

Economic Impact of the US Hotel Industry

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Executive summary

Executive summary

To quantify the economic impacts of the US hotel industry for the American Hotel & Lodging Association, Oxford Economics analyzed industry information from a variety of sources and prepared a comprehensive measure of industry performance. This research was funded by the American Hotel & Lodging Association Educational Foundation and represents the most comprehensive analysis of industry impacts to date.

As part of this analysis, Oxford Economics analyzed:

- **hotel operations** by gathering and integrating information on the size and performance of hotels and motels, casino hotels, and bed and breakfast inns by state;
- **hotel guest ancillary spending** based on consumer survey data by state;
- **capital investment** in hotels by analyzing data on new hotel construction and renovations; and,
- **indirect and induced impacts** supported by the hotel industry in other parts of the US economy.

The results show the US hotel industry supports a total economic impact (2015) of:

- \$1.1 trillion of output (representing revenue plus certain taxes);
- 7.8 million jobs with \$355 billion of labor income;
- \$589 billion of GDP (representing contribution to US gross domestic product); and,
- \$167 billion of Federal, state and local taxes.

The hotel industry consists of 54,200 properties, with more than 4.6 million guestrooms. The sector records more than 1.1 billion occupied room nights annually. As the hotel industry attracts increasing numbers of guests, employment has expanded to new highs, representing a gain of 188,000 direct jobs at hotels since 2010.

This document presents key elements of the research and findings.

1. Approach and sources

Approach and industry definition

Overview of approach

Oxford Economics (Oxford or we) prepared this analysis by first assessing the direct effects of the hotel industry (hotel operations, hotel guest ancillary spending, and capital investment). We based this analysis of direct effects primarily on data released by Federal statistical agencies, as well as inputs from STR, the leading provider of hotel industry data; and Longwoods International, a leading provider of traveler survey data.

We then prepared estimates of the downstream impacts, including indirect and induced effects, using a customized economic impact model. Lastly, we prepared estimates of fiscal impacts using a hybrid approach based on estimates of specific taxes (e.g. taxes on lodging and hotel property taxes), and the economic impact model.

We prepared a full set of estimates for 2015. We estimated selected measures for historical years as well.

We prepared certain aspects of the direct analysis at the state level, then aggregated the results to the US level and calculated the indirect and induced effects.

Report outline

This section continues with a discussion of the industry definition, definition of other terms, and summary of key sources. Subsequent sections present estimates of direct impacts, total impacts, and fiscal impacts. The report concludes with a summary of historical metrics.

Industry definition

For the purpose of this study, the hotel industry was defined as including the following types of business establishments (each sector is also referenced here by the corresponding code in the North American Industry Classification System):

- hotels and motels (NAICS 721110);
- casino hotels (NAICS 721120); and,
- bed and breakfast inns (NAICS 721191).

The analysis excludes:

- short-term rentals;
- other traveler accommodations (NAICS 721199), such as guest houses and youth hostels; and,
- casinos except casino hotels (NAICS 713210).

Definitions

Definitions

Capital investment: Investment in the construction of new hotels, and renovation of existing hotels (excluding maintenance).

Direct effects: Also referred to as direct impacts. Includes direct spending and revenues, in this case from hotel operations, hotel guest ancillary spending, and capital investment; as well as the corresponding employment, income and fiscal impacts.

Fiscal impacts: Tax revenue, as well as contributions to Social Security and unemployment insurance, as well as government revenue from various fees.

GDP: Gross domestic product, or value added. Refers to the industry's contribution to national GDP. Represents gross output of the sector, less the cost of its inputs. Can also be measured as the sum of compensation of employees, taxes on production and imports, and gross operating surplus (profit).

Hotel guest ancillary spending: Hotel guest spending that occurs off-site (i.e. at non-hotel businesses).

Hotel industry: The sector studied in this analysis, including hotels and motels, bed and breakfast inns, and casino hotels.

Hotel operations: Traditional on-site hotel revenue and associated activities, excluding guest spending occurring at ancillary businesses in the destination.

Indirect impacts: Downstream supplier industry impacts, also referred to as supply chain impacts. For example, hotels require inputs such as energy and food ingredients. Also can refer to indirect and induced impacts combined.

Induced impacts: Arise as employees spend their wages in the broader economy. For example, as hotel employees spend money on rent, transportation, food and beverage, and entertainment.

Jobs: Also referred to as employment. Number of full- and part-time jobs, including proprietors.

Labor income: Earnings of wage and salary employees and proprietors. The definition used is consistent with the Bureau of Economic Analysis (BEA) data for earnings in its regional program. It includes tips, commissions and bonuses.

Output: Revenue, also referred to as business sales, plus certain taxes (e.g. taxes on lodging and other sales taxes).

Taxes on lodging: Sales taxes applicable to room rentals, plus hotel occupancy taxes and any other fees or taxes that apply to lodging stays (e.g. tourism improvement district fees).

Total impacts: Direct, indirect and induced impacts combined.

Key data sources

Key data sources

AH&LA and STR 2016 US Lodging Tax Study: Data on state and local tax rates on lodging.

Bureau of Economic Analysis: National and, in some cases, state data on output, employment, income, and GDP.

Bureau of Labor Statistics: Recent data on employment and wages and salaries.

Census Bureau Economic Census: Revenue by industry and product line. Count of establishments and guestrooms.

Census Bureau Value of Construction Put in Place: Survey measure of new construction, expansions, and building renovations.

IMPLAN: Economic impact modeling software and data.

Longwoods International: Hotel guest spending estimates based on Longwoods Travel USA, the largest ongoing survey of US business and leisure travel.

STR: Customized data on industry size (properties and guestrooms) and performance (room demand, room revenue, occupancy, ADR)

STR Host Report database: Hotel industry financial statement ratios based on data submitted by hotels (e.g. ratio of property taxes to sales).

2. Direct impacts

Overview of direct impacts

Estimating direct impacts

The components of direct industry impacts are:

- **hotel operations:** representing the revenue of hotel-industry establishments (e.g. rooms, food and beverage, gaming, and other) plus certain taxes (taxes on lodging and other sales taxes);
- **ancillary hotel guest spending:** representing spending by hotel guests at other businesses, such as in the local destination and transportation; and,
- **capital investment:** representing the construction of new hotels, renovations, and ongoing capital spending on the upkeep of existing hotels.

Direct impacts: Hotel operations

As steps in our analysis of hotel operations, we analyzed:

- revenue, establishment, and guestroom count data from the Census Bureau Economic Census (Economic Census) for 2012 to form a baseline view of industry revenue by state;
- casino hotel data from primary sources (e.g. gaming regulatory boards), and secondary sources (e.g. American Gaming Association) to develop comprehensive, multi-year, measures of casino hotel revenue by state;
- revenue, establishment and guestroom count data from STR for 2005 to 2015;
- data from the BEA on the accommodations industry (NAICS 721), including industry output (national), employment (national and states), labor income (national and states), and GDP (national and states).

Additionally, we estimated the taxes on lodging and other sales taxes that are paid by consumers and are part of industry output but not counted as part of hotel revenue.

