


## THE CONTRIBUTION OF THE INTERNATIONAL CRUISE INDUSTRY TO THE GLOBAL ECONOMY IN 2017

## PUBLISHED 2018

# The Global Economic Contribution of Cruise Tourism 2017 



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## Introduction

Business Research and Economic Advisors (BREA) was engaged by the Cruise Lines International Association (CLIA) to provide estimates of the global economic contribution ${ }^{1}$ of cruise tourism in 2017. Data on passengers by source and destination market, as well as the global deployment of the global ocean-going cruise fleet were obtained from sources published by CLIA. Research reports on passenger and crew expenditures and the economic impact of the industry in specific national and regional markets were assembled and reviewed.

## Methodology

The global impact relied heavily on existing reports by BREA and other researchers and represents an aggregation of the results reported in these studies, plus estimates developed for regions where data were not readily available. The majority of the global economic contribution reported below is derived directly from studies prepared for CLIA by BREA. Data on passenger and crew visits, direct expenditures of the cruise lines and their passengers and crew and the resulting economic impacts were taken directly from these reports and shown in regional data categories for the United States, the Rest of North America, Europe EU +3 , and the Rest of the world.

The data for the United States were taken directly from:
I. BREA, The Contribution of the International Cruise Industry to the U.S. Economy in 2016, prepared for Cruise Lines International Association, May 2017.

The data for the region of Rest of North America were derived from one current report and extrapolated from an additional study conducted in 2017. These reports were:
II. BREA, The Economic Contribution of the International Cruise Industry in Canada, prepared for CLIA North West and Partnering Cruise Associations, April 2017.
III. BREA, Economic Contribution of Cruise Tourism to the Destination Economies, 201718 Cruise Year, prepared for The Florida-Caribbean Cruise Association, October 2018.

The estimates for Europe (EU + 3) were derived from the following report:
IV. BREA and G. P. Wild (International) Ltd. ${ }^{2}$ Contribution of Cruise Tourism to the Economies of Europe, 2018 Edition, prepared for CLIA Europe, June 2018.

[^0]Finally, the estimates for the Rest of the World were estimated by using data taken directly from the 2018 report for Australia, extrapolated from 2017 reports for North Asia and Singapore, while the remainder were extrapolated from studies conducted during the previous three years. These reports were:
I. CLIA Australia, Australia Cruise Impact Study, October 2018.
II. BREA, The Economic Contribution of Cruise Tourism to the North Asia Region in 2016, prepared for CLIA North Asia, May 2017
III. G.P. Wild, BREA and Moore Stephens, Cruise Tourism and Economic Impact Assessment for Singapore, prepared for the Singapore Tourism Board, August 2017.
IV. BREA $_{2}$ The Contribution of Cruise Tourism to the Southeast Asia Region in 2014, prepared for CLIA Southeast Asia, September 2015.

Limited data was available for the remainder of Rest of the World, which consisted primarily of South America, New Zealand and the South Pacific. Estimated data for these locations were extrapolated using the following reports.
V. FGV Projetos, Cruise Industry Season 2017-2018: Economic Impacts in Brazil prepared for CLIA Brazil, 2018.
VI. BREA The Contribution of Cruise Tourism to the New Zealand Economy in 2014-15 Cruise Year, prepared for CLIA Australasia, July 2015.

Data taken directly from current studies and studies previously conducted by BREA account for over 95 percent of the estimates for total global output coming from cruise tourism. Data on spending by cruise lines and their passengers and crew that were not readily available were extrapolated to 2017 by adjusting average spending rates for inflation as reported by the appropriate government and monetary authorities. Passenger and crew visits were updated with data for 2017 as obtained from the destination ports and other sources. Given the extrapolated visit and spending data, the direct cruise sector expenditures were estimated for each of the markets. The resulting economic impacts were estimated with the same models that were used to estimate the economic impacts for the reported years.

The expenditure and economic impact data reported in these studies were directly included in the estimated impacts for the Rest of World. Estimates for all of South America were estimated utilizing the Brazilian data and passenger and crew visit data for the rest of South America. Estimates for the remaining global destinations were estimated from average cruise line, passenger and crew expenditure rates for home port and transit port destinations as derived from the above 10 studies. The resulting estimated impacts accounted for less than 5 percent of the global total output impacts.

## Global Economic Impacts

As noted above, the global impact relied heavily on existing reports by BREA and other researchers and represents an aggregation of the results reported in these studies plus estimates developed for regions where data were not readily available. All data that were reported in local currencies, i.e., expenditures, output, income, etc., were converted to US\$ for purposes of aggregation.

As shown in Table 1, an estimated 136.9 million onshore visits by passengers and crew helped generate $\$ 61.0$ billion in direct cruise sector expenditures at destinations and source markets around the world. This $\$ 61.0$ billion also includes the direct expenditures of the cruise lines for goods and services in support of their cruise operations.

Table 1-Total Global Economic Contribution of the Cruise Sector - 2017

| Category |  | Current US\$ |  |
| :---: | :---: | :---: | :---: |
|  | 2017 <br> Global | 2016 Global | Percent Change from 2016 |
| Passenger and Crew Onshore Visits (Mil) | 136.87 | 129.38 | 5.8\% |
| Total Direct Expenditures (US\$ Bil) | \$61.02 | \$57.93 | 5.3\% |
| Total Output Contribution (US\$ Bil) | \$133.96 | \$125.96 | 6.3\% |
| Total Income Contribution (US\$ Bil) | \$45.57 | \$41.09 | 10.9\% |
| Total Employment Contribution | 1,108,677 | 1,021,681 | 8.5\% |

These expenditures generated total (direct, indirect and induced) global output of $\$ 134$ billion. The production of the cruise industry output continues to produce new jobs and income. For the second consecutive year, the cruise industry required the employment of over 1 million employees; reaching over 1.1 million FTE ${ }^{2}$ employees in 2017. These employees earned $\$ 45.6$ billion in income. The details of this global contribution are discussed in the following sections of this report.

