket=1k4B6r6dr-U%3d&tabid=67> (last accessed December 12, 2011).

<sup>17</sup> As noted previously, we limit our discussion of gaming generally to legalized casino gaming, including, land-based, riverboat and dockside, and racetrack casinos. Native American casinos, cruise ship casinos, non-casino racetracks, and card rooms have not been considered in this study.

<sup>18</sup> See, Appendix for details on data and methodology used to identify the relevant casinos and to calculate gaming revenues. This compares to 483 casinos reported in the 2011 State of the States Report (covering CY2010) by the American Gaming Association ("2011 AGA Report"). See, 2011 State of the States: The AGA Survey of Casino Entertainment, American Gaming Association, available at <http://www.americangaming.org/files/aga/uploads/docs/sos/aga-sos-2011.pdf> (last accessed, June 30, 2011). The difference primarily stems from the inclusion of 87 additional smaller casinos in Nevada. The AGA Report includes in its analyses 256 casinos in Nevada with gross gaming revenues of \$1MM and over.

<sup>19</sup> Such as food and beverage sales, hotel operations and other sources, including retail outlets, entertainment and conventions. The components do not sum to total due to rounding.



courses, spas, theaters and nightclubs. Many of the casinos of this type generate more revenues from their non-gaming offerings than from their casino floors.

Other types of casinos, sometimes called regional casinos, cater primarily to customers within driving distance. These properties tend to be less expensive to build and operate and are more likely to earn a higher percentage of their revenues (80 percent or more) from gaming operations than destination casino resorts do. Because regional casinos typically draw patrons from relatively close by, the average visitor tends to stay for a shorter period of time than does a visitor to a destination casino resort. There are a host of factors that can impact the size and scope of these (and other) casino facilities, such as the legislative and/or regulatory climate (Illinois, for example, statutorily limits the number of gaming positions<sup>20</sup> to 2,000 at each of the state's riverboats), the competitive landscape in which they operate, and particularly the tax rates imposed on gaming revenues, among other things.<sup>21</sup> The vast majority of riverboat casinos and casinos at horse and dog racing tracks ("racinos" in industry parlance) fall into this regional casino category.

## **B. The Commercial Casino Industry Has Diverse Revenue Streams**

As one might expect based on the diversity of casinos in the U.S., the amount of revenue and the sources of that revenue (whether from the casino floor, food and beverage sales, hotel operations or other sources) vary significantly depending on the facility or facilities being considered.

Virtually all commercial casinos rely on the sale of food and beverages as complements to their overall business operations, but the scale, variety, and sophistication of casinos' food and beverage operations vary widely. A large destination casino resort may offer its customers a choice of well over a dozen different restaurants. In total, commercial casinos in the U.S. directly generated \$6.5 billion in revenue from food and beverage sales in 2010, accounting for just over 13 percent of the industry total revenue mix (as shown in Figure 4).

**Commercial casinos in the U.S. generated \$5.1 billion in lodging revenues in 2010, and this revenue accounted for about 10 percent of the industry's overall revenue from all sources.**

A majority of commercial casinos in the U.S. – about 290 out of the 566 total – offer lodging. In all, commercial casinos in the U.S. generated \$5.1 billion in lodging revenues in 2010, and this revenue accounted for about 10 percent of the industry's overall revenue from all sources.

The importance of lodging in the overall mix of activities offered by a casino is obviously related to the nature of the casino, its location and how large an area from which it draws. Lodging is less consequential for a regional casino that has relatively fewer customers who plan multi-day visits. It is also less important to a casino located in an already well-developed tourist destination offering a wide range of lodging opportunities. On the other hand, lodging availability will be more important to a destination casino resort catering to customers who plan long, multi-day stays and participate in a variety of recreational activities.

In this area of activity, as in others, the largest properties offer lodging services on a genuinely impressive scale. Approximately 10 percent of commercial casino properties – or 56 out of 566 commercial casinos – include hotels with more than 1,000 rooms.<sup>22</sup>

As previously mentioned, casino resorts also generate revenue from a number of other sources beyond the gaming floor, food and beverage operations, and lodging. In fact, these "other sources" – such as retail outlets,

<sup>20</sup> Gaming positions are the equivalent of one slot machine or one seat at a table game. For example, one blackjack table (six positions) and 12 slot machines is the equivalent of 18 positions.