In certain instances, the statistical data was subject to reporting lags or disclosure limitations. In these cases, we prepared estimates using alternative sources. For example, we estimated state-level employment growth for 2015 based on Bureau of Labor Statistics data from the Quarterly Census of Employment and Wages.

Overview of direct impacts (continued)

Direct impacts: Ancillary hotel guest spending

Spending by hotel guests represents an important catalytic effect of the industry. To measure the magnitude of such spending at ancillary businesses we obtained consumer survey data from Longwoods International (Longwoods), based on Longwoods Travel USA, the largest ongoing survey of US business and leisure travel. The Longwoods data indicates typical spending patterns by hotel guests in each state. We used the survey-based ratio of total spending to lodging spending to estimate total ancillary hotel guest spending, and then adjusted for on-site spending already captured within our estimates of on-site hotel revenue (e.g. guest spending on food and beverage at hotel restaurants). We also added an estimate of hotel guest spending on airfares and rail transportation to their destination.

Direct impacts: Capital investment

Investment in the construction of new hotels and renovation of existing hotels represents another important part of industry impacts. For the purpose of this analysis, we have included these jobs as part of the industry's direct impact.

For estimates of new hotel construction by year and Census Division, we relied primarily on the Census Bureau Value of Construction Put in Place Survey. We supplemented this data with estimates of ongoing capital expenditures not captured by this survey (e.g. furniture, carpeting and technology).

The following pages summarize key estimates of direct industry impacts.

Hotel industry revenue totals \$227.2 billion

Industry revenue totals \$227.2 billion (2015). Of this, rooms revenue represents less than two thirds (58.9%), gaming represents 19.5%, and food and beverage represents 14.3%.

This industry profile demonstrates that in many cases the scope of hotel operations extends beyond guestroom accommodations. For example, catering for meetings, conferences and other events represents a major source of food and beverage revenue, while other operated departments such as spa, retail, parking, and recreation (e.g. golf, ski, marina, waterpark) are also substantial.

Note: This analysis excludes certain markups that represent guest spending but not hotel revenue, such as the markup on rooms sold by online travel agencies under a merchant model.

Hotel revenue by category (2015)

Amounts in billions of dollars

	Total	Rooms	Food and beverage	Gaming	Other
<i>Dollar value</i>					
Total revenue	\$227.2	\$133.9	\$32.4	\$44.3	\$16.5
Hotels, motels, and B&Bs	169.7	129.1	27.3	0.0	13.3
Casino hotels	57.5	4.8	5.1	44.3	3.2
<i>Share of total revenue</i>					
Total revenue	100.0%	58.9%	14.3%	19.5%	7.3%
Hotels, motels, and B&Bs	100.0%	76.1%	16.1%	0.0%	7.8%
Casino hotels	100.0%	8.4%	8.9%	77.1%	5.6%

Source: Oxford Economics

Including taxes, hotel operations output totals \$245.4 billion

In addition to total hotel industry revenue of \$227.2 billion (2015), we estimate that guests spend an additional \$18.3 billion on taxes on lodging and other sales taxes. As a result, total hotel industry output – equivalent to total guest spending at hotels – is \$245.4 billion.

For example, on rooms revenue of \$133.9 billion, we estimate guests spend \$16.5 billion on taxes on lodging, equivalent to a 12.3% rate. This represents the aggregate of various forms of taxes on lodging, such as sales taxes, hotel occupancy taxes, and tourism improvement district fees. We based this estimate on a state-by-state analysis of tax rates, with adjustments for specific tax rates in major markets as gathered by STR and AH&LA.*

* AH&LA and STR. (2016) US Lodging Tax Study.

Total output: Hotel operations (2015)

Amounts in billions of dollars

	Total	Rooms	Food and beverage	Gaming	Other
Total output (spending)	\$245.4	\$150.4	\$33.6	\$44.3	\$17.1
Hotels, motels, and B&Bs	187.0	145.0	28.2	0.0	13.8
Casino hotels	58.4	5.4	5.3	44.3	3.4
Total revenue	\$227.2	\$133.9	\$32.4	\$44.3	\$16.5
Hotels, motels, and B&Bs	169.7	129.1	27.3	0.0	13.3
Casino hotels	57.5	4.8	5.1	44.3	3.2
Taxes on lodging and sales taxes	\$18.3	\$16.5	\$1.2	\$0.0	\$0.6
Hotels, motels, and B&Bs	17.4	15.9	1.0	0.0	0.5
Casino hotels	0.9	0.6	0.2	0.0	0.1

Source: Oxford Economics

For each \$100 spent on lodging, hotel guests spend an additional \$221 at other businesses

We estimate hotel guests spend \$237.8 billion at other businesses as part of their trips, which is in addition to \$245.4 billion of guest spending on-site at hotel-industry establishments (2015). This includes transportation en route to the destination, such as airfare, but excludes pre-trip purchases. In total, guests spend \$483.2 billion at hotels and other businesses as part of their trip.

Comparing this total spending of \$483.2 billion to the \$150.4 billion that guests spend specifically on lodging, indicates that for each \$100 spent on lodging (i.e. guestroom portion of the stay), hotel guests spend an additional \$221 on other goods and services in the destination. This represents \$332.8 billion of additional guest spending beyond lodging. The lodging portion represents slightly less than one-third (31.1%) of total guest spending.

Hotel guest spending (2015)

Amounts in billions of dollars

	Total hotel guest spending		On-site guest spending (at lodging establishments)		Ancillary guest spending	
	Amount	Share	Amount	Share	Amount	Share
Total guest spending	\$483.2	100.0%	\$245.4	100.0%	\$237.8	100.0%
Lodging	150.4	31.1%	150.4	61.3%	0.0	0.0%
Transportation (off-site)	117.9	24.4%	0.0	0.0%	117.9	49.6%
Food and beverage	89.8	18.6%	33.6	13.7%	56.2	23.7%
Gaming (on-site)	44.3	9.2%	44.3	18.1%	0.0	0.0%
Retail	35.7	7.4%	3.1	1.3%	32.6	13.7%
Recreation (off-site)	31.0	6.4%	0.0	0.0%	31.0	13.1%
Other	14.1	2.9%	14.1	5.7%	0.0	0.0%

Source: Oxford Economics

Hotel operations and hotel guest spending support 4.3 million direct jobs

The direct impacts of hotel operations consist of guest spending at hotel-industry establishments, the jobs at those establishments and the corresponding labor income. This includes 2.0 million jobs at hotels, motels, B&Bs, and casino hotels, with \$80.4 billion of labor income, as well as an additional 2.2 million jobs and \$82.4 billion of labor income supported by hotel guest spending at other businesses (e.g. jobs at restaurants, retail stores, airfare, local transportation, and museums) (2015).

Hotel operations generate \$143.3 billion of industry GDP. This represents the direct effect contribution of the hotel industry to overall US GDP. It is equivalent to industry output (sales plus taxes) minus the cost of intermediate inputs (e.g. energy, raw materials, and services purchased from other sectors).

Hotel operations also support \$55.1 billion of fiscal impacts. Additional detail on these impacts is provided in the fiscal impacts section.