[^1]
## Background: Cruising - A Global Industry

The cruise industry continues to enjoy dynamic growth, as the increase in cruise passengers rose 6.4 percent in 2017 to 26.75 million. North America and Europe experienced another year of steady growth while the Rest of the World experienced more notable growth. Table 2 sets out the international cruise sector growth between 2007 and 2017. Over this ten-year period, demand for cruising worldwide has increased from 15.9 million passengers to 26.8 million. This represents a 69 percent increase overall and a 5.4 annual average increase. Over the same 10-year period, global tourist arrivals, mainly land-based tourism, has risen from 930 million in 2007 to an estimated 1,323 million in 2017, approximately 42 percent $^{3}$ overall or 3.6 percent a year.

Table 2-International Demand for Cruises, 2007 to 2017
Millions of passengers

|  | 2007 | 2012 | 2013 | 2014 | 2015 | $2016(3$ | 2017 | 10-Year <br> Growth |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North <br> America | 10.45 | 11.64 | 11.82 | 12.21 | 12.20 | 12.49 | 13.12 | $25.6 \%$ |
| Europe (1) | 4.05 | 6.23 | 6.40 | 6.39 | 6.58 | 6.79 | 6.96 | $71.9 \%$ |
| Subtotal | 14.50 | 17.87 | 18.22 | 18.60 | 18.78 | 19.28 | 20.08 | $38.5 \%$ |
| Rest of the <br> World (2) | 1.37 | 3.03 | 3.09 | 3.74 | 4.40 | 5.87 | 6.67 | $386.6 \%$ |
| Total | 15.87 | 20.90 | 21.31 | 22.34 | 23.18 | 25.15 | $\mathbf{2 6 . 7 5}$ | $68.5 \%$ |

(1) Including Russia and Central and Eastern European countries outside the EU+3
(2) Rest of the world: 2007-2013 data is generally estimated and may be under-reported
(3) Data for 2016 has been revised from the last report

Numbers may not add due to rounding
Source: CLIA; CLIA One reSource 2016 \& 2017.
Since 2007 passengers sourced from North America have increased by 26 percent, and the North America region remains the largest source market, accounting for 49 percent of global passengers. However, global changes in demand have continued the growth in source and destination markets outside of North America, and as a result North America's share of the global source market has steadily declined over the past decade from nearly 66 percent in 2007 to its current 49 percent share.

Europe has also experienced strong growth over the last decade, with passengers sourced from Europe increasing 72 percent over this timeframe. In 2007 Europe accounted for 26 percent of the global cruise market with 4.1 million passengers. In 2017 this increased to 7.0

[^2]million passengers. Despite this growth, Europe's overall market share has remained virtually unchanged in 2017.

The Rest of the World has seen the most significant growth in both passenger numbers and market share. In 2007 the Rest of the World accounted for 8.6 percent of the global cruise market with 1.37 million passengers. In 2017 its global share of passengers has increased to 25 percent with 6.67 million passengers. This ten-year passenger growth represents a 387 percent increase, which includes an increase of 14 percent for 2017 over 2016.

To further illustrate the continued dynamic and shifting pattern of growth in the global cruise industry, from 2007 to 2012, passengers sourced from Europe increased by 54 percent, those sourced from the Rest of the World increased by 121 percent, while those from North America increased by 11 percent. Over the next five years (2012-2017), Europe's growth slowed to 11 percent, expansion in the Rest of the World continued to climb at 120 percent, and North America's growth remained at a relatively constant 12 percent.

Not surprisingly, the capacity deployed by the cruise industry, as measured by bed days ${ }^{4}$, has followed a similar growth and distribution profile. Overall, the global supply of bed days has increased by 36 percent from 2012 through 2017, increasing from 125.8 million bed days to 170.6 million. Global capacity in 2017 is up 4.3 percent over 2016 (see Table 3).

Table 3-Global Deployment of Capacity, 2012 to 2017
Millions of bed days

| Region | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 1-year <br> Growth |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alaska | 5.87 | 6.25 | 6.15 | 6.65 | 6.77 | 7.33 | $8.3 \%$ |
| Asia | 3.21 | 4.72 | 6.17 | 11.33 | 15.06 | 17.76 | $17.9 \%$ |
| Australia/NZ/Pacific | 5.49 | 6.51 | 7.09 | 8.36 | 9.97 | 10.21 | $2.4 \%$ |
| Caribbean | 44.20 | 44.66 | 51.00 | 53.58 | 55.07 | 59.27 | $7.6 \%$ |
| Europe w/o Med | 12.71 | 14.37 | 14.88 | 17.48 | 19.16 | 18.80 | $-1.9 \%$ |
| Mediterranean | 28.54 | 28.38 | 25.14 | 29.93 | 30.53 | 28.02 | $-8.2 \%$ |
| South America | 4.80 | 4.93 | 4.42 | 4.27 | 4.50 | 3.79 | $-15.8 \%$ |
| Rest of the World | 21.01 | 20.53 | 20.63 | 22.81 | 22.49 | 25.38 | $12.9 \%$ |
| Total | 125.8 | 130.3 | $\mathbf{1 3 5 . 5}$ | $\mathbf{1 5 4 . 4}$ | $\mathbf{1 6 3 . 5}$ | $\mathbf{1 7 0 . 6}$ | $\mathbf{4 . 3 \%}$ |

Numbers may not add due to rounding
Source: CLIA
The Caribbean is the principal cruise destination for passengers sourced from North America. Its share of the cruise industry's global deployment has remained relatively constant from

[^3]2012 to 2017 at about 35 percent, and it remains the largest destination market with 59.3 million bed days deployed in the region during 2017. As shown in Table 3, this represents a 34 percent increase in capacity since 2012 and includes a 7.6 percent increase in 2017 over 2016.