<sup>21</sup> Eadington, W.R., Doyle, M.R., eds. (2009), *Integrated Resort Casinos: Implications for Economic Growth and Social Impacts*. Reno, NV: Institute for the Study of Gambling and Commercial Gaming. In this volume, a fuller discussion of various types of casinos around the world is available at "Managing the Social Costs Associated with Casinos: Destination Resorts in Comparison to Other Types of Casino-Style Gaming" by William Eadington and Peter Collins.

<sup>22</sup> The American Hotel and Lodging Association notes that in 2010, about 1 percent (or 534 properties) of the 51,015 properties offering lodging in the U.S. had over 500 rooms. 88 percent (or 44,978) of the properties had less than 150 rooms. See, "2011 Lodging Industry Profile – 2010 Property/Room Breakdown," American Hotel and Lodging Association, available at <http://www.ahla.com/content.aspx?id=32567> (last accessed December 12, 2011). The study focuses on properties with 15 or more rooms.

spas, nightclubs, convention and meeting space, etc. – generated \$3.5 billion at commercial casinos in the U.S. in 2010, accounting for the remaining 7.1 percent of total industry revenues.

The commercial casino industry plays a significant role in attracting meetings, conventions, and events. Among larger casinos (those with more than 1,000 gaming machines), 77 percent offer some form of convention and meeting space. Las Vegas, in particular, stands out in this regard. The city hosts more than 18,000 meetings a year, has 10.6 million square feet of meeting and convention space, and was home to six of the 10 largest trade shows held in the U.S. in 2010.<sup>23</sup> The prevalence of entertainment venues at larger commercial casinos is also very high, with 87 percent of these properties having one or more such venues.

A number of important synergies exist when casino gaming activities and lodging, retail, entertainment and meeting facilities are contained in the same development. By offering a range of activities, casinos encourage customers to plan longer visits and increase their overall recreational spending. The availability of gaming opportunities can also add to the attractiveness of casino venues for business meeting attendees. Finally, the presence of convention goers will tend to increase the revenue generated by a casino's gaming operations.

## V. Commercial Casino Industry Employment

### A. Direct Employment, Wages and Benefits

The commercial casino industry *directly* employed about 350,000 people in 2010 and spent almost \$15 billion on salaries and benefits for these employees. About 175,000 – or slightly more than half – of these employees worked in the gaming sector of the business, while the remaining employees worked in its food and beverage, hotel and other lines of business.<sup>24</sup> Including *indirect* and *induced* employment, the commercial casino industry supported a total of nearly 820,000 jobs in the U.S. economy in 2010. The average salary and benefits provided to employees in the commercial casino industry totaled almost \$42,000 annually in 2010, with the gaming and hotel lines of business each paying on average about \$43,500 and \$51,000 annually. This compares quite favorably to other segments of the broader recreation sector (such as museums, historical sites, zoos, parks and spectator sports industries) where, taken altogether, salaries and benefits average about \$37,000 per year. Average salary and benefits provided by the commercial casino industry also are higher than those paid by retail industries such as food and beverage, clothing and gasoline, for which the average, when taken together, is about \$29,000.

**Table 2: Direct Employment & Direct Labor Income by Revenue Source (2010)**

	Gaming	Food and Beverage	Hotel	Other	Total
Number of Employees	173,813	103,755	45,529	23,174	346,272
Labor Income (\$ billions)	\$7.6	\$3.4	\$2.3	\$1.2	\$14.5

Source:  
The Brattle Group

Notes:

[1] Employment includes both full-time and part-time positions. Labor Income includes all forms of employee compensation (wages, tips, and benefits).

[2] Our estimate of \$14.5 billion in labor income is larger than the \$13.3 billion reported in the 2011 AGA Report for calendar year 2010. This is in part because we base our estimate on a larger pool of commercial casino industry employees (346,272 versus 340,564). But we also find higher labor income per employee than the AGA report sample.

[3] The components may not add up to the total due to rounding.

<sup>23</sup> According to Las Vegas Convention and Visitors Authority data. Ranking of the largest tradeshow in the U.S. in 2010 was done by Trade Show News Network. See, "2010 Top 250 Trade Shows" available at <http://www.tsnn.com/datasite-us> (last accessed November 30, 2011). The data associated with Las Vegas meeting and conventions do not differentiate between events held at casino-owned facilities and those held at non-casino locations. However, the figures do give a sense of how important Las Vegas – and by extension, many of the commercial casino resorts located there – is as a destination for the meeting and convention industry.