Direct impacts: Operations and hotel guest spending (2015)

Amounts in billions of dollars, except jobs

	Economic impacts				Fiscal impacts		
	Output (revenue)	Labor income	Employment (in millions)	GDP	Total	State and local	Federal
Direct impacts	\$483.2	\$162.8	4.3	\$261.6	\$92.2	\$53.2	\$39.0
Hotel operations	245.4	80.4	2.0	143.3	55.1	35.1	20.0
Hotel guest spending (ancillary)	237.8	82.4	2.2	118.4	37.2	18.2	19.0

Source: Oxford Economics

Hotel capital investment supports 161,300 direct jobs

Annual capital investment in hotels totals \$31.0 billion (2015). This represents \$20.6 billion of spending on construction of new hotels, and building renovations and expansions at existing hotels, plus \$10.5 billion of ongoing capital spending at existing hotels (e.g. furniture and equipment).

This capital spending supports approximately 161,300 direct jobs, with \$11.0 billion of labor income, and \$13.0 billion of GDP. It also supports \$2.8 billion of direct fiscal impacts.

Direct impacts: Capital investment (2015)

Amounts in billions of dollars, except jobs

	Economic impacts				Fiscal impacts		
	Output (revenue)	Labor income	Employment (in thousands)	GDP	Total	State and local	Federal
Direct impacts							
Capital investment	\$31.0	\$11.0	161.3	\$13.0	\$2.8	\$0.6	\$2.2

Source: Oxford Economics

3. Total impacts

Economic impact analysis quantifies the downstream impacts of the industry

Analysis of the direct effects of the hotel industry serve as inputs for the economic impact model. The economic impact model, also referred to as the input-output (I-O) model, quantifies the downstream impacts of direct spending.

Main components of economic impact analysis

There are three main components of a project or sector's overall economic impact:

- **Direct impacts** consisting of direct spending and revenues, in this case hotel operations, hotel guest ancillary spending, and capital investment.
- **Indirect impacts** representing downstream supplier industry impacts, also referred to as supply chain impacts. For example, hotels require inputs such as energy and food ingredients. Also, many hotels contract with specialized service providers, such as for marketing, equipment upkeep, cleaning, technology support, accounting, and legal and financial services.
- **Induced impacts** which occur as employees spend their wages in the broader economy. For example, as hotel employees spend money on rent, transportation, food and beverage, and entertainment.

In summary tables we present the indirect and induced effects on a combined basis. These effects may also be referred to collectively as indirect effects.

To conduct the economic impact analysis, we used a customized model based on the IMPLAN modeling system, a well-respected economic impact analysis tool, to quantify key relationships in the economy. The IMPLAN model traces the flow of direct expenditures through the economy and the effects on employment, wages, and taxes. IMPLAN also quantifies the indirect (supplier) and induced (income) impacts. For example, when a visitor purchases a meal at a hotel restaurant, a portion of the sale supports wages for hotel employees, while a portion of the sale may consist of locally produced food and beverages. The IMPLAN model captures these types of relationships based on a structured analysis of economic statistics. Additionally, the IMPLAN model reflects the typical levels of federal, state and local taxes generated by specific types of economic activity.

Oxford applied an analysis-by-parts approach using the IMPLAN model. In this approach, Oxford estimated the direct impacts of hotel operations in terms of output, employment, and labor income. We also estimated purchases from vendors. We then used the IMPLAN model to estimate the indirect and induced effects associated with each of key driver of downstream impacts (employment, labor income, and purchases of intermediate inputs).

Including indirect and induced effects, hotel operations and guest spending support 7.3 million jobs

Including indirect and induced effects, hotel operations and hotel guest ancillary spending support total impacts consisting of 7.3 million jobs, with \$327.5 billion of labor income, and \$1.0 trillion of output.

Economic impacts: Operations and hotel guest spending (2015)

Amounts in billions of dollars, except jobs

	Economic impacts				Fiscal impacts		
	Output (revenue)	Labor income	Employment (in millions)	GDP	Total	State and local	Federal
Total impact of operations	\$1,024.4	\$327.5	7.3	\$548.1	\$158.1	\$78.6	\$79.5
Hotel operations	439.8	141.6	3.2	247.9	79.6	44.6	35.0
Hotel guest spending (ancillary)	584.6	185.9	4.1	300.2	78.5	34.0	44.5
Direct impacts	\$483.2	\$162.8	4.3	\$261.6	\$92.2	\$53.2	\$39.0
Hotel operations	245.4	80.4	2.0	143.3	55.1	35.1	20.0
Hotel guest spending (ancillary)	237.8	82.4	2.2	118.4	37.2	18.2	19.0
Indirect and induced impacts	\$541.3	\$164.6	3.0	\$286.5	\$65.9	\$25.4	\$40.5
Hotel operations	194.4	61.2	1.2	104.7	24.5	9.6	15.0
Hotel guest spending (ancillary)	346.8	103.4	1.9	181.9	41.3	15.8	25.5

Source: Oxford Economics

Hotel capital investment supports 444,200 total jobs

Capital investment generates \$54.0 billion of output attributable to indirect and induced effects, resulting in \$85.0 billion of total output, with 444,200 jobs and \$27.3 billion of labor income.

Economic impacts: Capital investment (2015)

Amounts in billions of dollars, except jobs

	Economic impacts				Fiscal impacts		
	Output (revenue)	Labor income	Employment (in thousands)	GDP	Total	State and local	Federal
Total impact of capital investment	\$85.0	\$27.3	444.2	\$40.4	\$9.1	\$3.0	\$6.2
Direct impacts	31.0	11.0	161.3	13.0	2.8	0.6	2.2
Indirect and induced impacts	54.0	16.3	283.0	27.3	6.4	2.4	3.9

Source: Oxford Economics

Combined, the hotel industry supports 7.8 million jobs

In aggregate, when including both direct and indirect effects, the hotel industry supports \$1.1 trillion of economic output (revenue plus certain taxes), 7.8 million jobs with \$354.8 billion of labor income, and \$588.5 billion of GDP.

The industry also supports \$167.2 billion of total fiscal impacts.

Total economic impacts: Operations, guest ancillary spending, and capital investment (2015)

Amounts in billions of dollars, except jobs

	Economic impacts				Fiscal impacts		
	Output (revenue)	Labor income	Employment (in millions)	GDP	Total	State and local	Federal
Total	\$1,109.4	\$354.8	7.8	\$588.5	\$167.2	\$81.6	\$85.6
Direct operations	245.4	80.4	2.0	143.3	55.1	35.1	20.0
Direct hotel guest ancillary	237.8	82.4	2.2	118.4	37.2	18.2	19.0
Direct capital investment	31.0	11.0	0.2	13.0	2.8	0.6	2.2
Indirect and induced	595.2	180.9	3.3	313.9	72.2	27.8	44.4

Source: Oxford Economics

A typical hotel with 100 occupied rooms supports 254 total jobs

To consider the impacts of a typical property, we calculated the annual impacts of a hotel with an average of 100 occupied rooms daily. To represent the full hotel life cycle, we included an allocation of capital investment activities (both new construction and ongoing capex). On this basis, the typical property supports 146 direct jobs and 108 indirect and induced jobs, for a total of 254 jobs.