Asia continues to lead the industry growth and saw its deployed capacity increase by 18 percent in 2017 to 17.8 million bed days. Since 2012, deployed capacity in Asia has risen from 3.2 million bed days to 17.8 million, representing a 453 percent increase. Despite growing at only 2.4 percent in 2017, Australia, New Zealand and the Pacific have experienced significant growth since 2012, increasing from 5.5 million to 10.2 million bed days in 2017 , or an increase of 86 percent.

Including the Mediterranean, Europe has seen its bed day capacity increase by 14 percent over the 5 -year period, rising from 41.25 million bed days in 2012 to 46.8 million in 2017. This increase is solely due to growth in the non-Mediterranean markets. The Mediterranean market has seen its capacity decrease by 1.8 percent over the 5 -year period, and included an 8 percent decrease since 2016. The remainder of Europe has seen its capacity increase by 48 percent since 2012, notwithstanding a decrease of 1.9 percent in 2017 from 2016.

South America's capacity fluctuated from 2012 through 2016, recording a high of 4.93 million bed days in 2013 and a low of 4.3 million bed days in 2015. South America experienced a decrease of 16 percent in 2017 bringing its total down to 3.8 million for the year. The Rest of the World increased from 21.0 million bed days in 2012 to 25.4 million in 2017, for a 21 percent increase. Much of this increase (13\%) came in 2017 over 2016. Expectations are that South America will see continued growth in capacity for 2018 and 2019.

Thus, the cruise industry is truly a global industry with passengers sourced from around the world and with cruise itineraries destined for countries and ports around the globe. It is also a dynamic industry with overall global growth rates (69\%) exceeding that of land-based tourism (42\%) over the past ten years. The dynamism also carries over to the geographic distribution of growth which has shifted from North America, to Europe and now to Australasia. As a result, the industry impacts the global economy generating jobs, income and tax revenues in all regions of the world.

## Source Markets: Where do cruise passengers reside?

As discussed in the previous section, cruise passengers are sourced from around the world. In this section, we focus on the global distribution for 2017. North America accounted for 49 percent of the 26.75 million global cruise passengers with 13.12 million passengers. Europe was next with 26 percent and 6.96 million passengers and the Rest of the World accounted for the remaining 25 percent with 6.67 million passengers. The potential for growth in the Rest of the World is illustrated by the fact that it accounts for about 82 percent of the world's population ${ }^{5}$ but only 25 percent of world cruisers.

Figure 1 - Global Distribution of Cruise Passengers by Source Market - 2017
Millions of passengers


Source: CLIA One reSource

[^4]
## North America

Within North America, 11.94 million passengers were sourced from the United States and accounted for 91 percent of the region's cruise passengers (see Figure 2). Canada accounted for 7 percent with 921,000 passengers, an increase of 6.5 percent from 2016. The remaining 2 percent, or 250,000 passengers, resided elsewhere in North America. This group experienced an increase of 10 percent from 2016. The largest of these other North American source markets are: Mexico, Panama, Costa Rica, the Dominican Republic and The Bahamas. Combined these five countries accounted for 81 percent of the passengers sourced from North America countries other than the U.S. and Canada.

In addition to being the largest source market, the United States is also the largest originator of cruises. During 2017, cruises originating from U.S. ports carried an estimated 12.2 million passengers. Thus, passenger embarkations in the United States accounted for 46 percent of the 26.75 million global embarking passengers. In 2017, the five largest cruise ports, Miami, Port Canaveral, Port Everglades, Galveston and Long Beach accounted for about two-thirds of the passenger embarkations in the United States.

Figure 2 -Distribution of Cruise Passengers Sourced from North America - 2017
Millions of passengers


Source: CLIA One reSource
Note: Rest of North America consists of Mexico, Bermuda, Central America and the Caribbean.

## Europe

As shown in Figure 3, the five largest source countries in Europe accounted for 85 percent of the 6.96 million passengers sourced from Europe in 2017. As in 2016, Germany and the United Kingdom accounted for 59 percent of the passengers sourced from Europe with a total of 4.1 million passengers. Germany experienced the highest European year-over-year growth with an 8.5 percent increase in the number passengers in 2017, while the United Kingdom remained virtually unchanged ( $+0.4 \%$ ). An additional 1.8 million passengers were sourced from Italy, France and Spain, 26 percent of European-sourced passengers. Italy and Spain experienced increases of 2.5 percent and 6.4 percent respectively in the number of passengers in 2017, but passengers sourced from France experienced a decline of 9.1 percent.

Among the other European countries contributing at least 100,000 cruise passengers were sourced from Austria, Netherlands, Norway and Switzerland. Combined, 496,000 passengers were sourced from these four countries, about 7.1 percent of European sourced passengers. Finally, approximately 560,000 cruise passengers were sourced from the remaining European countries, 8.1 percent of European-sourced passengers.

Figure 3 -Distribution of Cruise Passengers Sourced from Europe - 2017
Millions of passengers


Note: United Kingdom includes Ireland
Source: CLIA One reSource
An estimated 6.50 million passengers embarked on their cruise from European ports. This is up from 6.32 million in 2016, or an increase of 2.8 percent. Key European home ports include: Barcelona, Civitavecchia, Copenhagen, Genoa, Hamburg, Kiel, Palma Majorca, Savona, Southampton, and Venice. Combined, these ports accounted for nearly two-thirds of all European embarkations.

## Rest of the World

As shown in Figure 4, the two principal sources in the Rest of the World are the countries of China, with 2.4 million passengers and Australia with 1.3 million passengers. Combined these two countries accounted for about 56 percent of the 6.67 million passengers sourced from the Rest of the World. Hong Kong, Japan, Malaysia, Singapore, and Taiwan combined for 20 percent of the total source passengers in the Rest of the World with 1.32 million passengers. Each had growth of 20 percent or more over 2016, with Hong Kong leading the way with 107 percent growth. The countries of South America accounted for about 800,000 passengers which equates to about 12 percent of the Rest of the world. Finally, the remainder of the countries of the Rest of the World accounted for 810,000 passengers or 12 percent of the remainder.