<sup>24</sup> These total employment numbers are based in part on output from our IMPLAN modeling for the gaming, food and beverage, and hotel activities of the commercial casino industry. We estimate the employment associated with other activities as proportional to revenues generated by the sector. Where available, we use the actual employment information from survey data, with the exception of establishments that provided partial year data.

Table 2 details the number of commercial casino employees in the U.S. broken out according to the industry's various lines of business, as well as the salaries and benefits paid to those employees in 2010.

In addition to the very size of the commercial casino industry in terms of employment and labor income, the typical casino today requires a significant diversity of skills at every level of the organization due to the magnitude and complexity of these facilities' operations. According to the University of Nevada at Las Vegas' 2002 Las Vegas Casino/Hotel Wage Survey,<sup>25</sup> there were a total of 19 distinct departments and 827 unique job titles at the properties they surveyed, which truly underscores the diversity and range of employment opportunities within the industry. Moreover, the diversity of careers has no doubt expanded in the intervening years since this data was last collected.<sup>26</sup> This information is found in the table below.

Department	# Job Titles	Department	# Job Titles
Accounting	77	Keno	17
Cage, Credit & Collections	29	Marketing	42
Cardroom	10	Pool & Spa	25
Casino	40	Race & Sports	18
Entertainment Services	43	Retail	22
Food & Beverage	151	Services	80
General Management	14	Slots	55
Hotel	105	Surveillance	18
Human Resources	50	Wedding Chapel	5
Information Systems	26		

Sources:

"Las Vegas 2002 Casino / Hotel Wage Survey," University of Nevada at Las Vegas, William F. Harrah College of Hotel Administration, Hospitality Outreach Services, 2002.

## **B. Indirect and Induced Employment, Wages and Benefits**

The secondary economic impacts generated by the commercial casino industry are considerable, particularly with respect to the *indirect* and *induced* employment it supports (as mentioned above). In fact, in 2010, the commercial casino industry supported nearly a half million jobs (more than 470,000) among suppliers and other businesses throughout the U.S. economy, which is an even greater number of jobs than the direct employment base it maintains. These *indirect* and *induced* jobs generated almost \$25 billion in wages, benefits and tips in 2010. As shown in the table on page 12, the commercial casino industry supported a total of nearly 820,000 full-time and part-time jobs in the U.S. and more than \$39.1 billion in wages and benefits in 2010.

## **C. Comparison of Direct Employment with Other Select Industries**

Juxtaposing the commercial casino industry with other industries of roughly the same size (based on revenues) underscores just how labor intensive casinos and their ancillary facilities and entertainment offerings are. Recall, for example, that the commercial casino industry generated \$34.6 billion in gross gaming revenue in 2010, while employing 173,813 people in its gaming line of business. Based upon Bureau of Economic Analysis data, which focuses mainly on an industry's core line of business (in this case, gaming), the gaming sector of commercial casinos is roughly the same size as the \$33.7 billion U.S. coal mining industry,<sup>27</sup> yet the coal mining industry employs approximately three-quarters the number of workers (134,089 direct

<sup>25</sup> "Las Vegas 2002 Casino / Hotel Wage Survey," University of Nevada at Las Vegas, William F. Harrah College of Hotel Administration, Hospitality Outreach Services, 2002.

<sup>26</sup> UNLV stopped conducting their wage surveys at about this time.

<sup>27</sup> The coal mining industry generated an estimated \$33.7 billion in output in 2009. See, "Gross Output by Industry in Current Dollars," Bureau of Economic Analysis, U.S. Department of Commerce, available at [http://www.bea.gov/industry/gdpbyind\\_data.htm](http://www.bea.gov/industry/gdpbyind_data.htm) (last accessed, July 15, 2011).

**Table 4: Nationwide Total Employment and Labor Income (2010)**

	Direct	Indirect	Induced	Total
Number of Employees	346,272	178,608	294,127	819,007
Labor Income (\$ billions)	\$14.5	\$10.5	\$14.2	\$39.1

Source:

The Brattle Group

Notes:

[1] Employment includes both full-time and part-time positions. Labor Income includes all forms of employee compensation (wages, tips, and benefits).

[2] The indirect and induced impacts from the other line of business are based on multipliers across the gaming, food and beverage, and hotel sectors.