Of the 146 direct jobs, 67 are in hotel operations, 74 are supported by hotel guest ancillary spending, and five are supported by capital investment.

Annual impacts per 100 occupied rooms

Amounts in millions of dollars, except jobs

	Economic impacts				Fiscal impacts		
	Output (revenue)	Labor income	Employment	GDP	Total	State and local	Federal
Total operations and capital investment	\$36.3	\$11.6	254	\$19.3	\$5.5	\$2.7	\$2.8
Hotel operations	14.4	4.6	105	8.1	2.6	1.5	1.1
Hotel guest ancillary spending	19.1	6.1	134	9.8	2.6	1.1	1.5
Capital investment	2.8	0.9	15	1.3	0.3	0.1	0.2
Total operations and capital investment	\$36.3	\$11.6	254	\$19.3	\$5.5	\$2.7	\$2.8
Direct	16.8	5.7	146	9.0	3.1	1.8	1.3
Indirect and induced	19.5	5.9	108	10.3	2.4	0.9	1.5

Source: Oxford Economics

4. Fiscal impacts

The hotel industry supports a variety of taxes

We analyzed the fiscal impacts of the hotel industry by applying a hybrid approach. Where appropriate, we calculated direct industry tax impacts specifically. These included the following calculations:

- **Taxes on lodging and other sales taxes:** Estimated based on rooms revenue and other categories of revenue, multiplied by estimated average effective tax rates in each state.
- **Gaming taxes:** Estimated based on gaming regulatory board reporting and American Gaming Association estimates.
- **Hotel property taxes:** Estimated based on state-by-state averages of hotel property taxes as a ratio to revenue from the STR Host Report database.

We then estimated other taxes based on relationships in the IMPLAN economic impact model. For example, we estimated taxes supported by hotel employee labor income by applying ratios to estimated direct labor income.

In the case of hotel guest ancillary spending, capital investment, and indirect and induced effects, we applied the IMPLAN model to generate estimates.

We have presented the combined results in the IMPLAN model framework of federal, state and local tax categories, modified to show taxes on lodging and gaming taxes separately. These results are shown on the following pages, first for just hotel operations, and then for the combined total of hotel operations, hotel guest ancillary spending, and capital investment.

Hotel operations directly support \$55.1 billion of taxes

Direct taxes supported by hotel operations (i.e. on-site hotel revenue excluding hotel guest ancillary spending in the destination, and including capital investment) total \$55.1 billion (2015).

This includes \$16.5 billion of taxes on lodging (sales taxes on room revenue, hotel occupancy taxes and tourism improvement district fees, and other taxes on room rentals). It also includes \$1.8 billion of sales taxes on other sales at hotels (e.g. food and beverage and retail), as well as \$5.3 billion of gaming taxes at casino hotels. Hotel property taxes total \$7.9 billion.

In addition, hotels directly support \$20.0 billion of Federal taxes.

When taxes supported by indirect and induced effects are included, the fiscal impacts of hotel operations total \$79.6 billion.

Fiscal impacts: Hotel operations

Amounts in billions of dollars

	Total	Direct	Indirect and induced
Total taxes	\$79.6	\$55.1	\$24.5
State and local taxes	\$44.6	\$35.1	\$9.6
Taxes on lodging	16.5	16.5	0.0
Sales	5.4	1.8	3.6
Gaming	5.3	5.3	0.0
Personal income	2.8	1.6	1.2
Corporate	0.9	0.5	0.4
Unemp. ins. and other social	0.2	0.1	0.1
Excise taxes and fees	2.4	1.4	1.0
Property taxes	11.0	7.9	3.2
Federal taxes	\$35.0	\$20.0	\$15.0
Personal income	11.3	6.4	4.9
Corporate	6.3	3.7	2.6
Indirect business taxes	2.5	1.4	1.0
Social security	15.0	8.5	6.5

Source: Oxford Economics

The hotel industry supports \$167.2 billion of total taxes annually

Fiscal impacts: Operations, guest spending, and capital investment

Amounts in billions of dollars

Once hotel guest ancillary spending and capital investment are included, the total fiscal impact of the hotel industry is estimated at \$167.2 billion. This includes \$81.6 billion of state and local taxes and \$85.6 billion of Federal taxes.

	Total	Direct	Indirect and induced
Total taxes	\$167.2	\$95.0	\$72.2
State and local taxes	\$81.6	\$53.8	\$27.8
Taxes on lodging	16.5	16.5	0.0
Sales	20.1	9.6	10.6
Gaming	5.3	5.3	0.0
Personal income	7.1	3.5	3.6
Corporate	2.0	0.8	1.2
Unemp. ins. and other social	0.6	0.3	0.3
Excise taxes and fees	6.1	3.2	2.9
Property taxes	23.9	14.7	9.2
Federal taxes	\$85.6	\$41.2	\$44.4
Personal income	28.2	13.8	14.4
Corporate	13.2	5.1	8.1
Indirect business taxes	6.6	3.6	3.0
Social security	37.6	18.7	18.9

Source: Oxford Economics

5. Historical summary

Summary of historical hotel industry metrics

As shown on the following page, Oxford Economics prepared historical estimates of certain hotel industry metrics. The broadest coverage is available for the period from 2012 to 2015. Certain estimates are extended back to 2005, primarily using data from BEA, STR, and the Census Bureau. A more narrow set of estimates is extended further back using growth rates for the accommodations sector data from BEA.

STR data for occupancy and ADR is shown for the 2005 to 2015 period as a benchmark. Other measures of industry size (properties, room supply, and occupied rooms) are based on Economic Census estimates for 2012, with additional years estimated based primarily on an integrated set of STR and BEA data.