As discussed in the previous section, The Rest of the World has experienced the highest sourced passenger growth among the regional cruise markets with 14 percent in year-overyear growth in 2017. Even with this growth rate there was considerable variation in growth across the countries in this region. Hong Kong experienced the largest relative increase (107\%) in their sourced passengers from 110,000 in 2016 to 230,000 in 2017, while China added the highest absolute number of passengers with about 284,000. Malaysia, Colombia, Russia, Indonesia, Philippines and Panama experienced relative growth in excess of 40 percent. At the same time, passengers sourced from several nations in Asia and South America saw decreases that ranged from .2 percent in Chile, to 48 percent in Thailand and Venezuela.

Figure 4 -Distribution of Cruise Passengers Sourced from the Rest of the World - 2017
Millions of passengers


Source: CLIA One reSource

## Top Ten Countries

In summary, a total of 22.95 million passengers were sourced from the top ten countries which accounts for 86 percent of global cruise passengers. As indicated in Figure 5, these countries are located in all major global regions.

The United States with 11.94 million passengers was the largest source country by far, accounting for 45 percent of global cruise passengers. The next two countries combined, China and Germany, accounted for 17 percent of global passengers with a total of 4.59 million passengers. The United Kingdom had 1.93 million passengers and Australia had 1.34 million cruise passengers and together accounted for 12 percent of global passengers. The last five countries: Canada, Italy, Spain, France and Brazil generated a total of 3.15 million passengers, about 12 percent of the global passengers.

Figure 5 -Cruise Passengers Sourced from the Top 10 Countries - 2017


Source: CLIA One reSource

## Destination Markets: Where are cruise ships deployed?

As discussed in the Introduction, cruise lines deploy their ships around the globe. In this section, we focus on the global distribution of bed day capacity for 2017. Overall, bed days are up 4.3 percent globally to 170.6 million. As shown in Figure 6, North America accounted for 39 percent of the global bed day capacity with 66.6 million bed days, an increase of 7.8 percent from 2016. Europe, including the Mediterranean was next with a 27 percent share and 46.8 million bed days. This represented a decrease of 5.8 percent from 2016, although early indications are that deployment in the Mediterranean will increase in 2018 and 2019. The Asia/Pacific region came in with 28.0 million bed days, up 12.0 percent from 2016 and representing 16 percent of the global capacity. The Rest of the World, including South America, accounted for the remaining 17 percent with 29.2 million bed days. Bed day capacity increased by 8.1 percent in the Rest of the World in 2017.

Figure 6 - Global Distribution of Passenger Bed Days - 2017
Millions of bed days


Source: CLIA One reSource
North America accounted for a smaller share of global capacity than global passengers (39\% vs. 49\%). Europe, on the other hand accounted for a larger share of capacity (28\%) than passengers (26\%), while the Rest of the World, including Asia/Pacific, had more capacity (32\%) than sourced passengers (25\%).

## North America

Within North America, the Caribbean, with 59.3 million bed days, accounted for 89 percent of the capacity deployed in the market (see Figure 7).

Figure 7 -Distribution of Passenger Bed Days in North America - 2017
Millions of bed days


Source: CLIA One reSource
BREA in its latest analysis for the FCCA ${ }^{6}$ reported that 11 Caribbean destinations had in excess of one million passenger arrivals ${ }^{7}$ during the 2017-18 cruise year8. These were: the Bahamas ( 3.0 million $^{9}$ ), Belize ( 1.02 million), the Cayman Islands ( 1.86 million), Costa Maya ( 1.15 million), Cozumel ( 4.12 million), the Dominican Republic ( 1.06 million), Honduras ( 1.07 million), Jamaica ( 1.99 million), Puerto Rico ( 1.19 million), St. Kitts ( 1.12 million) and the U.S. Virgin Islands ( 1.12 million). Combined, the arrivals at these 11 destinations represent about 32 percent of the 59.3 million bed days across the Caribbean.

Within the United States, BREA has estimated that 12.2 million passengers embarked on their cruises from U.S. ports (excludes San Juan, PR) while 5.6 million passengers visited U.S. ports as transit passengers. Relative to 2016, embarkations at U.S. ports during 2017 increased by about 5 percent while visits by transit passengers were up by nearly 8 percent. As noted pre-

[^5]viously the five largest embarkation ports in the U.S. during 2017 were: Miami, Port Canaveral, Port Everglades, Galveston and Long Beach. Combined, these five ports accounted for over 8 million embarkations which is about two-thirds of embarkations among all U.S. ports.

In total, there were 5.6 million transit visits. The major transit ports were the Alaska ports of Juneau, Ketchikan and Skagway and the Florida ports of Key West and Port Canaveral. These five ports accounted for about three out of four of all passenger arrivals at U.S. transit ports.

In Canada the principal home ports remain to be Vancouver, Montreal and Quebec City. Vancouver, along with Seattle, is a major home port for Alaska cruises, while the two ports along the St. Lawrence River handle home port and transit port passengers for those who are sailing New England and Canadian itineraries and transcontinental sailings. Port of call ports in Atlantic Canada also handle transit passengers on these itineraries.

## Europe

The Mediterranean accounted for 60 percent of the capacity deployed in Europe during 2017 with 28.0 million bed days (see Figure 8). The Mediterranean is a fairly self-contained market with most cruise originating and terminating within the region. As noted previously the major home ports in the Mediterranean are Barcelona, Civitavecchia, Palma Mallorca, Venice, Piraeus, Genoa and Savona. Major destination or transit ports also include Marseille, Tenerife, Naples, Valletta and Dubrovnik.