[3] The components may not add up to the total due to rounding.

employees)<sup>28</sup> that casinos do. The commercial casino sector also compares favorably to the soft drink and ice manufacturing industries in terms of labor intensity. Soft drink manufacturing, for instance, generated about 25 percent higher revenue<sup>29</sup> than casinos in 2009 yet directly employed a little more than one-third (66,666) the number of people.<sup>30</sup>

Table 5 further illustrates how the commercial casino industry compares to some other mature U.S. industries in terms of revenues and employment. Clearly, in terms of generating jobs and employment per dollar of revenue, the commercial casino industry fares quite well. As one can see from the column entitled “Revenue Per Employee,” commercial casinos simply require significantly less revenue (in the case of casinos, this could be termed “consumer spending”) to bring about job creation than other types of businesses do.

**Table 5: Commercial Casinos Compared to Other U.S. Industries – Revenues and Employment**

Industry Sector	Revenues (\$ billions)	Employees (#)	Revenue Per Employee (\$ thousands)
Aircraft Manufacturing	\$97.6	182,045	\$535.86
Coal Mining	\$33.7	134,089	\$251.33
Commercial Casino Gaming	\$34.6	173,813	\$198.89
Heavy Duty Truck Manufacturing	\$16.0	21,974	\$729.04
Soft Drink Manufacturing	\$43.0	66,666	\$645.31

Sources:

[1] Output for commercial casino gaming: The Brattle Group; Output for other industries: Gross Output by Industry in Current Dollars, Bureau of Economic Analysis, U.S. Department of Commerce, available at [http://www.bea.gov/industry/gdpbyind\\_data.htm](http://www.bea.gov/industry/gdpbyind_data.htm) (last accessed, July 15, 2011).

[2] Employees for commercial casino gaming: The Brattle Group; Employees for coal mining: “Most Requested Statistics – U.S. Coal Industry,” National Mining Association, available at [http://www.nma.org/pdf/c\\_most\\_requested.pdf](http://www.nma.org/pdf/c_most_requested.pdf) (last accessed July 16, 2011);

Employees for other industries: “Sector 31 Annual Survey of Manufacturers,” 2009 Annual Survey of Manufacturers, U.S. Census Bureau, available at [http://factfinder2.census.gov/legacy/aff\\_sunet.html?\\_bm=y&-NAICSASM=31211%7c336120%7c336411%7c&-ds\\_name=AM0931GS101&-ib\\_type=NAICSASM&-NAICSASMsector=&-\\_lang=en](http://factfinder2.census.gov/legacy/aff_sunet.html?_bm=y&-NAICSASM=31211%7c336120%7c336411%7c&-ds_name=AM0931GS101&-ib_type=NAICSASM&-NAICSASMsector=&-_lang=en) (last accessed, August 3, 2011).

Notes:

[1] Output for commercial casino gaming is for 2010; Output for all other industries is for 2009.

[2] Industries based on NAICS codes.

28 “Most Requested Statistics – U.S. Coal Industry,” National Mining Association, available at [http://www.nma.org/pdf/c\\_most\\_requested.pdf](http://www.nma.org/pdf/c_most_requested.pdf) (last accessed July 16, 2011). While 2010 employment figures are available, 2009 figures were used here so as to be consistent with 2009 output data.

29 “Gross Output by Industry in Current Dollars,” Bureau of Economic Analysis, U.S. Department of Commerce, available at [http://www.bea.gov/industry/gdpbyind\\_data.htm](http://www.bea.gov/industry/gdpbyind_data.htm) (last accessed, July 15, 2011).

30 “Sector 31 Annual Survey of Manufacturers,” 2009 Annual Survey of Manufacturers, U.S. Census Bureau, available at: [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-NAICSASM=31211|336120|336411|&-ds\\_name=AM0931GS101&-ib\\_type=NAICSASM&-NAICSASMsector=&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-NAICSASM=31211|336120|336411|&-ds_name=AM0931GS101&-ib_type=NAICSASM&-NAICSASMsector=&-_lang=en) (last accessed, August 3, 2011).

## D. Comparison of Secondary Impacts with Other Select Industries

In addition to comparing favorably to other businesses and sectors within the U.S. economy with respect to generating *direct* employment opportunities, the commercial casino industry also generates significant secondary economic impacts through *indirect* and *induced* effects. Using input-output models, which are described in greater detail in the Appendix, the secondary impacts of commercial casinos' activities can be traced throughout the economy. Input-output models provide a number referred to as a "multiplier," which summarizes the effects of one particular type of economic activity (for example, spending or employment in the commercial casino industry) on economic activities (such as output, wages and employment) in all other industries.