Summary of historical hotel industry metrics

Historical summary: Hotel industry

Amounts in billions of dollars, except where otherwise noted

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Industry metrics																		
Output (revenue and taxes)	126.2	136.1	152.8	147.5	150.6	156.1	168.8	181.6	191.9	198.7	200.2	180.7	181.1	191.9	206.0	214.8	230.2	245.4
Labor income	48.8	51.9	55.5	53.1	52.6	53.4	57.4	59.9	62.0	64.8	66.1	57.2	59.8	64.8	69.5	73.5	77.5	80.4
Employment (thousands)	1,836	1,891	1,927	1,895	1,865	1,863	1,883	1,916	1,947	1,967	1,974	1,860	1,859	1,908	1,946	1,974	2,012	2,046
GDP	73.4	81.6	90.6	87.7	90.4	91.9	100.0	106.2	112.8	120.9	119.6	104.0	107.9	116.9	123.0	131.6	137.8	143.3
Capital investment	NA	NA	NA	NA	NA	NA	NA	20.4	25.7	35.9	43.8	33.0	18.8	16.5	18.9	22.1	25.5	31.0
Industry size and performance																		
Number of properties (thousands)	NA	NA	NA	NA	NA	NA	NA	49.8	49.8	50.3	51.1	52.2	52.8	52.8	53.0	53.3	53.6	54.2
Number of guestrooms (thousands, year-end)	NA	NA	NA	NA	NA	NA	NA	4,124	4,134	4,182	4,278	4,398	4,472	4,492	4,511	4,539	4,572	4,621
Occupied rooms (millions)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,019	1,028	1,081	1,116
Occupancy rate (STR)	NA	NA	NA	NA	NA	NA	NA	63.0%	63.2%	62.8%	59.8%	54.6%	57.6%	60.0%	61.4%	62.3%	64.4%	65.5%
Average daily rate (STR)	NA	NA	NA	NA	NA	NA	NA	91.04	97.84	104.33	107.40	98.17	98.04	101.74	106.02	109.98	114.92	120.02
Additional income and employment measures																		
Wage and salary income	43.4	47.0	50.9	49.3	48.6	49.7	53.5	55.7	57.7	61.5	63.8	58.3	59.3	62.7	65.7	67.7	71.6	74.2
Wage and salary employment (thousands)	1,733	1,775	1,814	1,788	1,733	1,731	1,751	1,776	1,796	1,827	1,830	1,715	1,708	1,746	1,775	1,807	1,843	1,873
Proprietors income	NA	NA	NA	NA	NA	NA	NA	4.2	4.3	3.3	2.3	-1.1	0.6	2.1	3.8	5.9	5.9	6.2

NA indicates not available (not part of industry estimates for the purpose of this analysis)

Source: STR; Oxford Economics

Appendix 1. Key findings in presentation format

Updating “The Numbers”

THE NUMBERS



These 30,000 new hotel jobs build on the travel industry's continued growth, resulting in an additional **100,000 new travel-related jobs** and an increase of over **\$12 billion in travel-related wages and salaries**.

Hotels and hotel guests support
(2015)



7.8 million
American jobs



\$1.1 trillion of US
business sales



188,000+ new hotel
jobs since 2010

Source: Oxford Economics

For each \$100 hotel guests spend on lodging, they spend another \$221 in the destination

In total, hotel guests spend \$483 billion in the US annually.

Hotel guest spending (2015, in billions)

	Total	On-site	Ancillary
Total spending (output)	\$483.2	\$245.4	\$237.8
Lodging	150.4	150.4	0
Transportation (off-site)	117.9	0	117.9
Food and beverage	89.8	33.6	56.2
Various (e.g. recreation, retail)	125.1	61.5	63.6

Source: STR; Oxford Economics

The hotel industry supports 7.8 million US jobs and \$1.1 trillion of revenue

	Hotel industry (2015)
Total output (revenue)	<u>\$1.1 trillion</u>
Direct output (on-site, ancillary, capital investment)	514 billion
Indirect and induced output	595 billion
Total jobs	7.8 million
Direct jobs	4.5 million
Total labor income	\$355 billion
Federal, state and local taxes	\$167 billion

Source: Oxford Economics

The Oxford analysis is a complete view based on an integration of multiple data sources

Hotel industry definition



Hotels and motels



Casino hotels



Bed & breakfast inns

Key data sources

Bureau of Economic Analysis

Census Bureau (Economic Census)

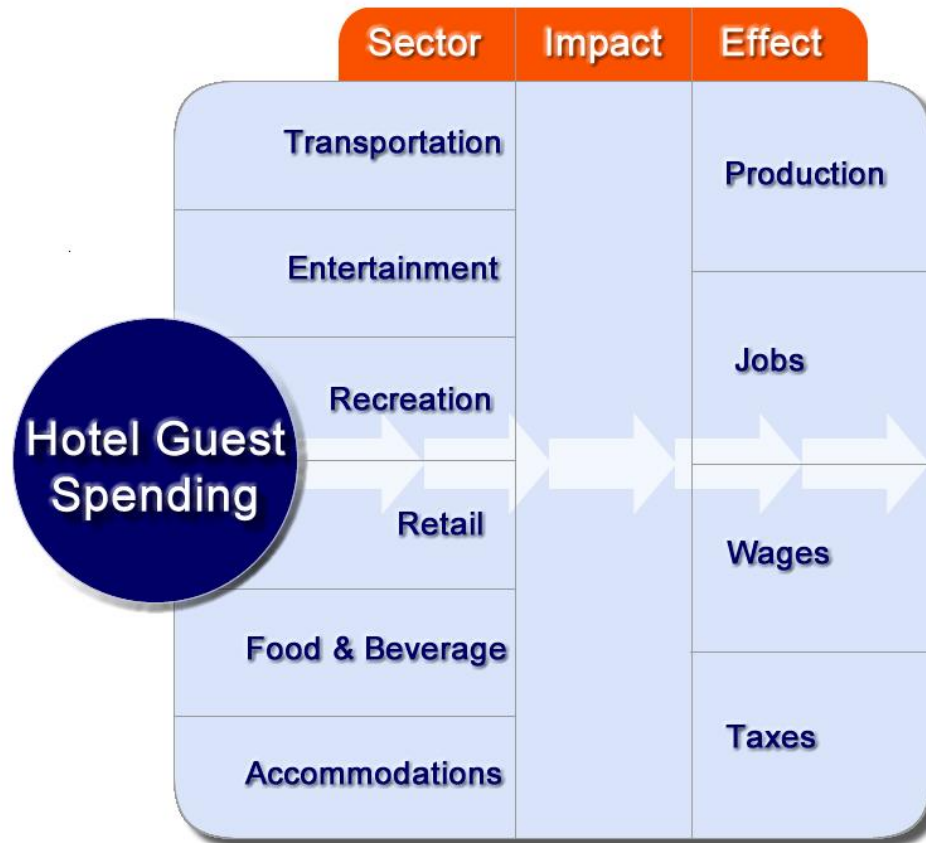
STR

Longwoods International

IMPLAN (economic impact)

Economic impact analysis quantifies the effects supported by initial spending

Illustration of impact model flow



Hotel revenue exceeds \$227 billion

Hotel industry revenue by category (2015, in billions)

	Total	Rooms	F&B	Gaming	Other
Total hotel industry	\$227.2	\$133.9	\$32.4	\$44.3	\$16.5
Hotels, motels and B&Bs	169.7	129.1	27.3	0.0	13.3
Casino hotels	57.5	4.8	5.1	44.3	3.2

Source: Oxford Economics

Oxford estimates are closely aligned with STR

- STR includes condo rentals by management companies, resulting in higher rooms and rooms revenue.
- Oxford includes casino hotel revenue, resulting in higher total revenue.