Figure 8 -Distribution of Passenger Bed Days in Europe - 2017
Millions of bed days


Source: CLIA One reSource
Notes: The Mediterranean includes the Atlantic Isles while Northern Europe includes the Black Sea.

Cruise lines also deployed an estimated 18.8 million bed days in Northern Europe. Like the Mediterranean, most cruises originate and terminate within the region. The principal home ports are Southampton, Copenhagen, Hamburg, Kiel and Amsterdam. Major cruise destinations in Northern Europe include Stockholm, St. Petersburg, Lisbon, Rostock/Warnemunde, Tallinn, Helsinki, and Bergen.

Asia/Pacific
Combined, the Asia/Pacific destination market's nearly 28 million bed days represents a 15 percent increase over 2016 and accounts for 16 percent of the cruise industry's global bed day capacity. As shown in Figure 9, the Australia/South Pacific region accounted for 36 percent of the capacity deployed in this market with 10.2 million bed days. Sydney serves as the primary homeport in the region with cruises primarily destined for New Zealand and South Pacific destinations as well as other Australian ports.

Figure 9 -Distribution of Passenger Bed Days in Asia/Pacific - 2017
Millions of bed days


Source: CLIA One reSource
The Asia region, led by China, accounted for 64 percent of the capacity deployed in the market with 17.8 million bed days, an increase of 18 percent from 2016.

## Rest of the World

The Rest of the World accounted for 17 percent of the cruise industry's global capacity with 29.2 million bed days. South America was the largest sub region within this destination market with 3.8 million bed days, 13 percent of the region's capacity.

## Passenger and Crew Onshore Visits

As shown in Table 4, the cruise industry generated nearly 137 million passenger and crew visits at ports around the globe. These consisted of 26.7 million passenger embarkations, 84.7 million transit passenger visits and 25.5 million crew visit days. North American ports accounted for 47 percent of the global passenger and crew visits, while ports throughout Europe accounted for 33 percent.

Table 4-Passenger and Crew Onshore Visits - Global and Regional Markets - 2017
Millions of Visit Days

| Category |  | Regional Markets |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Global | North <br> America(1) | Europe <br> (EU+3)(2) | Rest of <br> World(3) |
| Passenger Embarkations | 26.75 | 13.84 | 6.43 | 6.48 |
| Transit Passengers | 84.67 | 37.49 | 32.66 | 14.52 |
| Crew | 25.45 | 13.34 | 6.42 | 5.69 |
| Total | 136.87 | 64.68 | 45.51 | 26.68 |
| Percent Change from 2016 | $\mathbf{5 . 8 \%}$ | $\mathbf{4 . 3 \%}$ | $\mathbf{0 . 5 \%}$ | $\mathbf{2 0 . 7 \%}$ |

${ }^{(1)}$ North America consists of all US ports including those in Alaska and Hawaii, ports in Bermuda, Canada, the Caribbean, Central America \& Mexico.
(2)Europe EU+3 includes the ports of the 27-member states of the EU plus Iceland, Norway \& Switzerland.
(3)Rest of the World consists of ports in South America, Asia, the South Pacific and Australia.

Of the 26.75 million embarking global cruise passengers, 12.2 million, or 46 percent of the global total, embarked on their cruise from a port in the United States. The major embarkation ports in the United States include Miami, Port Canaveral, and Port Everglades in Florida; Galveston Texas and Long Beach, California. Another 1.6 million passengers, 6 percent of the global total, embarked on cruises from other ports in North America. The more prominent of these ports consisted of Puerto Rico in the Caribbean and Vancouver in Canada. Thus, the combined North American contribution is 52 percent of all global passenger embarkations.

European ports with 6.4 million passenger embarkations accounted for another 24 percent of global passenger embarkations. The major embarkation ports in Europe included Barcelona, Civitavecchia, Palma Majorca, Venice, Piraeus (Athens), Genoa and Savona in the Mediterranean and, Southampton, Copenhagen, and Hamburg in northern Europe. Combined, these ten ports accounted for over two-thirds of the passenger embarkations in Europe.

For the first time, embarkations at ports in the Rest of the World outnumbered those in Europe. A total of 6.5 million passengers embarked on cruises at ports around the Rest of the

World, 24 percent of the total. Sydney and Singapore are the major home ports in the Rest of the World.

On a conventional seven-day itinerary, the typical cruise ship makes between three and four calls in addition to the home port call. The average number of calls per itinerary has decreased over the past few years to an average of approximately 3.2 visits per cruise. Still, the 26.75 million cruise passenger embarkations generated another 84.7 million visits at transit calls at ports around the globe.

The ports of North America accounted for the largest share at 37.5 million transit passenger visits, 44 percent of the total. North America's major transit ports included Cozumel, the Bahamas, Jamaica, the Cayman Islands and Costa Maya in the Caribbean and the state of Alaska. All of these locations received in excess of 1 million transit passenger visits. The ports of Europe were next at 39 percent and 32.7 million transit visits. Ports in the Mediterranean, including Barcelona, Palma Mallorca, Civitavecchia, Marseille, Tenerife, Naples, Valetta, Dubrovnik, Piraeus (Athens) and Mykonos accounted for the majority of these visits, each having over 700,000 transit passenger visits. Finally, ports in the Rest of the World received 14.5 million transit passenger visits. The principal transit ports in this region were located in Australia and Southeast Asia.

Finally, crew onboard cruise ships also disembark and visit in both home and transit ports. Based upon data collected as part of regional and port specific cruise studies, BREA has estimated that the crew disembark rate ranges from 30 percent to 45 percent at each port call. Recent studies suggest that this disembarkation rate has fallen slightly over time, as is the case with the ratio of crew members to passengers. On a global basis cruises generated an estimated 26.7 million crew visits.