We consider the impacts of the commercial casino industry via two distinct multipliers, an employment multiplier and an output multiplier. An employment multiplier captures how jobs in a particular industry translate into wider job creation throughout the economy. In this case, the employment multiplier for the commercial casino industry is 1.92, meaning that one job in the gaming line of business generates nearly 1 additional job (0.92 specifically) in the economy for a total of about 1.92 jobs created.

**A dollar in revenue generated by commercial casinos results in income for individuals and businesses who then spend this money on various goods and services in the economy.**

An output multiplier, on the other hand, helps capture the ripple effects of spending in an industry across all other industries in the economy. A dollar in revenue generated by commercial casinos results in income for individuals and businesses who then spend this money on various goods and services in the economy. This spending in turn becomes income for other individuals and businesses across various industries. The final effect, which is the sum of all effects at each level of spending, is captured by the output multiplier. The output multiplier for the commercial casino industry is about 2.49, meaning a dollar in casino gaming revenue generates \$1.49 in additional revenue in the economy through *indirect* and *induced* impacts, thus totaling about \$2.49 for the U.S. economy.

Table 6 on the following page details how the commercial casino industry compares to a number of industries within the recreation and retail sectors. Casinos' employment multiplier is notably more than that of any single segment within the retail store sector and very similar to the vast majority of segments within the recreation sector. The story is much the same with respect to output multipliers. A dollar spent in the gaming line of business at a commercial casino has a larger economic ripple effect through the U.S. economy than almost every segment of the retail store sector and is relatively near the average output multiplier seen in the recreation sector.

## VI. The Commercial Casino Industry Supports a Broad Network of Suppliers of Goods and Services

The commercial casino industry directly spent \$18.4 billion – or 37 percent – of the \$49.7 billion revenue it earned across all of its lines of business in 2010 on purchasing goods and services from suppliers across a broad range of industries in the U.S. Spending to support gaming operations accounted for about 65 percent – or \$12 billion – of these purchases, while spending associated with food and beverage and hotel operations accounted for another 28 percent – or \$5.1 billion. The remaining \$1.3 billion in purchases were directed toward other non-gaming activities.

The economic impacts of the commercial casino industry do not stop at the factories, offices, and workshops of the industry's suppliers, however. The firms that supply gaming equipment, beverages, kitchen equipment, furniture, food, linens and all of the other items required to run a casino also purchase inputs from their own suppliers. Thus, the commercial casino industry not only supports the business of its suppliers, but an

**Table 6: Multipliers Across Various Recreation and Retail Industries**

	Employment Multiplier	Output Multiplier
<b>Gaming Industry<sup>[1]</sup></b>	<b>1.929</b>	<b>2.499</b>
<b>Recreation Industries</b>		
Bowling centers	1.416	2.436
Fitness and recreational sports centers	1.423	2.866
Independent artists, writers, and performers	2.731	2.735
Motion picture and video industries	2.850	2.402
Museums, historical sites, zoos, and parks	2.126	2.469
Newspaper publishers	2.472	2.865
Other amusement and recreation industries	1.605	2.544
Performing arts companies	1.437	3.087
Photographic services	1.822	2.598
Promoters of performing arts and sports and agents for public figures	1.908	3.029
Spectator sports companies	1.876	2.895
Video tape and disc rental	1.616	2.510
<b>Recreation Multiplier Average</b>	<b>1.940</b>	<b>2.703</b>
<b>Retail Stores</b>		
Building material and garden supply	1.611	2.257
Clothing and clothing accessories	1.399	2.075
Direct and electronic sales	1.380	1.861
Electronics and appliances	1.725	2.510
Food and beverage	1.490	2.236
Furniture and home furnishings	1.616	2.151
Gasoline stations	1.565	2.243
General merchandise	1.443	2.227
Health and personal care	1.615	2.266
Miscellaneous	1.334	2.320
Motor vehicle and parts	1.767	2.532
Sporting goods, hobby, book and music	1.361	2.232
<b>Retail Multiplier Average</b>	<b>1.525</b>	<b>2.242</b>

Source:  
The Brattle Group

Note:  
[1] Gaming line of business.

additional \$12.6 billion in impacts on the firms that supply goods and services to those suppliers. Just as importantly, all of these businesses then pay wages to their employees, who in turn purchase houses, food, clothing, appliances, education and other consumer goods. In this fashion, the casino industry expands the markets for a wide range of other industries located throughout the country.