Comparison to STR (2015)

		STR	Oxford	Ratio (Oxford/STR)	Difference (Oxford – STR)
Inventory	Establishments	52,896	54,179	102.4%	(1,283)
	Rooms (millions)	5.0	4.6	92.5%	(0.4)
Revenue	Room revenue (billions)	\$142.5	\$133.9	93.9%	(\$8.6)
	Total revenue (billions)	\$189.0	\$227.2	120.2%	\$38.2

Source: STR; Oxford Economics

With sales and occupancy taxes included, hotel output exceeds \$245 billion

Hotel industry output (2015, in billions)

	Total	Rooms
Total output	\$245.4	\$150.4
Revenue	227.2	\$133.9
Sales and occupancy taxes	18.3	\$16.5

Source: Oxford Economics

Hotels and hotel guests support 7.8 million jobs, including 2.0 million direct jobs at hotels

Employment impacts (2015, in millions)

	Total	Hotel operations	Guest ancillary spending	Capital investment
Total effect	7.8	3.2	4.1	0.4
Direct effect	4.5	2.0	2.2	0.2
Indirect effect	3.3	1.2	1.9	0.3

Source: Oxford Economics

The typical hotel with 100 occupied rooms per night supports 228 jobs annually

Typical hotel



X 365 days =

\$16.8 million of hotel guest spending and capex
 (Guest spending of \$8.0 million at hotel and \$7.8 million guest ancillary spending, plus \$1.0 million of capital investment for upkeep and annualized construction of new hotels)

Annual impact of a typical hotel with 100 occupied rooms per night

(in millions, except jobs)

	Output	Income	Jobs	Taxes
Total	\$36.3	11.6	254	5.5
Direct	16.8	5.7	146 (including 67 jobs at hotel, 74 at other businesses serving guests, and 5 related to capital investment)	3.1
Indirect	19.5	5.9	108	2.4

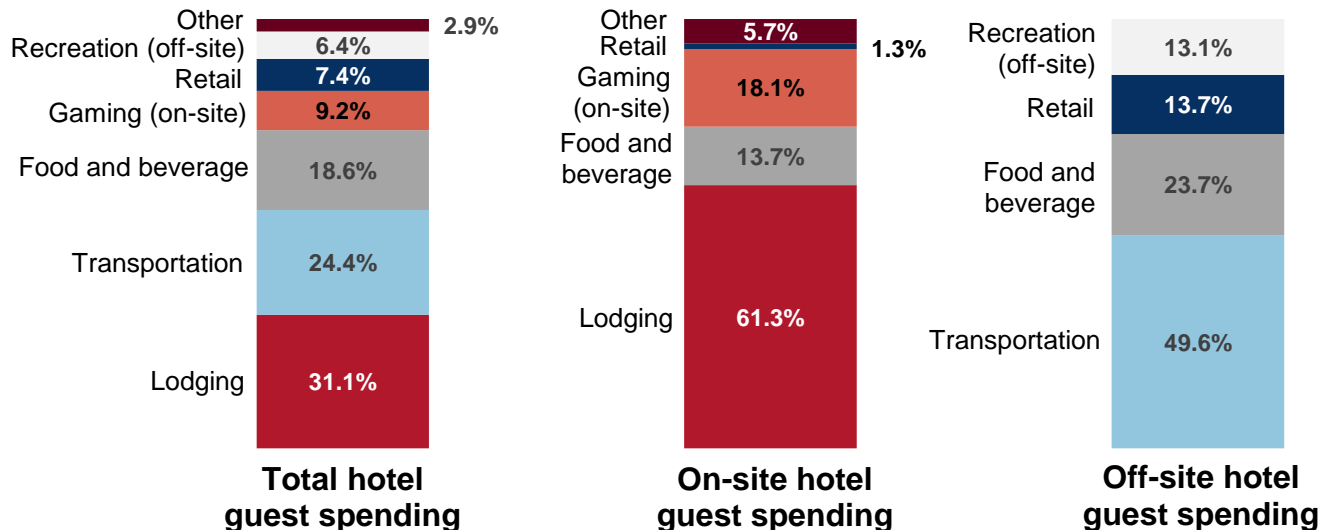
Source: Oxford Economics

For each \$100 spent on lodging, hotel guests spend an additional \$221 in the destination

Hotel guest spending shares by location (2015)



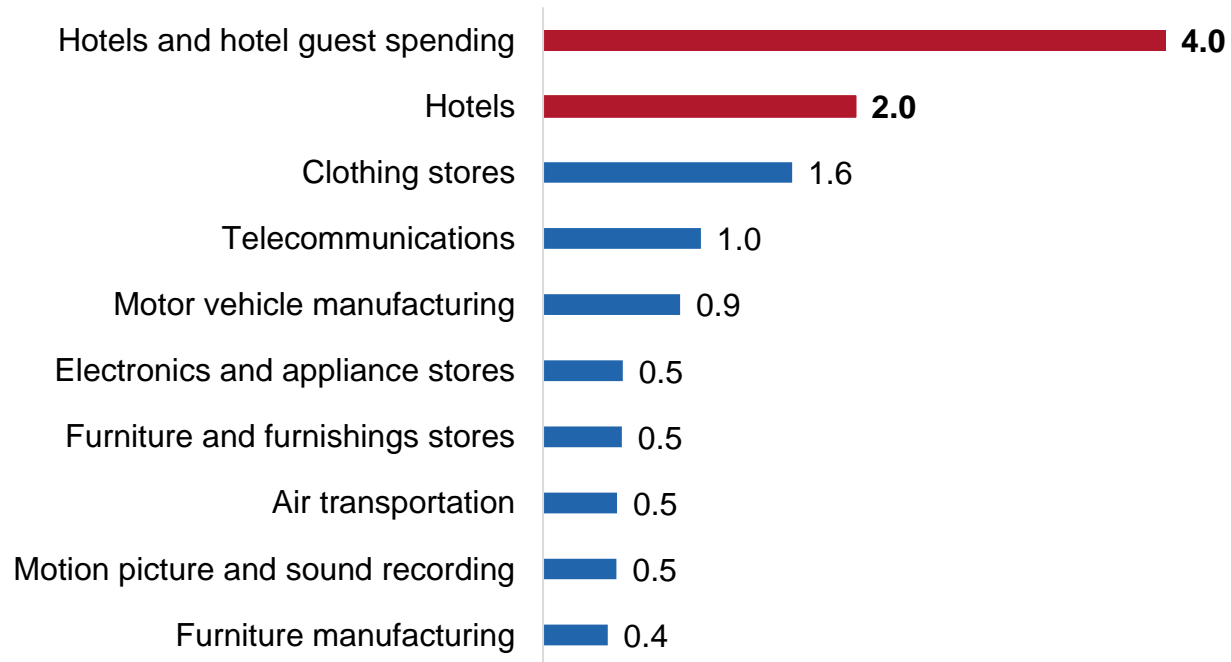
Hotel guest spending shares by category (2015)



Hotels employ 2x more than motor vehicle manufacturing firms

Employment by industry

Full and part-time employment, 2014, in millions



Source: Bureau of Economic Analysis; Oxford Economics

Hotels generate \$167.2 billion of taxes, including \$16.5 billion of taxes on lodging

Hotel industry tax impact
(2015, in billions)

	Total
Total taxes	\$167.2
State and local	81.6
Federal	85.6

Breakout of state and local taxes
(2015, in billions)

	Total
Total state and local	\$81.6
Taxes on lodging	16.5
Sales	20.1
Property taxes	23.8
Personal income and other	21.1

Source: Oxford Economics

| Oxford Economics

Each \$100 of spending at hotels supports \$32 of total taxes (excluding guest ancillary spending)