The ports of North America generated 13.3 million crew visits, slightly more than half of the global crew visits. Europe accounted for another 6.4 million visits, or 25 percent of the global total, while the Rest if the World accounted for the remaining 5.7 million, or 22 percent of the global total.

## Direct Expenditures Generated by Cruise Tourism

The direct expenditures generated by cruise tourism were analyzed for three segments: i) cruise passengers, ii) crew members and iii) cruise lines. Passengers purchased pre- and post-cruise vacations, shore excursions, souvenirs and other retail goods while crew purchased a similar set of goods and services with a heavier concentration on retail goods. In addition, cruise lines purchased a variety of goods in support of their cruise operations, including food and beverages, hotel supplies, bunker fuel, and utilities while in port. Cruise lines also made payments for a variety of services in support of their global cruise operations, including travel agent commissions, expenditures for advertising and promotion and other professional and business services. As shown in Table 5, the estimated direct global spending by cruise lines and their passengers and crew totaled $\$ 61.0$ billion during 2017.

Table 5-Direct Cruise Sector Expenditures - Global and Regional Markets - 2017
Billions of US\$

| Category |  | Regional markets |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Global | North <br> America | Europe <br> $(E U+3)$ | Rest of <br> World |
|  |  | $\$ 9.49$ | $\$ 4.20$ | $\$ 2.05$ |
| Home Port Passengers <br> Transit Passengers <br> Passenger Total <br> Crew | $\$ 8.17$ | $\$ 3.80$ | $\$ 2.35$ | $\$ 2.02$ |
|  | $\$ 17.67$ | $\$ 8.00$ | $\$ 4.41$ | $\$ 5.26$ |
|  | $\$ 1.35$ | $\$ 0.75$ | $\$ 0.18$ | $\$ 0.42$ |
| Total | $\$ 42.01$ | $\$ 19.99$ | $\$ 16.76$ | $\$ 5.25$ |
| Percent Change from 2016 | $\mathbf{5 . 3 \%}$ | $5.6 \%$ | $\mathbf{3 . 2 \%}$ | $\mathbf{9 . 0 \%}$ |

(1) Expenditures by cruise lines consists of purchases of goods consumed and used on ships, port charges and fees, travel agent commissions, administrative expenses and wages paid to shore side employees and crew among others.

On a global basis, passengers spent an estimated $\$ 17.7$ billion during home and transit port calls, accounting for 29 percent of total cruise sector direct expenditures. Crew spent another $\$ 1.4$ billion, 2.2 percent of the total. Finally, cruise lines spent an estimated $\$ 42.0$ billion on cruise operations, 69 percent of the total.

On a regional basis, North America and Europe had direct expenditure totals of $\$ 28.8$ and $\$ 21.3$ billion, respectively. Thus, they accounted for about 47 percent and 35 percent of the total global direct expenditures, respectively. Not surprisingly, this is about even with the proportions of global passenger and crew visits. The Rest of the World accounted for the remaining 18 percent. The changes in the distribution of expenditures has mirrored the changes seen in passenger and capacity distribution changes. Since 2013, the Rest of the World has seen its share of direct cruise expenditures increase from 12 percent to 18 percent,

North America has remained consistent at 47 percent, and Europe experienced a decrease in its share of global direct expenditures from 41 percent to 35 percent.

Passenger and crew spending in North America occurs predominantly in South Florida and the Caribbean. However, direct expenditures in this part of the region were impacted by significant damage in the Caribbean from Hurricanes Irma and Maria in the fall of 2017. Most cruise lines had to alter their itineraries which had the effect of displacing passenger visits to locations that typically had higher passenger average expenditures ${ }^{10}$. As a result, it is estimated that total direct spending decreased in this part of the region from 2016.

Overall, home port passengers accounted for 48 percent of all passenger and crew spending and 15 percent of all spending in North America. The total passenger and crew expenditures of $\$ 8.8$ billion in North America also accounted for nearly half ( $46 \%$ ) of global passenger and crew expenditures. Passenger expenditures in Europe were split almost evenly between home port passengers and transit passengers. European passenger and crew expenditures accounted for 26 percent of the global total with $\$ 4.6$ billion. Finally, passengers and crew spent an estimated $\$ 5.7$ billion in the Rest of the World. Home port passengers spent significantly more than transit passengers with $\$ 3.2$ billion compared to $\$ 2.0$ billion, respectively. Passenger and crew expenditures in the Rest of the World accounted for 30 percent of the global total.

Cruise line operations are headquartered predominantly in Europe and the United States. Additionally, ship building for the global fleet takes place predominantly in Europe, although several new builds are starting to occur in Asia. Due to of the high output of shipbuilding in Europe, its share of global cruise line expenditures (40\%) is higher than its global share of total expenditures (35\%). North American cruise line expenditures, with a high concentration of operations in Florida accounts for 48 percent of the global cruise line expenditures, and a third (33\%) of total global cruise industry expenditures. The Rest of the World accounts for the remaining 13 percent of cruise line expenditures.

[^6]As shown in Table 6, passenger and crew expenditures were concentrated in three categories, retail \& other, travel to home port, and tours \& local transit. Combined these three categories accounted for 78 percent of the global expenditures of passengers and crew. On average $\$ 138.96$ in expenditures was generated by each visit.