### **A. Focus on Gaming Equipment Suppliers**

A significant amount of purchases of the commercial casino industry are made with gaming equipment suppliers. The goods and services provided by these suppliers go beyond traditional gaming machines to include the services that allow machines to be networked together and other gaming management activities. The gaming equipment sector is increasingly high-tech and, as such, draws on skills from the IT industry.

Based on data furnished by the Association of Gaming Equipment Manufacturers (AGEM) and supplemented by survey and SEC filing data, it is estimated that the U.S. commercial casino industry supported approximately \$2.5 billion in sales related to gaming equipment hardware, software and services in 2010.<sup>31</sup> About half of this approximately \$2.5 billion was spent on services associated with the equipment, and the remaining half went toward the purchase of actual gaming equipment hardware and software.

In the same way that the commercial casino industry generates an output multiplier, analysis by AGEM indicates that the gaming equipment manufacturing sector generates important economic impacts that ripple through the U.S. economy. In fact, AGEM found that every dollar of direct industry revenue leads to an additional \$1.79 in indirect and induced impacts.<sup>32</sup>

The equipment manufacturing industry also directly employed about 29,400 people and paid total salaries and wages of \$2.1 billion in 2010. The total employment multiplier for the supplier industry is estimated to be 2.8, implying that for every direct job in the industry, an additional 1.8 jobs are created.<sup>33</sup> The gaming equipment manufacturing industry's total wages of \$2.1 billion paid to 29,400 direct employees implies an average total employee compensation of about \$71,429 per year.<sup>34</sup>

Finally, the equipment manufacturing sector increases the geographic diversity of industries closely associated with and reliant upon the commercial casino industry. While many industry suppliers operate in areas near heavy casino concentrations, such as in the Las Vegas area, they also have facilities located throughout the country in support of local casino markets. Our survey of industry suppliers found equipment manufacturers operate facilities in at least seven counties outside of the commercial casino impact areas. The total estimated economic impact generated by the equipment manufacturers in these counties represents almost \$600 million in output and more than 1,500 additional jobs in 2010.<sup>35</sup>

**In the same way that the commercial casino industry generates an output multiplier, analysis by AGEM indicates that the gaming equipment manufacturing sector generates important economic impacts that ripple through the U.S. economy.**

31 The global gaming equipment manufacturing industry generated \$11.5 billion in revenues. See, the 2011 AGA Report at p.9. Although this supplier industry serves a global market, the majority of sales are in the U.S. According to analysis of our sample of industry suppliers, supplemented by SEC filing data, approximately 62 percent, or about \$7.1 billion, of worldwide sales occur in the U.S. These domestic sales serve the entire U.S. gaming market—only a fraction of those sales are to commercial casino operators. The exact share of total sales to domestic commercial casinos is difficult to estimate precisely, but it is likely to be in the \$2 billion to \$3 billion range, with an expectation of \$2.5 billion in sales.

32 "Global Gaming Supplier: Industry Impact Analysis," Association of Gaming Equipment Manufacturers, 2008 at p.8.

33 See, Id.

34 See, 2011 AGA Report, p.9.

35 Based on survey of AGA supplier members and The Brattle Group analysis.

## VII. The Impact of Commercial Casinos and Their Employees Extends Far Beyond the Property Line

### A. The Commercial Casino Industry's Impact on Host Casino Counties

In communities where commercial casinos operate, the economic impacts of the industry are, as one would expect, varied and much more considerable than national impact figures suggest. To estimate these local effects, our economic impact model is calibrated to estimate impacts at the individual county level. While total spending from the commercial casino industry was equivalent to about 1 percent of the U.S. GDP in 2010, it generated a much larger share – on average about 7 percent – of economic activity in its host counties. To quantify this in dollar terms, of the approximately \$125 billion in total spending in the economy created by commercial casinos in 2010, about two-thirds of the activity was generated in the host and surrounding counties, and about one-third was generated in other counties across the U.S.