Taxes per \$100 of spending at hotels (2015)

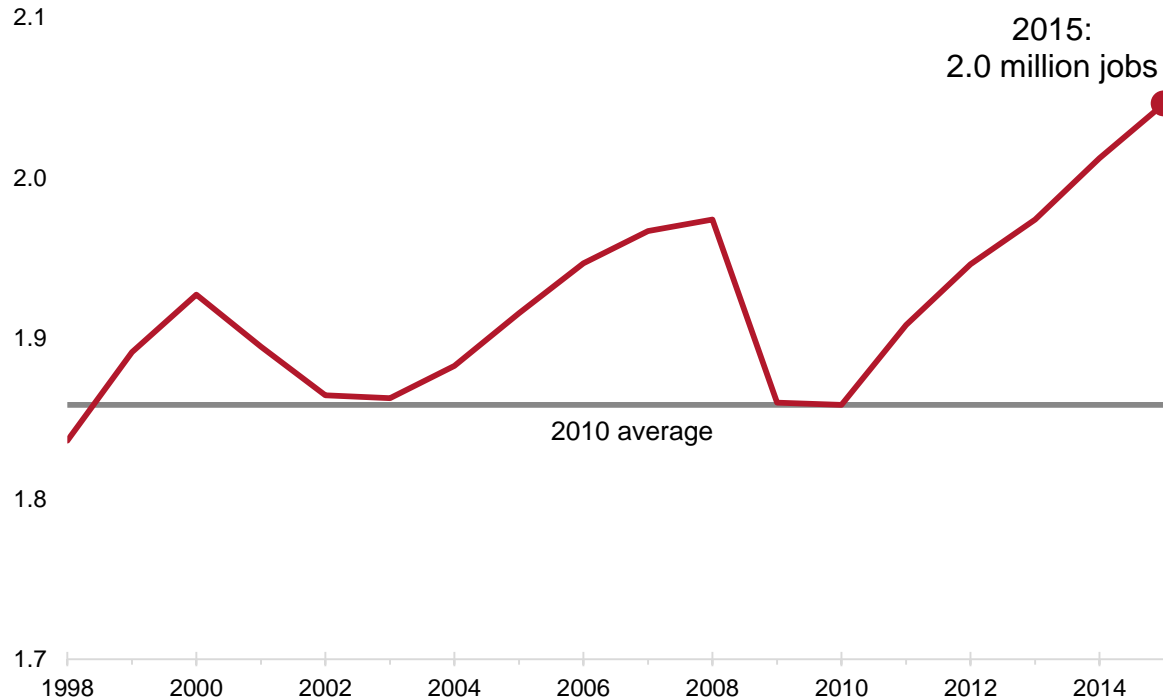
	Total	State and local	Federal
Total taxes	\$32	\$18	\$14
Direct effect	22	14	8
Taxes on lodging and sales	7	7	0
Other direct	15	7	8
Indirect and induced effect	10	4	6

Source: Oxford Economics

Hotels have added 188,000 jobs since 2010

Hotel industry employment

Jobs, in millions



The hotel industry has added **188,000** direct jobs since 2010...

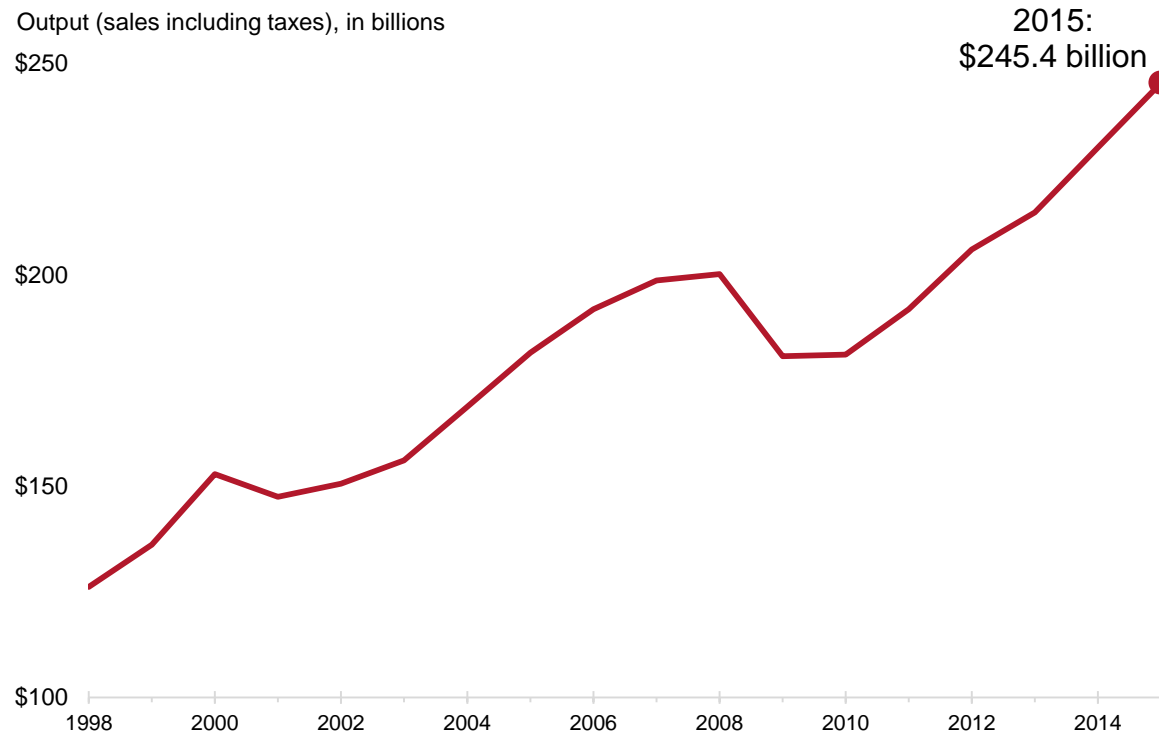
...and is now **72,000** jobs ahead of its prior peak.