Table 6-Global Passenger and Crew Spending by Category - 2017
Millions of US\$

| Categories | Total | Home Port <br> Passengers | Transit Pas- <br> sengers | Crew |
| :--- | :---: | :---: | :---: | :---: |
| Visit Days (Millions) | $\mathbf{1 3 6 . 9 2}$ | $\mathbf{2 6 . 7 5}$ | $\mathbf{8 4 . 6 1}$ | $\mathbf{2 5 . 5 6}$ |
| Accommodations | $\$ 1,901$ | $\$ 1,895$ | $\$ 2.4$ | $\$ 2.9$ |
| Travel to Home Port | $\$ 4,775$ | $\$ 4,775$ | $\$ 0$ | $\$ 0$ |
| Food \& Beverages | $\$ 2,344$ | $\$ 813$ | $\$ 1,120$ | $\$ 411$ |
| Tours \& Local Transit | $\$ 4,392$ | $\$ 914$ | $\$ 3,252$ | $\$ 227$ |
| Retail \& Other | $\$ 5,608$ | $\$ 1,098$ | $\$ 3,800$ | $\$ 711$ |
| Total | $\$ 19,019$ | $\$ 9,494$ | $\$ 8,174$ | $\$ 1,351$ |
| Average Spend per Visit | $\$ 138.96$ | $\$ 354.97$ | $\$ 96.54$ | $\$ 53.08$ |
| Percent Change in Total <br> Spending From 2016 | $\mathbf{7 . 0 \%}$ | $\mathbf{7 . 8 \%}$ | $\mathbf{7 . 9 \%}$ | $\mathbf{- 3 . 2 \%}$ |

## Economic Contribution Generated by Cruise Tourism in 2017

The objective of this analysis is to quantify the contribution of the spending generated by cruise tourism to the global economy during 2017. The quantification consists of the measurement of the direct expenditures and the resulting impacts on output, employment and income. The contribution analysis consists of three elements: i) the direct economic contribution, ii) the indirect economic contribution and the iii) the induced economic contribution.

The direct expenditures generated by the cruise industry and its passengers and crew that were quantified and discussed in the previous section, are the driving force of the industry's contribution to the global economy. These expenditures generate direct employment and employee income in support of providing the goods and services purchased by the cruise lines and their passengers and crew.

The indirect contribution results from the subsequent demand for goods and services generated by the directly impacted businesses. For example, food processors must purchase raw foodstuffs for processing; utility services, such as electricity and water, to run equipment and process raw materials; transportation services to deliver finished products to the cruise lines or wholesalers; and insurance for property and employees.

The induced contribution is generated by the spending of the employees of the cruise lines and their suppliers. The income of these employees is used to purchase a broad range of consumer goods and services including such goods as autos, food, clothing, furniture, health care and so forth. As a consequence, the induced contribution is concentrated in the final demand for final goods produced for the household sector.

As discussed in the Introduction, the estimates of the global direct, indirect and induced contribution are the sum of the impacts estimated for the regional markets. The regional estimates for 2017 are taken directly from published economic impact studies for 2017, extrapolated impacts for regions where studies were conducted in the past three years and estimates developed by BREA for those regions where recent economic impact data are unavailable.

## Direct Economic Contribution

The $\$ 61.0$ billion in global direct cruise tourism expenditures account for a 5.3 percent increase over 2016 and by themselves generated a significant contribution to the global economy. As shown in Table 7, these direct expenditures generated 530,560 FTE jobs, up 8.0 percent from 2016, paying $\$ 19.6$ billion in employee income, up 10 percent from 2016. They include the shore side employees and crew of cruise lines.

Table 7-Direct Cruise Sector Economic Contribution - Global and Regional Markets - 2017
Billions of US\$

| Category | Global | Regional Markets |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | North America | $\begin{aligned} & \text { Europe } \\ & \text { (EU+3) } \end{aligned}$ | Rest of World |
| Output (\$ Billion) | \$61.02 | \$28.75 | \$21.34 | \$10.93 |
| Share of Global |  | 47.1\% | 35.0\% | 17.9\% |
| Income (\$ Billion) | \$19.55 | \$9.11 | \$6.53 | \$3.92 |
| Share of Global |  | 46.6\% | 33.4\% | 20.0\% |
| Employment | 530,560 | 233,701 | 195,240 | 101,619 |
| Share of Global |  | 44.0\% | 36.8\% | 19.2\% |
|  | Percent Change from 2016 |  |  |  |
| Output (\$ Billion) | 5.3\% | 5.6\% | 3.2\% | 9.0\% |
| Income (\$ Billion) | 10.0\% | 8.2\% | 8.9\% | 16.4\% |
| Employment | 8.0\% | 8.0\% | 5.1\% | 14.3\% |

The table also shows the regional distribution of the direct economic contribution. North America's direct economic contributions accounted for 47 percent of the global direct contribution of the cruise industry. The $\$ 28.8$ billion in direct expenditures in North America generated 233,701 FTE jobs paying an estimated $\$ 9.1$ billion in employee income. As noted previously, North America's cruise line headquarters presence and the homeport operations for itineraries in the Caribbean represent a significant component of the direct economic contribution of the cruise industry and is heavily weighted toward those industries that supply goods and services to the cruise ships, i.e., cruise ports, suppliers of food and beverages, fuel and equipment, and administrative support services such as, advertising, accounting and professional services and transportation services, including travel agents. North America's shares of output, income and employment have remained relatively unchanged from the previous year.

Europe accounted for 35 percent of global direct contribution to the cruise industry with $\$ 21.3$ billion in direct expenditures. These expenditures generated an estimated 195,240 FTE jobs paying $\$ 6.5$ billion in employee income. Given the significance of the shipbuilding industry in Europe, the direct economic contribution has a high concentration of manufacturing in
that industry. The European shares of each impact category have seen small declines over the last several years as much of it is shifted towards other regions, particularly those in the Rest of the World.

Finally, the direct expenditures of $\$ 10.9$ billion in the Rest of the World generated 101,619 FTE jobs paying $\$ 3.9$ billion in employee income. The overall global share in each of these categories has increased noticeably over the last four years. Driven by growth in capacity and the resulting visits predominantly in Australasia, the global share of direct output in the Rest of the World has increased from approximately 8.7 percent in 2013 to 18 percent in 2017. Employment share has increased from 11 percent to 19 percent, and the income share has increased from 9.7 percent to 20 percent over this same 4 -year period.