Additionally, the gaming industry plays an integral role in the broader U.S. travel and tourism industry, and casino customers contribute to local and regional economies beyond the casino properties they visit. In fact, at the national level, approximately 50 percent of goods and services generated by the gaming industry are sold to visitors who come from outside the area in which the casino is located, thus introducing “new” spending in the community.<sup>36</sup>

### B. Local Casino Counties vs. Non-Casino Counties: Indirect and Induced Effects

Based on our findings and economic modeling, the degree to which secondary employment and economic activity extend outside of local casino counties is significant. For example, of the total *indirect* and *induced* employment the industry created in the U.S. in 2010, almost half – or more than 235,000 – of these jobs were located outside of the 114 casino host counties and these counties’ local catchment areas (together “local casino counties”).

Secondary economic activity from commercial casinos is even more likely than employment activity to ripple beyond local casino counties. In fact, well over half (totaling \$46.6 billion) of all indirect and induced economic outputs from commercial casinos in 2010 were generated in counties beyond casino host and catchment counties (“non-casino” counties). Table 7 presents exact figures associated with the distribution of secondary employment and economic outputs beyond casino host and catchment counties for 2010.

**Table 7: Distribution of Employment and Economic Outputs in 2010 - Local Casino Counties vs. Non-Casino Counties**

	Local Casino Counties	Non-Casino Counties	National
Employment ( <i>Indirect and Induced</i> )	235,443	237,293	472,735
Economic Output ( <i>Indirect and Induced</i> )	\$29.37 billion	\$46.58 billion	\$75.96 billion
Economic Output ( <i>Total</i> )	\$79.1 billion	\$46.58 billion	\$125.69 billion

Source:

The Brattle Group

Notes:

[1] Local casino counties are defined as casino host or catchment counties.

[2] The components may not add to the total due to rounding.

<sup>36</sup> The overall U.S. gaming industry has a tourism industry ratio of .49 indicating that nearly 50% of its output is sold to visitors, where a visitor is defined as a person who travels outside of their area of normal everyday activities (within 50-100 miles of their home) for less than a year or who stays overnight in a hotel or motel. See, Zemanek, Steven L. “U.S. Travel and Tourism Satellite Accounts for 2007-2010,” Bureau of Economic Analysis, U.S. Department of Commerce, June 2010 available at [http://www.bea.gov/scb/pdf/2011/06%20June/0611\\_travel.pdf](http://www.bea.gov/scb/pdf/2011/06%20June/0611_travel.pdf) (last accessed August 3, 2011).



### C. National Indirect and Induced Effects

As previously noted, the commercial casino industry employed about 350,000 people at its properties in 2010, but supported more than 470,000 additional jobs in the economy through indirect and induced spending effects. These effects, also known as secondary effects, are the economic forces that ripple beyond immediate surroundings and cause an industry's impact to be felt more broadly through the economy. Taken as a whole, commercial casinos supported \$31 billion dollars in spending in supplier industries and nearly 180,000 jobs via these *indirect* effects.

Another way the commercial casino industry helps to generate additional economic activity is through the paychecks that casinos' and suppliers' employees bring home and spend in the community. For instance, casino employees pay rent or a mortgage, buy cars and school supplies, and use the services of local professionals. This spending supports these and other businesses in the communities within which these employees reside and throughout the country. The *induced* effects of this spending by commercial casinos' employees and suppliers' employees supported an additional \$45 billion in output and more than 290,000 jobs.

### VIII. The Commercial Casino Industry Pays More in Taxes Than Most Industries and Receives Almost No Subsidies

Rare among U.S. businesses, commercial casinos pay taxes on gross revenues (in the case of this industry, gaming revenue)<sup>37</sup> in addition to the usual menu of state and local sales, income and payroll taxes. Across all 22 states, the commercial casino industry paid \$7.6 billion in taxes on its gross gaming revenue of \$34.6 billion in 2010. This amounts to an average rate of almost 22 percent. These taxes, which vary significantly by state, do not include up-front licensing fees, which also can be sizeable.<sup>38</sup> The commercial casino industry paid an additional \$8.3 billion in other taxes in 2010, \$3.8 billion of which went to pay federal taxes and \$4.5 billion to state and local taxes.

While the commercial casino industry directly paid almost \$16 billion in taxes in 2010, this total under-represents the actual tax revenues the industry was responsible for generating because it doesn't take indirect and induced activities into account. In fact, as detailed in Table 8, federal, state and local taxes levied on indirect and induced economic output associated with the industry generated more than \$9 billion in tax revenues in 2010.<sup>39</sup> In all, through direct, indirect and induced economic activity, the commercial casino industry generated close to \$25 billion in taxes in 2010.