Source: Bureau of Economic Analysis; Oxford Economics

Hotel output (revenue and certain taxes) increased to \$245.4 billion in 2015

Hotel industry output

Output (sales including taxes), in billions
\$250

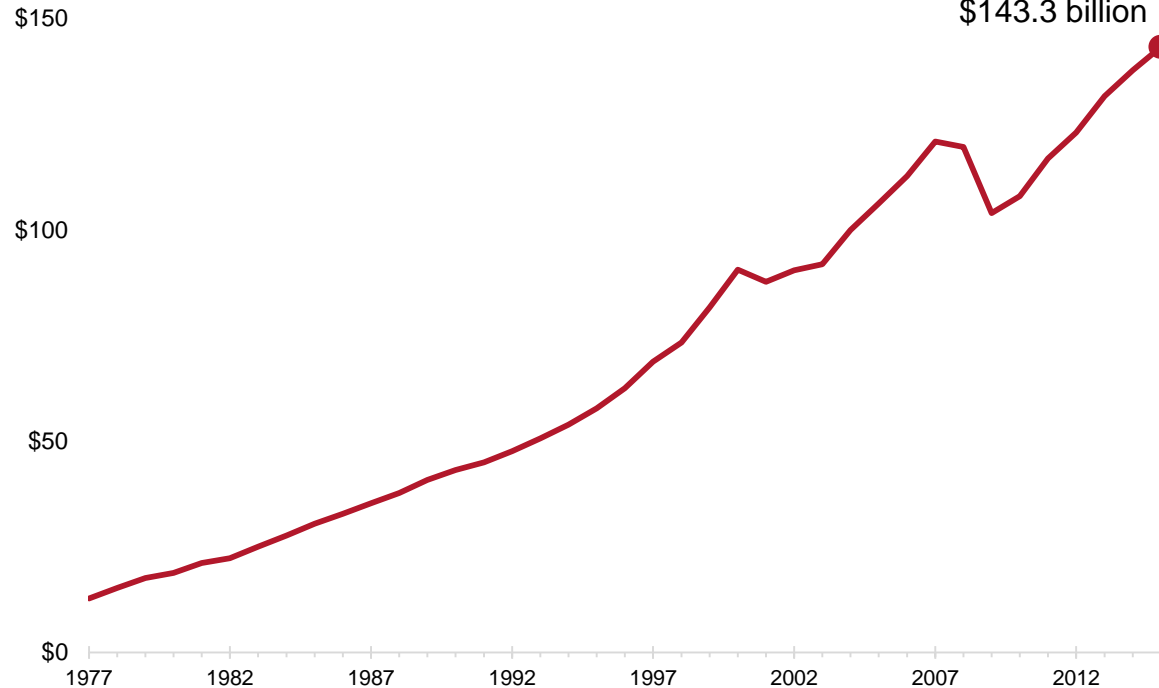


Source: Bureau of Economic Analysis; Oxford Economics

Hotel industry GDP increased to \$143.3 billion in 2015

Hotel industry GDP

Contribution to GDP, in billions

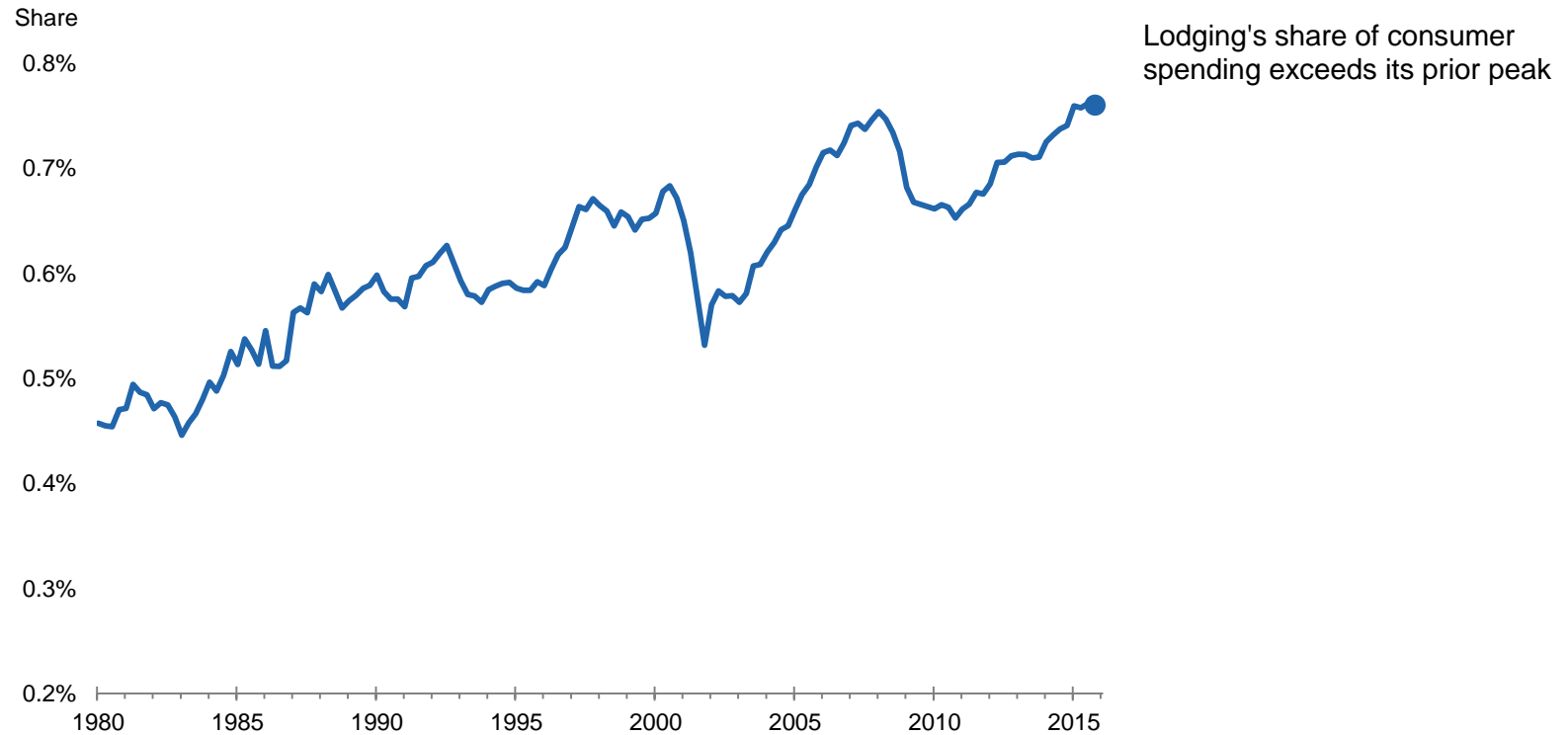


Source: Bureau of Economic Analysis; Oxford Economics

Hotels attract a growing share of consumer spending

Consumer spending on lodging

As share of total consumer spending, nominal



Lodging's share of consumer spending exceeds its prior peak

Source: Bureau of Economic Analysis; Oxford Economics

Consumer spending on hotels has outpaced GDP over the long-term

Consumer spending on lodging

Real, per capita GDP and spending on lodging

Percentage change since 1980

250%

200%

150%

100%

50%

0%

-50%

1980

1985

1990

1995

2000

2005

2010

2015

230%

Spending on lodging has increased 230% since 1980 (real, per capita basis)

77%

GDP has increased 77% since 1980 (real, per capita basis)

Source: Bureau of Economic Analysis; Oxford Economics

About Oxford Economics

Oxford Economics was founded in 1981 as a commercial venture with Oxford University's business college to provide economic forecasting and modelling to UK companies and financial institutions expanding abroad. Since then, we have become one of the world's foremost independent global advisory firms, providing reports, forecasts and analytical tools on 200 countries, 100 industrial sectors and over 3,000 cities.

Headquartered in Oxford, England, with regional centres in London, New York, and Singapore, Oxford Economics has offices across the globe in Belfast, Chicago, Dubai, Miami, Milan, Paris, Philadelphia, San Francisco, and Washington DC. We employ over 200 full-time people, including more than 130 professional economists, industry experts and business editors—one of the largest teams of macroeconomists and thought leadership specialists.

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