## Indirect and Induced Economic Contribution

As discussed previously, the indirect and induced contributions are generated by the spending of the directly impacted businesses and their employees. As a consequence, these impacts spread throughout the global and regional economies. The specific indirect and induced impacts are determined by the structure of the individual economies and as a result can vary significantly from region to region. As shown in Table 8, the $\$ 61.0$ billion in direct cruise tourism expenditures generated an additional $\$ 72.9$ billion in indirect and induced output. This is an increase of 7.2 percent from 2016. It also generated $\$ 26.0$ billion in employee income, up 11.6 percent from 2016; and 578,116 FTE jobs, up 9.0 percent from 2016.

Table 8-Indirect and Induced Cruise Sector Economic Impact - Global and Regional Markets - 2017 Billions of US\$

| Category | Global | Regional Markets |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | North <br> America | Europe $(E U+3)$ | Rest of World |
| Output (\$ Billion) | \$72.93 | \$32.70 | \$30.51 | \$9.72 |
| Share of Global |  | 44.8\% | 41.8\% | 13.3\% |
| Income (\$ Billion) | \$26.02 | \$15.38 | \$7.31 | \$3.33 |
| Share of Global |  | 59.1\% | 28.1\% | 12.8\% |
| Employment | 578,116 | 294,528 | 208,381 | 75,207 |
| Share of Global |  | 51.0\% | 36.0\% | 13.0\% |
|  | Percent Change from 2016 |  |  |  |
| Output (\$ Billion) | 7.2\% | 7.0\% | 3.6\% | 21.2\% |
| Income (\$ Billion) | 11.6\% | 8.5\% | 15.6\% | 18.3\% |
| Employment | 9.0\% | 8.2\% | 6.5\% | 19.8\% |

As with the direct contribution, North America accounts for a plurality of the global indirect and induced output with 45 percent of the total. North America contributed a larger share of the global employment (51\%) and income contribution (59\%). Europe accounted for 42 percent of the global indirect and induced economic output while the Rest of the World accounted for 13 percent.

## Total Economic Contribution

Combining the direct, indirect and induced contributions, cruise tourism generated an estimated $\$ 134.0$ billion in total output of goods and services throughout the global economy during 2017, an increase of 6.3 percent over 2016. As a result of the production of this output, $1,108,676$ FTE jobs were required, an increase of 8.5 percent over 2016. The workers who were employed in these jobs were paid $\$ 45.6$ billion in income, a total that accounts for an 11 percent increase over 2016 (see Table 9).

Table 9-Total Cruise Sector Economic Contribution - Global and Regional Markets - 2017 Billions of US\$

| Category | Global | Regional Markets |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | North America | Europe $(E U+3)$ | Rest of World |
| Output (\$ Billion) | \$133.96 | \$61.45 | \$51.85 | \$20.66 |
| Share of Global |  | 45.9\% | 38.7\% | 15.4\% |
| Income (\$ Billion) | \$45.57 | \$24.49 | \$13.83 | \$7.24 |
| Share of Global |  | 53.7\% | 30.4\% | 15.9\% |
| Employment | 1,108,676 | 528,229 | 403,621 | 176,826 |
| Share of Global |  | 47.6\% | 36.4\% | 15.9\% |
|  | Percent Change from 2016 |  |  |  |
| Output (\$ Billion) | 6.3\% | 6.4\% | 3.4\% | 14.4\% |
| Income (\$ Billion) | 10.9\% | 8.4\% | 12.3\% | 17.3\% |
| Employment | 8.5\% | 8.1\% | 5.8\% | 16.6\% |

The table also shows the regional distribution of the direct economic contribution. North America has the largest total output contribution of $\$ 61.5$ billion and accounted for about 46 percent of the total global output contribution of the cruise industry. This output resulted in employment of 528,229 FTE workers paying an estimated $\$ 24.5$ billion in employee income. North America's employment and income contribution accounted for 48 percent and 54 percent of the total global income and employment contribution, respectively. These were also the highest among the 3 major regions.

The total output contribution in Europe was $\$ 51.9$ billion, 39 percent of the total global output contribution. The $\$ 51.9$ billion in total output generated an estimated 403,621 FTE jobs
paying $\$ 13.8$ billion in employee income. The jobs and income share equals 36 percent and 30 percent, respectively. Finally, the total output contribution of $\$ 20.7$ billion in the Rest of the World generated 176,826 FTE jobs paying $\$ 6.2$ billion in employee income. The share of the global contribution was 15 percent for the total output contribution, and 16 percent for both income and employment contribution.

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[^0]:    ${ }^{1}$ The terms economic contribution and economic impact are used interchangeably throughout this report.

[^1]:    ${ }^{2}$ Full-time Equivalent

[^2]:    ${ }^{3}$ UNWTO Annual Report 2017.

[^3]:    ${ }^{4}$ Passenger bed days are the number of days that all berths could be occupied at $100 \%$ occupancy. For example, a cruise ship with 2,000 lower berths on a 7 -day cruise generates 14,000 potential bed days.

[^4]:    ${ }^{5}$ United Nations, http://data.un.org/, 2018.

[^5]:    ${ }^{6}$ Economic Contribution of Cruise Tourism to Destination Economies, prepared for Florida-Caribbean Cruise Association, October 2018.
    ${ }^{7}$ Passenger arrivals are the number of passengers on cruise ships that arrive at destination ports. Since not all passengers will disembark at a given port, passenger arrivals are larger than passenger onshore visits.
    ${ }^{8}$ The 2017-18 cruise year is defined as the 12-month period from May, 2017 through April, 2018.
    ${ }^{9}$ This figure excludes arrivals at the private islands in the Bahamas.

[^6]:    ${ }^{10}$ Economic Contribution of Cruise Tourism to Destination Economies, prepared for Florida-Caribbean Cruise Association, September 2018.