If one looks at the aggregate of all taxes paid directly by the industry (nearly \$16 billion) as a ratio of its total \$49.7 billion in direct economic activity, the commercial casino industry operates under an effective tax rate of 32 percent.<sup>40</sup> This rate is, in fact, nearly 20 percent higher than the economy-wide total tax burden of 27 percent.<sup>41</sup> Looking solely at the gaming line of business within commercial casinos, the effective tax rate is even higher, totaling 39 percent.<sup>42</sup>

Many states provide targeted investment tax credits to entice businesses to move to their states. These tax incentives are provided in the recognition that investments have positive economic externalities, and there is evidence that the use of tax incentive programs by state governments has grown in past decades.<sup>43</sup> Automobile manufacturers, for example, are frequent recipients of tax induced investment. One economic impact analysis,

37 Gross revenue is the equivalent of income before any deductions, allowances or expenses are taken into account.

38 In Pennsylvania, for example, casino operators had to pay an initial license fee of \$50 million before they could be approved to operate a commercial casino location.

39 These total tax calculations are based on output from our IMPLAN modeling for the Gaming, Food & Beverage, and Hotel activities of the commercial casino industry. We estimate the taxes associated with other activities as proportional to those paid on the Gaming, Food & Beverage, and Hotel activities of the industry.

40 This comparison is made on direct taxes paid only so as to avoid any issues of double counting tax payments when making comparisons.

41 All taxes paid as a percentage of the entire economy. See, "Special Report," Tax Foundation, at p.5, available at <http://www.taxfoundation.org/files/sr190.pdf> (last accessed September 26, 2011).

42 \$13.6 billion (of \$15.9 billion) in tax payments are associated with the gaming line of business in casinos.

43 "State Investment Tax Incentives: A Zero-Sum Game?" Robert S. Chirinko and Daniel J. Wilson, July 2008, Figure 1, p.51.

**Table 8: Total Industry Tax Payments in 2010 (\$ Billions)**

	Gaming Taxes	Federal Taxes	State and Local Taxes	Total Taxes
Direct	\$7.6	\$3.8	\$4.5	\$15.9
Indirect		\$2.1	\$1.3	\$3.4
Induced		\$3.0	\$2.6	\$5.6
<b>Total</b>	<b>\$7.6</b>	<b>\$9.0</b>	<b>\$8.4</b>	<b>\$25.0</b>

Source:

The Brattle Group

Note:

[1] The components may not add up to the total due to rounding.

for example, found that Kentucky's investment of \$325.4 million in a Toyota plant produced a total of 35,530 jobs, representing an investment of more than \$9,000 per job.<sup>44</sup>

While other industries *receive* incentives to generate economic benefits, the commercial casino industry instead *pays* state and local government for the privilege of creating economic activity. Taking some of the previously discussed tax data as an example, the commercial casino industry paid \$7.6 billion in state gaming taxes in 2010, and with nearly 820,000 jobs supported by the commercial casino industry, it thus paid over \$9,000 per job to these states and localities.

## IX. Conclusion

Over the last 20 to 25 years, the commercial casino industry has undergone a substantial transformation. Casinos, by and large, have become more complex and diversified businesses and now offer more entertainment and recreation options to their customers than ever before.

This industry transformation has taken place at a time when the U.S. economy has seen a tremendous amount of growth. As a result of this growing economy, standards of living have improved, and consumers have shifted more of their spending toward recreational activities, including gaming and associated activities. Generating well over \$100 billion in economic activity and billions of dollars in tax revenues per year, directly and indirectly employing a workforce of hundreds of thousands and operating in 22 states, the commercial casino industry is a significant contributor to our nation's economy.

<sup>44</sup> "The Economic Impact of Development: Honda in Ohio," Mary K. Marvel and William J. Shkurti, *Economic Development Quarterly*, Vol. 7 No. 1, February 1993, (Herein, "Marvel and Shkurti."), p.51. By taking Kentucky's \$325.4 million investment and dividing it by the total number of jobs (35,530) the state provided an incentive of \$9,161 per job. See, Marvel and Shkurti, p.52.

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## **Disclaimer**

The views expressed in this paper are strictly those of the authors and do not necessarily state or reflect the views of The Brattle Group or its clients.

## **Note**

To access the Technical Appendix and Methodology, visit [www.americangaming.org/BeyondTheCasinoFloor](http://www.americangaming.org/BeyondTheCasinoFloor).